DAIKIN

EDUS122402C

R-32

# Engineering Data

## Multi-Split Type Air Conditioners

### - Heat Pump -

## MXM-A, MXT-A, MXTH-A Series



INVERTER

**Part 1 Multi-Split Type Air Conditioners ..... 5**
1. Lineup ..... 6
2. Functions ..... 7
2.1 Indoor unit ..... 7
2.2 Outdoor unit ..... 9
3. Specification ..... 10
3.1 Indoor unit ..... 10
3.2 Outdoor unit ..... 18
3.3 Combination Capacity ..... 27
4. Dimensions ..... 28
4.1 Indoor unit ..... 28
4.2 Outdoor unit ..... 34
5. Wiring Diagram ..... 37
5.1 Indoor unit ..... 37
5.2 Outdoor unit ..... 41
6. Piping Diagram ..... 46
6.1 Indoor unit ..... 46
6.2 Outdoor unit ..... 49
7. Capacity Table ..... 53
8. Operation Limit ..... 54
9. Fan Characteristics ..... 56
9.1 External Static Pressure ..... 56
9.2 Airflow Auto Adjustment ..... 62
10. Sound Level ..... 65
10.1 Measuring Location ..... 65
10.2 Indoor unit ..... 66
10.3 Outdoor unit ..... 75
11. Electric Characteristics ..... 77

**Part 2 Installation Manual ..... 79**
1. Indoor Unit ..... 80
1.1 CTXV07, FTXV09/12 ..... 80
1.2 FTXV15/18/24 ..... 94
1.3 CDMA07, FDMA09/12/15/18/24 ..... 108
1.4 FVXV09/12/15/18 ..... 133
1.5 CMXV12/18/24 ..... 155
1.6 FFA09/12/15/18AVJU9 ..... 184
2. Outdoor Unit ..... 205
2.1 2/3/4MXM, 2MXT, 2MXTH ..... 205
2.2 5MXM, 3/4/5MXT, 3/4/5MXTH ..... 224

**Part 3 Operation Manual ..... 245**
1. Operation Manual List ..... 246
2. Operation Manual ..... 247
2.1 CTXV07, FTXV09/12 ..... 247
2.2 FTXV15/18/24 ..... 280
2.3 CDMA07, FDMA09/12/15/18/24 ..... 313
2.4 General Safety Considerations ..... 323
2.5 FVXV09/12/15/18 ..... 331
2.6 CMXV12/18/24 ..... 381
2.7 FFA09/12/15/18 ..... 389

**Part 4 Options ..... 401**
1. Options List ..... 402
1.1 Indoor Unit ..... 402
1.2 Outdoor Unit ..... 404
2. Control Devices ..... 405
2.1 <BRC073A6> Wired Remote Controller (Installation) ..... 405
2.2 <BRC073A6> Wired Remote Controller (Operation) ..... 434
2.3 <BRC944B2> Wired Remote Controller (Installation) ..... 477
2.4 <BRC944B2> Wired Remote Controller (Operation) ..... 479
2.5 <BRC1NRV71> Wired Remote Controller (Installation) ..... 491
2.6 <BRC1NRV71> Wired Remote Controller (Operation) ..... 523
2.7 <BRCW901A03/08> Wired Remote Controller Cord ..... 577
2.8 <KRP413BB1S> Wiring Adaptor ..... 578
2.9 <DCS302C71> Central Remote Controller (Installation) ..... 582
2.10 <DCS302C71> Central Remote Controller (Operation) ..... 587
2.11 <DCS301C71> Unified ON/OFF Controller (Installation) ..... 613
2.12 <DCS301C71> Unified ON/OFF Controller (Operation) ..... 618
2.13 <DST301BA61> Schedule Timer Controller (Installation) ..... 620
2.14 <DST301BA61> Schedule Timer Controller (Operation) ..... 625
2.15 <KRP1C76/77> Wire Renovated Adaptor (Installation) ..... 638
2.16 <KRP4A74> Group Control Adaptor (Installation) ..... 639
2.17 <KRP928BB2S> Interface Adaptor for DIII-NET ..... 641
2.18 <KRCS01-6B> Remote Sensor (Installation) ..... 644
3. Indoor Unit ..... 647
3.1 <BRYQ60AAW> Sensor Kit ..... 647
3.2 <BYFQ60C3W2W> Decoration Panel ..... 649
3.3 <BDBHQ44C60> Sealing Member ..... 652
3.4 <KDDQ44XA60> Fresh Air Intake Kit ..... 654
4. Outdoor Unit ..... 656
4.1 <KPW063B4> Air Direction Adjustment Grille ..... 656

4.2 <KPW082A41> Air Direction Adjustment Grille.....658
4.3 <KKG063A44> Back Protection Wire Net.....660
4.4 <KKG082A41> Back Protection Wire Net.....661
4.5 <BKP082A41> Drain Plug.....663
4.6 <KEH064A41> Drain Pan Heater.....665
4.7 <KPS063A41> Snow Hood (Side) .....669
4.8 <KPS063A44> Snow Hood (Rear).....671
4.9 <KPS063A47> Snow Hood (Discharge) .....673

# Part 1 Multi-Split Type Air Conditioners

1. Lineup ..... 6
2. Functions ..... 7
   2.1 Indoor unit ..... 7
   2.2 Outdoor unit ..... 9
3. Specification ..... 10
   3.1 Indoor unit ..... 10
   3.2 Outdoor unit ..... 18
   3.3 Combination Capacity ..... 27
4. Dimensions ..... 28
   4.1 Indoor unit ..... 28
   4.2 Outdoor unit ..... 34
5. Wiring Diagram ..... 37
   5.1 Indoor unit ..... 37
   5.2 Outdoor unit ..... 41
6. Piping Diagram ..... 46
   6.1 Indoor unit ..... 46
   6.2 Outdoor unit ..... 49
7. Capacity Table ..... 53
8. Operation Limit ..... 54
9. Fan Characteristics ..... 56
   9.1 External Static Pressure ..... 56
   9.2 Airflow Auto Adjustment ..... 62
10. Sound Level ..... 65
   10.1 Measuring Location ..... 65
   10.2 Indoor unit ..... 66
   10.3 Outdoor unit ..... 75
11. Electric Characteristics ..... 77

# 1. Lineup

| Indoor Unit | | Outdoor Unit | Power Supply |
|---|---|---|---|
| **Wall Mounted Type** | CTXV07AVJU9 | **Standard Type** | 1 phase, 208 - 230 V, 60 Hz |
| CTXV, FTXV Series | FTXV09AVJU9 | 2MXM18AVJU9 2MXM18AVJU8 | |
| | FTXV12AVJU9 | 3MXM24AVJU9 3MXM24AVJU8 | |
| | FTXV15AVJU9 | 4MXM36AVJU9 4MXM36AVJU8 | |
| | FTXV18AVJU9 | 5MXM48AVJU9 5MXM48AVJU8 | |
| | FTXV24AVJU9 | | |
| **Duct concealed type** | CDMA07AVJU9 | **Cold Climate Type** | |
| CDMA, FDMA Series | FDMA09AVJU9 | 2MXT18AVJU9 2MXT18AVJU8 | |
| | FDMA12AVJU9 | 3MXT24AVJU9 3MXT24AVJU8 | |
| | FDMA15AVJU9 | 4MXT36AVJU9 4MXT36AVJU8 | |
| | FDMA18AVJU9 | 5MXT40AVJU9 5MXT40AVJU8 | |
| | FDMA24AVJU9 | 2MXTH18AVJU9 (with drain pan heater) | |
| **Floor standing type** | FVXV09AVJUW9 | 3MXTH24AVJU9 (with drain pan heater) | |
| FVXV Series | FVXV09AVJUT9 | 4MXTH36AVJU9 (with drain pan heater) | |
| | FVXV12AVJUW9 | 5MXTH40AVJU9 (with drain pan heater) | |
| | FVXV12AVJUT9 | 2MXTH18AVJU8 (with drain pan heater) | |
| | FVXV15AVJUW9 | 3MXTH24AVJU8 (with drain pan heater) | |
| | FVXV15AVJUT9 | 4MXTH36AVJU8 (with drain pan heater) | |
| | FVXV18AVJUW9 | 5MXTH40AVJU8 (with drain pan heater) | |
| | FVXV18AVJUT9 | | |
| **Air handling units** | CMXV12AVJUA | | |
| CMXV Series | CMXV18AVJUA | | |
| | CMXV24AVJUA | | |
| **Ceiling mounted cassette type** | FFA09AVJU9 | | |
| FFA Series | FFA12AVJU9 | | |
| | FFA15AVJU9 | | |
| | FFA18AVJU9 | | |

**Notes:** Power Supply Intake ; Outdoor Unit

Duct concealed type, floor standing type, ceiling cassette type and air handling units cannot be connected to 2/3/4MXM-AVJU9 and 2MXT(H)18AVJU9 outdoor units.

**Cautions**

1. Air conditioners should not be installed in areas where corrosive gasses, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided and choose an outdoor unit with anti-corrosion treatment.
3. For CMXV
   One CMXV* unit can be powered directly by the outdoor unit. If the installation requires multiple CMXV**AVJUA units to be connected to one outdoor unit then an alternative wiring method must be used. Refer to the CMXV installation/ operation manual and Wiring Diagram.

# 2. Functions

## 2.1 Indoor unit

| Category | Functions | CTXV07AVJU9 FTXV09/12AVJU9 | FTXV15/18/24AVJU9 |
|---|---|---|---|
| Basic Function | Inverter (with inverter power control) | ● | ● |
| Comfortable Airflow | Power-airflow flap (horizontal blade) | ● | — |
| | Power-airflow dual flaps (horizontal blade) | — | ● |
| | Wide-angle louvers (vertical blades) | ● | ● |
| | Auto-swing (up and down) | ● | ● |
| | Auto-swing (left and right) | — | — |
| | 3-D airflow | — | — |
| | COMFORT AIRFLOW operation | ● | ● |
| Comfort Control | Auto fan speed | ● | ● |
| | Switchable fan speed | ● | ● |
| | Indoor unit quiet operation | ● | ● |
| | INTELLIGENT EYE operation | — | — |
| | 2-area INTELLIGENT EYE operation | — | — |
| | Hot-start function | ● | ● |
| Operation | Automatic cooling/heating change-over | ● | ● |
| | Program dry operation | ● | ● |
| | Fan only | ● | ● |
| Lifestyle Convenience | POWERFUL operation (inverter) | ● | ● |
| | ECONO operation | ● | ● |
| | Indoor unit **ON/OFF** switch | ● | ● |
| | Multi-colored indicator lamp | — | — |
| | Monitor brightness setting | — | — |
| | Signal receiving sign | ● | ● |
| | R/C with back light | ● | ● |
| Health and Cleanliness | Titanium apatite deodorizing filter | ● | ● |
| | Mold proof air filter | ● | ● |
| | Wipe-clean flat panel | ● | ● |
| | Washable grille | — | — |
| Timer | WEEKLY TIMER operation | — | — |
| | 24-hour ON/OFF TIMER | — | — |
| | Count up-down ON/OFF timer | ● | ● |
| | NIGHT SET mode | ● | ● |
| Worry Free (Reliability & Durability) | Auto-restart (after power failure) | ● | ● |
| | Self-diagnosis (R/C, LED) | ● | ● |
| Flexibility | Multi-split/split type compatible indoor unit | ● | ● |
| | Either side drain (left or right) | ● | ● |
| | °F/°C changeover R/C temperature display (factory setting: °F) | ● | ● |
| Remote Control | Remote control adaptor (normal open pulse contact) | Option | Option |
| | Remote control adaptor (normal open contact) | Option | Option |
| | DIII-NET compatible (adaptor) | Option | Option |
| | Wireless LAN connection | ● | ● |
| Remote Controller | Wireless | ● | ● |
| | Wired | Option | Option |

**Notes:** ●: Available

—: Not available

| Category | Functions | FDMA Series | FVXV Series | CMXV Series | FFA Series |
|---|---|---|---|---|---|
| Basic Function | Inverter (with inverter power control) | ● | ● | ● | ● |
| Comfort Control | Auto fan speed | ● | ● | ● | ● |
| | Switchable fan speed | 3 steps | 5 steps | 5 steps | 3 steps |
| | Indoor unit quiet operation | — | ● | — | — |
| | 2 selectable temperature sensors | ● | — | — | ● |
| | Hot-start function | ● | ● | ● | ● |
| | INTELLIGENT EYE operation (auto energy saving) | — | — | — | — |
| | Heat Plus | — | ● | — | — |
| | Floor warming | — | ● | — | — |
| Comfortable Airflow | Auto-Swing (Up and Down) | — | ● | — | ● |
| | Wide-Angle Louvers | — | ● | — | — |
| | 2-Way Air flow (top and bottom) | — | ● | — | — |
| Operation | Automatic cooling/heating change-over | ● | ● | ● | ● |
| | Program dry operation | ● | ● | ● | ● |
| | Fan only | ● | ● | — | ● |
| Lifestyle Convenience | POWERFUL operation (inverter) | — | — | — | — |
| | ECONO operation | — | ● | — | — |
| | Indoor unit **ON/OFF** switch | — | ● | — | — |
| | Signal receiving sign | — | ● | — | — |
| | Remote controller with back light | ● | ● | ● | ● |
| | Home leave operation | — | ● | — | — |
| | Multi-colored operation lamp | — | ● | — | — |
| Health and Cleanliness | Titanium apatite deodorizing filter | — | Option | — | — |
| | Mold proof air filter | — | ● | — | — |
| | Filter cleaning indicator | ● | — | — | ● |
| | Silver ion anti-bacterial drain pan | ● | — | — | ● |
| | Clean operation | — | ● | — | — |
| Timer | WEEKLY TIMER operation | ● | ● | Refer to the following link for details. https://daikincomfort.com/pro | ● |
| | Schedule timer | Option | Option | | Option |
| | Setpoint auto reset | — | — | | — |
| | Setpoint range set | ● | — | | ● |
| | 24-hour ON/OFF TIMER | — | ● | | — |
| | 72-hour ON/OFF TIMER | — | — | | — |
| | Off timer (turns unit off after set time) | — | ● | | — |
| | NIGHT SET mode | — | ● | | — |
| Worry Free (Reliability & Durability) | Auto-restart (after power failure) | ● | ● | ● | ● |
| | Self-diagnosis (R/C, LED) | ● | ● | ● | ● |
| Flexibility | Multi-split/split type compatible indoor unit | ● | ● | ● | ● |
| | Chargeless | 49.2 ft. (15 m) | 49.2 ft. (15 m) | 49.2 ft. (15 m) | 49.2 ft. (15 m) |
| | Drain pump | ● | — | — | ● |
| | °F/°C changeover R/C temperature display (factory setting: °F) | ● | ● | ● | ● |
| Remote Control | Remote control adaptor (normal open pulse contact) | — | Option | — | — |
| | Remote control adaptor (normal open contact) | — | Option | — | — |
| | DIII-NET compatible (adaptor) | — | Option | — | — |
| | Wireless LAN connection | — | ● | — | — |
| Remote Controller | Wireless | — | ● | — | — |
| | Wired | Option | Option | Option | Option |

● : Available
— : Not available

## 2.2 Outdoor unit

| Function | Standard | | Cold Climate | | | |
|---|---|---|---|---|---|---|
| | 2MXM | 3/4/5MXM | 2MXT | 3/4/5MXT | 2MXTH | 3/4/5MXTH |
| Inverter (with inverter power control) | ● | ● | ● | ● | ● | ● |
| Operation limit | Refer to P. 54 | | | | | |
| PAM control | ● | ● | ● | ● | ● | ● |
| Standby electricity saving | — | — | — | — | — | — |
| Swing compressor | ● | ● | ● | ● | ● | ● |
| Reluctance DC motor | ● | ● | ● | ● | ● | ● |
| NIGHT QUIET mode | ● | ● | ● | ● | ● | ● |
| QUIET OUTDOOR UNIT operation | ● | ● | ● | ● | ● | ● |
| Quick warming function | — | — | — | — | — | — |
| Automatic defrosting | ● | ● | ● | ● | ● | ● |
| Defrost learning control | — | — | — | — | — | — |
| Priority room setting | ● | ● | ● | ● | ● | ● |
| COOL/HEAT mode lock | ● | ● | ● | ● | ● | ● |
| Self-diagnosis (R/C, LED) | ● | ● | ● | ● | ● | ● |
| Wiring error check function | ● | ● | ● | ● | ● | ● |
| Anti-corrosion treatment of outdoor heat exchanger | ● | ● | ● | ● | ● | ● |
| Drain pan heater | Option | Option | Option | Option | ● | ● |
| Drain pan heater control by microcomputer | ● | ● | ● | ● | ● | ● |
| Chargeless | 98.4 ft (30 m) | 131.2 ft (40 m) | 98.4 ft (30 m) | 131.2 ft (40 m) | 98.4 ft (30 m) | 131.2 ft (40 m) |
| Low temp. cooling operation (−15°C) (5°F) | — | — | — | — | — | — |

**Notes:** ●: Available

—: Not available

# 3. Specification

## 3.1 Indoor unit

### 3.1.1 Wall Mounted Type

| Model | | | CTXV07AVJU9 | | FTXV09AVJU9 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| Rated Capacity | | | 7 kBtu/h Class | | 9 kBtu/h Class | |
| Front Panel Color (Munsell No.) | | | White (N9.5) | | White (N9.5) | |
| Airflow Rates | H | cfm ($m^3$/min) | 332 (9.4) | 332 (9.4) | 381 (10.8) | 385 (10.9) |
| | M | | 268 (7.6) | 279 (7.9) | 272 (7.7) | 304 (8.6) |
| | L | | 230 (6.5) | 230 (6.5) | 230 (6.5) | 230 (6.5) |
| | SL | | 166 (4.7) | 194 (5.5) | 166 (4.7) | 194 (5.5) |
| Fan | Type | | Cross Flow Fan | | Cross Flow Fan | |
| | Drive Input | A | 0.20 | | 0.20 | |
| | Speed | Steps | 5 Steps, Quiet, Auto | | 5 Steps, Quiet, Auto | |
| Air Direction Control | | | Right, Left, Horizontal, Downward | | Right, Left, Horizontal, Downward | |
| Air Filter | | | Removable, Washable | | Removable, Washable | |
| Running Current (Rated) | | A | 0.11 - 0.10 | 0.12 - 0.11 | 0.14 - 0.13 | 0.13 - 0.12 |
| Power Consumption (Rated) | | W | 20 - 20 | 23 - 23 | 26 - 26 | 25 - 25 |
| Power Factor (Rated) | | % | 87.0 - 90.3 | 94.0 - 91.3 | 90.4 - 86.2 | 90.9 - 87.3 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | in. (mm) | 11-1/4 × 30-5/16 × 8-3/4 (286 × 770 × 223) | | 11-1/4 × 30-5/16 × 8-3/4 (286 × 770 × 223) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 12-5/8 × 32-11/16 × 14-3/16 (320 × 830 × 360) | | 12-5/8 × 32-11/16 × 14-3/16 (320 × 830 × 360) | |
| Weight (Mass) | | lbs (kg) | 19 (9) | | 19 (9) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 24 (11) | | 24 (11) | |
| Sound Pressure Level | H / M / L / SL | dB(A) | 40 / 35 / 31 / 24 | 39 / 34 / 28 / 25 | 43 / 35 / 31 / 24 | 41 / 35 / 28 / 25 |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 (ϕ 6.4) | | ϕ 1/4 (ϕ 6.4) | |
| | Gas | in. (mm) | ϕ 3/8 (ϕ 9.5) | | ϕ 3/8 (ϕ 9.5) | |
| | Drain | in. (mm) | ϕ 5/8 (ϕ 16) | | ϕ 5/8 (ϕ 16) | |
| Drawing No. | | | 3D153215A | | 3D153215A | |
| Note | | | SL: The quiet fan level of the airflow rate setting | | SL: The quiet fan level of the airflow rate setting | |

| Model | | | FTXV12AVJU9 | | FTXV15AVJU9 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| Rated Capacity | | | 12 kBtu/h Class | | 15 kBtu/h Class | |
| Front Panel Color (Munsell No.) | | | White (N9.5) | | White (N9.5) | |
| Airflow Rates | H | cfm ($m^3$/min) | 392 (11.1) | 438 (12.4) | 540 (15.3) | 636 (18.0) |
| | M | | 293 (8.3) | 318 (9.0) | 470 (13.3) | 537 (15.2) |
| | L | | 226 (6.4) | 240 (6.8) | 381 (10.8) | 452 (12.8) |
| | SL | | 166 (4.7) | 205 (5.8) | 339 (9.6) | 388 (11.0) |
| Fan | Type | | Cross Flow Fan | | Cross Flow Fan | |
| | Drive Input | A | 0.23 | | 0.31 | |
| | Speed | Steps | 5 Steps, Quiet, Auto | | 5 Steps, Quiet, Auto | |
| Air Direction Control | | | Right, Left, Horizontal, Downward | | Right, Left, Horizontal, Downward | |
| Air Filter | | | Removable, Washable | | Removable, Washable | |
| Running Current (Rated) | | A | 0.17 - 0.15 | 0.20 - 0.18 | 0.19 - 0.17 | 0.20 - 0.18 |
| Power Consumption (Rated) | | W | 29 - 29 | 35 - 35 | 36 - 36 | 39 - 39 |
| Power Factor (Rated) | | % | 81.3 - 84.7 | 83.7 - 82.7 | 91.1 - 93.5 | 93.8 - 92.3 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | in. (mm) | 11-1/4 × 30-5/16 × 8-3/4 (286 × 770 × 223) | | 11-5/8 × 39 × 10-3/8 (295 × 990 × 263) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 12-5/8 × 32-11/16 × 14-3/16 (320 × 830 × 360) | | 15-3/16 × 43-3/8 × 15-5/16 (386 × 1,102 × 389) | |
| Weight (Mass) | | lbs (kg) | 19 (9) | | 27 (13) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 24 (11) | | 37 (17) | |
| Sound Pressure Level | H / M / L / SL | dB(A) | 45 / 37 / 31 / 24 | 45 / 37 / 30 / 26 | 45 / 41 / 36 / 33 | 45 / 41 / 37 / 33 |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 (ϕ 6.4) | | ϕ 1/4 (ϕ 6.4) | |
| | Gas | in. (mm) | ϕ 3/8 (ϕ 9.5) | | ϕ 1/2 (ϕ 12.7) | |
| | Drain | in. (mm) | ϕ 5/8 (ϕ 16) | | ϕ 5/8 (ϕ 16) | |
| Drawing No. | | | 3D153215A | | 3D153178A | |
| Note | | | SL: The quiet fan level of the airflow rate setting | | SL: The quiet fan level of the airflow rate setting | |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = $m^3$/min × 35.3 |

| Model | | | FTXV18AVJU9 | | FTXV24AVJU9 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| Rated Capacity | | | 18 kBtu/h Class | | 24 kBtu/h Class | |
| Front Panel Color (Munsell No.) | | | White (N9.5) | | White (N9.5) | |
| Airflow Rates | H | cfm (m³/min) | 565 (16.0) | 717 (20.3) | 629 (17.8) | 717 (20.3) |
| | M | | 463 (13.1) | 572 (16.2) | 501 (14.2) | 572 (16.2) |
| | L | | 378 (10.7) | 452 (12.8) | 378 (10.7) | 466 (13.2) |
| | SL | | 335 (9.5) | 388 (11.0) | 335 (9.5) | 413 (11.7) |
| Fan | Type | | Cross Flow Fan | | Cross Flow Fan | |
| | Drive Input | A | 0.40 | | 0.45 | |
| | Speed | Steps | 5 Steps, Quiet, Auto | | 5 Steps, Quiet, Auto | |
| Air Direction Control | | | Right, Left, Horizontal, Downward | | Right, Left, Horizontal, Downward | |
| Air Filter | | | Removable, Washable | | Removable, Washable | |
| Running Current (Rated) | | A | 0.20 - 0.18 | 0.29 - 0.26 | 0.31 - 0.28 | 0.30 - 0.27 |
| Power Consumption (Rated) | | W | 39 - 39 | 54 - 54 | 57 - 57 | 55 - 55 |
| Power Factor (Rated) | | % | 93.8 - 92.5 | 89.5 - 89.3 | 88.4 - 88.7 | 88.1 - 89.3 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | in. (mm) | 11-5/8 × 39 × 10-3/8 (295 × 990 × 263) | | 11-5/8 × 39 × 10-3/8 (295 × 990 × 263) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 15-3/16 × 43-3/8 × 15-5/16 (386 × 1,102 × 389) | | 15-3/16 × 43-3/8 × 15-5/16 (386 × 1,102 × 389) | |
| Weight (Mass) | | lbs (kg) | 27 (13) | | 27 (13) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 37 (17) | | 37 (17) | |
| Sound Pressure Level | H / M / L / SL | dB(A) | 48 / 43 / 38 / 33 | 49 / 42 / 37 / 33 | 52 / 45 / 39 / 34 | 49 / 43 / 38 / 34 |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 (ϕ 6.4) | | ϕ 1/4 (ϕ 6.4) | |
| | Gas | in. (mm) | ϕ 1/2 (ϕ 12.7) | | ϕ 5/8 (ϕ 15.9) | |
| | Drain | in. (mm) | ϕ 5/8 (ϕ 16) | | ϕ 5/8 (ϕ 16) | |
| Drawing No. | | | 3D153178A | | 3D153178A | |
| Note | | | SL: The quiet fan level of the airflow rate setting | | SL: The quiet fan level of the airflow rate setting | |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

## 3.1.2 Duct Concealed Type

| Model | | | CDMA07AVJU9 | | FDMA09AVJU9 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| Rated Capacity | | | 7 kBtu/h Class | | 9 kBtu/h Class | |
| Front Panel Color (Mancel No.) | | | — | | — | |
| Heat Exchanger | Rows × Stages, Fin per Inch | | 3 × 26, 18 | | 3 × 26, 18 | |
| | Fin Spec / Tube | | Multi Slit Fin / ϕ5 Hi-XA Tube | | Multi Slit Fin / ϕ5 Hi-XA Tube | |
| Airflow Rate | H / M / L | cfm | 325 / 301 / 278 | 325 / 301 / 278 | 401 / 338 / 279 | 401 / 338 / 279 |
| | | $m^3$/min | 9.2 / 8.5 / 7.9 | 9.2 / 8.5 / 7.9 | 11.4 / 9.6 / 7.9 | 11.35 / 9.6 / 7.9 |
| Fan Motor | H / M / L | rpm | 1,031 / 956 / 881 | 1,031 / 956 / 881 | 1,128 / 956 / 784 | 1,128 / 956 / 784 |
| | Drive input | A | 0.39 | | 0.52 | |
| Fan | Type | | Sirocco Fan | | Sirocco Fan | |
| External Static Pressure | | $inH_2O$ | Standard 0.20 (0.60 - 0.12) | | Standard 0.20 (0.60 - 0.12) | |
| | | Pa | Standard 50 (150 - 30) | | Standard 50 (150 - 30) | |
| Running Current (Rated) | | A | 0.39 - 0.35 | 0.39 - 0.35 | 0.53 - 0.48 | 0.53 - 0.48 |
| Power Consumption (Rated) | | W | 54 - 54 | 54 - 54 | 96 - 96 | 96 - 96 |
| Power Factor (Rated) | | % | 66.6 - 66.8 | 66.6 - 66.8 | 86.9 - 87.0 | 86.9 - 87.0 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | in. (mm) | 9-5/8 × 27-9/16 × 31-1/2 (245 × 700 × 800) | | 9-5/8 × 27-9/16 × 31-1/2 (245 × 700 × 800) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 11-9/16 × 35-3/8 × 34-7/8 (293 × 899 × 886) | | 11-9/16 × 35-3/8 × 34-7/8 (293 × 899 × 886) | |
| Weight (Mass) | | lbs (kg) | 64 (29) | | 64 (29) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 71 (32) | | 71 (32) | |
| Sound Pressure Level | | dB(A) | 30 | 30 | 32 | 32 |
| Remote Controller (Option) | | Wired | BRC1NRV71 | | BRC1NRV71 | |
| | | Wireless | — | | — | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 (ϕ 6.4) | | ϕ 1/4 (ϕ 6.4) | |
| | Gas | in. (mm) | ϕ 3/8 (ϕ 9.5) | | ϕ 3/8 (ϕ 9.5) | |
| | Drain | in. (mm) | I.D. ϕ1 (25) / O.D. ϕ1-1/4 (32) | | I.D. ϕ1 (25) / O.D. ϕ1-1/4 (32) | |
| Drawing No. | | | C: 3D161724A | | C: 3D159367 | |
| Note | | | SL: The quiet fan level of the airflow rate setting.<br>External static pressure is changeable in 13 stages by remote controller.<br>Air filter is not standard accessory, but please mount it in the duct system of the suction side.<br>Select its dust collection efficiency (gravity method) 50% or more. | | | |

| Model | | | FDMA12AVJU9 | | FDMA15AVJU9 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| Rated Capacity | | | 12 kBtu/h Class | | 15 kBtu/h Class | |
| Front Panel Color (Mancel No.) | | | — | | — | |
| Heat Exchanger | Rows × Stages, Fin per Inch | | 3 × 26, 18 | | 3 × 26, 18 | |
| | Fin Spec / Tube | | Multi Slit Fin / ϕ5 Hi-XA Tube | | Multi Slit Fin / ϕ5 Hi-XA Tube | |
| Airflow Rate | H / M / L | cfm | 440 / 367 / 299 | 440 / 367 / 299 | 471 / 382 / 284 | 471 / 382 / 284 |
| | | $m^3$/min | 12.5 / 10.4 / 8.5 | 12.45 / 10.4 / 8.5 | 13.4 / 10.8 / 8.0 | 13.4 / 10.8 / 8.0 |
| Fan Motor | H / M / L | rpm | 1,179 / 992 / 805 | 1,179 / 992 / 805 | 1,019 / 862 / 704 | 1,019 / 862 / 704 |
| | Drive input | A | 0.61 | | 0.87 | |
| Fan | Type | | Sirocco Fan | | Sirocco Fan | |
| External Static Pressure | | $inH_2O$ | Standard 0.20 (0.60 - 0.12) | | Standard 0.20 (0.60 - 0.20) | |
| | | Pa | Standard 50 (150 - 30) | | Standard 50 (150 - 50) | |
| Running Current (Rated) | | A | 0.56 - 0.51 | 0.56 - 0.51 | 0.62 - 0.56 | 0.62 - 0.56 |
| Power Consumption (Rated) | | W | 108 - 108 | 108 - 108 | 115 - 115 | 115 - 115 |
| Power Factor (Rated) | | % | 92.6 - 91.2 | 92.6 - 91.2 | 89.1 - 89.3 | 89.1 - 89.3 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | in. (mm) | 9-5/8 × 27-9/16 × 31-1/2 (245 × 700 × 800) | | 9-5/8 × 39-3/8 × 31-1/2 (245 × 1,000 × 800) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 11-9/16 × 35-3/8 × 34-7/8 (293 × 899 × 886) | | 11-9/16 × 47-3/16 × 34-7/8 (293 × 1,199 × 886) | |
| Weight (Mass) | | lbs (kg) | 64 (29) | | 82 (37) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 71 (32) | | 88 (40) | |
| Sound Pressure Level | | dB(A) | 33 | 33 | 34 | 34 |
| Remote Controller (Option) | | Wired | BRC1NRV71 | | BRC1NRV71 | |
| | | Wireless | — | | — | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 (ϕ 6.4) | | ϕ1/4 (6.4) | |
| | Gas | in. (mm) | ϕ 3/8 (ϕ 9.5) | | ϕ1/2 (12.7) | |
| | Drain | in. (mm) | I.D. ϕ1 (25) / O.D. ϕ1-1/4 (32) | | I.D. ϕ1 (25) / O.D. ϕ1-1/4 (32) | |
| Drawing No. | | | C: 3D159367 | | C: 3D159368 | |
| Note | | | SL: The quiet fan level of the airflow rate setting.<br>External static pressure is changeable in 13 stages by remote controller.<br>Air filter is not standard accessory, but please mount it in the duct system of the suction side.<br>Select its dust collection efficiency (gravity method) 50% or more. | | | |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = $m^3$/min × 35.3 |

| Model | | | FDMA18AVJU9 | | FDMA24AVJU9 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| Rated Capacity | | | 18 kBtu/h Class | | 24 kBtu/h Class | |
| Front Panel Color (Mancel No.) | | | — | | — | |
| Heat Exchanger | Rows × Stages, Fin per Inch | | 3 × 26, 18 | | 3 × 26, 18 | |
| | Fin Spec / Tube | | Multi Slit Fin / ϕ5 Hi-XA Tube | | Multi Slit Fin / ϕ5 Hi-XA Tube | |
| Airflow Rate | H / M / L | cfm | 609 / 498 / 373 | 609 / 498 / 373 | 666 / 553 / 426 | 666 / 553 / 426 |
| | | $m^3$/min | 17.3 / 14.1 / 10.6 | 17.25 / 14.1 / 10.6 | 18.9 / 15.7 / 12.1 | 18.85 / 15.7 / 12.1 |
| Fan Motor | H / M / L | rpm | 1,100 / 936 / 762 | 1,110 / 936 / 762 | 1,153 / 980 / 807 | 1,153 / 980 / 807 |
| | Drive input | A | 1.12 | | 1.24 | |
| Fan | Type | | Sirocco Fan | | Sirocco Fan | |
| External Static Pressure | | $inH_2O$ | Standard 0.20 (0.60 - 0.20) | | Standard 0.20 (0.60 - 0.20) | |
| | | Pa | Standard 50 (150 - 50) | | Standard 50 (150 - 50) | |
| Running Current (Rated) | | A | 0.75 - 0.68 | 0.75 - 0.68 | 0.81 - 0.73 | 0.81 - 0.73 |
| Power Consumption (Rated) | | W | 148 - 148 | 148 - 148 | 164 - 164 | 164 - 164 |
| Power Factor (Rated) | | % | 94.6 - 94.8 | 94.6 - 94.8 | 97.5 - 97.2 | 97.5 - 97.2 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | in. (mm) | 9-5/8 × 39-3/8 × 31-1/2 (245 × 1,000 × 800) | | 9-5/8 × 39-3/8 × 31-1/2 (245 × 1,000 × 800) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 11-9/16 × 47-3/16 × 34-7/8 (293 × 1,199 × 886) | | 11-9/16 × 47-3/16 × 34-7/8 (293 × 1,199 × 886) | |
| Weight (Mass) | | lbs (kg) | 82 (37) | | 82 (37) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 88 (40) | | 88 (40) | |
| Sound Pressure Level | | dB(A) | 35 | 35 | 40 | 40 |
| Remote Controller (Option) | | Wired | BRC1NRV71 | | BRC1NRV71 | |
| | | Wireless | — | | — | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 (ϕ 6.4) | | ϕ1/4 (6.4) | |
| | Gas | in. (mm) | ϕ1/2 (12.7) | | ϕ5/8 (15.9) | |
| | Drain | in. (mm) | I.D. ϕ1 (25) / O.D. ϕ1-1/4 (32) | | I.D. ϕ1 (25) / O.D. ϕ1-1/4 (32) | |
| Drawing No. | | | C: 3D159368 | | C: 3D159368 | |
| Note | | | SL: The quiet fan level of the airflow rate setting.<br>External static pressure is changeable in 13 stages by remote controller.<br>Air filter is not standard accessory, but please mount it in the duct system of the suction side.<br>Select its dust collection efficiency (gravity method) 50% or more. | | | |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = $m^3$/min × 35.3 |

## 3.1.3 Floor Standing Type

| Model | | | FVXV09AVJUW9 | | FVXV09AVJUT9 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| Rated Capacity | | | 9 kBtu/h Class | | 9 kBtu/h Class | |
| Front Panel Color (Mancel No.) | | | White (N9.5) | | Espresso (B-690) | |
| Heat Exchanger | Rows × Stages, Fin per Inch | | 2 × 22, 21 | | 2 × 22, 21 | |
| | Fin Spec / Tube | | Multi Slit Fin / ϕ5 Hi-XB Tube | | Multi Slit Fin / ϕ5 Hi-XB Tube | |
| Airflow Rate | H / M / L / SL | cfm | 297 / 265 / 201 / 173 | 321 / 261 / 219 / 191 | 297 / 265 / 201 / 173 | 321 / 261 / 219 / 191 |
| | | $m^3$/min | 8.4 / 7.5 / 5.7 / 4.9 | 9.1 / 7.4 / 6.2 / 5.4 | 8.4 / 7.5 / 5.7 / 4.9 | 9.1 / 7.4 / 6.2 / 5.4 |
| Air Direction Control | | | Right, Left, Upward, Downward | | Right, Left, Upward, Downward | |
| Air Filter | | | Removable, Washable, Mildew Proof | | Removable, Washable, Mildew Proof | |
| Fan Motor | H / M / L / SL | rpm | 650 / 590 / 460 / 410 | 700 / 580 / 500 / 440 | 650 / 590 / 460 / 410 | 700 / 580 / 500 / 440 |
| | Motor output | Hp | 0.05 | | 0.05 | |
| Fan | Type | | Turbo Fan | | Turbo Fan | |
| Running Current (Rated) | | A | 0.08 - 0.07 | 0.10 - 0.09 | 0.08 - 0.07 | 0.10 - 0.09 |
| Power Consumption (Rated) | | W | 9 - 9 | 11 - 11 | 9 - 9 | 11 - 11 |
| Power Factor (Rated) | | % | 48.0 - 56.3 | 48.0 - 54.2 | 48.0 - 56.3 | 48.0 - 54.2 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | in. (mm) | 23-5/8 × 29-1/2 × 9-3/8 (600 × 750 × 238) | | 23-5/8 × 29-1/2 × 9-3/8 (600 × 750 × 238) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 29-5/16 × 34-7/16 × 133-5/8 (757 × 874 × 346) | | 29-5/16 × 34-7/16 × 133-5/8 (757 × 874 × 346) | |
| Weight (Mass) | | lbs (kg) | 40 (18) | | 40 (18) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 50 (23) | | 50 (23) | |
| Sound Pressure Level (H / M / L / SL) | | dB(A) | 39 / 36 / 30 / 26 | 40 / 35 / 31 / 26 | 39 / 36 / 30 / 26 | 40 / 35 / 31 / 26 |
| Remote Controller | | | ARC466A89 | | ARC466A89 | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Piping Connection | Liquid | in. (mm) | ϕ1/4 (6.4) | | ϕ1/4 (6.4) | |
| | Gas | in. (mm) | ϕ3/8 (9.5) | | ϕ3/8 (9.5) | |
| | Drain | in. (mm) | ϕ13/16 (20) | | ϕ13/16 (20) | |
| Drawing No. | | | C: 3D159397A | | | |
| Note | | | SL: The quiet fan level of the airflow rate setting.<br>When indoor unit is connected with multi-system outdoor unit. Please refer to the specifications of the multi-system outdoor unit to be connected. | | | |

| Model | | | FVXV12AVJUW9 | | FVXV12AVJUT9 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| Rated Capacity | | | 12 kBtu/h Class | | 12 kBtu/h Class | |
| Front Panel Color (Mancel No.) | | | White (N9.5) | | Espresso (B-690) | |
| Heat Exchanger | Rows × Stages, Fin per Inch | | 2 × 22, 21 | | 2 × 22, 21 | |
| | Fin Spec / Tube | | Multi Slit Fin / ϕ5 Hi-XB Tube | | Multi Slit Fin / ϕ5 Hi-XB Tube | |
| Airflow Rate | H / M / L / SL | cfm | 321 / 265 / 201 / 173 | 371 / 300 / 219 / 191 | 321 / 265 / 201 / 173 | 371 / 300 / 219 / 191 |
| | | $m^3$/min | 9.1 / 7.5 / 5.7 / 4.9 | 10.5 / 8.5 / 6.2 / 5.4 | 9.1 / 7.5 / 5.7 / 4.9 | 10.5 / 8.5 / 6.2 / 5.4 |
| Air Direction Control | | | Right, Left, Upward, Downward | | Right, Left, Upward, Downward | |
| Air Filter | | | Removable, Washable, Mildew Proof | | Removable, Washable, Mildew Proof | |
| Fan Motor | H / M / L / SL | rpm | 700 / 590 / 460 / 410 | 800 / 660 / 500 / 440 | 700 / 590 / 460 / 410 | 800 / 660 / 500 / 440 |
| | Motor output | Hp | 0.05 | | 0.05 | |
| Fan | Type | | Sirocco Fan | | Sirocco Fan | |
| Running Current (Rated) | | A | 0.10 - 0.09 | 0.15 - 0.14 | 0.10 - 0.09 | 0.15 - 0.14 |
| Power Consumption (Rated) | | W | 11 - 11 | 16 - 16 | 11 - 11 | 16 - 16 |
| Power Factor (Rated) | | % | 48.0 - 54.2 | 48.0 - 50.7 | 48.0 - 54.2 | 48.0 - 50.7 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | in. (mm) | 23-5/8 × 29-1/2 × 9-3/8 (600 × 750 × 238) | | 23-5/8 × 29-1/2 × 9-3/8 (600 × 750 × 238) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 29-13/16 × 34-7/16 × 13-5/8 (757 × 874 × 346) | | 29-13/16 × 34-7/16 × 13-5/8 (757 × 874 × 346) | |
| Weight (Mass) | | lbs (kg) | 40 (18) | | 40 (18) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 50 (23) | | 50 (23) | |
| Sound Pressure Level (H / M / L / SL) | | dB(A) | 41 / 36 / 30 / 26 | 43 / 38 / 31 / 26 | 41 / 36 / 30 / 26 | 43 / 38 / 31 / 26 |
| Remote Controller | | | ARC466A89 | | ARC466A89 | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Piping Connection | Liquid | in. (mm) | ϕ1/4 (6.4) | | ϕ1/4 (6.4) | |
| | Gas | in. (mm) | ϕ3/8 (9.5) | | ϕ3/8 (9.5) | |
| | Drain | in. (mm) | ϕ13/16 (20) | | ϕ13/16 (20) | |
| Drawing No. | | | C: 3D159398A | | | |
| Note | | | SL: The quiet fan level of the airflow rate setting.<br>When indoor unit is connected with multi-system outdoor unit. Please refer to the specifications of the multi-system outdoor unit to be connected. | | | |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = $m^3$/min × 35.3 |

| Model | | | FVXV15AVJUW9 | | FVXV15AVJUT9 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| Rated Capacity | | | 15 kBtu/h Class | | 15 kBtu/h Class | |
| Front Panel Color (Mancel No.) | | | White (N9.5) | | Espresso (B-690) | |
| Heat Exchanger | Rows × Stages, Fin per Inch | | 2 × 22, 21 | | 2 × 22, 21 | |
| | Fin Spec / Tube | | Multi Slit Fin / ϕ5 Hi-XB Tube | | Multi Slit Fin / ϕ5 Hi-XB Tube | |
| Airflow Rate | H / M / L / SL | cfm | 392 / 311 / 254 / 201 | 417 / 321 / 272 / 215 | 392 / 311 / 254 / 201 | 417 / 321 / 272 / 215 |
| | | $m^3$/min | 11.1 / 8.8 / 7.2 / 5.7 | 11.8 / 9.1 / 7.7 / 6.1 | 11.1 / 8.8 / 7.2 / 5.7 | 11.8 / 9.1 / 7.7 / 6.1 |
| Air Direction Control | | | Right, Left, Upward, Downward | | Right, Left, Upward, Downward | |
| Air Filter | | | Removable, Washable, Mildew Proof | | Removable, Washable, Mildew Proof | |
| Fan Motor | H / M / L / SL | rpm | 840 / 680 / 570 / 460 | 890 / 700 / 600 / 490 | 840 / 680 / 570 / 460 | 890 / 700 / 600 / 490 |
| | Motor output | Hp | 0.05 | | 0.05 | |
| Fan | Type | | Sirocco Fan | | Sirocco Fan | |
| Running Current (Rated) | | A | 0.17 - 0.15 | 0.20 - 0.18 | 0.17 - 0.15 | 0.20 - 0.18 |
| Power Consumption (Rated) | | W | 19 - 19 | 22 - 22 | 19 - 19 | 22 - 22 |
| Power Factor (Rated) | | % | 48.0 - 54.1 | 48.0 - 52.6 | 48.0 - 54.1 | 48.0 - 52.6 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | in. (mm) | 23-5/8 × 29-1/2 × 9-3/8 (600 × 750 × 238) | | 23-5/8 × 29-1/2 × 9-3/8 (600 × 750 × 238) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 29-13/16 × 34-7/16 × 13-5/8 (757 × 874 × 346) | | 29-13/16 × 34-7/16 × 13-5/8 (757 × 874 × 346) | |
| Weight (Mass) | | lbs (kg) | 40 (18) | | 40 (18) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 50 (23) | | 50 (23) | |
| Sound Pressure Level (H / M / L / SL) | | dB(A) | 46 / 40 / 36 / 30 | 46 / 40 / 36 / 30 | 46 / 40 / 36 / 30 | 46 / 40 / 36 / 30 |
| Remote Controller | | | ARC466A89 | | ARC466A89 | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Piping Connection | Liquid | in. (mm) | ϕ1/4 (6.4) | | ϕ1/4 (6.4) | |
| | Gas | in. (mm) | ϕ1/2 (12.7) | | ϕ1/2 (12.7) | |
| | Drain | in. (mm) | ϕ13/16 (20) | | ϕ13/16 (20) | |
| Drawing No. | | | C: 3D159399A | | | |
| Note | | | SL: The quiet fan level of the airflow rate setting.<br>When indoor unit is connected with multi-system outdoor unit. Please refer to the specifications of the multi-system outdoor unit to be connected. | | | |

| Model | | | FVXV18AVJUW9 | | FVXV18AVJUT9 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| Rated Capacity | | | 18 kBtu/h Class | | 18 kBtu/h Class | |
| Front Panel Color (Mancel No.) | | | White (N9.5) | | Espresso (B-690) | |
| Heat Exchanger | Rows × Stages, Fin per Inch | | 2 × 22, 21 | | 2 × 22, 21 | |
| | Fin Spec / Tube | | Multi Slit Fin / ϕ5 Hi-XB Tube | | Multi Slit Fin / ϕ5 Hi-XB Tube | |
| Airflow Rate | H / M / L / SL | cfm | 448 / 332 / 286 / 240 | 455 / 360 / 290 / 240 | 448 / 332 / 286 / 240 | 455 / 360 / 290 / 240 |
| | | $m^3$/min | 12.7 / 9.4 / 8.1 / 6.8 | 12.9 / 10.2 / 8.2 / 6.8 | 12.7 / 9.4 / 8.1 / 6.8 | 12.9 / 10.2 / 8.2 / 6.8 |
| Air Direction Control | | | Right, Left, Upward, Downward | | Right, Left, Upward, Downward | |
| Air Filter | | | Removable, Washable, Mildew Proof | | Removable, Washable, Mildew Proof | |
| Fan Motor | H / M / L / SL | rpm | 950 / 720 / 630 / 540 | 970 / 780 / 640 / 540 | 950 / 720 / 630 / 540 | 970 / 780 / 640 / 540 |
| | Motor output | Hp | 0.05 | | 0.05 | |
| Fan | Type | | Sirocco Fan | | Sirocco Fan | |
| Running Current (Rated) | | A | 0.23 - 0.21 | 0.25 - 0.23 | 0.23 - 0.21 | 0.25 - 0.23 |
| Power Consumption (Rated) | | W | 26 - 26 | 27 - 27 | 26 - 26 | 27 - 27 |
| Power Factor (Rated) | | % | 48.0 - 53.6 | 48.0 - 51.7 | 48.0 - 53.6 | 48.0 - 51.7 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | in. (mm) | 23-5/8 × 29-1/2 × 9-3/8 (600 × 750 × 238) | | 23-5/8 × 29-1/2 × 9-3/8 (600 × 750 × 238) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 29-13/16 × 34-7/16 × 13-5/8 (757 × 874 × 346) | | 29-13/16 × 34-7/16 × 13-5/8 (757 × 874 × 346) | |
| Weight (Mass) | | lbs (kg) | 40 (18) | | 40 (18) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 50 (23) | | 50 (23) | |
| Sound Pressure Level (H / M / L / SL) | | dB(A) | 49 / 42 / 38 / 34 | 49 / 43 / 37 / 33 | 49 / 42 / 38 / 34 | 49 / 43 / 37 / 33 |
| Remote Controller | | | ARC466A89 | | ARC466A89 | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Piping Connection | Liquid | in. (mm) | ϕ1/4 (6.4) | | ϕ1/4 (6.4) | |
| | Gas | in. (mm) | ϕ1/2 (12.7) | | ϕ1/2 (12.7) | |
| | Drain | in. (mm) | ϕ13/16 (20) | | ϕ13/16 (20) | |
| Drawing No. | | | C: 3D159400A | | | |
| Note | | | SL: The quiet fan level of the airflow rate setting.<br>When indoor unit is connected with multi-system outdoor unit. Please refer to the specifications of the multi-system outdoor unit to be connected. | | | |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = $m^3$/min × 35.3 |

## 3.1.4 Air Handling Units

| Model | | | CMXV12AVJUA | CMXV18AVJUA |
|---|---|---|---|---|
| Electrical Data | | Phase | 1 ϕ | 1 ϕ |
| | | Hz, V | 60 Hz, 208 - 230 V | 60 Hz, 208 - 230 V |
| | | Minimum VAC | 197 | 197 |
| | | Maximum VAC | 253 | 253 |
| Rated Capacity | | | 12 kBtu/h Class | 18 kBtu/h Class |
| Airflow Rates | H | cfm ($m^3$/min) | 400 (11.3) | 600 (17) |
| | M | | 340 (9.6) | 510 (14.6) |
| | L | | 280 (7.9) | 420 (11.9) |
| | LL | | 250 (7) | 340 (9.6) |
| Motor | Type | | Variable Speed ECM - Constant Airflow at rated SP | Variable Speed ECM - Constant Airflow at rated SP |
| | Running Current (Rated) | A | 1.2 | 1.5 |
| | Power Consumption (Rated) | W | 249 | 373 |
| | HP | | 1/3 | 1/2 |
| Blower | Dimensions (D × W) | in. (mm) | 10 × 6 (254 × 152.4) | 10 × 6 (254 × 152.4) |
| Temperature Control | | | Microcomputer Control | Microcomputer Control |
| Cabinet Dimensions (H × W × D) | | in. (mm) | 45 × 17.7 × 21 (1143 × 450 × 533) | 45 × 17.7 × 21 (1143 × 450 × 533) |
| Ship Weight | | lbs (kg) | 110 (49.89) | 112 (50.80) |
| Heat Insulation | | | Both Liquid and Gas Pipes | Both Liquid and Gas Pipes |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 (ϕ 6.4) | ϕ 1/4 (ϕ 6.4) |
| | Gas | in. (mm) | ** | ϕ 1/2 (ϕ 12.7) |
| | Drain | in. (mm) | ϕ 3/4 (ϕ 19) | ϕ 3/4 (ϕ 19) |
| Note | | | •Available in horizontal or vertical configurations.<br>•Field-installed electric heater kit available - refer to the installation manual for available options.<br>•A single CMXV* unit can be powered directly by the outdoor unit (OD).<br>•For installations requiring multiple CMXV**AVJUA units connected to one OD, an alternative wiring method must be used. Refer to the wiring diagram for details.<br>**For CMXV12 If the connection is 1/2" (f12.7), the installer must install a 3/8 (f9.5) reducer to reduce the 1/2" (f12.7) suction line. If the connection is 3/8" (f9.5), the reducer is not required and should be disregarded. | |

| Model | | | CMXV24AVJUA |
|---|---|---|---|
| Electrical Data | | Phase | 1 ϕ |
| | | Hz, V | 60 Hz, 208 - 230 V |
| | | Minimum VAC | 197 |
| | | Maximum VAC | 253 |
| Rated Capacity | | | 24 kBtu/h Class |
| Airflow Rates | H | cfm ($m^3$/min) | 800 (22.7) |
| | M | | 680 (19.3) |
| | L | | 560 (15.9) |
| | LL | | 450 (12.7) |
| Motor | Type | | Variable Speed ECM - Constant Airflow at rated SP |
| | Running Current (Rated) | A | 2.4 |
| | Power Consumption (Rated) | W | 373 |
| | HP | | 1/2 |
| Blower | Dimensions (D × W) | in. (mm) | 10 × 6 (254 × 152.4) |
| Temperature Control | | | Microcomputer Control |
| Cabinet Dimensions (H × W × D) | | in. (mm) | 45 × 17.7 × 21 (1143 × 450 × 533) |
| Ship Weight | | lbs (kg) | 115 (52.16) |
| Heat Insulation | | | Both Liquid and Gas Pipes |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 (ϕ 6.4) |
| | Gas | in. (mm) | ϕ 5/8 (ϕ 15.9) |
| | Drain | in. (mm) | ϕ 3/4 (ϕ 19) |
| Note | | | •Available in horizontal or vertical configurations.<br>•Field-installed electric heater kit available - refer to the installation manual for available options.<br>•A single CMXV* unit can be powered directly by the outdoor unit (OD).<br>•For installations requiring multiple CMXV**AVJUA units connected to one OD, an alternative wiring method must be used. Refer to the wiring diagram for details. |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = $m^3$/min × 35.3 |

## 3.1.5 Ceiling Mounted Cassette Type

| Model | | | FFA09AVJU9 | | FFA12AVJU9 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1 ϕ | | 1 ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| Rated Capacity | | | 9 kBtu/h Class | | 12 kBtu/h Class | |
| Decoration Panel (Option) | Model | | BYFQ60C3W2W | | BYFQ60C3W2W | |
| | Color | | White | | White | |
| | Dimensions (H × W × D) | in. (mm) | 1-13/16 × 24-7/16 × 24-7/16 (46 × 620 × 620) | | 1-13/16 × 24-7/16 × 24-7/16 (46 × 620 × 620) | |
| | Weight (Mass) | lbs (kg) | 6.2 (2.8) | | 6.2 (2.8) | |
| Airflow Rates | H | cfm ($m^3$/min) | 378 (10.7) | 399 (11.3) | 406 (11.5) | 427 (12.1) |
| | M | | 339 (9.6) | 357 (10.1) | 353 (10.0) | 371 (10.5) |
| | L | | 268 (7.6) | 282 (8.0) | 268 (7.6) | 282 (8.0) |
| Fan | Type | | Turbo Fan | | Turbo Fan | |
| | Drive Input | A | 0.29 | | 0.31 | |
| | Speed | | 3 Steps | | 3 Steps | |
| Air Direction Control | | | — | | — | |
| Running Current (Rated) | | A | 0.32 - 0.29 | 0.32 - 0.29 | 0.34 - 0.30 | 0.34 - 0.30 |
| Power Consumption (Rated) | | W | 32 - 32 | 32 - 32 | 34 - 34 | 34 - 34 |
| Power Factor (Rated) | | % | 48.1 - 47.6 | 48.1 - 47.6 | 48.1 - 48.9 | 48.1 - 48.9 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | in. (mm) | 10-1/4 × 22-5/8 × 22-5/8 (260 × 575 × 575) | | 10-1/4 × 22-5/8 × 22-5/8 (260 × 575 × 575) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 11 × 27 × 23-1/2 (280 × 686 × 597) | | 11 × 27 × 23-1/2 (280 × 686 × 597) | |
| Weight (Mass) | | lbs (kg) | 36 (16) | | 36 (16) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 40 (18) | | 40 (18) | |
| Sound Pressure Level | H / M / L | dB(A) | 38 / 35 / 29 | 38 / 35 / 29 | 39 / 36 / 30 | 39 / 36 / 30 |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 (ϕ 6.4) | | ϕ 1/4 (ϕ 6.4) | |
| | Gas | in. (mm) | ϕ 3/8 (ϕ 9.5) | | ϕ 3/8 (ϕ 9.5) | |
| | Drain | in. (mm) | VP20 (O.D. ϕ 1-1/32 (ϕ 26)) | | VP20 (O.D. ϕ 1-1/32 (ϕ 26)) | |
| Drawing No. | | | 3D162090 | | 3D162090 | |
| Notes | | | SL: The quiet fan level of the airflow rate setting.<br>When indoor unit is connected with multi-system outdoor unit. Please refer to the specifications of the multi-system outdoor unit to be connected. | | | |

| Model | | | FFA15AVJU9 | | FFA18AVJU9 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1 ϕ | | 1 ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| Rated Capacity | | | 15 kBtu/h Class | | 18 kBtu/h Class | |
| Decoration Panel | Model | | BYFQ60C3W2W | | BYFQ60C3W2W | |
| | Color | | White | | White | |
| | Dimensions (H × W × D) | in. (mm) | 1-13/16 × 24-7/16 × 24-7/16 (46 × 620 × 620) | | 1-13/16 × 24-7/16 × 24-7/16 (46 × 620 × 620) | |
| | Weight (Mass) | lbs (kg) | 6.2 (2.8) | | 6.2 (2.8) | |
| Airflow Rates | H | cfm ($m^3$/min) | 420 (11.9) | 441 (12.5) | 508 (14.4) | 537 (15.2) |
| | M | | 367 (10.4) | 385 (10.9) | 431 (12.2) | 455 (12.9) |
| | L | | 293 (8.3) | 307 (8.7) | 314 (8.9) | 332 (9.4) |
| Fan | Type | | Turbo Fan | | Turbo Fan | |
| | Drive Input | A | 0.32 | | 0.41 | |
| | Speed | | 3 Steps | | 3 Steps | |
| Air Direction Control | | | — | | — | |
| Running Current (Rated) | | A | 0.36 - 0.33 | 0.36 - 0.33 | 0.46 - 0.41 | 0.46 - 0.41 |
| Power Consumption (Rated) | | W | 35 - 35 | 35 - 35 | 45 - 45 | 45 - 45 |
| Power Factor (Rated) | | % | 46.4 - 46.8 | 46.4 - 46.8 | 47.2 - 47.2 | 47.2 - 47.2 |
| Temperature Control | | | Microcomputer Control | | Microcomputer Control | |
| Dimensions (H × W × D) | | in. (mm) | 10-1/4 × 22-5/8 × 22-5/8 (260 × 575 × 575) | | 10-1/4 × 22-5/8 × 22-5/8 (260 × 575 × 575) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 11 × 27 × 23-1/2 (280 × 686 × 597) | | 11 × 27 × 23-1/2 (280 × 686 × 597) | |
| Weight (Mass) | | lbs (kg) | 36 (16) | | 36 (16) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 40 (18) | | 40 (18) | |
| Sound Pressure Level | H / M / L | dB(A) | 40 / 37 / 31 | 40 / 37 / 31 | 44 / 40 / 32 | 44 / 40 / 32 |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 (ϕ 6.4) | | ϕ 1/4 (ϕ 6.4) | |
| | Gas | in. (mm) | ϕ 1/2 (ϕ 12.7) | | ϕ 1/2 (ϕ 12.7) | |
| | Drain | in. (mm) | VP20 (O.D. ϕ 1-1/32 (ϕ 26)) | | VP20 (O.D. ϕ 1-1/32 (ϕ 26)) | |
| Drawing No. | | | 3D162091 | | 3D162091 | |
| Notes | | | SL: The quiet fan level of the airflow rate setting.<br>When indoor unit is connected with multi-system outdoor unit. Please refer to the specifications of the multi-system outdoor unit to be connected. | | | |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = $m^3$/min × 35.3 |

## 3.2 Outdoor unit

| Model | | | 2MXM18AVJU9 | | 2MXM18AVJU8 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| COP@5°F | | W/W | — | 1.8 (Non-Ducted) | — | 1.8 (Non-Ducted)<br>1.8 (Ducted) |
| EER2 | | Btu/W·h | 12.0 (Non-Ducted) | — | 12.0 (Non-Ducted)<br>10.0 (Ducted) | — |
| SEER2 | | | 21.0 (Non-Ducted) | — | 21.0 (Non-Ducted)<br>16.0 (Ducted) | — |
| HSPF2 | | | — | 10.0 (Non-Ducted) | — | 10.0 (Non-Ducted)<br>8.5 (Ducted) |
| Casing Color | | | Ivory White | | Ivory White | |
| Compressor | Type | | Hermetically Sealed Swing Type | | Hermetically Sealed Swing Type | |
| | Model | | 2Y147BKBX1A | | 2Y147BKBX1A | |
| | Motor Output | W | 1,300 | | 1,300 | |
| Refrigerant Oil | Model | | FW68DA | | FW68DA | |
| | Charge | fl oz (L) | 22.0 (0.65) | | 22.0 (0.65) | |
| Refrigerant | Type | | R-32 | | R-32 | |
| | Charge | lbs (kg) | 3.3 (1.50) | | 3.3 (1.50) | |
| Airflow Rates | | cfm | 2,112 | 2,140 | 2,112 | 2,140 |
| | | m³/min | 59.8 | 60.6 | 59.8 | 60.6 |
| Fan | Type | | Propeller | | Propeller | |
| | Motor Output | W | 150 | | 150 | |
| | Running Current | A | 0.31 | 0.33 | 0.31 | 0.33 |
| | Power Consumption | W | 65.4 | 67.7 | 65.4 | 67.7 |
| Starting Current | | A | 14.0 | | 14.0 | |
| Dimensions (H × W × D) | | in. (mm) | 29-1/2 × 34-1/4 × 12-5/8 (750 × 870 × 320) | | 29-1/2 × 34-1/4 × 12-5/8 (750 × 870 × 320) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 32-1/16 × 40-5/16 × 16 (814 × 1,024 × 406) | | 32-1/16 × 40-5/16 × 16 (814 × 1,024 × 406) | |
| Weight (Mass) | | lbs (kg) | 127 (58) | | 127 (58) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 135 (61) | | 135 (61) | |
| Sound Pressure Level | | dB(A) | 52 | 54 | 52 | 54 |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 × 2 (ϕ 6.4 × 2) | | ϕ 1/4 × 2 (ϕ 6.4 × 2) | |
| | Gas | in. (mm) | ϕ 3/8 × 1, ϕ 1/2 × 1 (ϕ 9.5 × 1, ϕ 12.7 × 1) | | ϕ 3/8 × 1, ϕ 1/2 × 1 (ϕ 9.5 × 1, ϕ 12.7 × 1) | |
| | Drain | in. (mm) | I.D. ϕ 5/8 (ϕ 15.9) | | I.D. ϕ 5/8 (ϕ 15.9) | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| No. of Wiring Connections | | | 3 for Power Supply, 4 for Interunit Wiring (Including Ground Wiring) | | 3 for Power Supply, 4 for Interunit Wiring (Including Ground Wiring) | |
| Max. Interunit Piping Length | | ft (m) | 164 (50) (for Total of Each Room) | | 164 (50) (for Total of Each Room) | |
| | | ft (m) | 82 (25) (for One Room) | | 82 (25) (for One Room) | |
| Amount of Additional Charge | | oz/ft (g/m) | 0.22 (20) (98-3/8 ft (30 m) or more) | | 0.22 (20) (98-3/8 ft (30 m) or more) | |
| Max. Installation Height Difference | | ft (m) | 49-1/4 (15) (Between Indoor Unit and Outdoor Unit) | | 49-1/4 (15) (Between Indoor Unit and Outdoor Unit) | |
| | | ft (m) | 24-5/8 (7.5) (Between Indoor Units) | | 24-5/8 (7.5) (Between Indoor Units) | |
| Conditions Based on | | | Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) | Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) | Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) | Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) |
| | | | Piping length: 25 ft (7.5 m) | | Piping length: 25 ft (7.5 m) | |
| Drawing No. | | | C: 3D151521A | | C: 3D160891 | |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

| Model | | | 3MXM24AVJU9 | | 3MXM24AVJU8 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| COP@5°F | | W/W | — | 1.8 (Non-Ducted) | — | 1.8 (Non-Ducted)<br>1.76 (Ducted) |
| EER2 | | Btu/W·h | 12.0 (Non-Ducted) | — | 12.0 (Non-Ducted)<br>9.8 (Ducted) | — |
| SEER2 | | | 21.0 (Non-Ducted) | — | 21.0 (Non-Ducted)<br>16.0 (Ducted) | — |
| HSPF2 | | | — | 10.0 (Non-Ducted) | — | 10.0 (Non-Ducted)<br>8.5 (Ducted) |
| Casing Color | | | Ivory White | | Ivory White | |
| Compressor | Type | | Hermetically Sealed Swing Type | | Hermetically Sealed Swing Type | |
| | Model | | 2Y260BPAX1A | | 2Y260BPAX1A | |
| | Motor Output | W | 2,400 | | 2,400 | |
| Refrigerant Oil | Model | | FW68DA | | FW68DA | |
| | Charge | fl oz (L) | 30.4 (0.9) | | 30.4 (0.9) | |
| Refrigerant | Type | | R-32 | | R-32 | |
| | Charge | lbs (kg) | 4.9 (2.2) | | 4.9 (2.2) | |
| Airflow Rates | | cfm | 2,055 | 2,140 | 2,055 | 2,140 |
| | | m³/min | 58.2 | 60.6 | 58.2 | 60.6 |
| Fan | Type | | Propeller | | Propeller | |
| | Motor Output | W | 150 | | 150 | |
| | Running Current | A | 0.29 | 0.33 | 0.29 | 0.33 |
| | Power Consumption | W | 61.0 | 67.7 | 61.0 | 67.7 |
| Starting Current | | A | 17.0 | | 17.0 | |
| Dimensions (H × W × D) | | in. (mm) | 29-1/2 × 34-1/4 × 12-5/8 (750 × 870 × 320) | | 29-1/2 × 34-1/4 × 12-5/8 (750 × 870 × 320) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 32-1/16 × 40-5/16 × 16 (814 × 1,024 × 406) | | 32-1/16 × 40-5/16 × 16 (814 × 1,024 × 406) | |
| Weight (Mass) | | lbs (kg) | 140 (64) | | 140 (64) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 148 (67) | | 148 (67) | |
| Sound Pressure Level | | dB(A) | 52 | 54 | 52 | 54 |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 × 3 (ϕ 6.4 × 3) | | ϕ 1/4 × 3 (ϕ 6.4 × 3) | |
| | Gas | in. (mm) | ϕ 3/8 × 1, ϕ 1/2 × 2 (ϕ 9.5 × 1, ϕ 12.7 × 2) | | ϕ 3/8 × 1, ϕ 1/2 × 2 (ϕ 9.5 × 1, ϕ 12.7 × 2) | |
| | Drain | in. (mm) | I.D. ϕ 5/8 (ϕ 15.9) | | I.D. ϕ 5/8 (ϕ 15.9) | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| No. of Wiring Connections | | | 3 for Power Supply, 4 for Interunit Wiring (Including Ground Wiring) | | 3 for Power Supply, 4 for Interunit Wiring (Including Ground Wiring) | |
| Max. Interunit Piping Length | | ft (m) | 230 (70) (for Total of Each Room) | | 230 (70) (for Total of Each Room) | |
| | | ft (m) | 82 (25) (for One Room) | | 82 (25) (for One Room) | |
| Amount of Additional Charge | | oz/ft (g/m) | 0.22 (20) (131-1/4 ft (40 m) or more) | | 0.22 (20) (131-1/4 ft (40 m) or more) | |
| Max. Installation Height Difference | | ft (m) | 49-1/4 (15) (Between Indoor Unit and Outdoor Unit) | | 49-1/4 (15) (Between Indoor Unit and Outdoor Unit) | |
| | | ft (m) | 24-5/8 (7.5) (Between Indoor Units) | | 24-5/8 (7.5) (Between Indoor Units) | |
| Conditions Based on | | | Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) | Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) | Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) | Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) |
| | | | Piping length: 25 ft (7.5 m) | | Piping length: 25 ft (7.5 m) | |
| Drawing No. | | | C: 3D152057A | | C: 3D160892 | |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

| Model | | | 4MXM36AVJU9 | | 4MXM36AVJU8 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| COP@5°F | | W/W | — | 1.8 (Non-Ducted) | — | 1.8 (Non-Ducted)<br>1.8 (Ducted) |
| EER2 | | Btu/W·h | 10.0 (Non-Ducted) | — | 10.0 (Non-Ducted)<br>8.0 (Ducted) | — |
| SEER2 | | | 20.0 (Non-Ducted) | — | 20.0 (Non-Ducted)<br>15.2 (Ducted) | — |
| HSPF2 | | | — | 9.5 (Non-Ducted) | — | 9.5 (Non-Ducted)<br>8.1 (Ducted) |
| Casing Color | | | Ivory White | | Ivory White | |
| Compressor | Type | | Hermetically Sealed Swing Type | | Hermetically Sealed Swing Type | |
| | Model | | 2Y260BPAX1A | | 2Y260BPAX1A | |
| | Motor Output | W | 2,400 | | 2,400 | |
| Refrigerant Oil | Model | | FW68DA | | FW68DA | |
| | Charge | fl oz (L) | 30.4 (0.9) | | 30.4 (0.9) | |
| Refrigerant | Type | | R-32 | | R-32 | |
| | Charge | lbs (kg) | 4.9 (2.2) | | 4.9 (2.2) | |
| Airflow Rates | | cfm | 2,402 | 2,518 | 2,402 | 2,518 |
| | | m³/min | 68.0 | 71.3 | 68.0 | 71.3 |
| Fan | Type | | Propeller | | Propeller | |
| | Motor Output | W | 150 | | 150 | |
| | Running Current | A | 0.44 | 0.49 | 0.44 | 0.49 |
| | Power Consumption | W | 90.9 | 102.7 | 90.9 | 102.7 |
| Starting Current | | A | 18.5 | | 18.5 | |
| Dimensions (H × W × D) | | in. (mm) | 29-1/2 × 34-1/4 × 12-5/8 (750 × 870 × 320) | | 29-1/2 × 34-1/4 × 12-5/8 (750 × 870 × 320) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 32-1/16 × 40-5/16 × 16 (814 × 1,024 × 406) | | 32-1/16 × 40-5/16 × 16 (814 × 1,024 × 406) | |
| Weight (Mass) | | lbs (kg) | 142 (65) | | 142 (65) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 150 (68) | | 150 (68) | |
| Sound Pressure Level | | dB(A) | 56 | 60 | 56 | 60 |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 × 4 (ϕ 6.4 × 4) | | ϕ 1/4 × 4 (ϕ 6.4 × 4) | |
| | Gas | in. (mm) | ϕ 3/8 × 1, ϕ 1/2 × 2, ϕ 5/8 × 1 (ϕ 9.5 × 1, ϕ 12.7 × 2, ϕ 15.9 × 1) | | ϕ 3/8 × 1, ϕ 1/2 × 2, ϕ 5/8 × 1 (ϕ 9.5 × 1, ϕ 12.7 × 2, ϕ 15.9 × 1) | |
| | Drain | in. (mm) | I.D. ϕ 5/8 (ϕ 15.9) | | I.D. ϕ 5/8 (ϕ 15.9) | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| No. of Wiring Connections | | | 3 for Power Supply, 4 for Interunit Wiring (Including Ground Wiring) | | 3 for Power Supply, 4 for Interunit Wiring (Including Ground Wiring) | |
| Max. Interunit Piping Length | | ft (m) | 230 (70) (for Total of Each Room) | | 230 (70) (for Total of Each Room) | |
| | | ft (m) | 82 (25) (for One Room) | | 82 (25) (for One Room) | |
| Amount of Additional Charge | | oz/ft (g/m) | 0.22 (20) (131-1/4 ft (40 m) or more) | | 0.22 (20) (131-1/4 ft (40 m) or more) | |
| Max. Installation Height Difference | | ft (m) | 49-1/4 (15) (Between Indoor Unit and Outdoor Unit) | | 49-1/4 (15) (Between Indoor Unit and Outdoor Unit) | |
| | | ft (m) | 24-5/8 (7.5) (Between Indoor Units) | | 24-5/8 (7.5) (Between Indoor Units) | |
| Conditions Based on | | | Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) | Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) | Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) | Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) |
| | | | Piping length: 25 ft (7.5 m) | | Piping length: 25 ft (7.5 m) | |
| Drawing No. | | | C: 3D151522A | | C: 3D160893 | |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

| Model | | | 5MXM48AVJU9<br>5MXM48AVJU8 | |
|---|---|---|---|---|
| | | | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | |
| COP@5°F | | W/W | — | 1.9 (Non-Ducted)<br>1.76 (Ducted) |
| EER2 | | Btu/W·h | 10.0 (Non-Ducted)<br>8.2 (Ducted) | — |
| SEER2 | | | 20.0 (Non-Ducted)<br>14.5 (Ducted) | — |
| HSPF2 | | | — | 9.5 (Non-Ducted)<br>8.2 (Ducted) |
| Casing Color | | | Ivory White | |
| Compressor | Type | | Hermetically Sealed Swing Type | |
| | Model | | 2Y350BPCX2A | |
| | Motor Output | W | 3,300 | |
| Refrigerant Oil | Model | | FW68DE | |
| | Charge | fl oz (L) | 51.4 (1.52) | |
| Refrigerant | Type | | R-32 | |
| | Charge | lbs (kg) | 6.94 (3.15) | |
| Airflow Rates | | cfm | 3,137 | 3,137 |
| | | m³/min | 88.7 | 88.7 |
| Fan | Type | | Propeller | |
| | Motor Output | W | 192 | |
| | Running Current | A | 0.48 | 0.48 |
| | Power Consumption | W | 99.5 | 99.5 |
| Starting Current | | A | 27.0 | |
| Dimensions (H × W × D) | | in. (mm) | 34-1/4 × 43-5/16 × 18-1/8 (870 × 1,100 × 460) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 39-15/16 × 46-7/8 × 21-15/16 (1,014 × 1,190 × 558) | |
| Weight (Mass) | | lbs (kg) | 219 (100) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 238 (108) | |
| Sound Pressure Level | | dB(A) | 55 | 57 |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 × 5 (ϕ 6.4 × 5) | |
| | Gas | in. (mm) | ϕ 3/8 × 1, ϕ 1/2 × 2, ϕ 5/8 × 2 (ϕ 9.5 × 1, ϕ 12.7 × 2, ϕ 15.9 × 2) | |
| | Drain | in. (mm) | I.D. ϕ 1 (ϕ 25) | |
| Heat Insulation | | | Both Liquid and Gas Pipes | |
| No. of Wiring Connections | | | 3 for Power Supply, 4 for Interunit Wiring (Including Ground Wiring) | |
| Max. Interunit Piping Length | | ft (m) | 262 (80) (for Total of Each Room) | |
| | | ft (m) | 98 (30) (for One Room) | |
| Amount of Additional Charge | | oz/ft (g/m) | 0.22 (20) (131-1/4 ft (40 m) or more) | |
| Max. Installation Height Difference | | ft (m) | 49-1/4 (15) (Between Indoor Unit and Outdoor Unit) | |
| | | ft (m) | 24-5/8 (7.5) (Between Indoor Units) | |
| Conditions Based on | | | Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) | Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) |
| | | | Piping length: 25 ft (7.5 m) | |
| Drawing No. | | | C: 3D158480<br>C: 3D160948 | |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

| Model | | | 2MXT18AVJU9 | | 2MXT18AVJU8 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| COP@5°F | | W/W | — | 1.8 (Non-Ducted) | — | 1.8 (Non-Ducted)<br>1.44 (Ducted) |
| EER2 | | Btu/W·h | 12.0 (Non-Ducted) | — | 12.0 (Non-Ducted)<br>10.0 (Ducted) | — |
| SEER2 | | | 21.0 (Non-Ducted) | — | 21.0 (Non-Ducted)<br>16.0 (Ducted) | — |
| HSPF2 | | | — | 10.0 (Non-Ducted) | — | 10.0 (Non-Ducted)<br>8.2 (Ducted) |
| Casing Color | | | Ivory White | | Ivory White | |
| Compressor | Type | | Hermetically Sealed Swing Type | | Hermetically Sealed Swing Type | |
| | Model | | 2Y260BPAX1A | | 2Y260BPAX1A | |
| | Motor Output | W | 2,400 | | 2,400 | |
| Refrigerant Oil | Model | | FW68DA | | FW68DA | |
| | Charge | fl oz (L) | 30.4 (0.9) | | 30.4 (0.9) | |
| Refrigerant | Type | | R-32 | | R-32 | |
| | Charge | lbs (kg) | 4.9 (2.2) | | 4.9 (2.2) | |
| Airflow Rates | | cfm | 2,112 | 2,140 | 2,112 | 2,140 |
| | | m³/min | 59.8 | 60.6 | 59.8 | 60.6 |
| Fan | Type | | Propeller | | Propeller | |
| | Motor Output | W | 150 | | 150 | |
| | Running Current | A | 0.31 | 0.33 | 0.31 | 0.33 |
| | Power Consumption | W | 65.4 | 67.7 | 65.4 | 67.7 |
| Starting Current | | A | 17.0 | | 17.0 | |
| Dimensions (H × W × D) | | in. (mm) | 29-1/2 × 34-1/4 × 12-5/8 (750 × 870 × 320) | | 29-1/2 × 34-1/4 × 12-5/8 (750 × 870 × 320) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 32-1/16 × 40-5/16 × 16 (814 × 1,024 × 406) | | 32-1/16 × 40-5/16 × 16 (814 × 1,024 × 406) | |
| Weight (Mass) | | lbs (kg) | 139 (63) | | 139 (63) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 147 (67) | | 147 (67) | |
| Sound Pressure Level | | dB(A) | 52 | 54 | 52 | 54 |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 × 2 (ϕ 6.4 × 2) | | ϕ 1/4 × 2 (ϕ 6.4 × 2) | |
| | Gas | in. (mm) | ϕ 3/8 × 1, ϕ 1/2 × 1 (ϕ 9.5 × 1, ϕ 12.7 × 1) | | ϕ 3/8 × 1, ϕ 1/2 × 1 (ϕ 9.5 × 1, ϕ 12.7 × 1) | |
| | Drain | in. (mm) | I.D. ϕ 5/8 (ϕ 15.9) | | I.D. ϕ 5/8 (ϕ 15.9) | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| No. of Wiring Connections | | | 3 for Power Supply, 4 for Interunit Wiring (Including Ground Wiring) | | 3 for Power Supply, 4 for Interunit Wiring (Including Ground Wiring) | |
| Max. Interunit Piping Length | | ft (m) | 164 (50) (for Total of Each Room) | | 164 (50) (for Total of Each Room) | |
| | | ft (m) | 82 (25) (for One Room) | | 82 (25) (for One Room) | |
| Amount of Additional Charge | | oz/ft (g/m) | 0.22 (20) (98-3/8 ft (30 m) or more) | | 0.22 (20) (98-3/8 ft (30 m) or more) | |
| Max. Installation Height Difference | | ft (m) | 49-1/4 (15) (Between Indoor Unit and Outdoor Unit) | | 49-1/4 (15) (Between Indoor Unit and Outdoor Unit) | |
| | | ft (m) | 24-5/8 (7.5) (Between Indoor Units) | | 24-5/8 (7.5) (Between Indoor Units) | |
| Conditions Based on | | | Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) | Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) | Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) | Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) |
| | | | Piping length: 25 ft (7.5 m) | | Piping length: 25 ft (7.5 m) | |
| Drawing No. | | | C: 3D152058A | | C: 3D160894 | |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

| Model | | | 2MXTH18AVJU9 | | 2MXTH18AVJU8 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| COP@5°F | | W/W | — | 1.8 (Non-Ducted) | — | 1.8 (Non-Ducted)<br>1.44 (Ducted) |
| EER2 | | Btu/W·h | 12.0 (Non-Ducted) | — | 12.0 (Non-Ducted)<br>10.0 (Ducted) | — |
| SEER2 | | | 21.0 (Non-Ducted) | — | 21.0 (Non-Ducted)<br>16.0 (Ducted) | — |
| HSPF2 | | | — | 10.0 (Non-Ducted) | — | 10.0 (Non-Ducted)<br>8.2 (Ducted) |
| Casing Color | | | Ivory White | | Ivory White | |
| Compressor | Type | | Hermetically Sealed Swing Type | | Hermetically Sealed Swing Type | |
| | Model | | 2Y260BPAX1A | | 2Y260BPAX1A | |
| | Motor Output | W | 2,400 | | 2,400 | |
| Refrigerant Oil | Model | | FW68DA | | FW68DA | |
| | Charge | fl oz (L) | 30.4 (0.9) | | 30.4 (0.9) | |
| Refrigerant | Type | | R-32 | | R-32 | |
| | Charge | lbs (kg) | 4.9 (2.2) | | 4.9 (2.2) | |
| Airflow Rates | | cfm | 2,112 | 2,140 | 2,112 | 2,140 |
| | | m³/min | 59.8 | 60.6 | 59.8 | 60.6 |
| Fan | Type | | Propeller | | Propeller | |
| | Motor Output | W | 150 | | 150 | |
| | Running Current | A | 0.31 | 0.33 | 0.31 | 0.33 |
| | Power Consumption | W | 65.4 | 67.7 | 65.4 | 67.7 |
| Starting Current | | A | 17.0 | | 17.0 | |
| Dimensions (H × W × D) | | in. (mm) | 29-1/2 × 34-1/4 × 12-5/8 (750 × 870 × 320) | | 29-1/2 × 34-1/4 × 12-5/8 (750 × 870 × 320) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 32-1/16 × 40-5/16 × 16 (814 × 1,024 × 406) | | 32-1/16 × 40-5/16 × 16 (814 × 1,024 × 406) | |
| Weight (Mass) | | lbs (kg) | 140 (64) | | 140 (64) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 148 (67) | | 148 (67) | |
| Sound Pressure Level | | dB(A) | 52 | 54 | 52 | 54 |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 × 2 (ϕ 6.4 × 2) | | ϕ 1/4 × 2 (ϕ 6.4 × 2) | |
| | Gas | in. (mm) | ϕ 3/8 × 1, ϕ 1/2 × 1 (ϕ 9.5 × 1, ϕ 12.7 × 1) | | ϕ 3/8 × 1, ϕ 1/2 × 1 (ϕ 9.5 × 1, ϕ 12.7 × 1) | |
| | Drain | in. (mm) | I.D. ϕ 5/8 (ϕ 15.9) | | I.D. ϕ 5/8 (ϕ 15.9) | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| No. of Wiring Connections | | | 3 for Power Supply, 4 for Interunit Wiring (Including Ground Wiring) | | 3 for Power Supply, 4 for Interunit Wiring (Including Ground Wiring) | |
| Max. Interunit Piping Length | | ft (m) | 164 (50) (for Total of Each Room) | | 164 (50) (for Total of Each Room) | |
| | | ft (m) | 82 (25) (for One Room) | | 82 (25) (for One Room) | |
| Amount of Additional Charge | | oz/ft (g/m) | 0.22 (20) (98-3/8 ft (30 m) or more) | | 0.22 (20) (98-3/8 ft (30 m) or more) | |
| Max. Installation Height Difference | | ft (m) | 49-1/4 (15) (Between Indoor Unit and Outdoor Unit) | | 49-1/4 (15) (Between Indoor Unit and Outdoor Unit) | |
| | | ft (m) | 24-5/8 (7.5) (Between Indoor Units) | | 24-5/8 (7.5) (Between Indoor Units) | |
| Conditions Based on | | | Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) | Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) | Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) | Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) |
| | | | Piping length: 25 ft (7.5 m) | | Piping length: 25 ft (7.5 m) | |
| Drawing No. | | | C: 3D151523A | | C: 3D160895 | |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

| Model | | | 3MXT24AVJU9<br>3MXT24AVJU8 | | 3MXTH24AVJU9<br>3MXTH24AVJU8 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| COP@5°F | | W/W | — | 1.9 (Non-Ducted)<br>1.8 (Ducted) | — | 1.8 (Non-Ducted)<br>1.8 (Ducted) |
| EER2 | | Btu/W·h | 12.5 (Non-Ducted)<br>11.0 (Ducted) | — | 12.5 (Non-Ducted)<br>11.0 (Ducted) | — |
| SEER2 | | | 19.0 (Non-Ducted)<br>16.0 (Ducted) | — | 19.0 (Non-Ducted)<br>16.0 (Ducted) | — |
| HSPF2 | | | — | 9.5 (Non-Ducted)<br>8.3 (Ducted) | — | 9.5 (Non-Ducted)<br>8.3 (Ducted) |
| Casing Color | | | Ivory White | | Ivory White | |
| Compressor | Type | | Hermetically Sealed Swing Type | | Hermetically Sealed Swing Type | |
| | Model | | 2Y350BPCX2A | | 2Y350BPCX2A | |
| | Motor Output | W | 3,300 | | 3,300 | |
| Refrigerant Oil | Model | | FW68DE | | FW68DE | |
| | Charge | fl oz (L) | 51.4 (1.52) | | 51.4 (1.52) | |
| Refrigerant | Type | | R-32 | | R-32 | |
| | Charge | lbs (kg) | 6.94 (3.15) | | 6.94 (3.15) | |
| Airflow Rates | | cfm | 3,137 | 3,137 | 3,137 | 3,137 |
| | | m³/min | 88.7 | 88.7 | 88.7 | 88.7 |
| Fan | Type | | Propeller | | Propeller | |
| | Motor Output | W | 192 | | 192 | |
| | Running Current | A | 0.48 | 0.48 | 0.48 | 0.48 |
| | Power Consumption | W | 99.5 | 99.5 | 99.5 | 99.5 |
| Starting Current | | A | 25.0 | | 25.0 | |
| Dimensions (H × W × D) | | in. (mm) | 34-1/4 × 43-5/16 × 18-1/8 (870 × 1,100 × 460) | | 34-1/4 × 43-5/16 × 18-1/8 (870 × 1,100 × 460) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 39-15/16 × 46-7/8 × 21-15/16 (1,014 × 1,190 × 558) | | 39-15/16 × 46-7/8 × 21-15/16 (1,014 × 1,190 × 558) | |
| Weight (Mass) | | lbs (kg) | 213 (97) | | 215 (97) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 231 (105) | | 233 (106) | |
| Sound Pressure Level | | dB(A) | 55 | 57 | 55 | 57 |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 × 3 (ϕ 6.4 × 3) | | ϕ 1/4 × 3 (ϕ 6.4 × 3) | |
| | Gas | in. (mm) | ϕ 3/8 × 1, ϕ 1/2 × 2 (ϕ 9.5 × 1, ϕ 12.7 × 2) | | ϕ 3/8 × 1, ϕ 1/2 × 2 (ϕ 9.5 × 1, ϕ 12.7 × 2) | |
| | Drain | in. (mm) | I.D. ϕ 1 (ϕ 25) | | I.D. ϕ 1 (ϕ 25) | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| No. of Wiring Connections | | | 3 for Power Supply, 4 for Interunit Wiring (Including Ground Wiring) | | 3 for Power Supply, 4 for Interunit Wiring (Including Ground Wiring) | |
| Max. Interunit Piping Length | | ft (m) | 230 (70) (for Total of Each Room) | | 230 (70) (for Total of Each Room) | |
| | | ft (m) | 82 (25) (for One Room) | | 82 (25) (for One Room) | |
| Amount of Additional Charge | | oz/ft (g/m) | 0.22 (20) (131-1/4 ft (40 m) or more) | | 0.22 (20) (131-1/4 ft (40 m) or more) | |
| Max. Installation Height Difference | | ft (m) | 49-1/4 (15) (Between Indoor Unit and Outdoor Unit) | | 49-1/4 (15) (Between Indoor Unit and Outdoor Unit) | |
| | | ft (m) | 24-5/8 (7.5) (Between Indoor Units) | | 24-5/8 (7.5) (Between Indoor Units) | |
| Conditions Based on | | | Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) | Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) | Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) | Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) |
| | | | Piping length: 25 ft (7.5 m) | | Piping length: 25 ft (7.5 m) | |
| Drawing No. | | | C: 3D158476<br>C: 3D160942 | | C: 3D158477<br>C: 3D160943 | |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

| Model | | | 4MXT36AVJU9 4MXT36AVJU8 | | 4MXTH36AVJU9 4MXTH36AVJU8 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| COP@5°F | | W/W | — | 1.8 (Non-Ducted)<br>1.8 (Ducted) | — | 1.8 (Non-Ducted)<br>1.8 (Ducted) |
| EER2 | | Btu/W·h | 12.0 (Non-Ducted)<br>9.8 (Ducted) | — | 12.0 (Non-Ducted)<br>9.8 (Ducted) | — |
| SEER2 | | | 20.0 (Non-Ducted)<br>16.0 (Ducted) | — | 20.0 (Non-Ducted)<br>16.0 (Ducted) | — |
| HSPF2 | | | — | 9.5 (Non-Ducted)<br>8.6 (Ducted) | — | 9.5 (Non-Ducted)<br>8.6 (Ducted) |
| Casing Color | | | Ivory White | | Ivory White | |
| Compressor | Type | | Hermetically Sealed Swing Type | | Hermetically Sealed Swing Type | |
| | Model | | 2Y350BPCX2A | | 2Y350BPCX2A | |
| | Motor Output | W | 3,300 | | 3,300 | |
| Refrigerant Oil | Model | | FW68DE | | FW68DE | |
| | Charge | fl oz (L) | 51.4 (1.52) | | 51.4 (1.52) | |
| Refrigerant | Type | | R-32 | | R-32 | |
| | Charge | lbs (kg) | 6.94 (3.15) | | 6.94 (3.15) | |
| Airflow Rates | | cfm | 3,137 | 3,137 | 3,137 | 3,137 |
| | | m³/min | 88.7 | 88.7 | 88.7 | 88.7 |
| Fan | Type | | Propeller | | Propeller | |
| | Motor Output | W | 192 | | 192 | |
| | Running Current | A | 0.48 | 0.48 | 0.48 | 0.48 |
| | Power Consumption | W | 99.5 | 99.5 | 99.5 | 99.5 |
| Starting Current | | A | 27.0 | | 27.0 | |
| Dimensions (H × W × D) | | in. (mm) | 34-1/4 × 43-5/16 × 18-1/8 (870 × 1,100 × 460) | | 34-1/4 × 43-5/16 × 18-1/8 (870 × 1,100 × 460) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 39-15/16 × 46-7/8 × 21-15/16 (1,014 × 1,190 × 558) | | 39-15/16 × 46-7/8 × 21-15/16 (1,014 × 1,190 × 558) | |
| Weight (Mass) | | lbs (kg) | 216 (98) | | 218 (99) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 234 (106) | | 236 (107) | |
| Sound Pressure Level | | dB(A) | 55 | 57 | 55 | 57 |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 × 4 (ϕ 6.4 × 4) | | ϕ 1/4 × 4 (ϕ 6.4 × 4) | |
| | Gas | in. (mm) | ϕ 3/8 × 1, ϕ 1/2 × 2, ϕ 5/8 × 1 (ϕ 9.5 × 1, ϕ 12.7 × 2, ϕ 15.9 × 1) | | ϕ 3/8 × 1, ϕ 1/2 × 2, ϕ 5/8 × 1 (ϕ 9.5 × 1, ϕ 12.7 × 2, ϕ 15.9 × 1) | |
| | Drain | in. (mm) | I.D. ϕ 1 (ϕ 25) | | I.D. ϕ 1 (ϕ 25) | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| No. of Wiring Connections | | | 3 for Power Supply, 4 for Interunit Wiring (Including Ground Wiring) | | 3 for Power Supply, 4 for Interunit Wiring (Including Ground Wiring) | |
| Max. Interunit Piping Length | | ft (m) | 230 (70) (for Total of Each Room) | | 230 (70) (for Total of Each Room) | |
| | | ft (m) | 98 (30) (for One Room) | | 98 (30) (for One Room) | |
| Amount of Additional Charge | | oz/ft (g/m) | 0.22 (20) (131-1/4 ft (40 m) or more) | | 0.22 (20) (131-1/4 ft (40 m) or more) | |
| Max. Installation Height Difference | | ft (m) | 49-1/4 (15) (Between Indoor Unit and Outdoor Unit) | | 49-1/4 (15) (Between Indoor Unit and Outdoor Unit) | |
| | | ft (m) | 24-5/8 (7.5) (Between Indoor Units) | | 24-5/8 (7.5) (Between Indoor Units) | |
| Conditions Based on | | | Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) | Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) | Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) | Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) |
| | | | Piping length: 25 ft (7.5 m) | | Piping length: 25 ft (7.5 m) | |
| Drawing No. | | | C: 3D158478<br>C: 3D160944 | | C: 3D158479<br>C: 3D160945 | |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

| Model | | | 5MXT40AVJU9<br>5MXT40AVJU8 | | 5MXTH40AVJU9<br>5MXTH40AVJU8 | |
|---|---|---|---|---|---|---|
| | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | Phase | 1ϕ | | 1ϕ | |
| | | Hz, V | 60 Hz, 208 - 230 V | | 60 Hz, 208 - 230 V | |
| COP@5°F | | W/W | — | 1.9 (Non-Ducted)<br>1.8 (Ducted) | — | 1.9 (Non-Ducted)<br>1.8 (Ducted) |
| EER2 | | Btu/W·h | 11.7 (Non-Ducted)<br>8.5 (Ducted) | — | 11.7 (Non-Ducted)<br>8.5 (Ducted) | — |
| SEER2 | | | 20.0 (Non-Ducted)<br>15.9 (Ducted) | — | 20.0 (Non-Ducted)<br>15.9 (Ducted) | — |
| HSPF2 | | | — | 9.5 (Non-Ducted)<br>8.2 (Ducted) | — | 9.5 (Non-Ducted)<br>8.2 (Ducted) |
| Casing Color | | | Ivory White | | Ivory White | |
| Compressor | Type | | Hermetically Sealed Swing Type | | Hermetically Sealed Swing Type | |
| | Model | | 2Y350BPCX2A | | 2Y350BPCX2A | |
| | Motor Output | W | 3,300 | | 3,300 | |
| Refrigerant Oil | Model | | FW68DE | | FW68DE | |
| | Charge | fl oz (L) | 51.4 (1.52) | | 51.4 (1.52) | |
| Refrigerant | Type | | R-32 | | R-32 | |
| | Charge | lbs (kg) | 6.94 (3.15) | | 6.94 (3.15) | |
| Airflow Rates | | cfm | 3,137 | 3,137 | 3,137 | 3,137 |
| | | m³/min | 88.7 | 88.7 | 88.7 | 88.7 |
| Fan | Type | | Propeller | | Propeller | |
| | Motor Output | W | 192 | | 192 | |
| | Running Current | A | 0.48 | 0.48 | 0.48 | 0.48 |
| | Power Consumption | W | 99.5 | 99.5 | 99.5 | 99.5 |
| Starting Current | | A | 27.0 | | 27.0 | |
| Dimensions (H × W × D) | | in. (mm) | 34-1/4 × 43-5/16 × 18-1/8 (870 × 1,100 × 460) | | 34-1/4 × 43-5/16 × 18-1/8 (870 × 1,100 × 460) | |
| Packaged Dimensions (H × W × D) | | in. (mm) | 39-15/16 × 46-7/8 × 21-15/16 (1,014 × 1,190 × 558) | | 39-15/16 × 46-7/8 × 21-15/16 (1,014 × 1,190 × 558) | |
| Weight (Mass) | | lbs (kg) | 219 (100) | | 221 (100) | |
| Gross Weight (Gross Mass) | | lbs (kg) | 238 (108) | | 239 (108) | |
| Sound Pressure Level | | dB(A) | 55 | 57 | 55 | 57 |
| Piping Connection | Liquid | in. (mm) | ϕ 1/4 × 5 (ϕ 6.4 × 5) | | ϕ 1/4 × 5 (ϕ 6.4 × 5) | |
| | Gas | in. (mm) | ϕ 3/8 × 1, ϕ 1/2 × 2, ϕ 5/8 × 2 (ϕ 9.5 × 1, ϕ 12.7 × 2, ϕ 15.9 × 2) | | ϕ 3/8 × 1, ϕ 1/2 × 2, ϕ 5/8 × 2 (ϕ 9.5 × 1, ϕ 12.7 × 2, ϕ 15.9 × 2) | |
| | Drain | in. (mm) | I.D. ϕ 1 (ϕ 25) | | I.D. ϕ 1 (ϕ 25) | |
| Heat Insulation | | | Both Liquid and Gas Pipes | | Both Liquid and Gas Pipes | |
| No. of Wiring Connections | | | 3 for Power Supply, 4 for Interunit Wiring (Including Ground Wiring) | | 3 for Power Supply, 4 for Interunit Wiring (Including Ground Wiring) | |
| Max. Interunit Piping Length | | ft (m) | 262 (80) (for Total of Each Room) | | 262 (80) (for Total of Each Room) | |
| | | ft (m) | 98 (30) (for One Room) | | 98 (30) (for One Room) | |
| Amount of Additional Charge | | oz/ft (g/m) | 0.22 (20) (131-1/4 ft (40 m) or more) | | 0.22 (20) (131-1/4 ft (40 m) or more) | |
| Max. Installation Height Difference | | ft (m) | 49-1/4 (15) (Between Indoor Unit and Outdoor Unit) | | 49-1/4 (15) (Between Indoor Unit and Outdoor Unit) | |
| | | ft (m) | 24-5/8 (7.5) (Between Indoor Units) | | 24-5/8 (7.5) (Between Indoor Units) | |
| Conditions Based on | | | Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) | Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) | Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) | Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) |
| | | | Piping length: 25 ft (7.5 m) | | Piping length: 25 ft (7.5 m) | |
| Drawing No. | | | C: 3D158484<br>C: 3D160946 | | C: 3D158481<br>C: 3D160947 | |

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

## 3.3 Combination Capacity

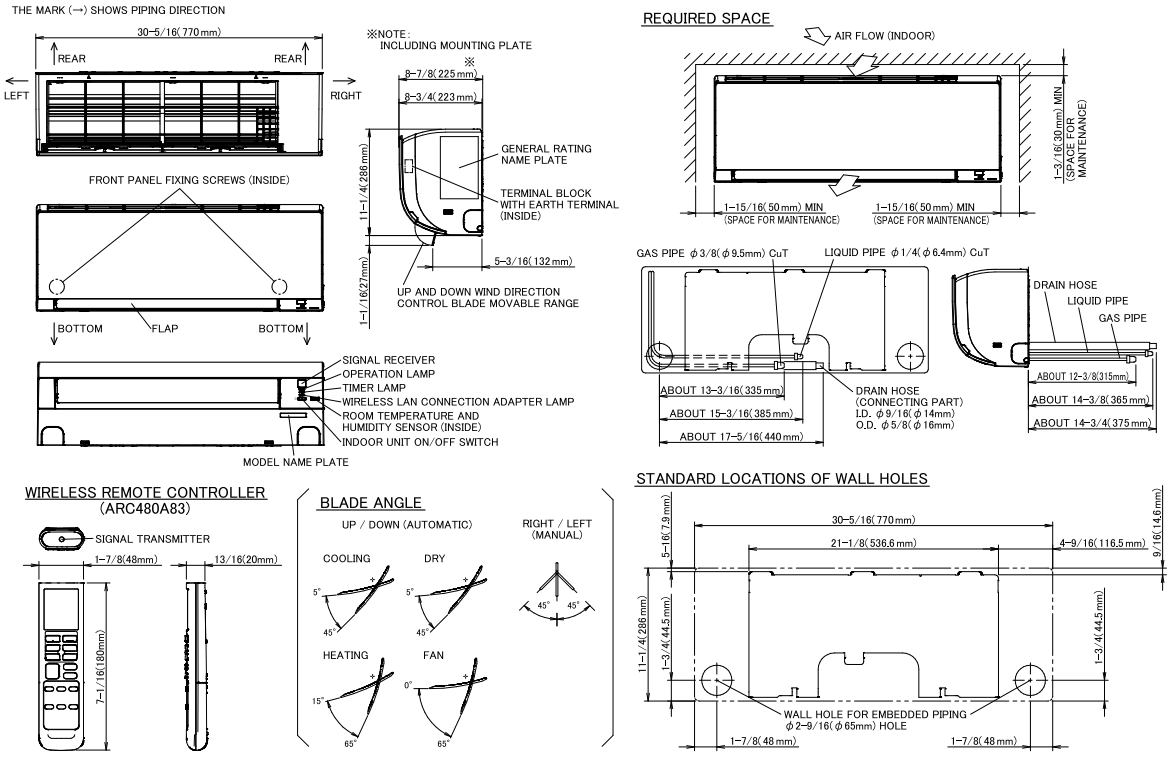
Refer to Engineering Data books below for the Combination Capacity.

| Type | Model Name | Reference |
|---|---|---|
| Standard type | 2MXM18AVJU9(8)<br>3MXM24AVJU9(8)<br>4MXM36AVJU9(8)<br>5MXM48AVJU9(8) | EDUS122403C |
| Cold climate type | 2MXT18AVJU9(8)<br>3MXT24AVJU9(8)<br>4MXT36AVJU9(8)<br>5MXT40AVJU9(8)<br><br>2MXTH18AVJU9(8)<br>3MXTH24AVJU9(8)<br>4MXTH36AVJU9(8)<br>5MXTH40AVJU9(8) | EDUS122404C |

# 4. Dimensions

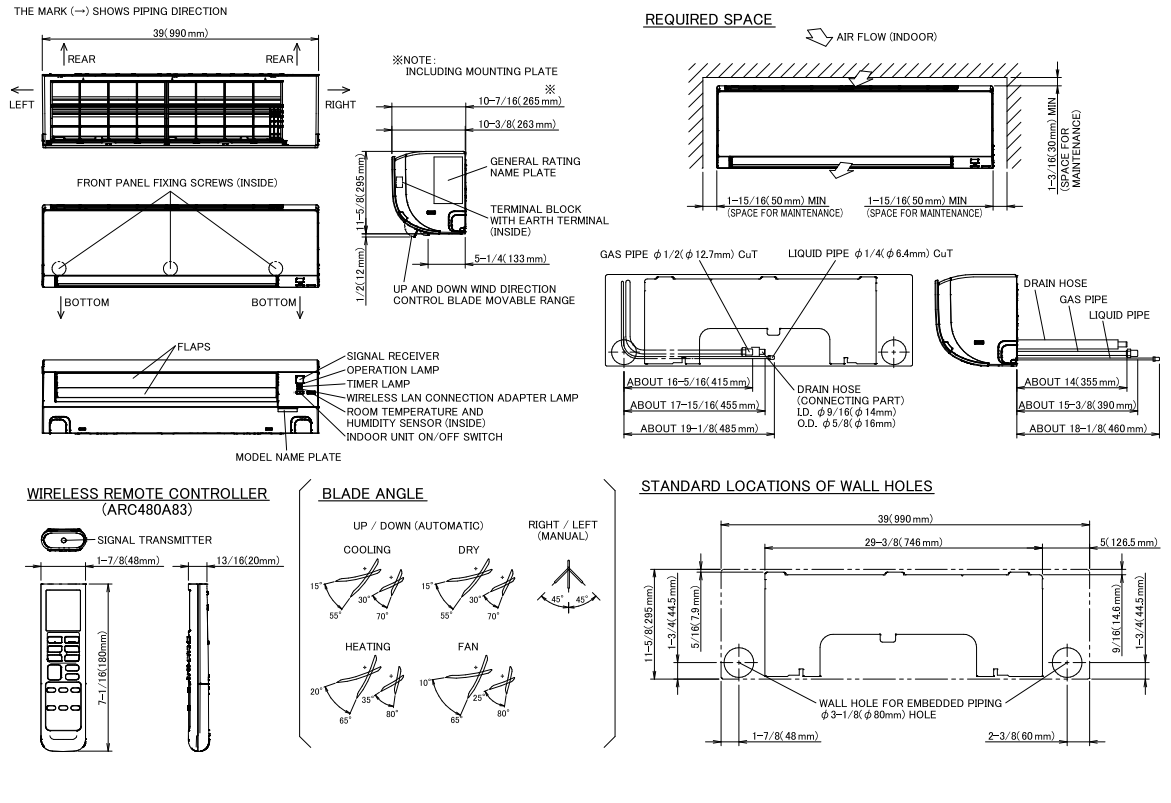
## 4.1 Indoor unit

### CTXV07AVJU9, FTXV09/12AVJU9



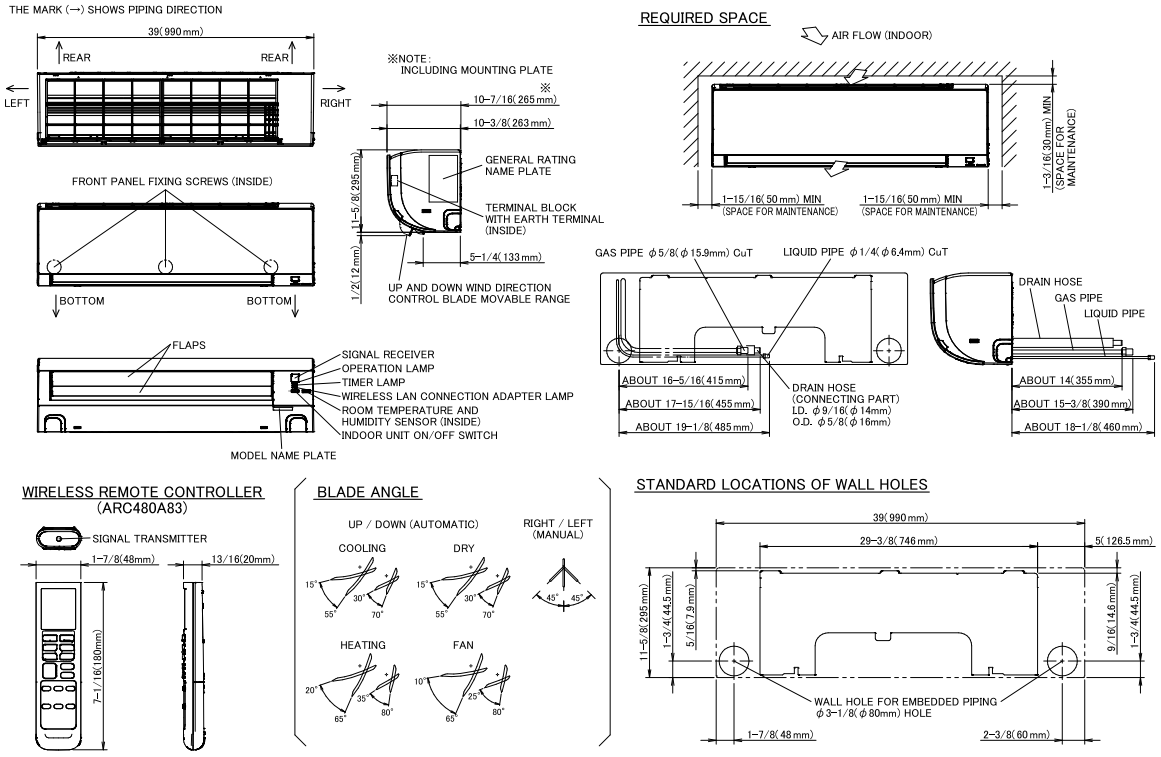

3D150958A

### FTXV15/18AVJU9



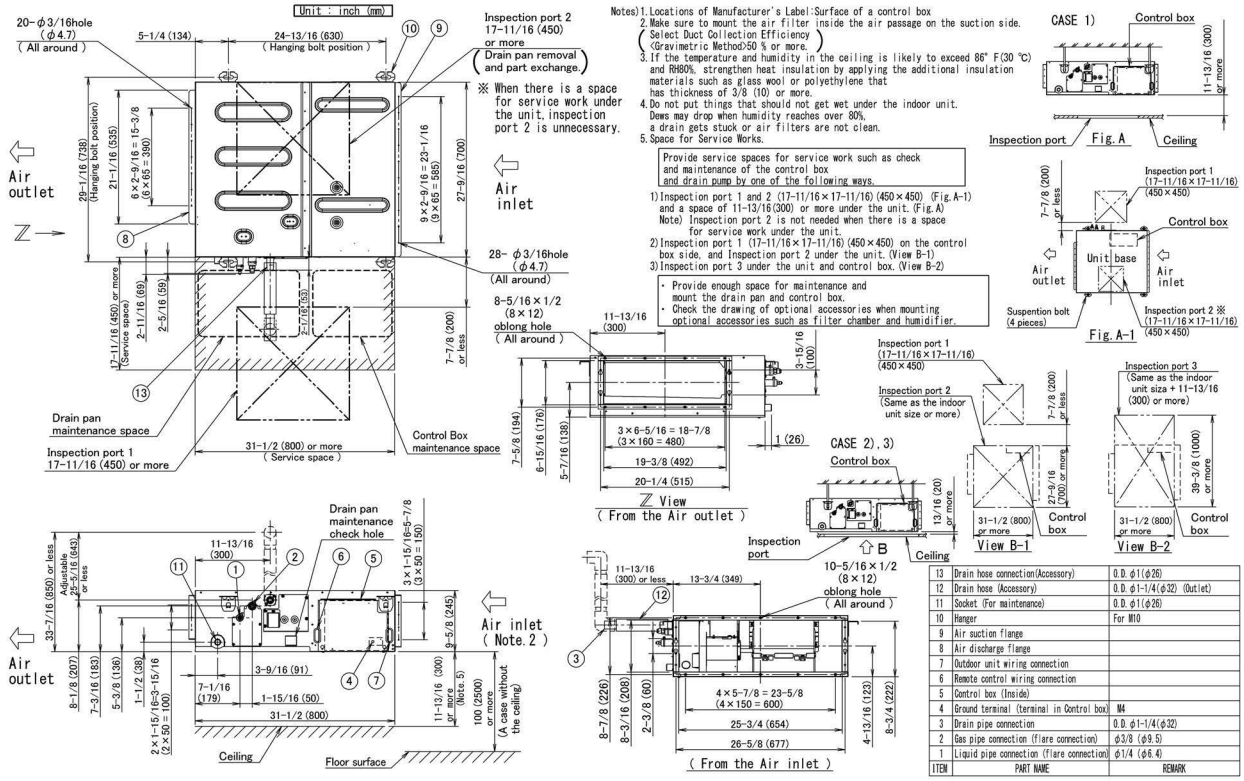

3D150966A

## FTXV24AVJU9




3D150967A

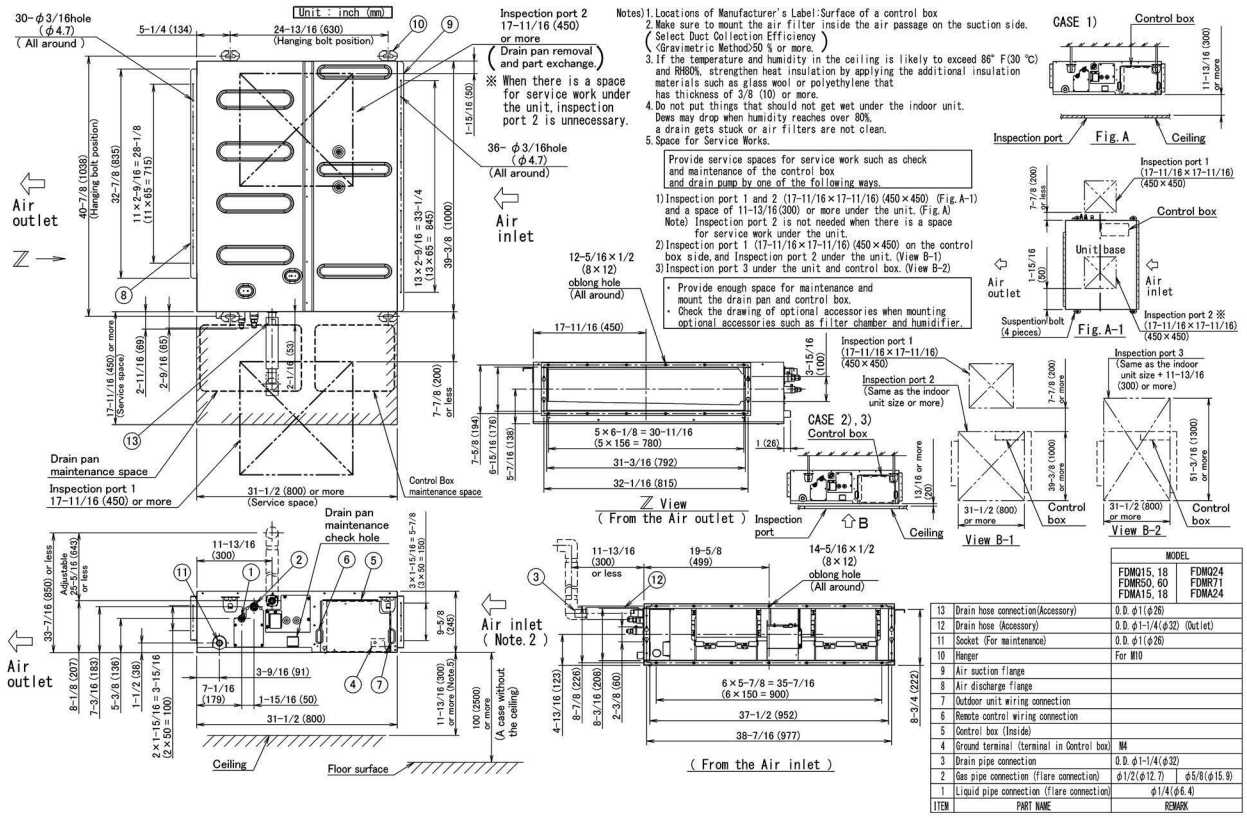
## CDMA07AVJU9, FDMA09/12AVJU9




| ITEM | PART NAME | REMARK |
|---|---|---|
| 13 | Drain hose connection(Accessory) | O.D. φ1(φ26) |
| 12 | Drain hose (Accessory) | O.D. φ1-1/4(φ32) (Outlet) |
| 11 | Socket (For maintenance) | O.D. φ1(φ26) |
| 10 | Hanger | For M10 |
| 9 | Air suction flange | |
| 8 | Air discharge flange | |
| 7 | Outdoor unit wiring connection | |
| 6 | Remote control wiring connection | |
| 5 | Control box (Inside) | |
| 4 | Ground terminal (terminal in Control box) | M4 |
| 3 | Drain pipe connection | O.D. φ1-1/4(φ32) |
| 2 | Gas pipe connection (flare connection) | φ3/8 (φ9.5) |
| 1 | Liquid pipe connection (flare connection) | φ1/4 (φ6.4) |

3D112918D

## FDMA15/18/24AVJU9

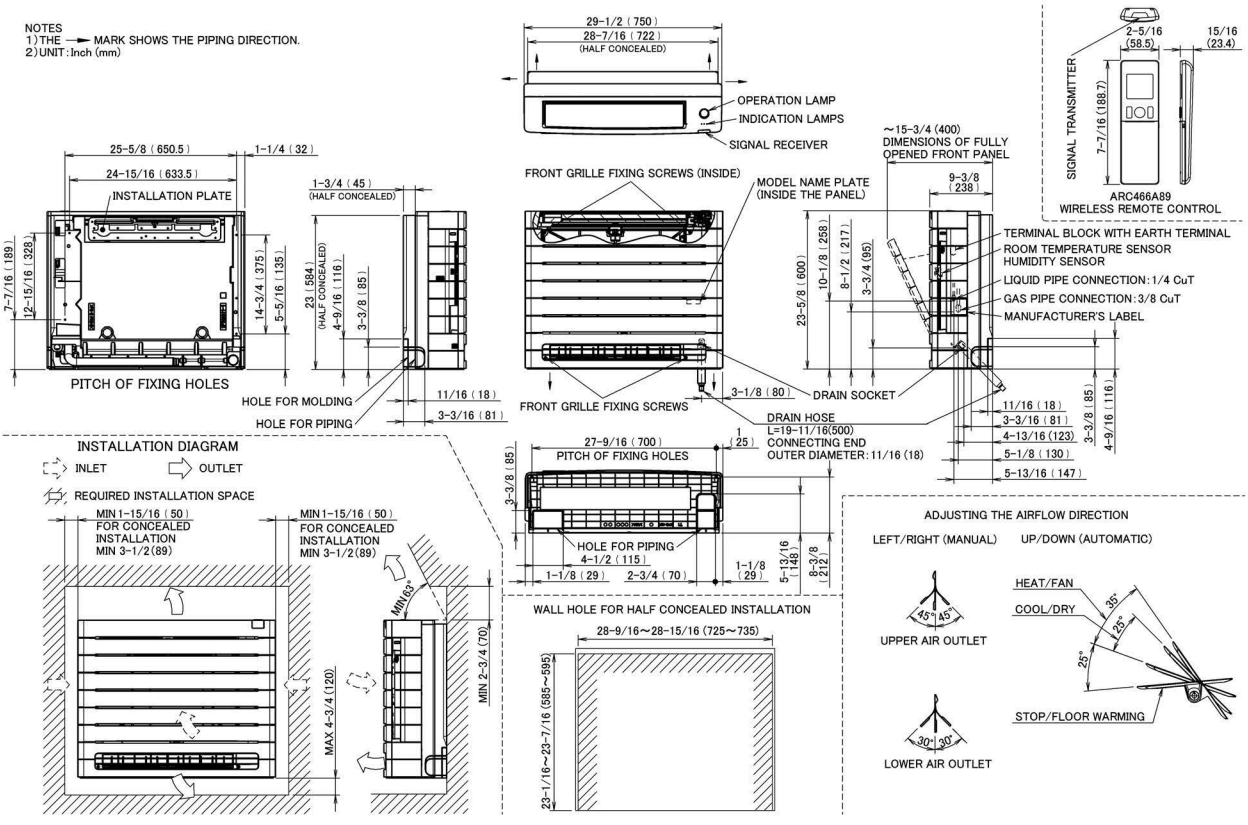



| ITEM | PART NAME | REMARK |
|---|---|---|
| 13 | Drain hose connection(Accessory) | O.D. φ1(φ26) |
| 12 | Drain hose (Accessory) | O.D. φ1-1/4(φ32) (Outlet) |
| 11 | Socket (For maintenance) | O.D. φ1(φ26) |
| 10 | Hanger | For M10 |
| 9 | Air suction flange | |
| 8 | Air discharge flange | |
| 7 | Outdoor unit wiring connection | |
| 6 | Remote control wiring connection | |
| 5 | Control box (Inside) | |
| 4 | Ground terminal (terminal in Control box) | M4 |
| 3 | Drain pipe connection | O.D. φ1-1/4(φ32) |
| 2 | Gas pipe connection (flare connection) | φ1/2(φ12.7) φ5/8(φ15.9) |
| 1 | Liquid pipe connection (flare connection) | φ1/4(φ6.4) |

MODEL: FDMQ15, 18 / FDMR50, 60 / FDMA15, 18 — FDMQ24 / FDMR71 / FDMA24

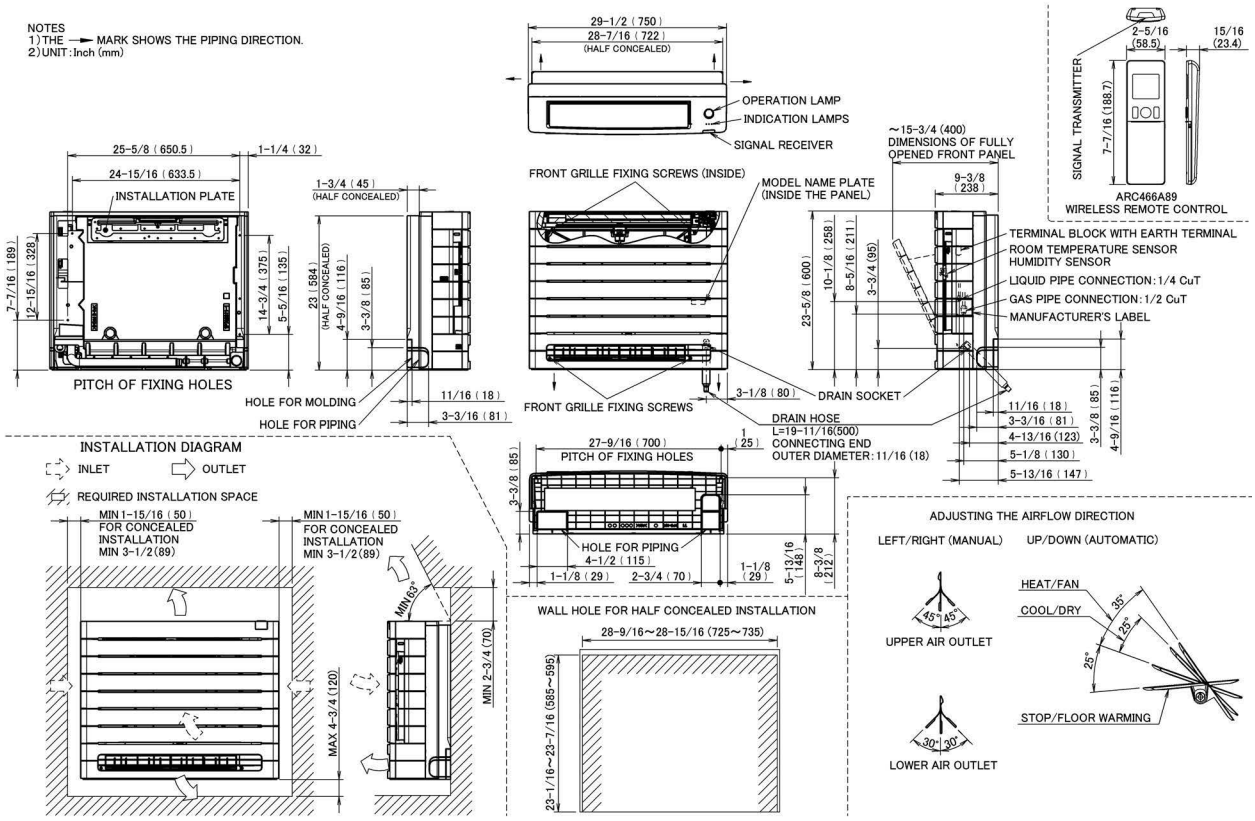
3D112919C

## FVXV09/12AVJUW(T)9



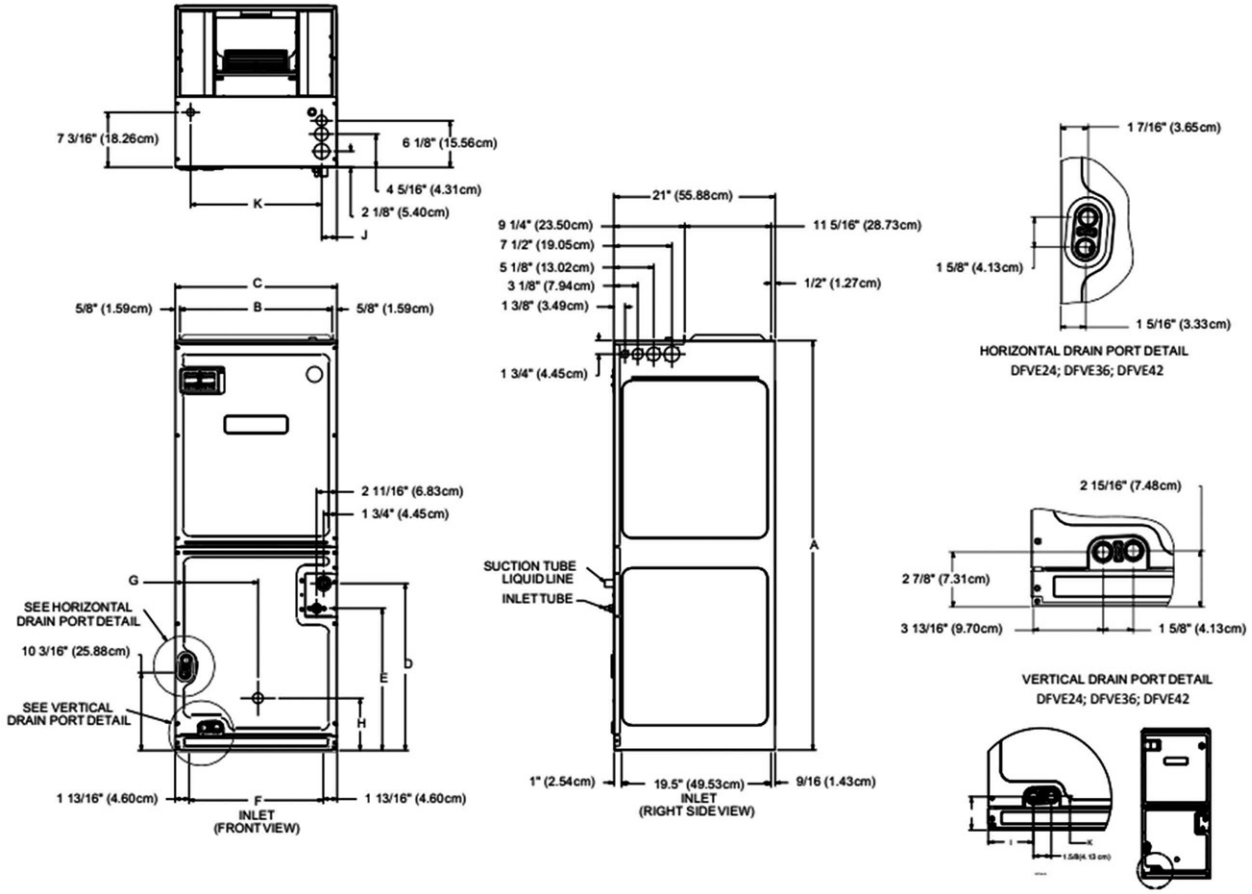

3D158881

## FVXV15/18AVJUW(T)9

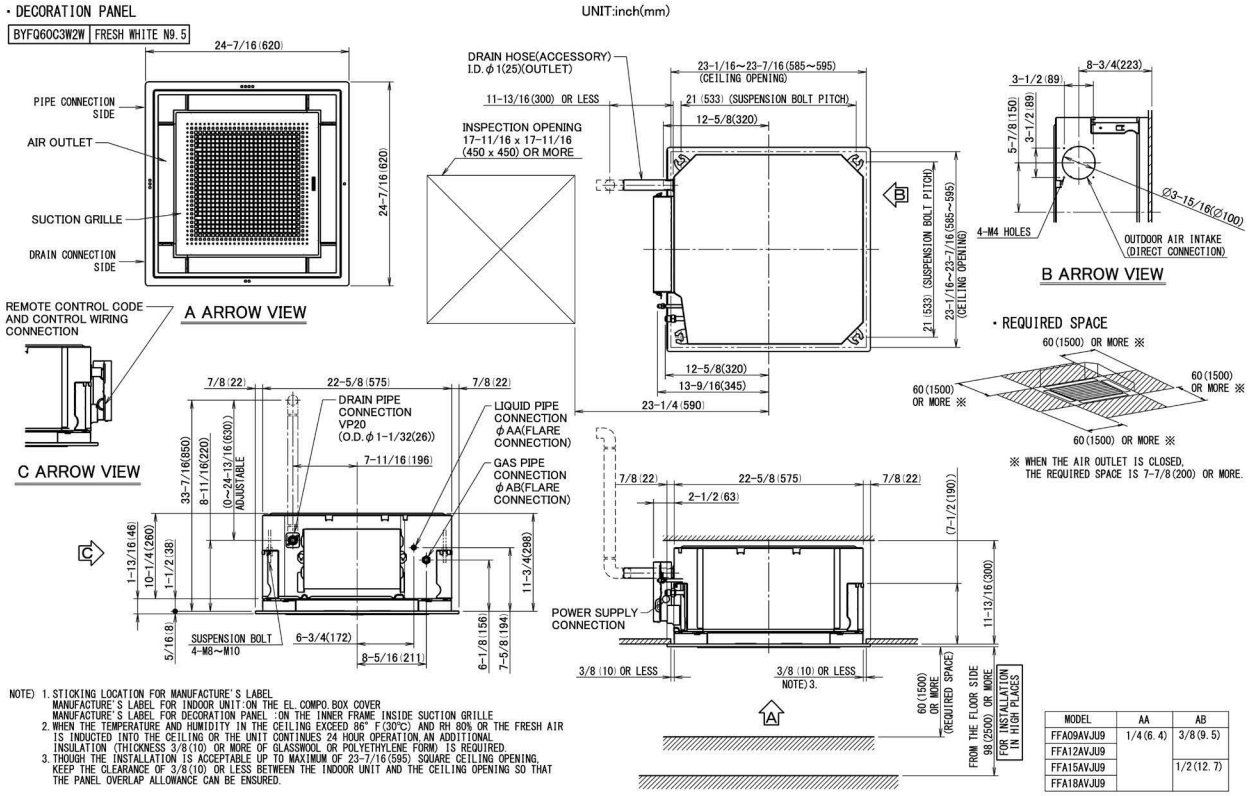



3D158883

## CMXV12/18/24AVJUA



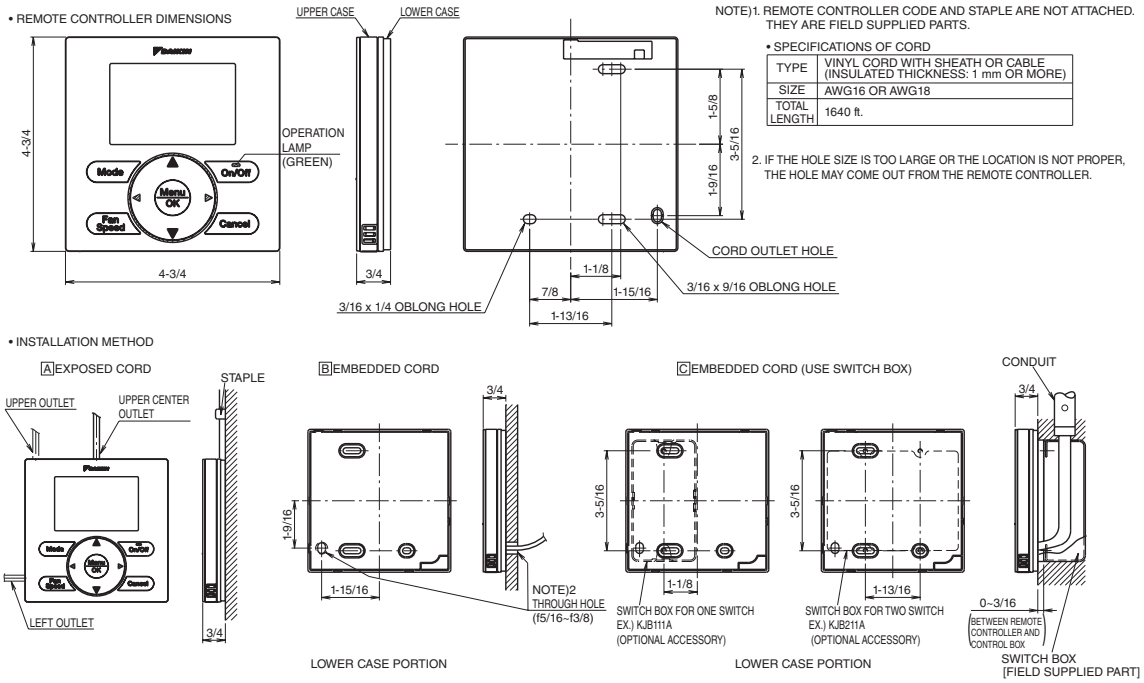
## FFA09/12/15/18AVJU9




| MODEL | AA | AB |
|---|---|---|
| FFA09AVJU9 | 1/4(6.4) | 3/8(9.5) |
| FFA12AVJU9 | | |
| FFA15AVJU9 | | 1/2(12.7) |
| FFA18AVJU9 | | |

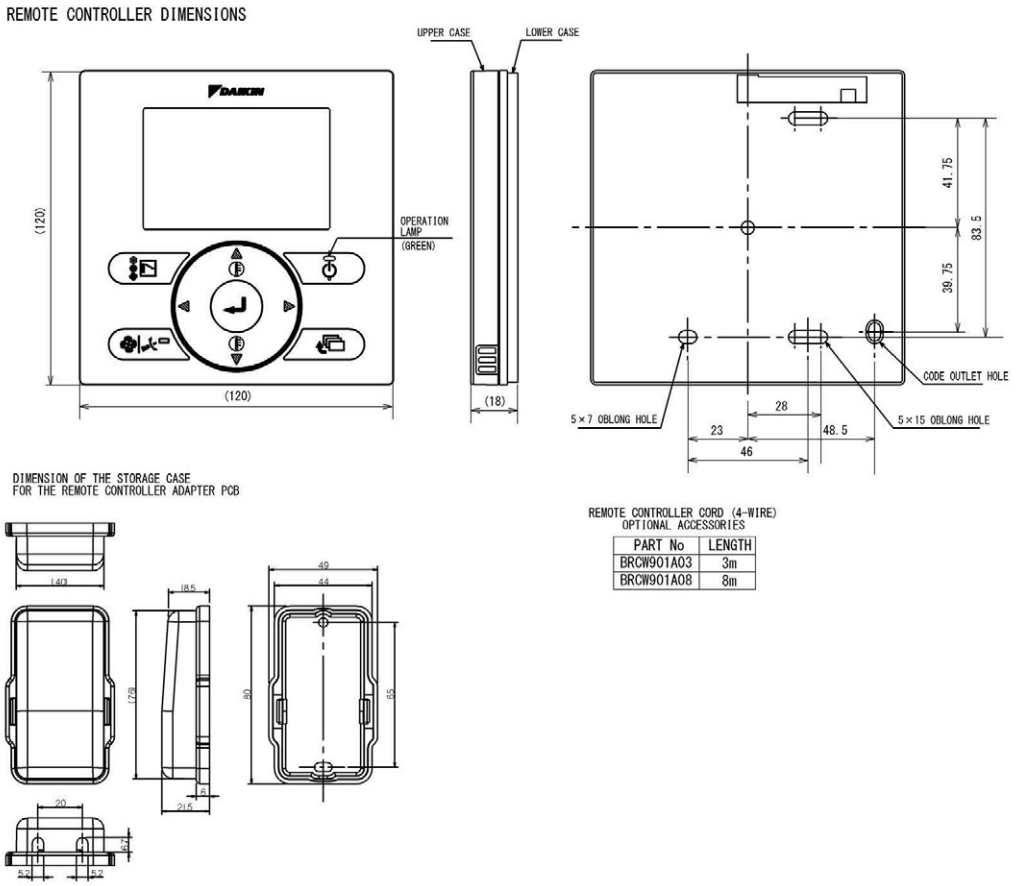
3D161611

## BRC1NRV71 — Wired Remote Controller (Option) —




3D091305A

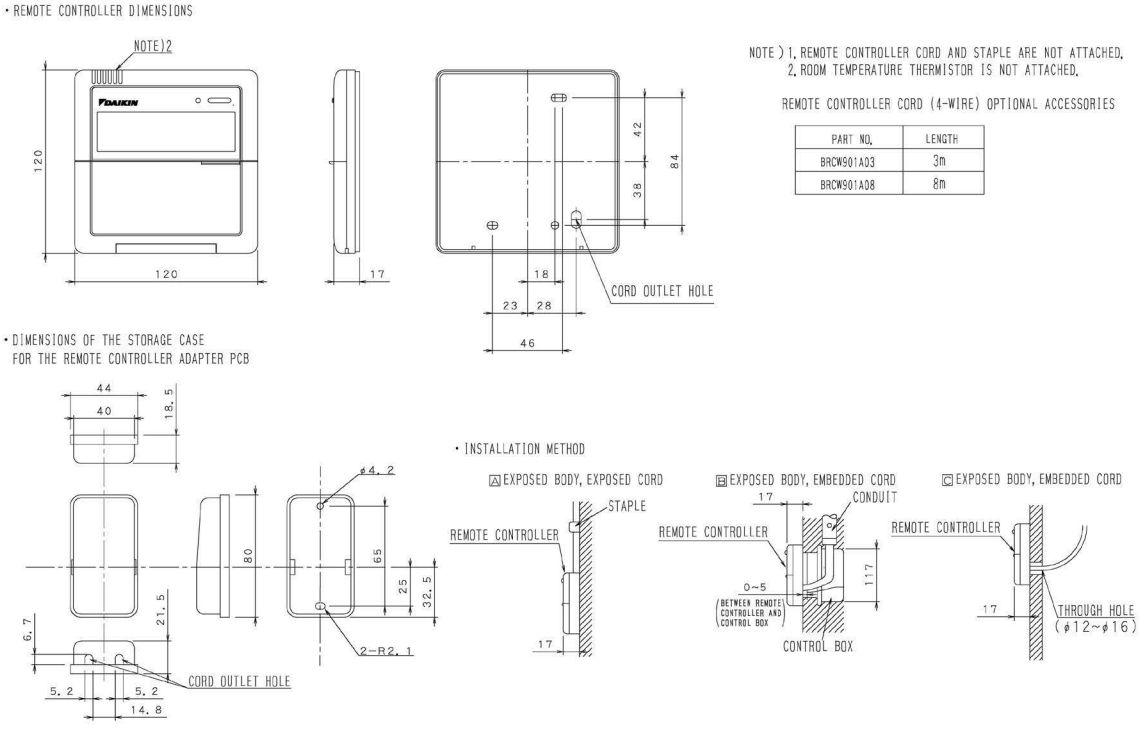
## BRC073A6 — Wired Remote Controller (Option) —




| PART No | LENGTH |
|---|---|
| BRCW901A03 | 3m |
| BRCW901A08 | 8m |

3D152615

## BRC944B2 — Wired Remote Controller (Option) —

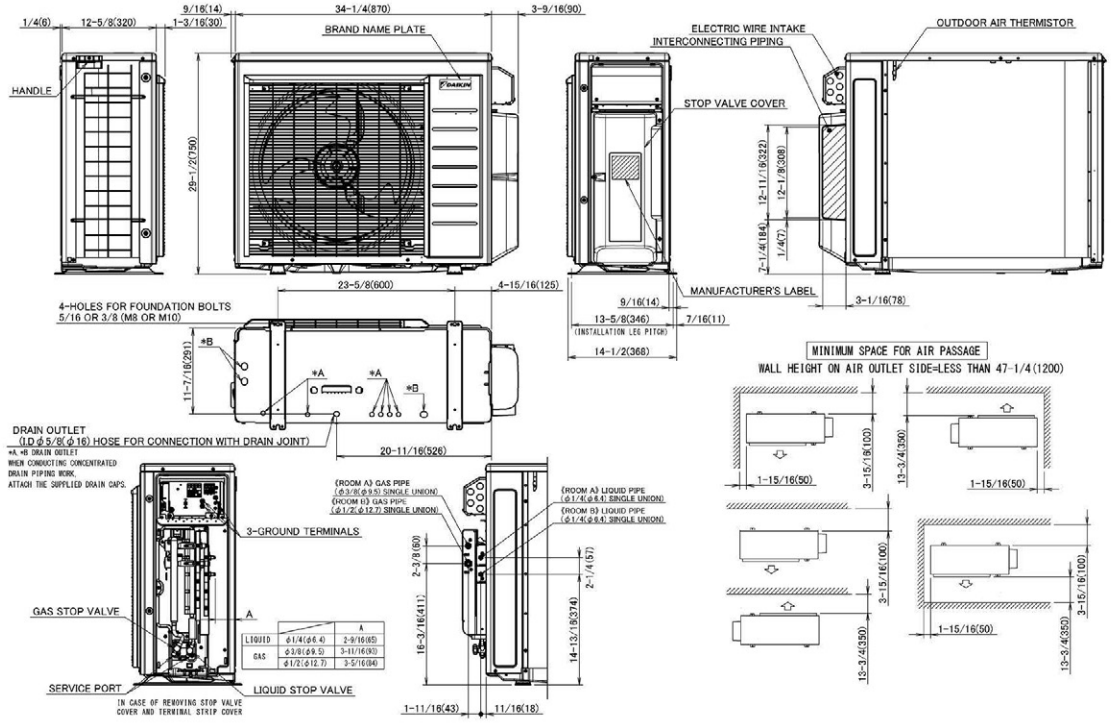



| PART NO. | LENGTH |
|---|---|
| BRCW901A03 | 3m |
| BRCW901A08 | 8m |

3D062374

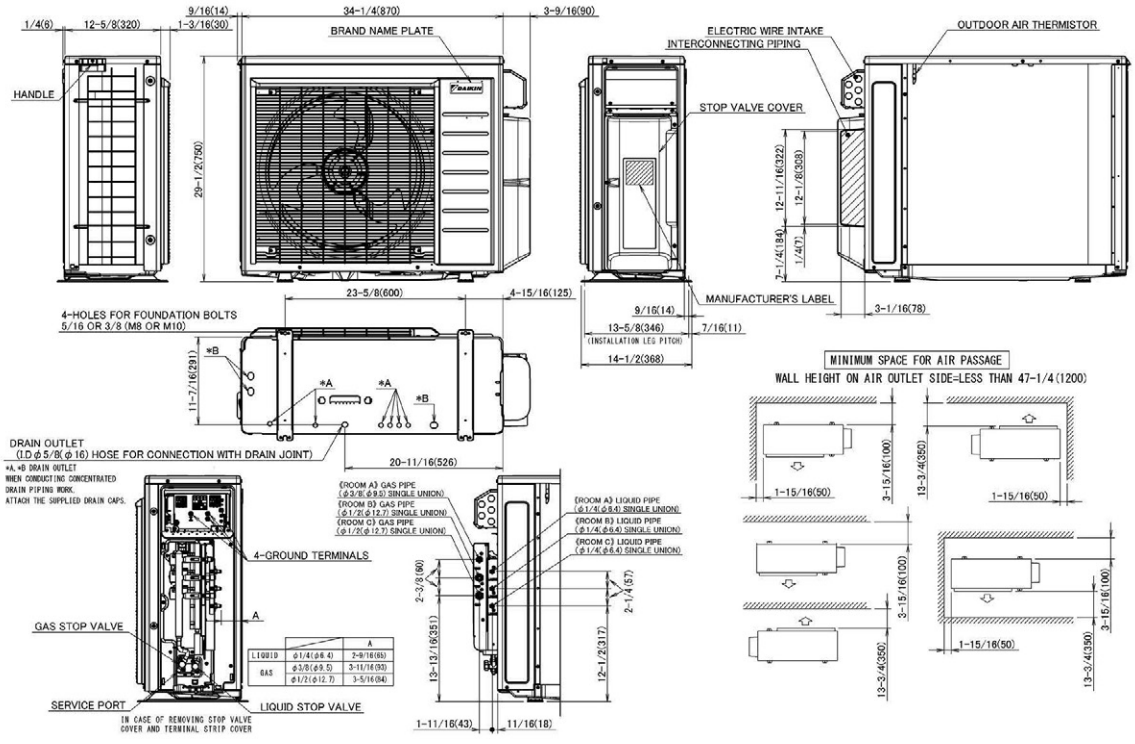
## 4.2 Outdoor unit

### 2MXM18AVJU9(8), 2MXT18AVJU9(8), 2MXTH18AVJU9(8)



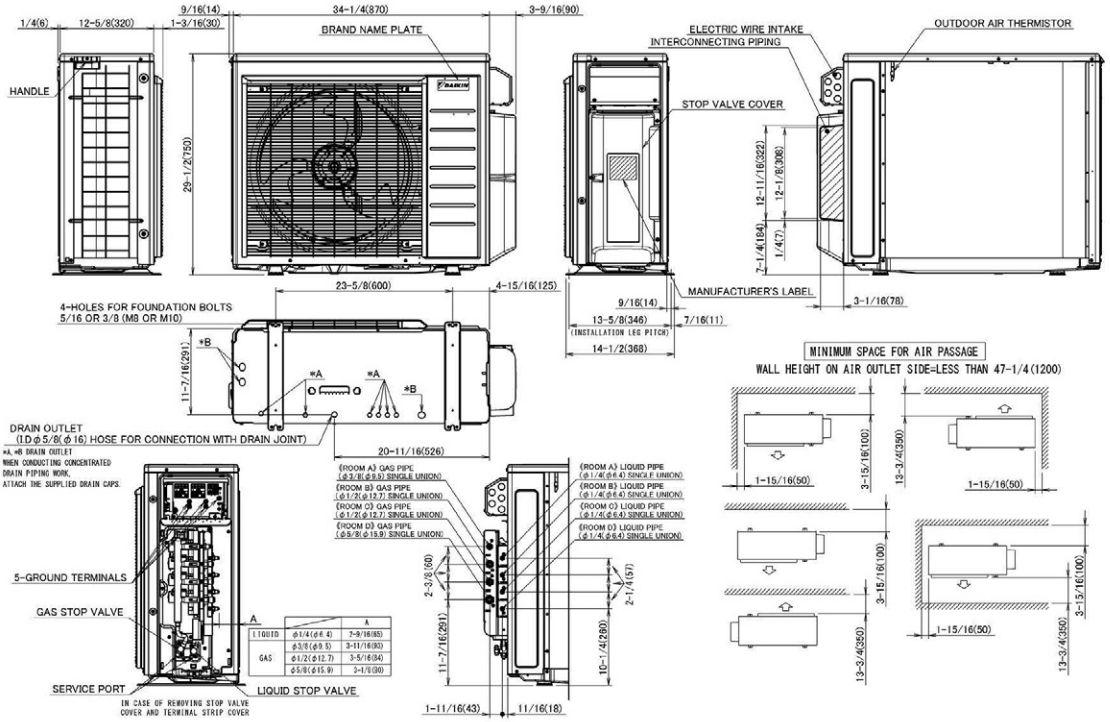

3D149807

### 3MXM24AVJU9(8)



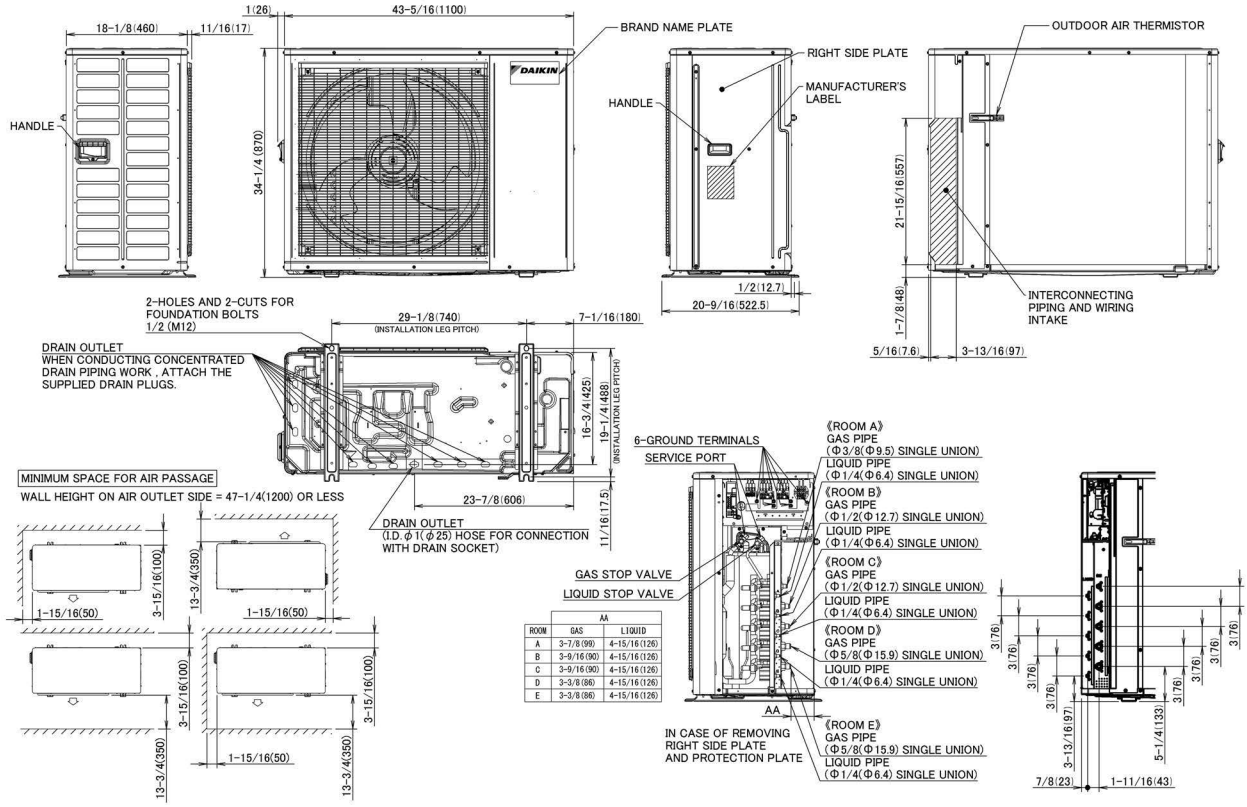

3D149808

## 4MXM36AVJU9(8)



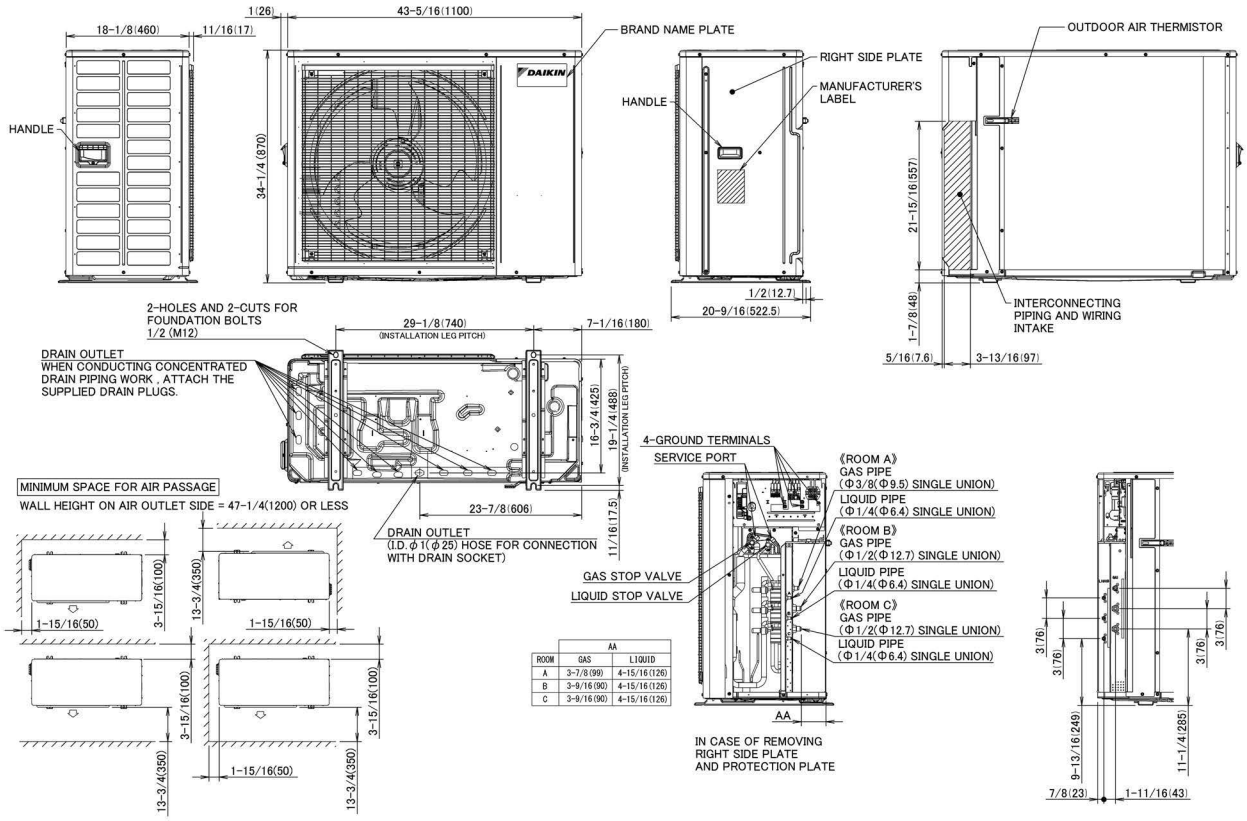

3D149809

## 5MXM48AVJU9(8), 5MXT40AVJU9(8), 5MXTH40AVJU9(8)



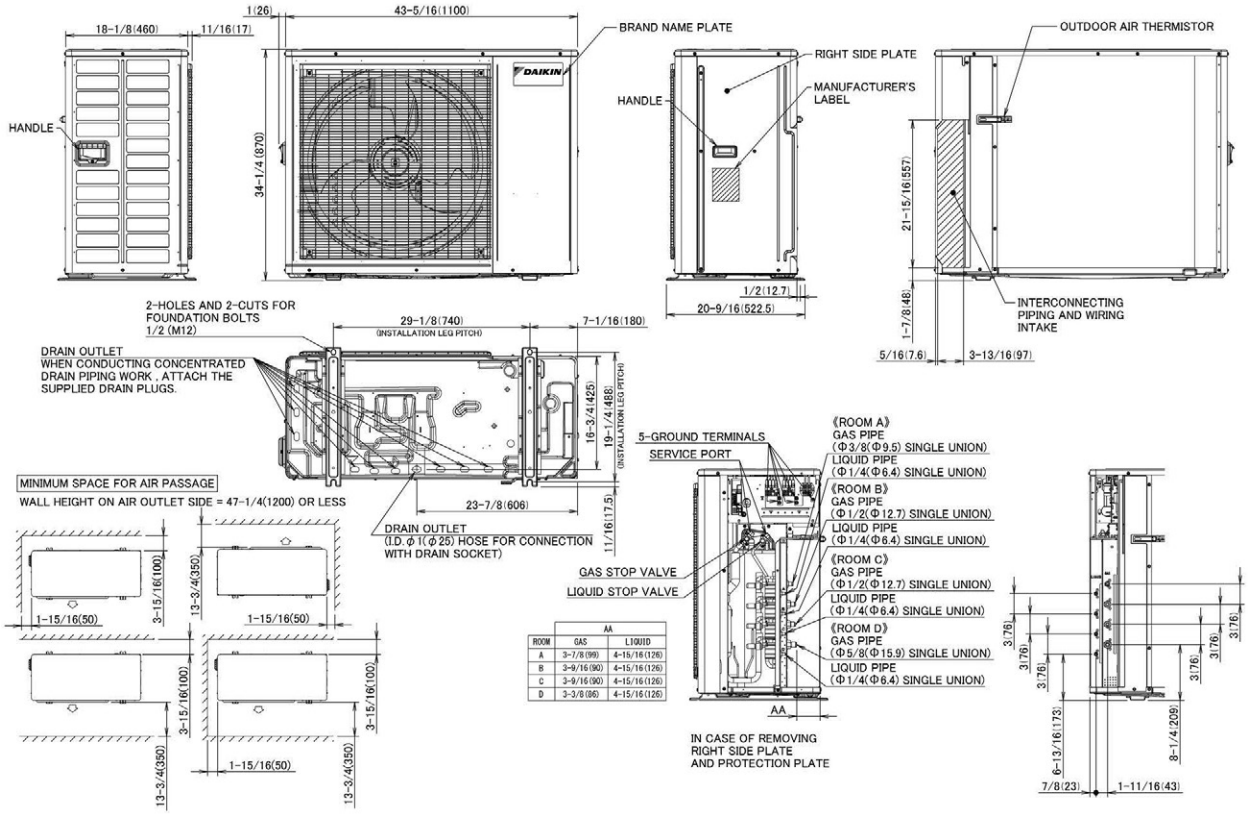

3D157869

## 3MXT24AVJU9(8), 3MXTH24AVJU9(8)




3D157871

## 4MXT36AVJU9(8), 4MXTH36AVJU9(8)

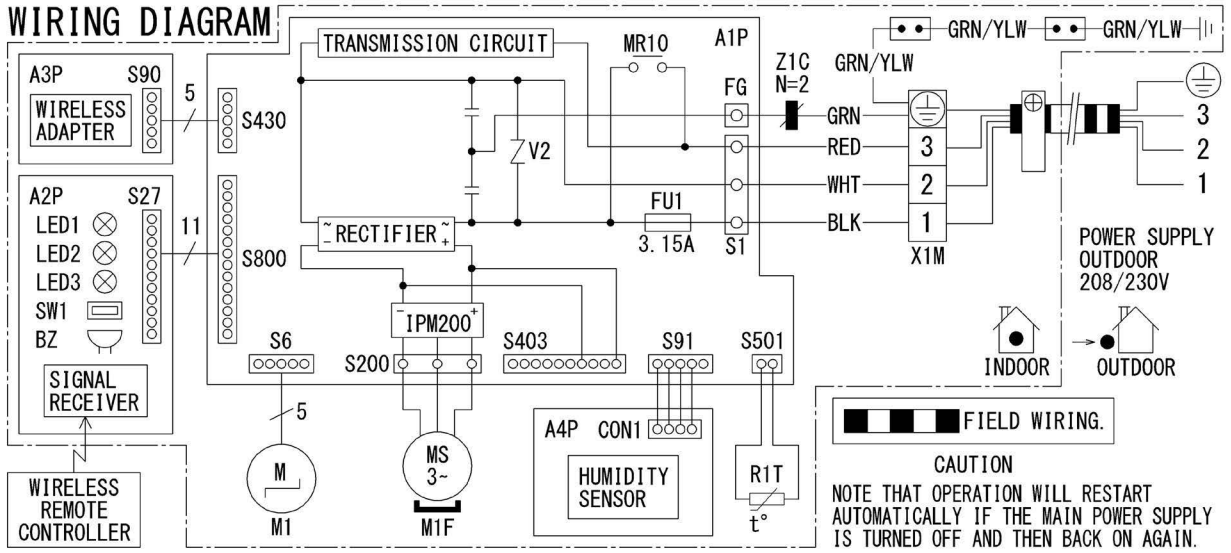



3D157870

# 5. Wiring Diagram

## 5.1 Indoor unit

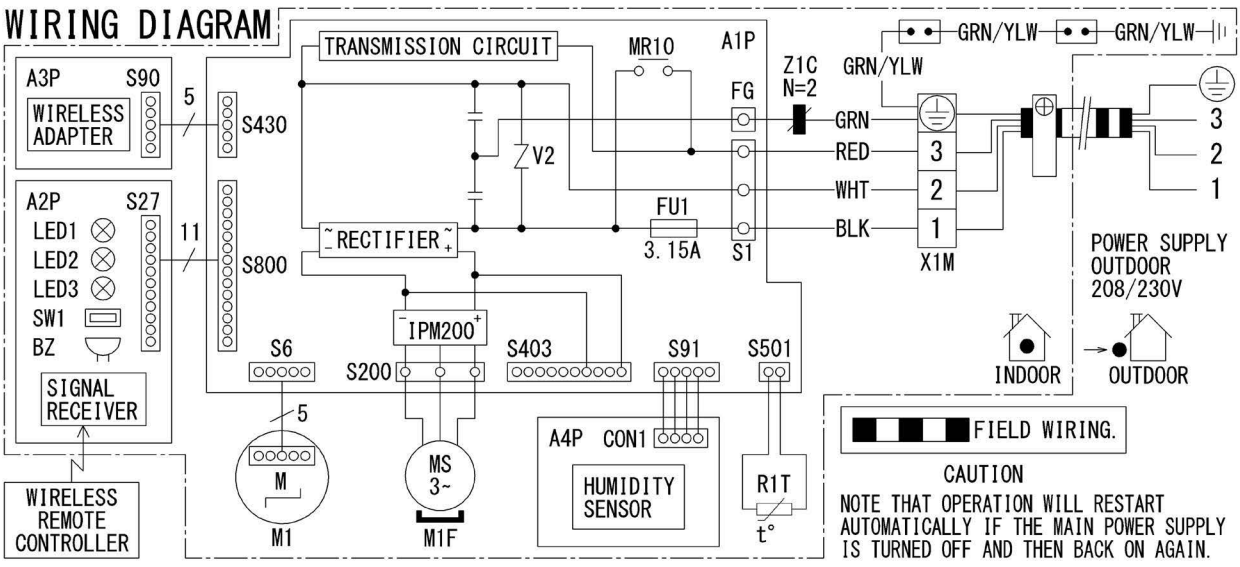
### CTXV07AVJU9, FTXV09/12AVJU9




| | | | | | |
|---|---|---|---|---|---|
| A1P～A4P | :PRINTED CIRCUIT BOARD | M1 | :SWING MOTOR | V2 | :VARISTOR |
| BZ | :BUZZER | MR10 | :RELAY | X1M | :TERMINAL STRIP |
| FG | :FRAME GROUND | R1T | :THERMISTOR | Z1C | :FERRITE CORE |
| FU1 | :FUSE | S1～S800, CON1 | :CONNECTOR | ⏚ | :PROTECTIVE EARTH (GROUND) |
| LED1～LED3 | :LIGHT-EMITTING DIODE | SW1 | :OPERATION SWITCH | | |
| M1F | :FAN MOTOR | | | | |

3D147521

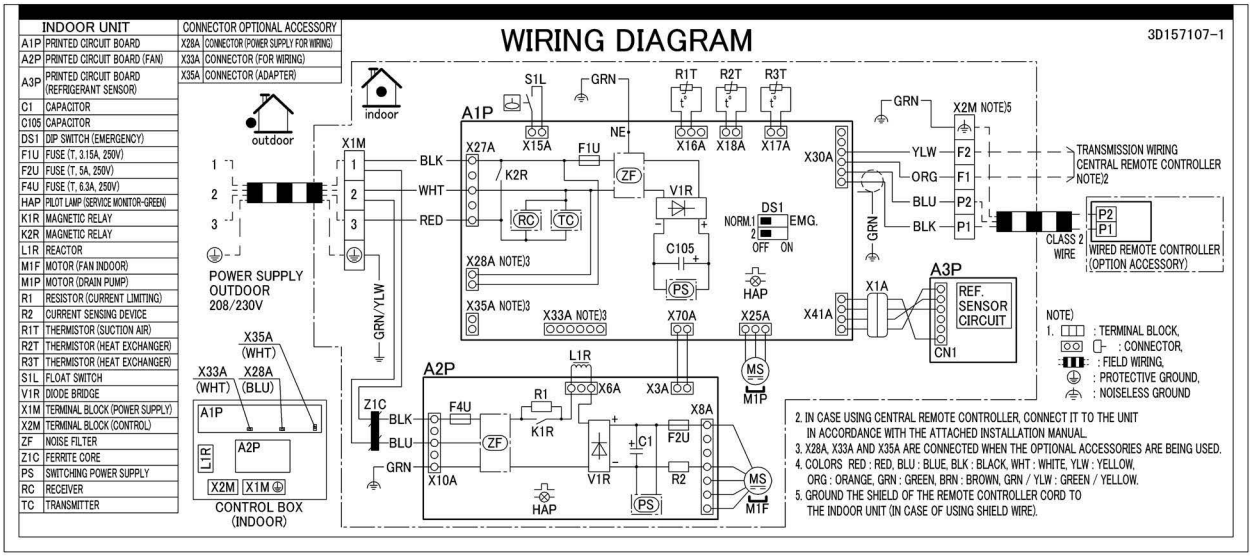
### FTXV15/18/24AVJU9




| | | | | | |
|---|---|---|---|---|---|
| A1P～A4P | :PRINTED CIRCUIT BOARD | M1 | :SWING MOTOR | V2 | :VARISTOR |
| BZ | :BUZZER | MR10 | :RELAY | X1M | :TERMINAL STRIP |
| FG | :FRAME GROUND | R1T | :THERMISTOR | Z1C | :FERRITE CORE |
| FU1 | :FUSE | S1～S800, CON1 | :CONNECTOR | ⏚ | :PROTECTIVE EARTH (GROUND) |
| LED1～LED3 | :LIGHT-EMITTING DIODE | SW1 | :OPERATION SWITCH | | |
| M1F | :FAN MOTOR | | | | |

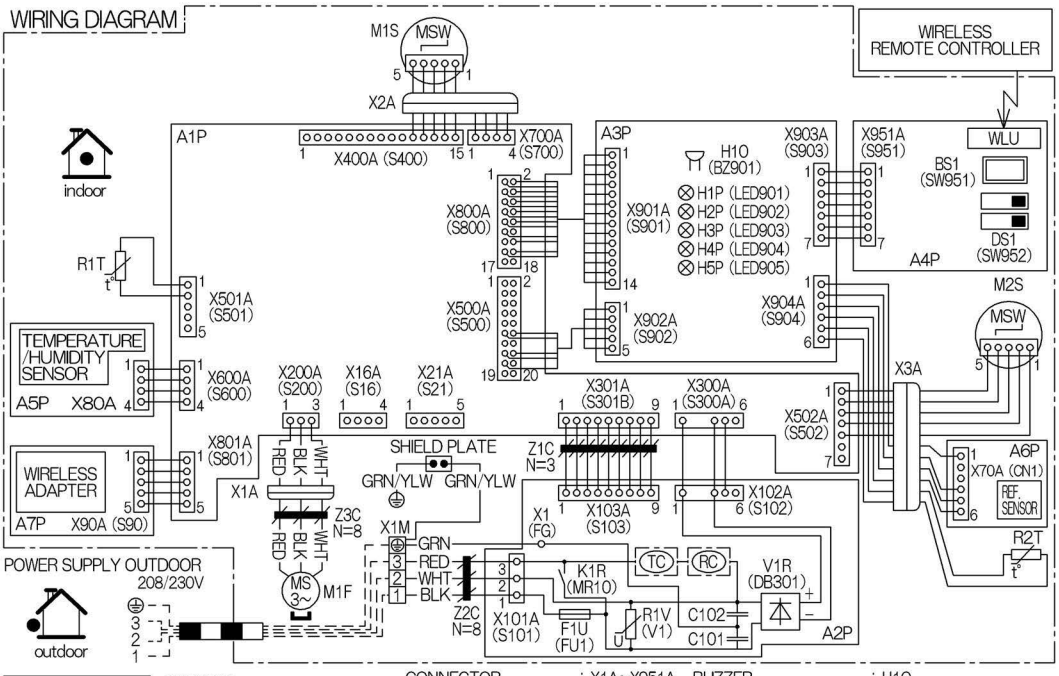
3D147460A

## CDMA07AVJU9, FDMA09/12/15/18/24AVJU9



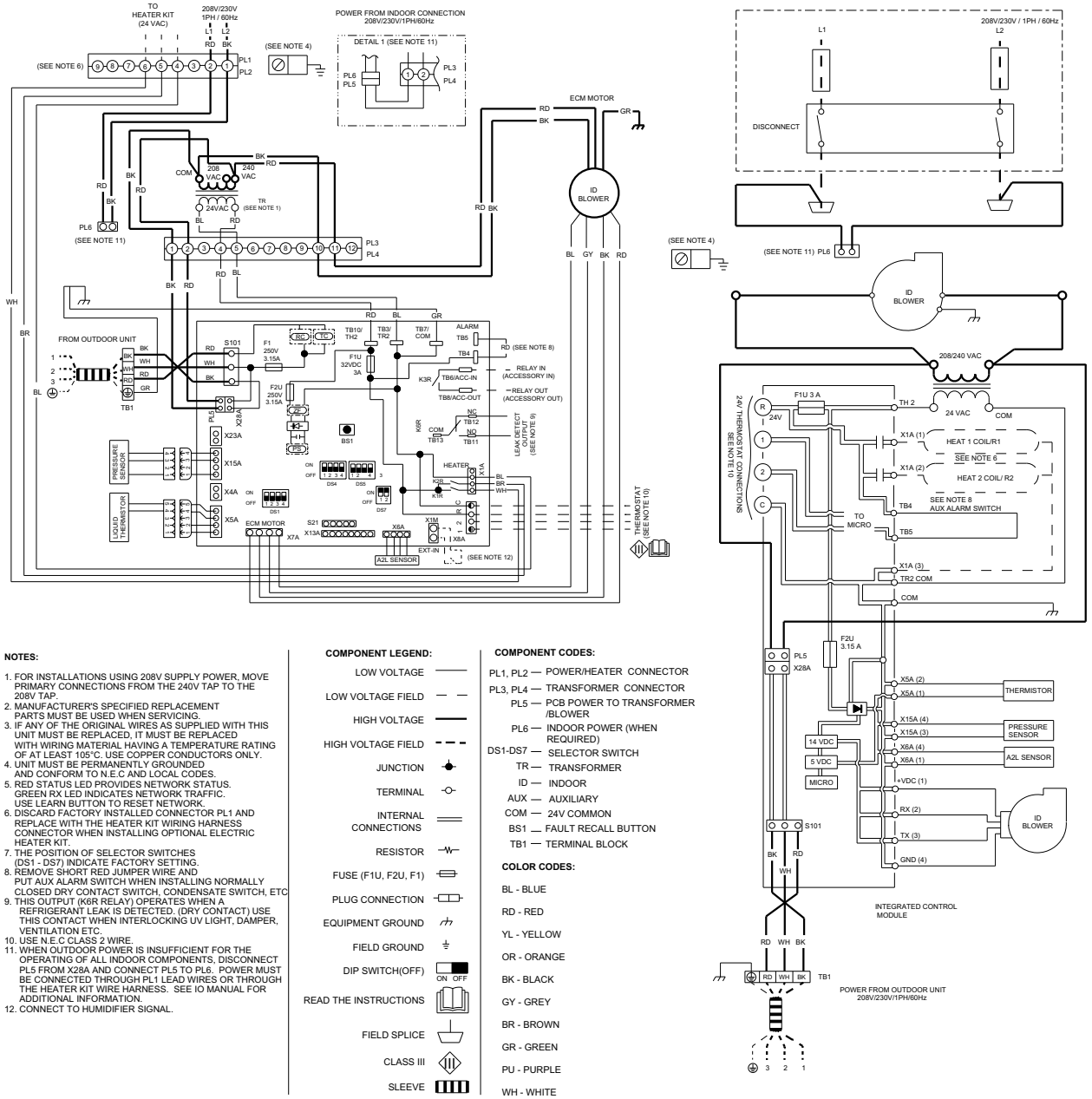

3D157107

## FVXV09/12/15/18AVJUW(T)9




3D157789

# CMXV12/18/24AVJUA




**NOTES:**

1. FOR INSTALLATIONS USING 208V SUPPLY POWER, MOVE PRIMARY CONNECTIONS FROM THE 240V TAP TO THE 208V TAP.
2. MANUFACTURER'S SPECIFIED REPLACEMENT PARTS MUST BE USED WHEN SERVICING.
3. IF ANY OF THE ORIGINAL WIRES AS SUPPLIED WITH THIS UNIT MUST BE REPLACED, IT MUST BE REPLACED WITH WIRING MATERIAL HAVING A TEMPERATURE RATING OF AT LEAST 105°C. USE COPPER CONDUCTORS ONLY.
4. UNIT MUST BE PERMANENTLY GROUNDED AND CONFORM TO N.E.C AND LOCAL CODES.
5. RED STATUS LED PROVIDES NETWORK STATUS. GREEN RX LED INDICATES NETWORK TRAFFIC. USE LEARN BUTTON TO RESET NETWORK.
6. DISCARD FACTORY INSTALLED CONNECTOR PL1 AND REPLACE WITH THE HEATER KIT WIRING HARNESS CONNECTOR WHEN INSTALLING OPTIONAL ELECTRIC HEATER KIT.
7. THE POSITION OF SELECTOR SWITCHES (DS1 - DS7) INDICATE FACTORY SETTING.
8. REMOVE SHORT RED JUMPER WIRE AND PUT AUX ALARM SWITCH WHEN INSTALLING NORMALLY CLOSED DRY CONTACT SWITCH, CONDENSATE SWITCH, ETC
9. THIS OUTPUT (K6R RELAY) OPERATES WHEN A REFRIGERANT LEAK IS DETECTED. (DRY CONTACT) USE THIS CONTACT WHEN INTERLOCKING UV LIGHT, DAMPER, VENTILATION ETC.
10. USE N.E.C CLASS 2 WIRE.
11. WHEN OUTDOOR POWER IS INSUFFICIENT FOR THE OPERATING OF ALL INDOOR COMPONENTS, DISCONNECT PL5 FROM X28A AND CONNECT PL5 TO PL6. POWER MUST BE CONNECTED THROUGH PL1 LEAD WIRES OR THROUGH THE HEATER KIT WIRE HARNESS. SEE IO MANUAL FOR ADDITIONAL INFORMATION.
12. CONNECT TO HUMIDIFIER SIGNAL.

**COMPONENT LEGEND:**

- LOW VOLTAGE
- LOW VOLTAGE FIELD
- HIGH VOLTAGE
- HIGH VOLTAGE FIELD
- JUNCTION
- TERMINAL
- INTERNAL CONNECTIONS
- RESISTOR
- FUSE (F1U, F2U, F1)
- PLUG CONNECTION
- EQUIPMENT GROUND
- FIELD GROUND
- DIP SWITCH(OFF)
- READ THE INSTRUCTIONS
- FIELD SPLICE
- CLASS III
- SLEEVE

**COMPONENT CODES:**

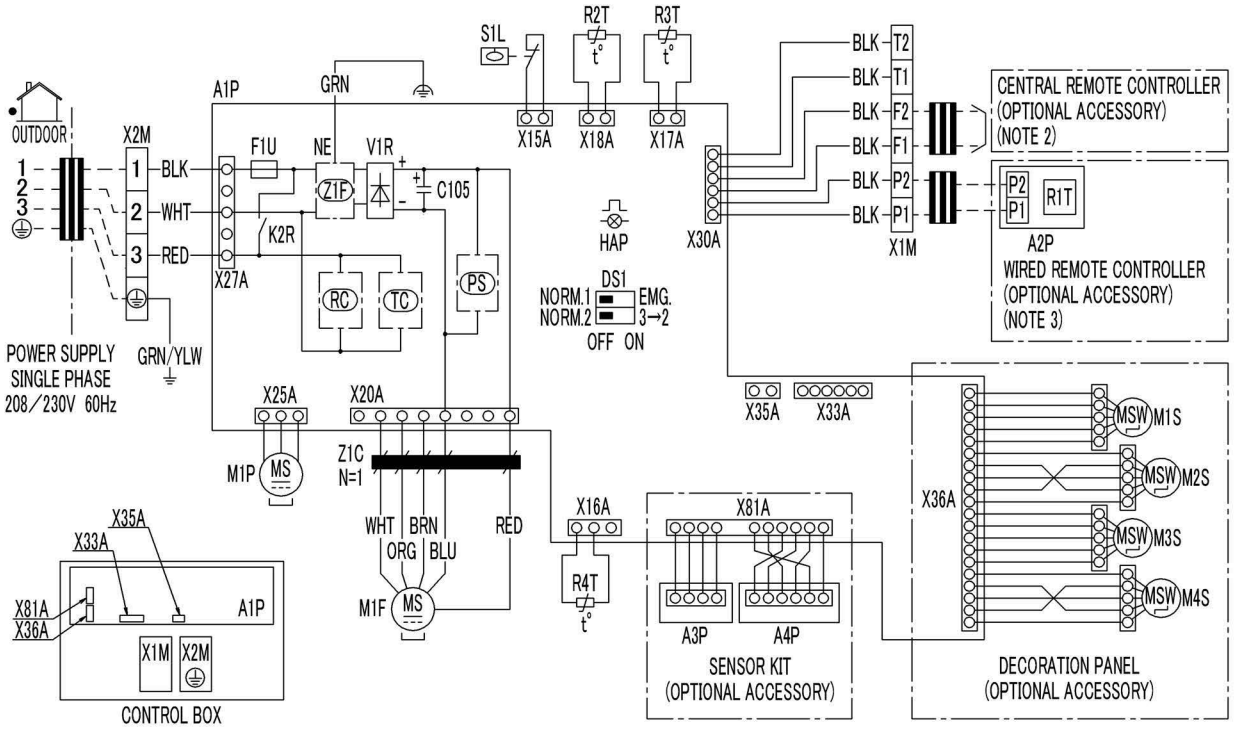
- PL1, PL2 — POWER/HEATER CONNECTOR
- PL3, PL4 — TRANSFORMER CONNECTOR
- PL5 — PCB POWER TO TRANSFORMER /BLOWER
- PL6 — INDOOR POWER (WHEN REQUIRED)
- DS1-DS7 — SELECTOR SWITCH
- TR — TRANSFORMER
- ID — INDOOR
- AUX — AUXILIARY
- COM — 24V COMMON
- BS1 — FAULT RECALL BUTTON
- TB1 — TERMINAL BLOCK

**COLOR CODES:**

- BL - BLUE
- RD - RED
- YL - YELLOW
- OR - ORANGE
- BK - BLACK
- GY - GREY
- BR - BROWN
- GR - GREEN
- PU - PURPLE
- WH - WHITE

0140A20115

## FFA09/12/15/18AVJU9




NOTES:
1. □□□ :TERMINAL BLOCK ⊙⊙ :CONNECTOR ▮▮▮ : FIELD WIRING ⏚ :PROTECTIVE EARTH(SCREW) ⏚ :NOISELESS EARTH
2. IN CASE USING CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED INSTALLATION MANUAL.
3. IN CASE OF MAIN/SUB CHANGEOVER, SEE THE INSTALLATION MANUAL ATTACHED TO REMOTE CONTROLLER.
4. SYMBOLS SHOW AS FOLLOWS: BLK:BLACK RED:RED BLU:BLUE WHT:WHITE YLW:YELLOW GRN:GREEN ORG:ORANGE BRN:BROWN

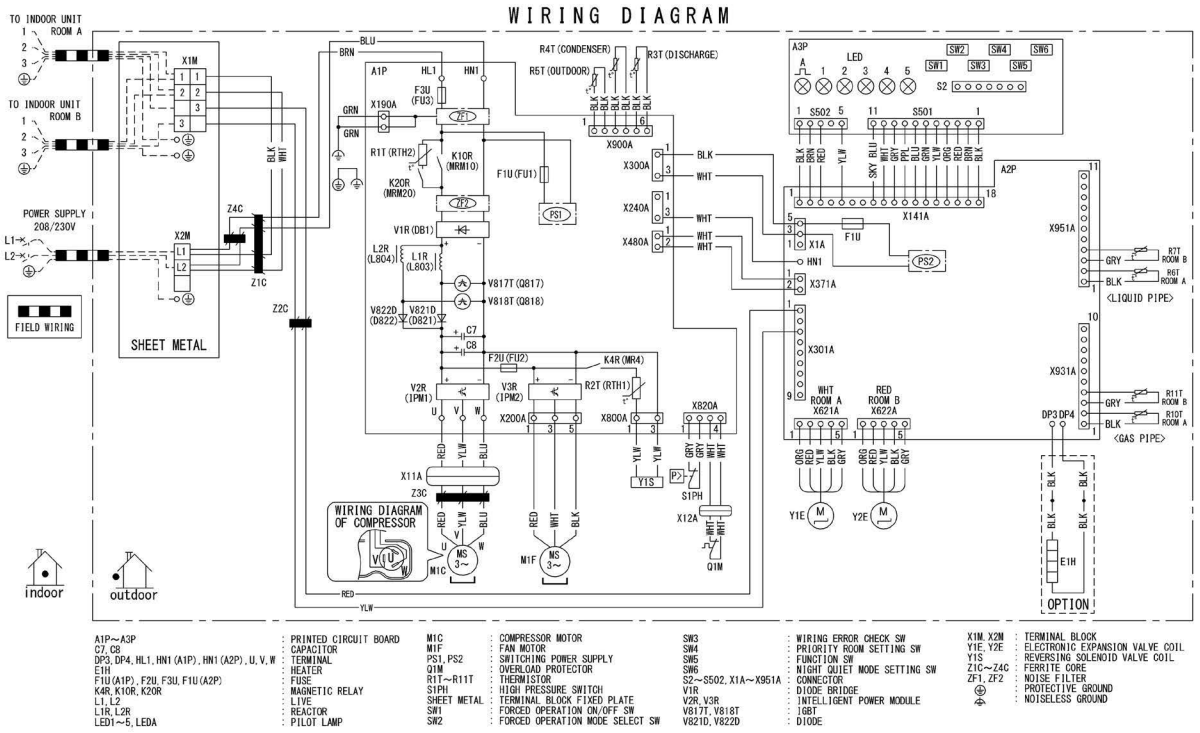
| INDOOR UNIT | |
|---|---|
| A1P | PRINTED CIRCUIT BOARD |
| C105 | CAPACITOR(M1F) |
| DS1 | DIP SWITCH ON PCB |
| F1U | FUSE(T,3.15A,250V) |
| HAP | FLASHING LAMP (SERVICE MONITOR GREEN) |
| K2R | MAGNETIC RELAY |
| M1F | FAN MOTOR |
| M1P | DRAIN PUMP MOTOR |
| M1S・M2S M3S・M4S | SWING MOTOR |
| R2T・R3T | THERMISTOR(COIL) |
| R4T | THERMISTOR(AIR) |
| S1L | FLOAT SWITCH |
| V1R | DIODE BRIDGE |
| X1M | TERMINAL BLOCK |
| X2M | TERMINAL BLOCK |
| Z1F | NOISE FILTER |
| Z1C | FERRITE CORE |
| PS | SWITCHING POWER SUPPLY |
| RC | RECEIVER |
| TC | TRANSMITTER |

| WIRED REMOTE CONTROLLER | |
|---|---|
| A2P | PRINTED CIRCUIT BOARD |
| R1T | THERMISTOR(AIR) |
| SENSOR KIT | |
| A3P | PRINTED CIRCUIT BOARD |
| A4P | PRINTED CIRCUIT BOARD |
| CONNECTOR FOR OPTIONAL PARTS | |
| X33A | CONNECTOR (WIRING ADAPTOR PRINTED CIRCUT BOARD) |
| X35A | CONNECTOR (GROUP CONTROL ADAPTOR) |
| X36A | CONNECTOR (DECORATION PANEL) |
| X81A | CONNECTOR (SENSOR KIT) |

3D159395A

## 5.2 Outdoor unit

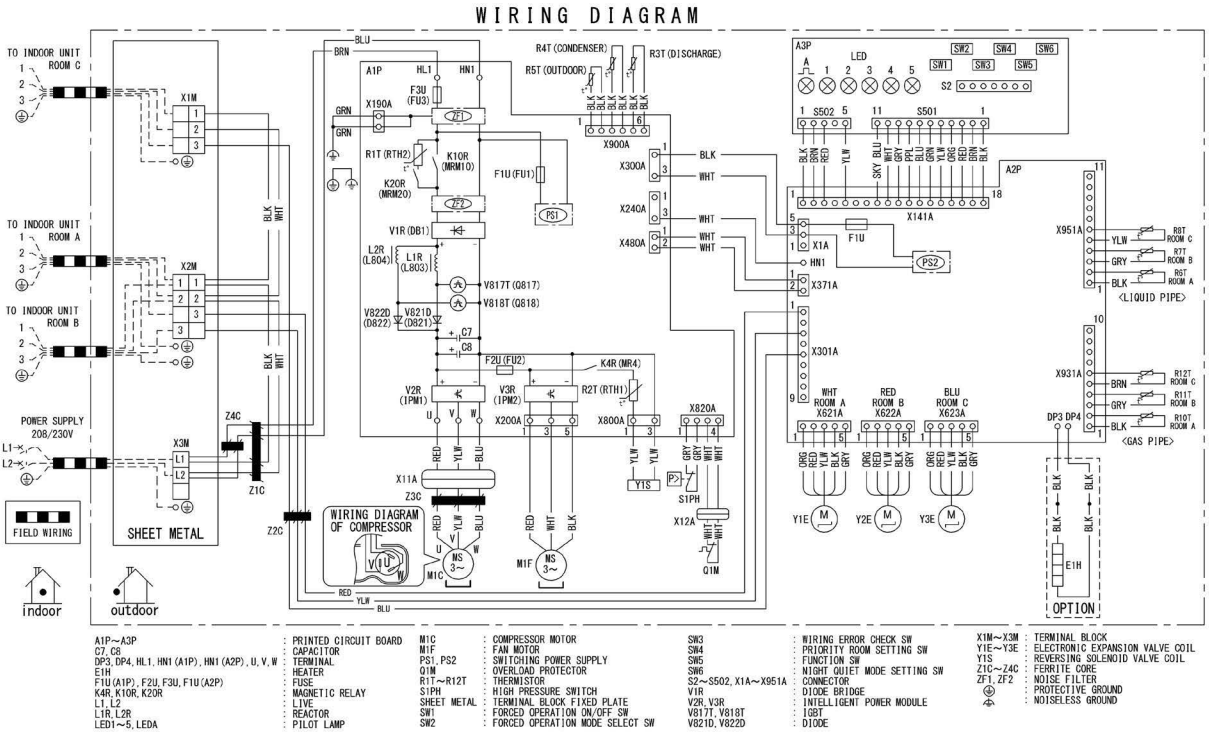
### 2MXM18AVJU9(8), 2MXT18AVJU9(8)




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A1P~A3P | : PRINTED CIRCUIT BOARD | M1C | : COMPRESSOR MOTOR | SW3 | : WIRING ERROR CHECK SW | X1M, X2M | : TERMINAL BLOCK |
| C7, C8 | : CAPACITOR | M1F | : FAN MOTOR | SW4 | : PRIORITY ROOM SETTING SW | Y1E, Y2E | : ELECTRONIC EXPANSION VALVE COIL |
| DP3, DP4, HL1, HN1 (A1P), HN1 (A2P), U, V, W | : TERMINAL | PS1, PS2 | : SWITCHING POWER SUPPLY | SW5 | : FUNCTION SW | Y1S | : REVERSING SOLENOID VALVE COIL |
| E1H | : HEATER | Q1M | : OVERLOAD PROTECTOR | SW6 | : NIGHT QUIET MODE SETTING SW | Z1C~Z4C | : FERRITE CORE |
| F1U (A1P), F2U, F3U, F1U (A2P) | : FUSE | R1T~R11T | : THERMISTOR | S2~S502, X1A~X951A | : CONNECTOR | ZF1, ZF2 | : NOISE FILTER |
| K4R, K10R, K20R | : MAGNETIC RELAY | S1PH | : HIGH PRESSURE SWITCH | V1R | : DIODE BRIDGE | ⏚ | : PROTECTIVE GROUND |
| L1, L2 | : LIVE | SHEET METAL | : TERMINAL BLOCK FIXED PLATE | V2R, V3R | : INTELLIGENT POWER MODULE | ⏚ | : NOISELESS GROUND |
| L1R, L2R | : REACTOR | SW1 | : FORCED OPERATION ON/OFF SW | V817T, V818T | : IGBT | | |
| LED1~5, LEDA | : PILOT LAMP | SW2 | : FORCED OPERATION MODE SELECT SW | V821D, V822D | : DIODE | | |

C: 3D149179

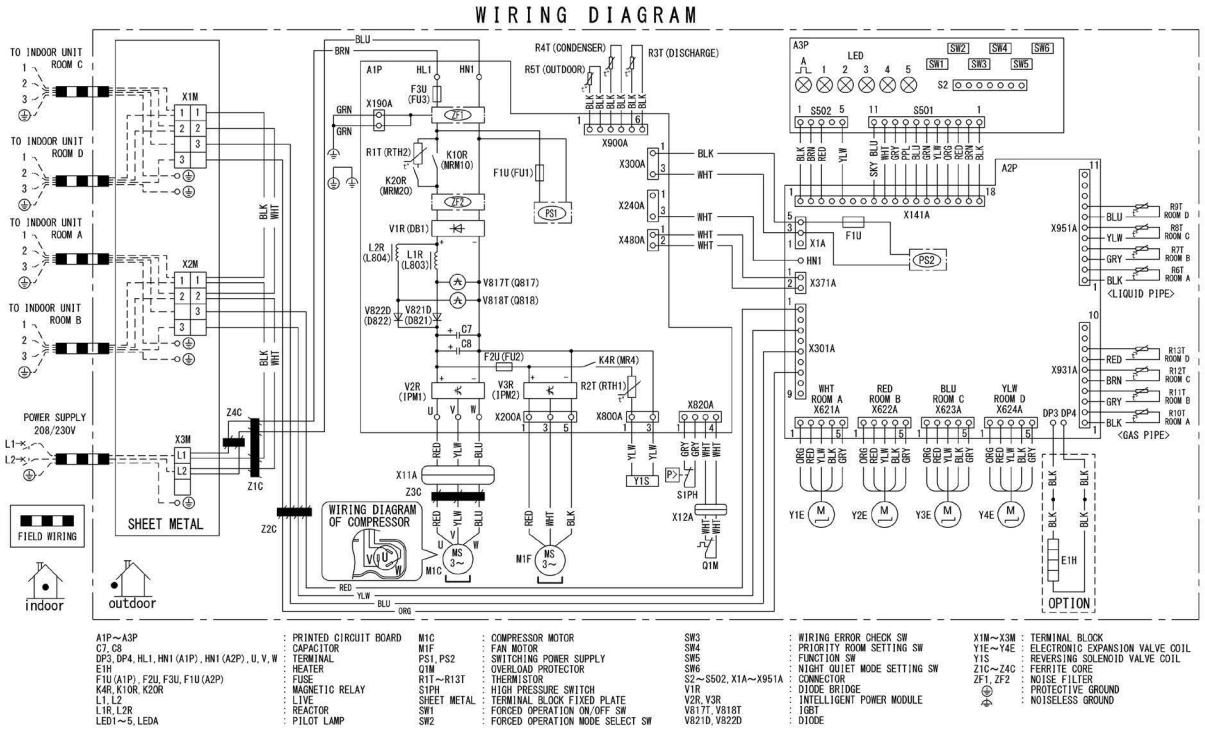
### 3MXM24AVJU9(8)




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A1P~A3P | : PRINTED CIRCUIT BOARD | M1C | : COMPRESSOR MOTOR | SW3 | : WIRING ERROR CHECK SW | X1M~X3M | : TERMINAL BLOCK |
| C7, C8 | : CAPACITOR | M1F | : FAN MOTOR | SW4 | : PRIORITY ROOM SETTING SW | Y1E~Y3E | : ELECTRONIC EXPANSION VALVE COIL |
| DP3, DP4, HL1, HN1 (A1P), HN1 (A2P), U, V, W | : TERMINAL | PS1, PS2 | : SWITCHING POWER SUPPLY | SW5 | : FUNCTION SW | Y1S | : REVERSING SOLENOID VALVE COIL |
| E1H | : HEATER | Q1M | : OVERLOAD PROTECTOR | SW6 | : NIGHT QUIET MODE SETTING SW | Z1C~Z4C | : FERRITE CORE |
| F1U (A1P), F2U, F3U, F1U (A2P) | : FUSE | R1T~R12T | : THERMISTOR | S2~S502, X1A~X951A | : CONNECTOR | ZF1, ZF2 | : NOISE FILTER |
| K4R, K10R, K20R | : MAGNETIC RELAY | S1PH | : HIGH PRESSURE SWITCH | V1R | : DIODE BRIDGE | ⏚ | : PROTECTIVE GROUND |
| L1, L2 | : LIVE | SHEET METAL | : TERMINAL BLOCK FIXED PLATE | V2R, V3R | : INTELLIGENT POWER MODULE | ⏚ | : NOISELESS GROUND |
| L1R, L2R | : REACTOR | SW1 | : FORCED OPERATION ON/OFF SW | V817T, V818T | : IGBT | | |
| LED1~5, LEDA | : PILOT LAMP | SW2 | : FORCED OPERATION MODE SELECT SW | V821D, V822D | : DIODE | | |

C: 3D149180

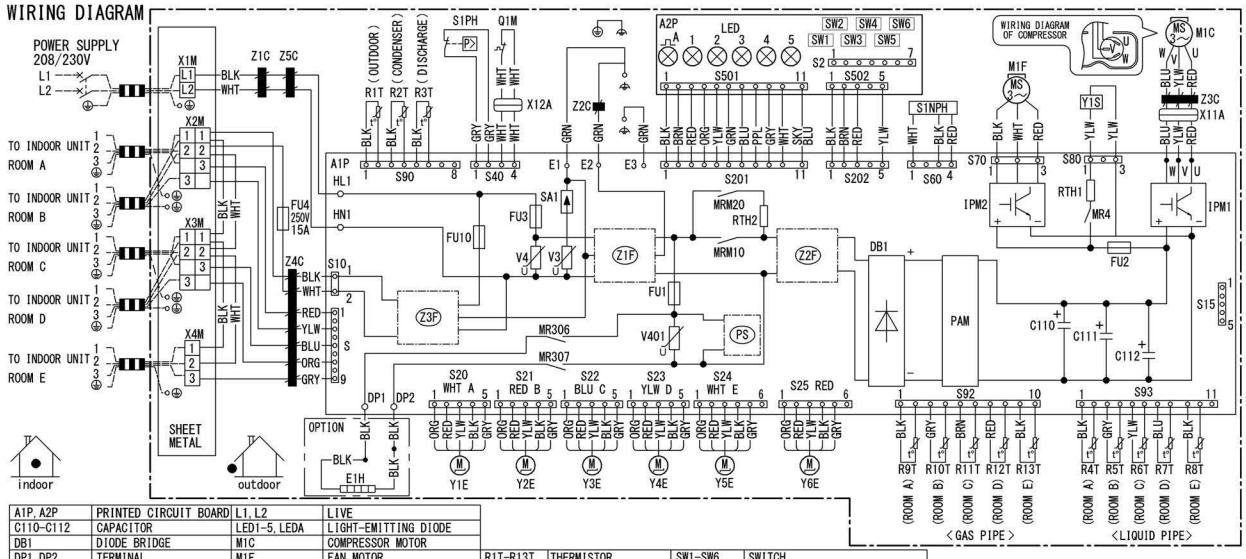
## 4MXM36AVJU9(8)




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A1P～A3P | PRINTED CIRCUIT BOARD | M1C | COMPRESSOR MOTOR | SW3 | WIRING ERROR CHECK SW | X1M～X3M | TERMINAL BLOCK |
| C7, C8 | CAPACITOR | M1F | FAN MOTOR | SW4 | PRIORITY ROOM SETTING SW | Y1E～Y4E | ELECTRONIC EXPANSION VALVE COIL |
| DP3, DP4, HL1, HN1 (A1P), HN1 (A2P), U, V, W | TERMINAL | PS1, PS2 | SWITCHING POWER SUPPLY | SW5 | FUNCTION SW | Y1S | REVERSING SOLENOID VALVE COIL |
| E1H | HEATER | Q1M | OVERLOAD PROTECTOR | SW6 | NIGHT QUIET MODE SETTING SW | Z1C～Z4C | FERRITE CORE |
| F1U (A1P), F2U, F3U, F1U (A2P) | FUSE | R1T～R13T | THERMISTOR | S2～S502, X1A～X951A | CONNECTOR | ZF1, ZF2 | NOISE FILTER |
| K4R, K1OR, K2OR | MAGNETIC RELAY | S1PH | HIGH PRESSURE SWITCH | V1R | DIODE BRIDGE | ⏚ | PROTECTIVE GROUND |
| L1, L2 | LIVE | SHEET METAL | TERMINAL BLOCK FIXED PLATE | V2R, V3R | INTELLIGENT POWER MODULE | ⏚ | NOISELESS GROUND |
| L1R, L2R | REACTOR | SW1 | FORCED OPERATION ON/OFF SW | V817T, V818T | IGBT | | |
| LED1～5, LEDA | PILOT LAMP | SW2 | FORCED OPERATION MODE SELECT SW | V821D, V822D | DIODE | | |

C: 3D149197

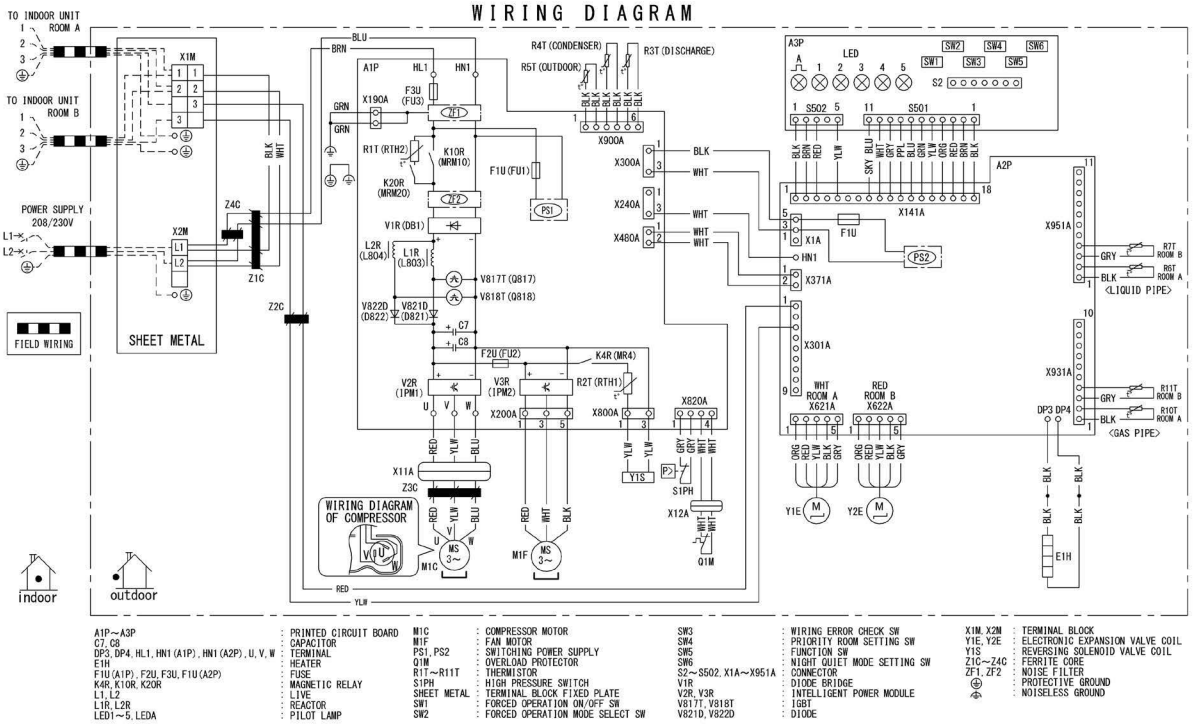
## 5MXM48AVJU9(8), 5MXT40AVJU9(8)




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| A1P, A2P | PRINTED CIRCUIT BOARD | L1, L2 | LIVE | | | | | | |
| C110-C112 | CAPACITOR | LED1-5, LEDA | LIGHT-EMITTING DIODE | | | | | | |
| DB1 | DIODE BRIDGE | M1C | COMPRESSOR MOTOR | | | | | | |
| DP1, DP2 | TERMINAL | M1F | FAN MOTOR | R1T-R13T | THERMISTOR | SW1-SW6 | SWITCH | | |
| E1, E2, E3 | TERMINAL | MR4, MR306, MR307 | MAGNETIC RELAY | RTH1, RTH2 | RESISTOR | V3, V4, V401 | VARISTOR | Z1C-Z5C | FERRITE CORE |
| E1H | HEATER | MRM10, MRM20 | MAGNETIC RELAY | S, S2-S502 | CONNECTOR | X11A, X12A | CONNECTOR | Z1F-Z3F | NOISE FILTER |
| FU1-FU4, FU10 | FUSE | PAM | PULSE AMPLITUDE MODULATION | S1NPH | PRESSURE SENSOR | X1M-X4M | TERMINAL BLOCK | ▬ | FIELD WIRING |
| HL1, HN1 | TERMINAL | PS | SWITCHING POWER SUPPLY | S1PH | HIGH PRESSURE SWITCH | Y1E-Y6E | ELECTRONIC EXPANSION VALVE COIL | ⏚ | PROTECTIVE GROUND |
| IPM1, IPM2 | INTELLIGENT POWER MODULE | Q1M | OVERLOAD PROTECTOR | SA1 | SURGE ARRESTOR | Y1S | REVERSING SOLENOID VALVE COIL | ⏚ | NOISELESS GROUND |

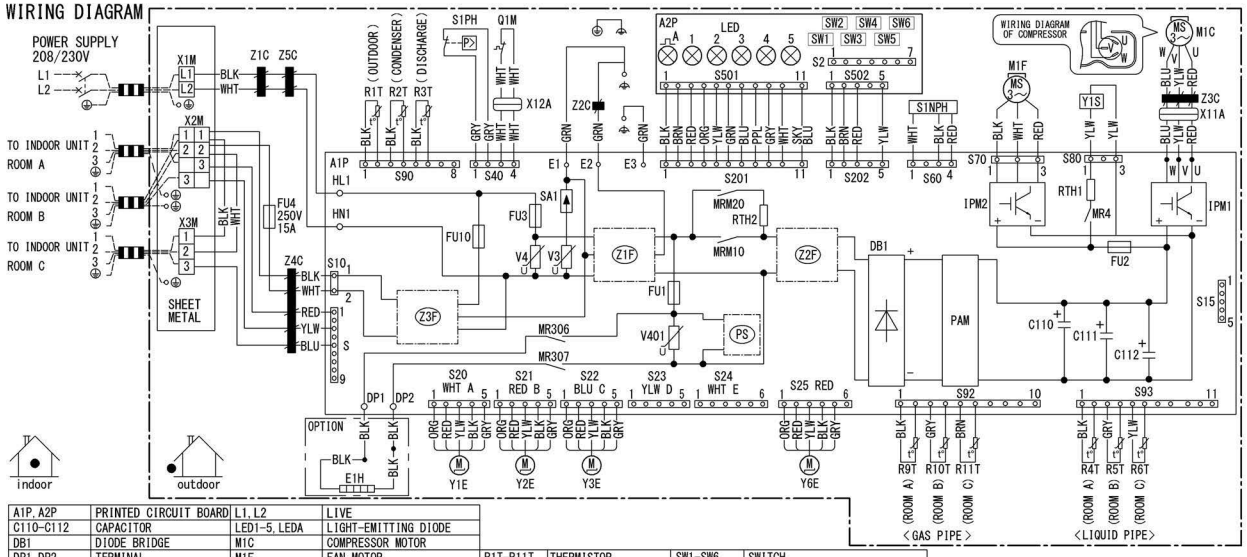
C: 3D156355

## 2MXTH18AVJU9(8)




C: 3D149587

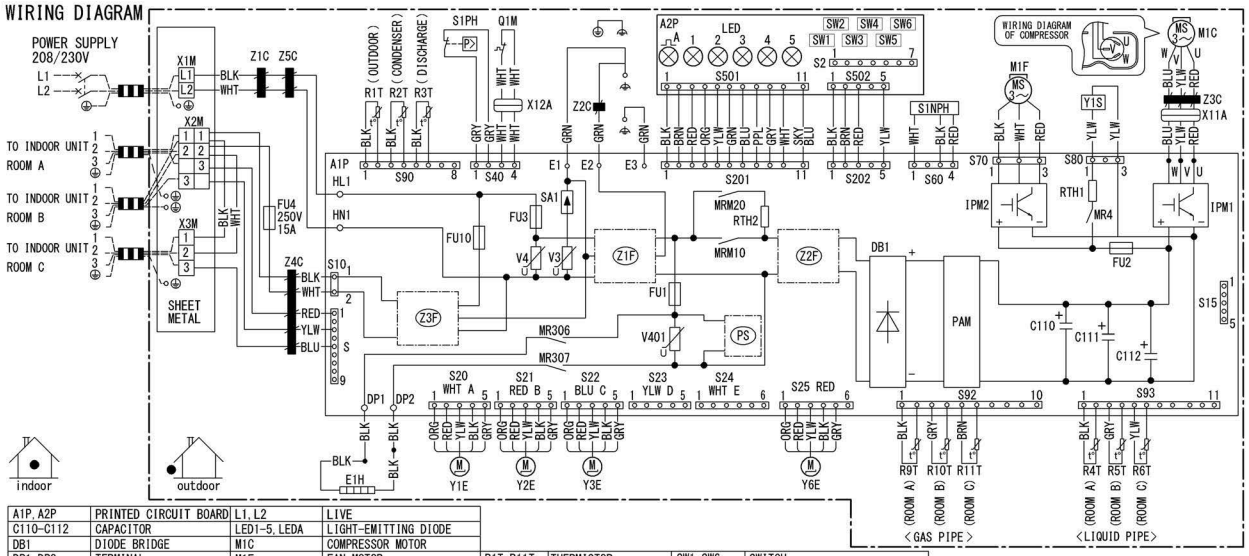
## 3MXT24AVJU9(8)




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| A1P, A2P | PRINTED CIRCUIT BOARD | L1, L2 | LINE | | | | | | |
| C110~C112 | CAPACITOR | LED1~5, LEDA | LIGHT-EMITTING DIODE | | | | | | |
| DB1 | DIODE BRIDGE | M1C | COMPRESSOR MOTOR | | | | | | |
| DP1, DP2 | TERMINAL | M1F | FAN MOTOR | R1T~R11T | THERMISTOR | SW1~SW6 | SWITCH | | |
| E1, E2, E3 | TERMINAL | MR4, MR306, MR307 | MAGNETIC RELAY | RTH1, RTH2 | RESISTOR | V3, V4, V401 | VARISTOR | Z1C~Z5C | FERRITE CORE |
| E1H | HEATER | MRM10, MRM20 | MAGNETIC RELAY | S, S2~S502 | CONNECTOR | X11A, X12A | CONNECTOR | Z1F~Z3F | NOISE FILTER |
| FU1~FU4, FU10 | FUSE | PAM | PULSE AMPLITUDE MODULATION | S1NPH | PRESSURE SENSOR | X1M~X3M | TERMINAL BLOCK | ▬ | FIELD WIRING |
| HL1, HN1 | TERMINAL | PS | SWITCHING POWER SUPPLY | S1PH | HIGH PRESSURE SWITCH | Y1E~Y6E | ELECTRONIC EXPANSION VALVE COIL | ⏚ | PROTECTIVE GROUND |
| IPM1, IPM2 | INTELLIGENT POWER MODULE | Q1M | OVERLOAD PROTECTOR | SA1 | SURGE ARRESTOR | Y1S | REVERSING SOLENOID VALVE COIL | ⏚ | NOISELESS GROUND |

C: 3D156320

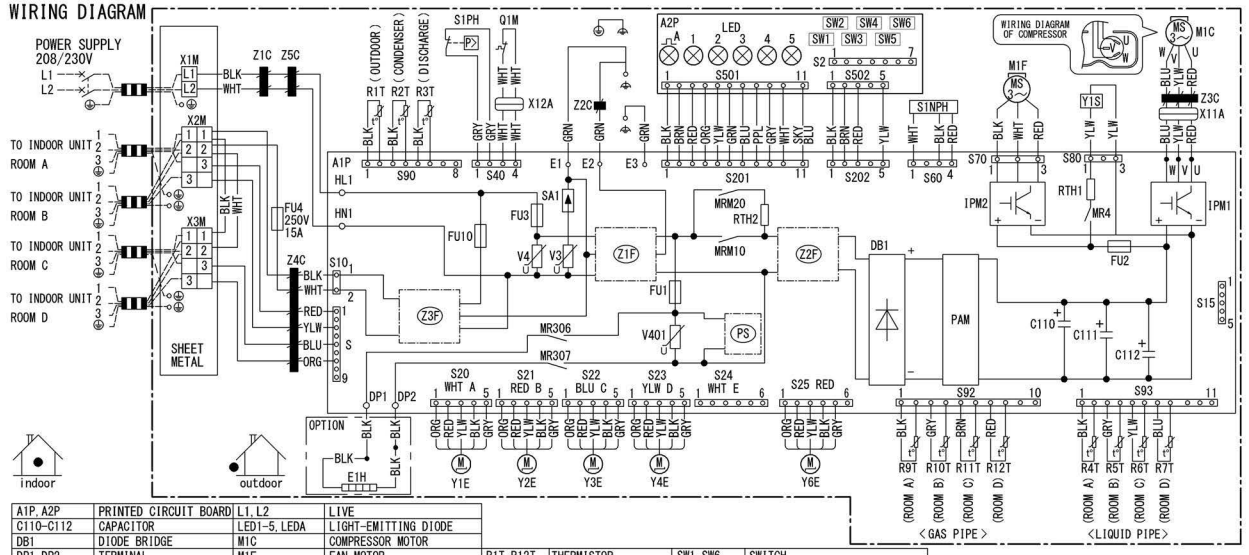
## 3MXTH24AVJU9(8)




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| A1P, A2P | PRINTED CIRCUIT BOARD | L1, L2 | LIVE | | | | | | |
| C110-C112 | CAPACITOR | LED1-5, LEDA | LIGHT-EMITTING DIODE | | | | | | |
| DB1 | DIODE BRIDGE | M1C | COMPRESSOR MOTOR | | | | | | |
| DP1, DP2 | TERMINAL | M1F | FAN MOTOR | R1T-R11T | THERMISTOR | SW1-SW6 | SWITCH | | |
| E1, E2, E3 | TERMINAL | MR4, MR306, MR307 | MAGNETIC RELAY | RTH1, RTH2 | RESISTOR | V3, V4, V401 | VARISTOR | Z1C-Z5C | FERRITE CORE |
| E1H | HEATER | MRM10, MRM20 | MAGNETIC RELAY | S, S2-S502 | CONNECTOR | X11A, X12A | CONNECTOR | Z1F-Z3F | NOISE FILTER |
| FU1-FU4, FU10 | FUSE | PAM | PULSE AMPLITUDE MODULATION | S1NPH | PRESSURE SENSOR | X1M-X3M | TERMINAL BLOCK | | FIELD WIRING |
| HL1, HN1 | TERMINAL | PS | SWITCHING POWER SUPPLY | S1PH | HIGH PRESSURE SWITCH | Y1E-Y6E | ELECTRONIC EXPANSION VALVE COIL | | PROTECTIVE GROUND |
| IPM1, IPM2 | INTELLIGENT POWER MODULE | Q1M | OVERLOAD PROTECTOR | SA1 | SURGE ARRESTOR | Y1S | REVERSING SOLENOID VALVE COIL | | NOISELESS GROUND |

C: 3D156321

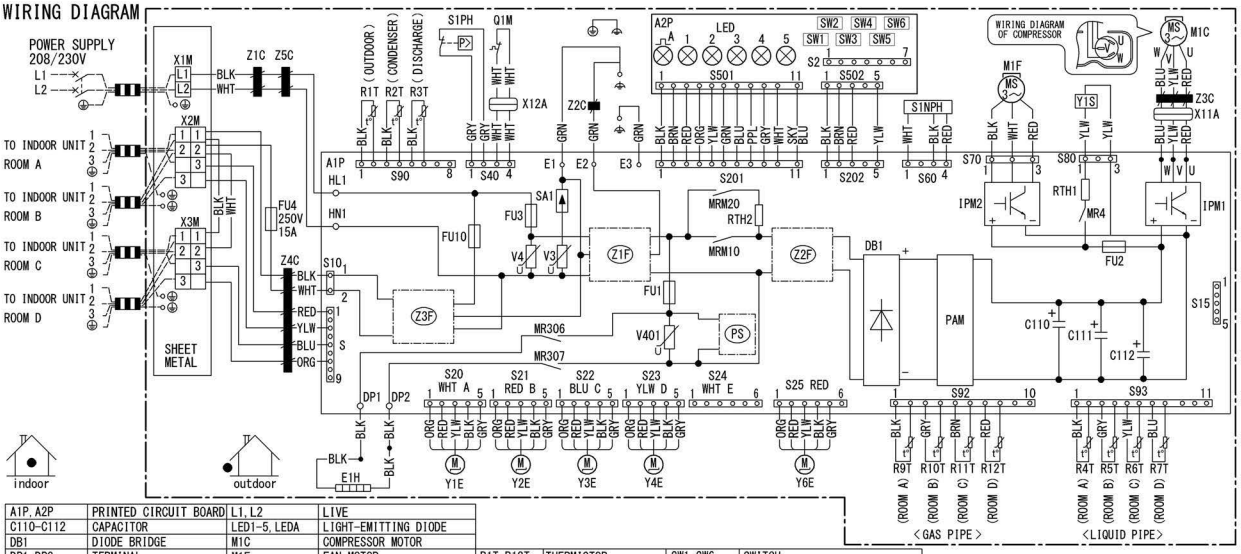
## 4MXT36AVJU9(8)




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| A1P, A2P | PRINTED CIRCUIT BOARD | L1, L2 | LIVE | | | | | | |
| C110-C112 | CAPACITOR | LED1-5, LEDA | LIGHT-EMITTING DIODE | | | | | | |
| DB1 | DIODE BRIDGE | M1C | COMPRESSOR MOTOR | | | | | | |
| DP1, DP2 | TERMINAL | M1F | FAN MOTOR | R1T-R12T | THERMISTOR | SW1-SW6 | SWITCH | | |
| E1, E2, E3 | TERMINAL | MR4, MR306, MR307 | MAGNETIC RELAY | RTH1, RTH2 | RESISTOR | V3, V4, V401 | VARISTOR | Z1C-Z5C | FERRITE CORE |
| E1H | HEATER | MRM10, MRM20 | MAGNETIC RELAY | S, S2-S502 | CONNECTOR | X11A, X12A | CONNECTOR | Z1F-Z3F | NOISE FILTER |
| FU1-FU4, FU10 | FUSE | PAM | PULSE AMPLITUDE MODULATION | S1NPH | PRESSURE SENSOR | X1M-X3M | TERMINAL BLOCK | | FIELD WIRING |
| HL1, HN1 | TERMINAL | PS | SWITCHING POWER SUPPLY | S1PH | HIGH PRESSURE SWITCH | Y1E-Y6E | ELECTRONIC EXPANSION VALVE COIL | | PROTECTIVE GROUND |
| IPM1, IPM2 | INTELLIGENT POWER MODULE | Q1M | OVERLOAD PROTECTOR | SA1 | SURGE ARRESTOR | Y1S | REVERSING SOLENOID VALVE COIL | | NOISELESS GROUND |

C: 3D156353

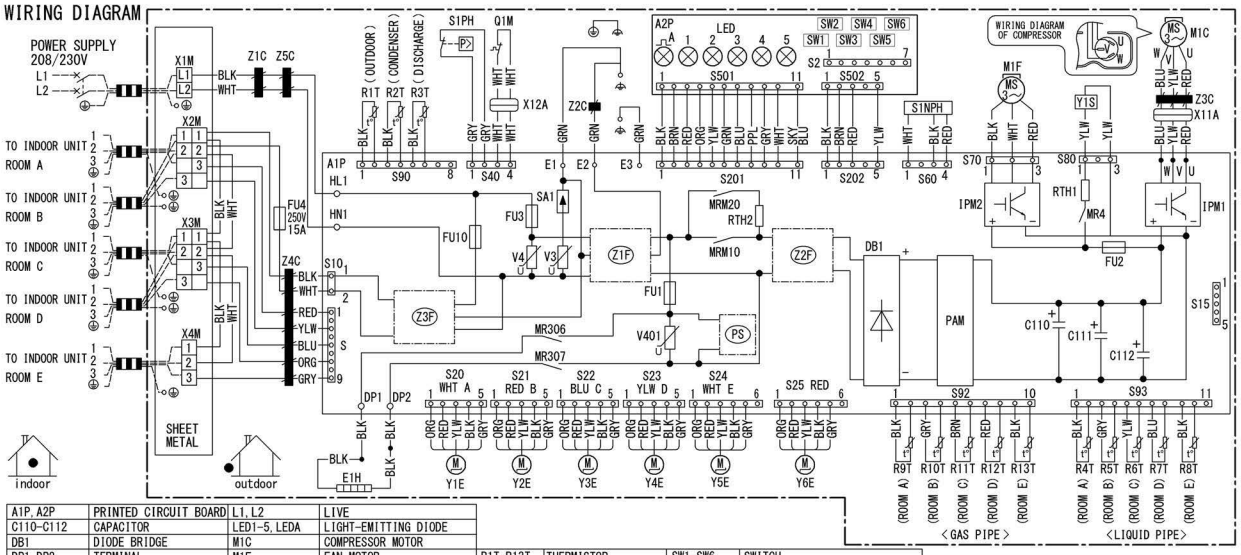
## 4MXTH36AVJU9(8)




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| A1P, A2P | PRINTED CIRCUIT BOARD | L1, L2 | LIVE | | | | | | |
| C11O-C112 | CAPACITOR | LED1-5, LEDA | LIGHT-EMITTING DIODE | | | | | | |
| DB1 | DIODE BRIDGE | M1C | COMPRESSOR MOTOR | | | | | | |
| DP1, DP2 | TERMINAL | M1F | FAN MOTOR | R1T-R12T | THERMISTOR | SW1-SW6 | SWITCH | Z1C-Z5C | FERRITE CORE |
| E1, E2, E3 | TERMINAL | MR4, MR306, MR307 | MAGNETIC RELAY | RTH1, RTH2 | RESISTOR | V3, V4, V401 | VARISTOR | Z1F-Z3F | NOISE FILTER |
| E1H | HEATER | MRM1O, MRM2O | MAGNETIC RELAY | S, S2-S502 | CONNECTOR | X11A, X12A | CONNECTOR | | FIELD WIRING |
| FU1-FU4, FU1O | FUSE | PAM | PULSE AMPLITUDE MODULATION | S1NPH | PRESSURE SENSOR | X1M-X3M | TERMINAL BLOCK | | PROTECTIVE GROUND |
| HL1, HN1 | TERMINAL | PS | SWITCHING POWER SUPPLY | S1PH | HIGH PRESSURE SWITCH | Y1E-Y6E | ELECTRONIC EXPANSION VALVE COIL | | NOISELESS GROUND |
| IPM1, IPM2 | INTELLIGENT POWER MODULE | Q1M | OVERLOAD PROTECTOR | SA1 | SURGE ARRESTOR | Y1S | REVERSING SOLENOID VALVE COIL | | |

C: 3D156354

## 5MXTH40AVJU9(8)



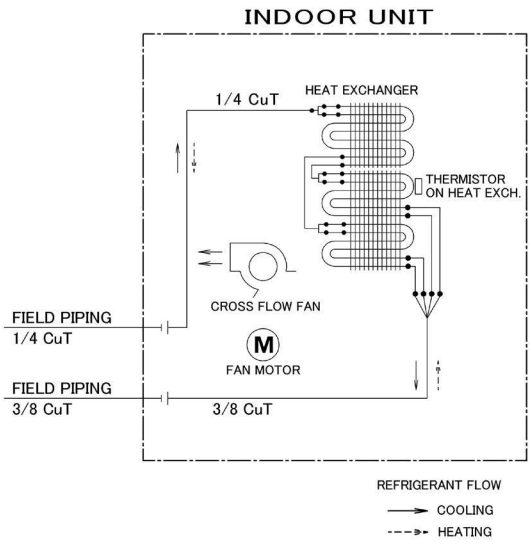

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| A1P, A2P | PRINTED CIRCUIT BOARD | L1, L2 | LIVE | | | | | | |
| C11O-C112 | CAPACITOR | LED1-5, LEDA | LIGHT-EMITTING DIODE | | | | | | |
| DB1 | DIODE BRIDGE | M1C | COMPRESSOR MOTOR | | | | | | |
| DP1, DP2 | TERMINAL | M1F | FAN MOTOR | R1T-R13T | THERMISTOR | SW1-SW6 | SWITCH | | |
| E1, E2, E3 | TERMINAL | MR4, MR306, MR307 | MAGNETIC RELAY | RTH1, RTH2 | RESISTOR | V3, V4, V401 | VARISTOR | Z1C-Z5C | FERRITE CORE |
| E1H | HEATER | MRM1O, MRM2O | MAGNETIC RELAY | S, S2-S502 | CONNECTOR | X11A, X12A | CONNECTOR | Z1F-Z3F | NOISE FILTER |
| FU1-FU4, FU1O | FUSE | PAM | PULSE AMPLITUDE MODULATION | S1NPH | PRESSURE SENSOR | X1M-X4M | TERMINAL BLOCK | | FIELD WIRING |
| HL1, HN1 | TERMINAL | PS | SWITCHING POWER SUPPLY | S1PH | HIGH PRESSURE SWITCH | Y1E-Y6E | ELECTRONIC EXPANSION VALVE COIL | | PROTECTIVE GROUND |
| IPM1, IPM2 | INTELLIGENT POWER MODULE | Q1M | OVERLOAD PROTECTOR | SA1 | SURGE ARRESTOR | Y1S | REVERSING SOLENOID VALVE COIL | | NOISELESS GROUND |

C: 3D156356

# 6. Piping Diagram

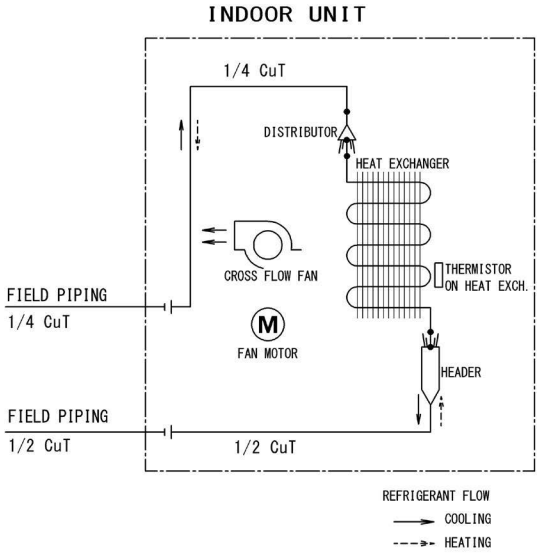
## 6.1 Indoor unit

### CTXV07AVJU9, FTXV09/12AVJU9



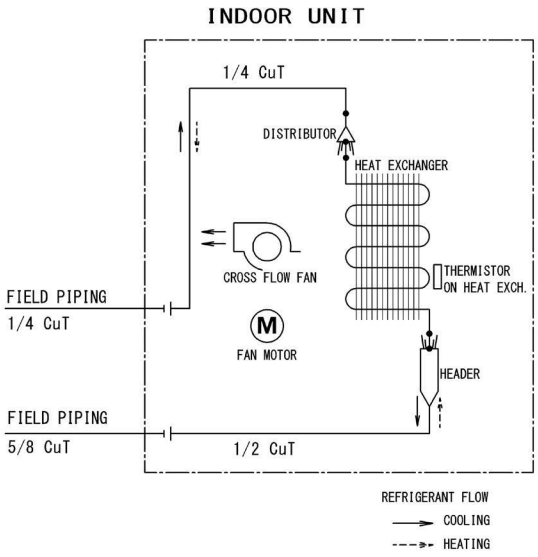

4D150950

### FTXV15/18AVJU9



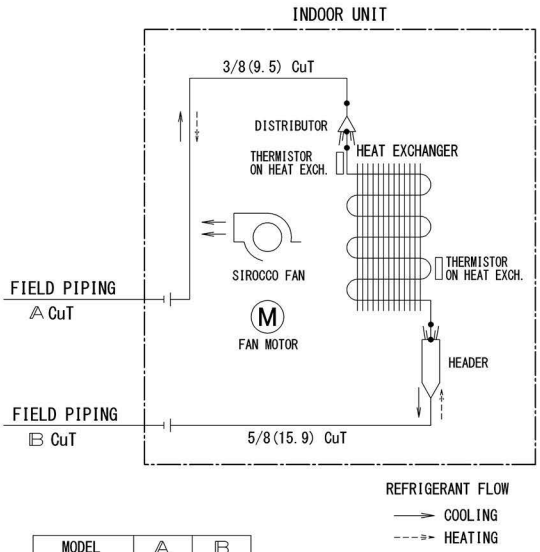

4D091769E

### FTXV24AVJU9




4D091768C

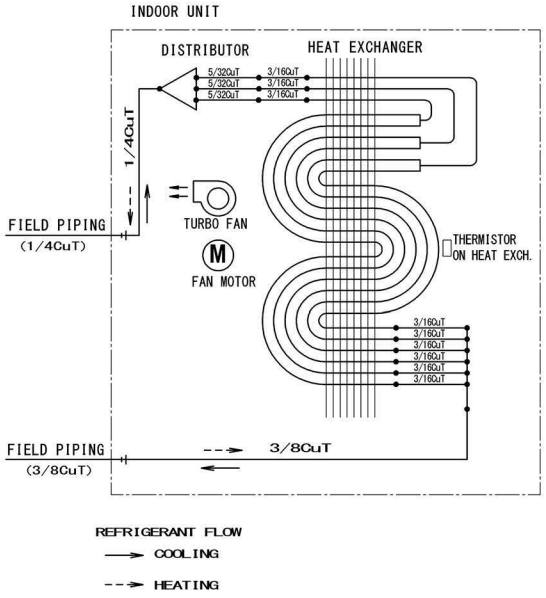
### CDMA07AVJU9, FDMA09/12/15/18/24AVJU9




| MODEL | Ⓐ | Ⓑ |
|---|---|---|
| FDMQ09・12<br>FDMA09・12<br>CDMQ07<br>CDMA07 | 1/4(6.4) | 3/8(9.5) |
| FDMQ15・18<br>FDMR50・60<br>FDMA15・18 | 1/4(6.4) | 1/2(12.7) |
| FDMQ24<br>FDMR71<br>FDMA24 | 1/4(6.4) | 5/8(15.9) |

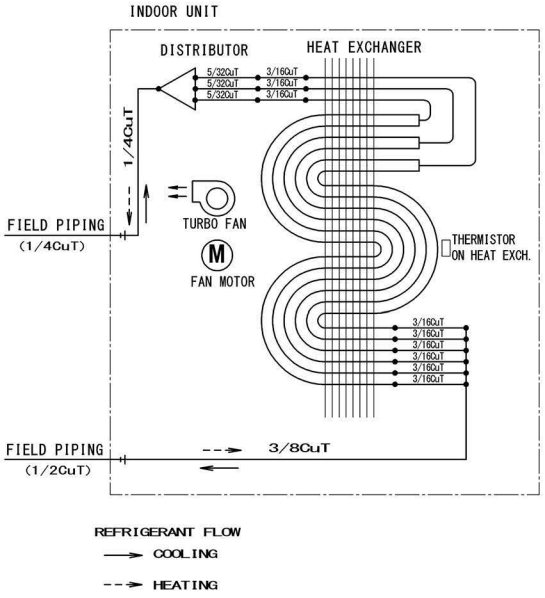
4D112974C

## FVXV09/12AVJUW(T)9



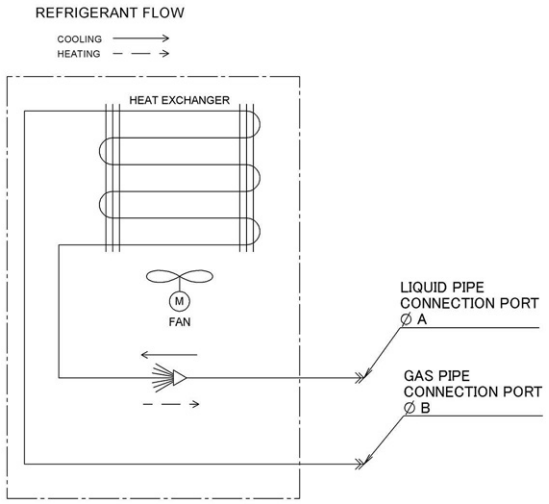

4D158898

## FVXV15/18AVJUW(T)9




4D158899

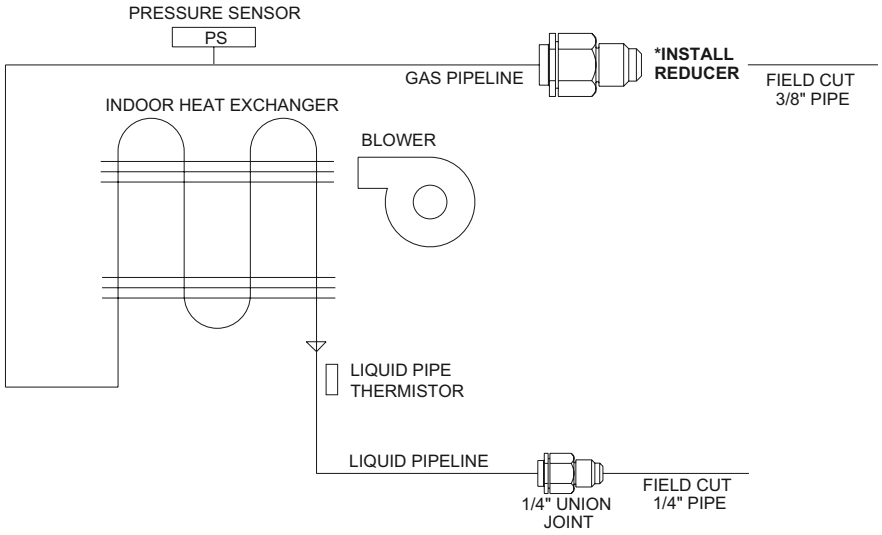
## FFA09/12/15/18AVJU9



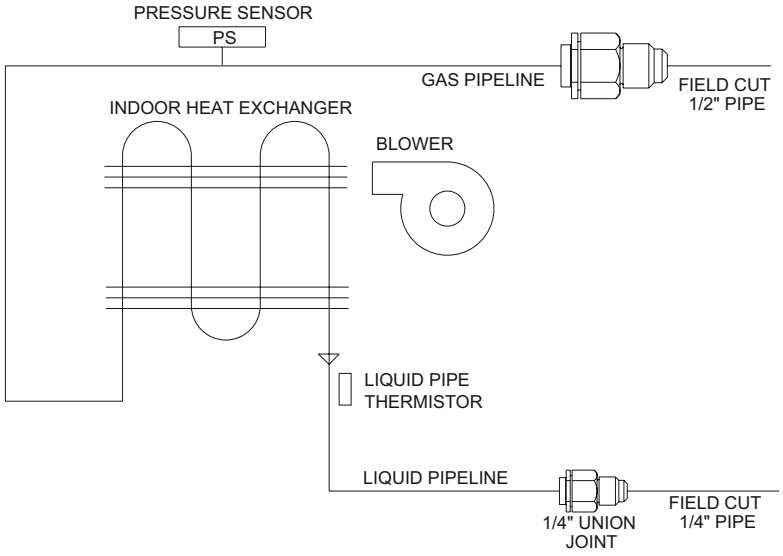

| MODEL | A | B |
|---|---|---|
| FFQ09Q2VJU FFQ09W2VJU9 FFQ09W2VJU8 FFA09AVJU9 | 1/4(6.4) | 3/8(9.5) |
| FFQ12Q2VJU FFQ12W2VJU9 FFQ12W2VJU8 FFA12AVJU9 | | |
| FFQ15Q2VJU FFQ15W2VJU9 FFQ15W2VJU8 FFA15AVJU9 | | 1/2(12.7) |
| FFQ18Q2VJU FFQ18W2VJU9 FFQ18W2VJU8 FFA18AVJU9 | | |

4D106033C

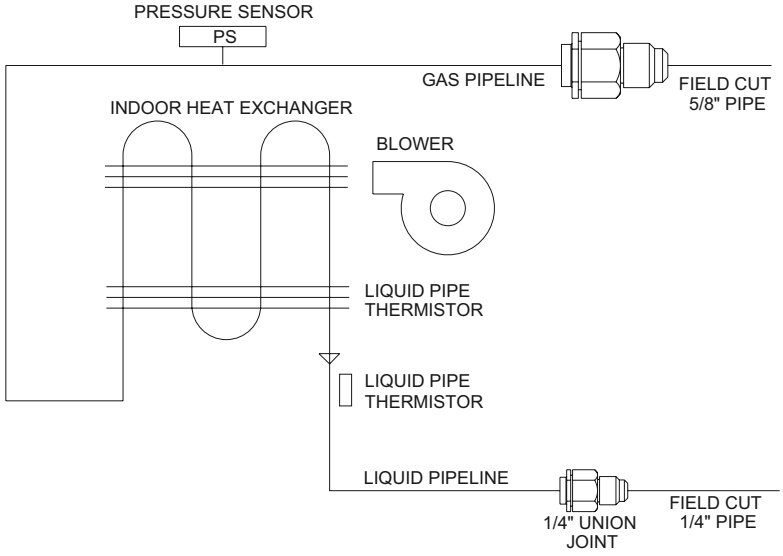
## CMXV12AVJUA




## CMXV18AVJUA

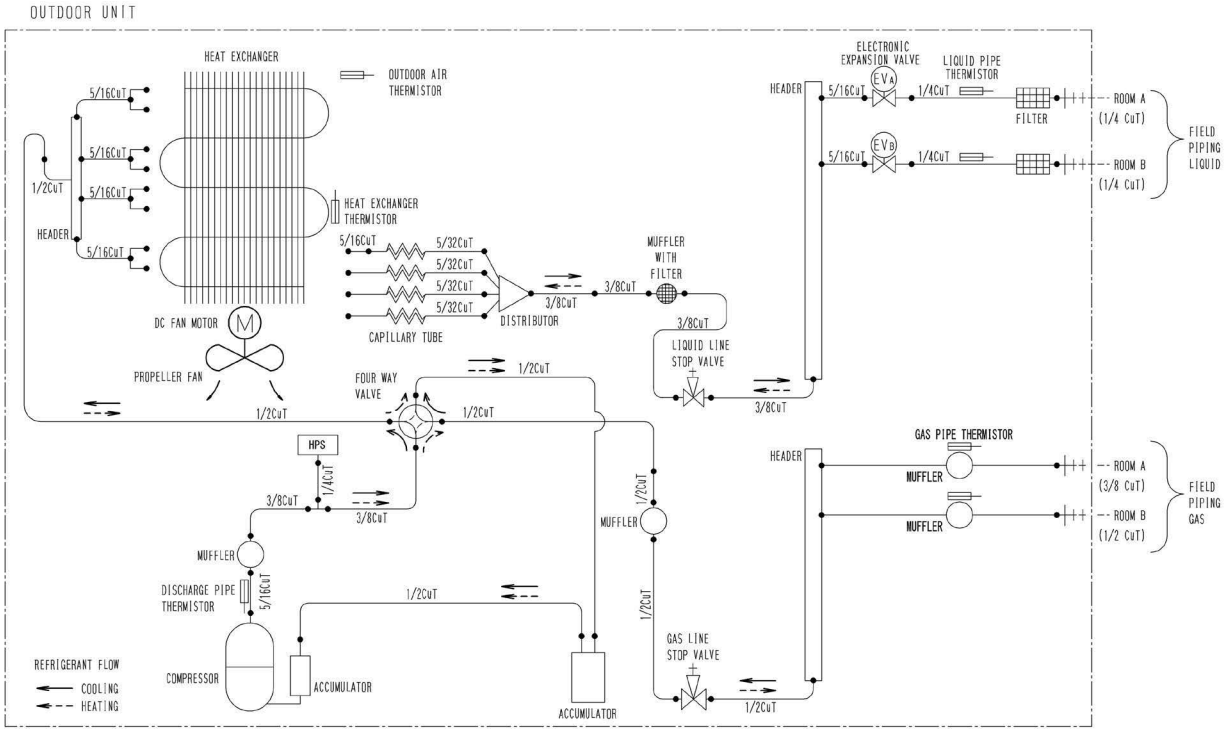



## CMXV24AVJUA



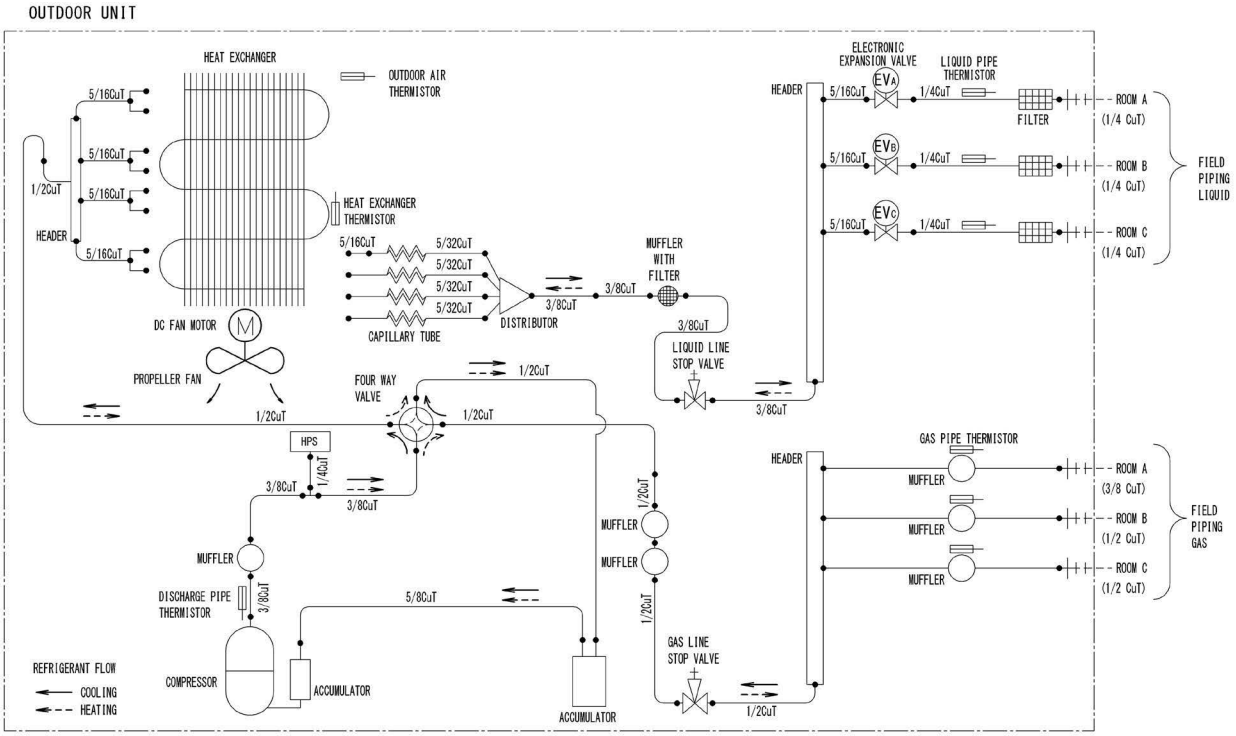
## 6.2 Outdoor unit

### 2MXM18AVJU9(8)



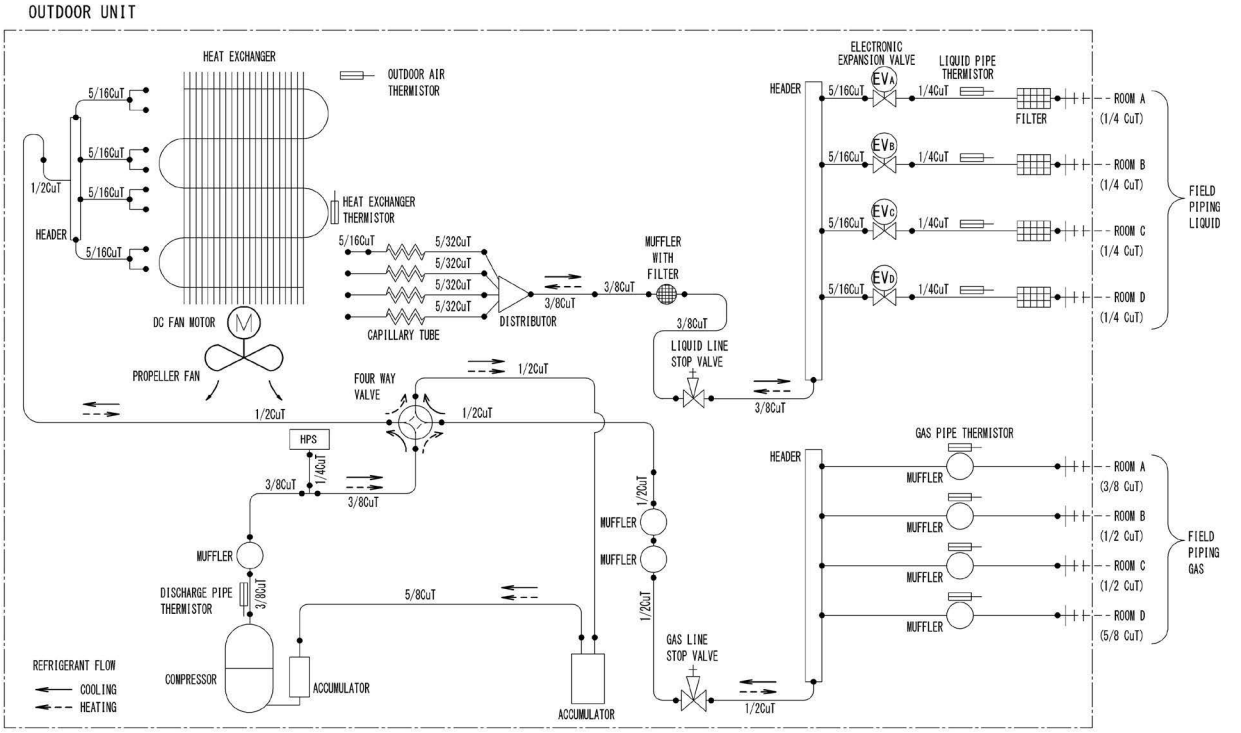

3D149796

### 3MXM24AVJU9(8)



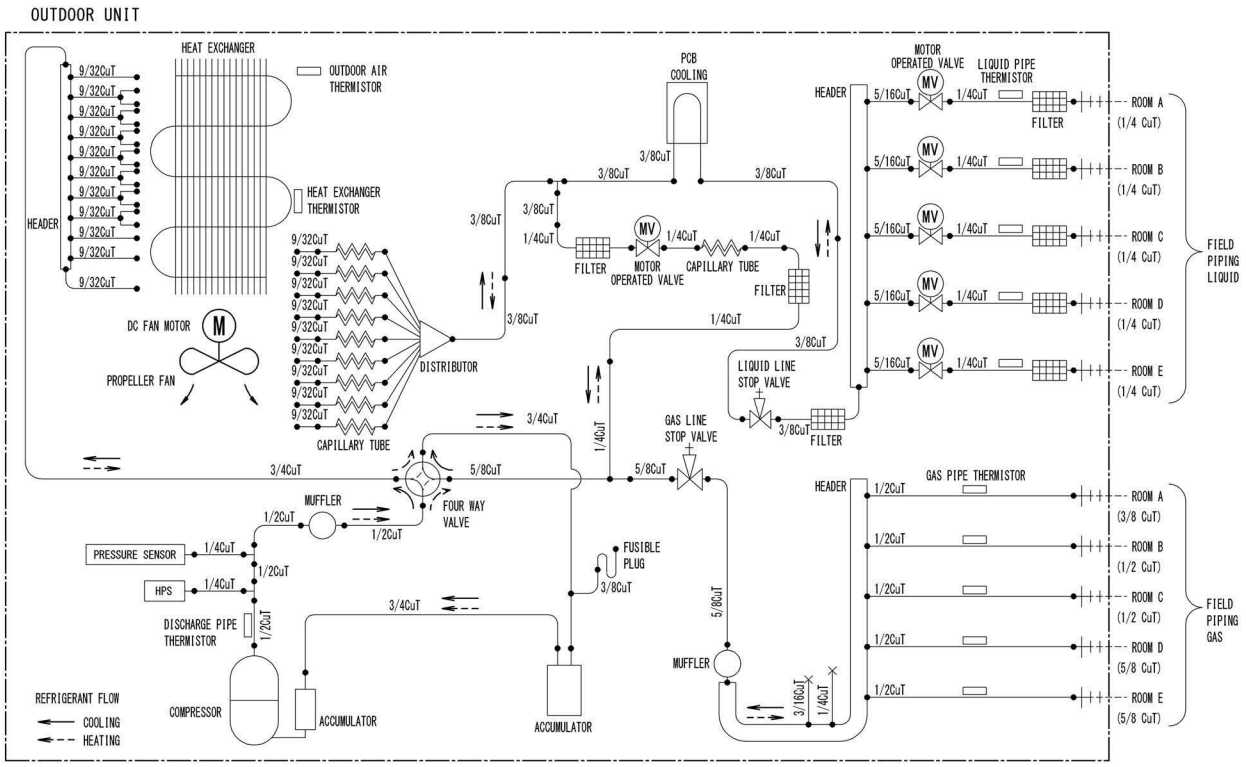

3D149798

## 4MXM36AVJU9(8)



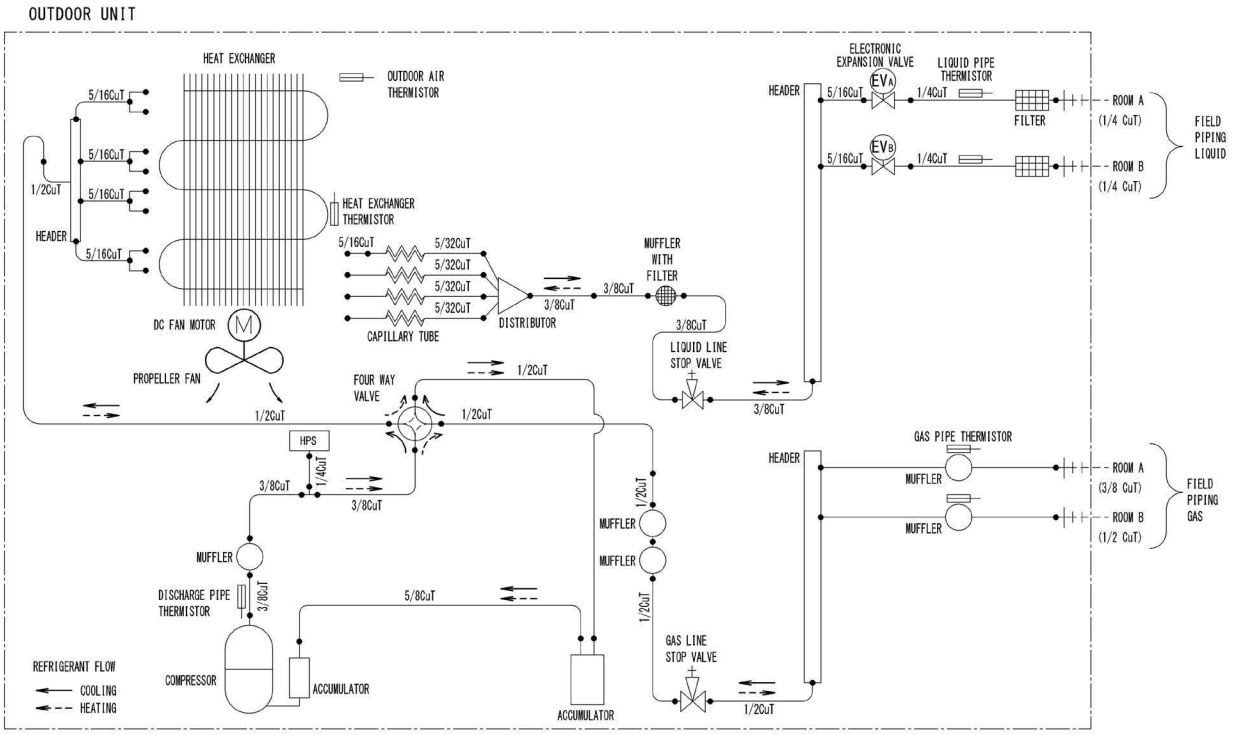

3D149799

## 5MXM48AVJU9(8), 5MXT40AVJU9(8), 5MXTH40AVJU9(8)



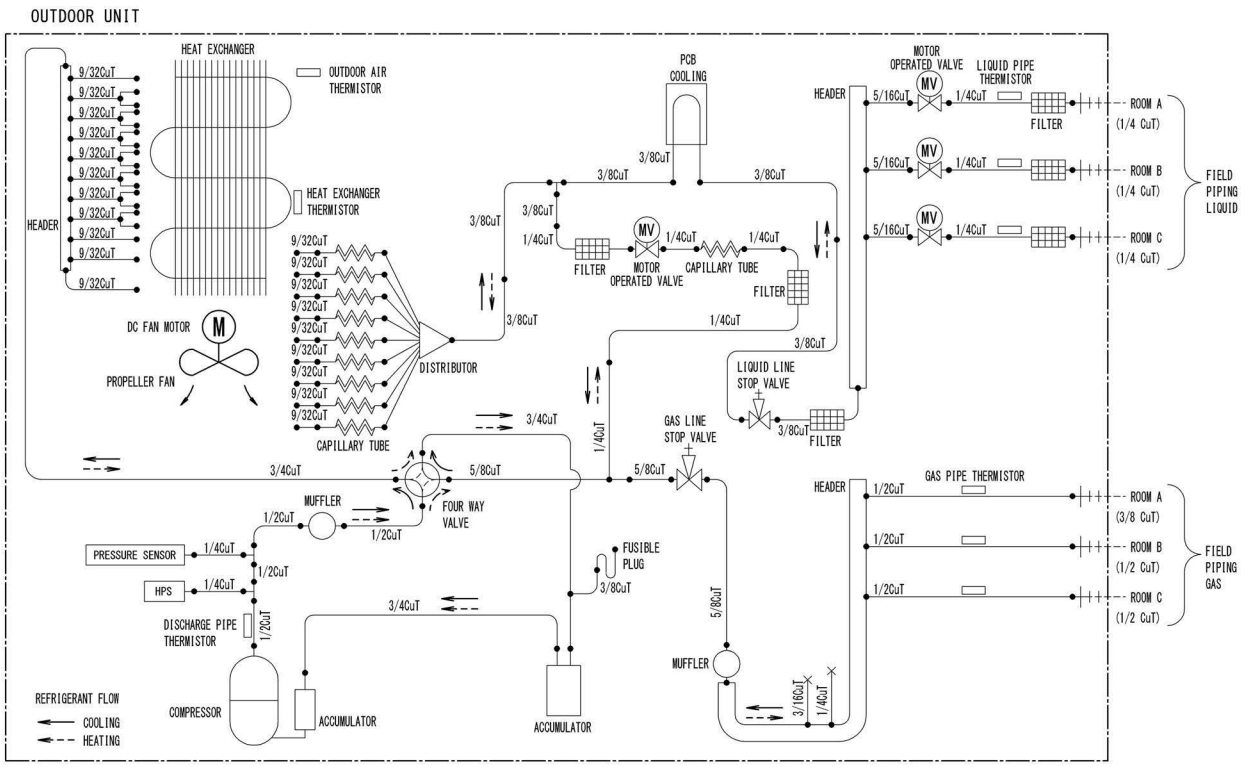

3D157508

## 2MXT18AVJU9(8), 2MXTH18AVJU9(8)



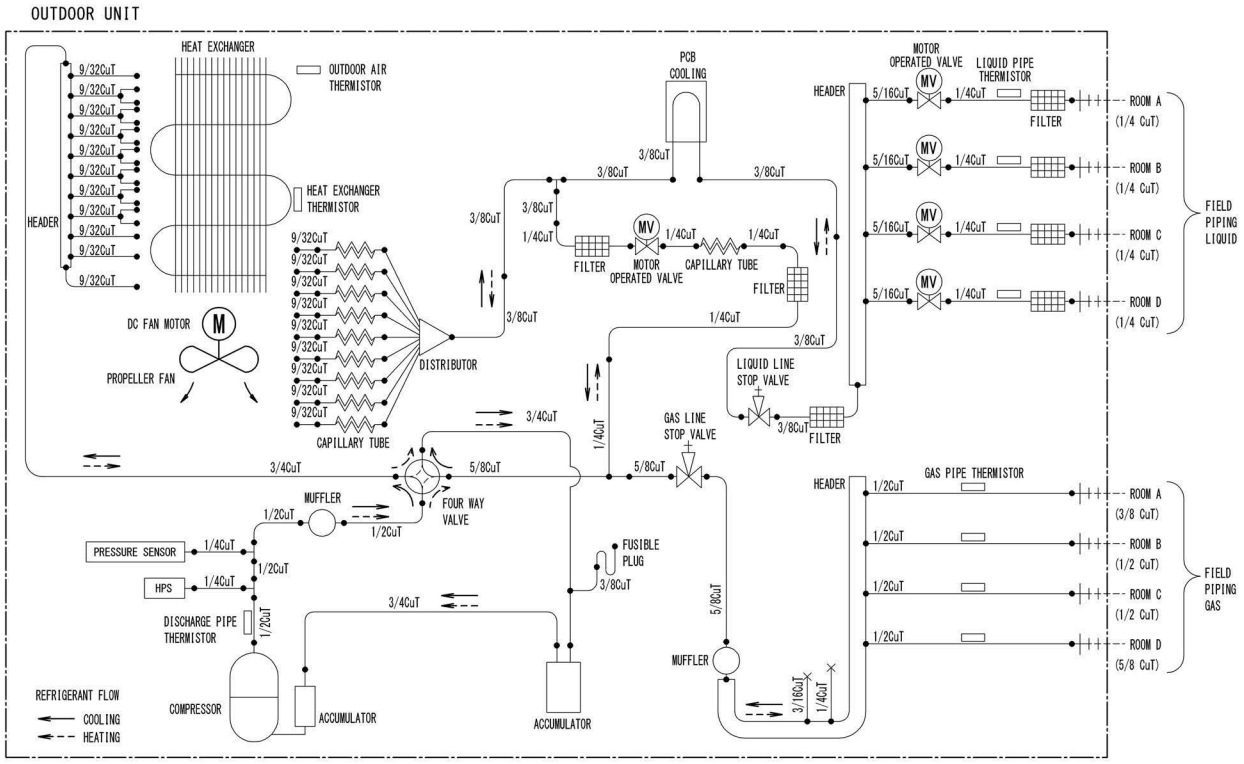

3D149797

## 3MXT24AVJU9(8), 3MXTH24AVJU9(8)




3D157510

## 4MXT36AVJU9(8), 4MXTH36AVJU9(8)




3D157509

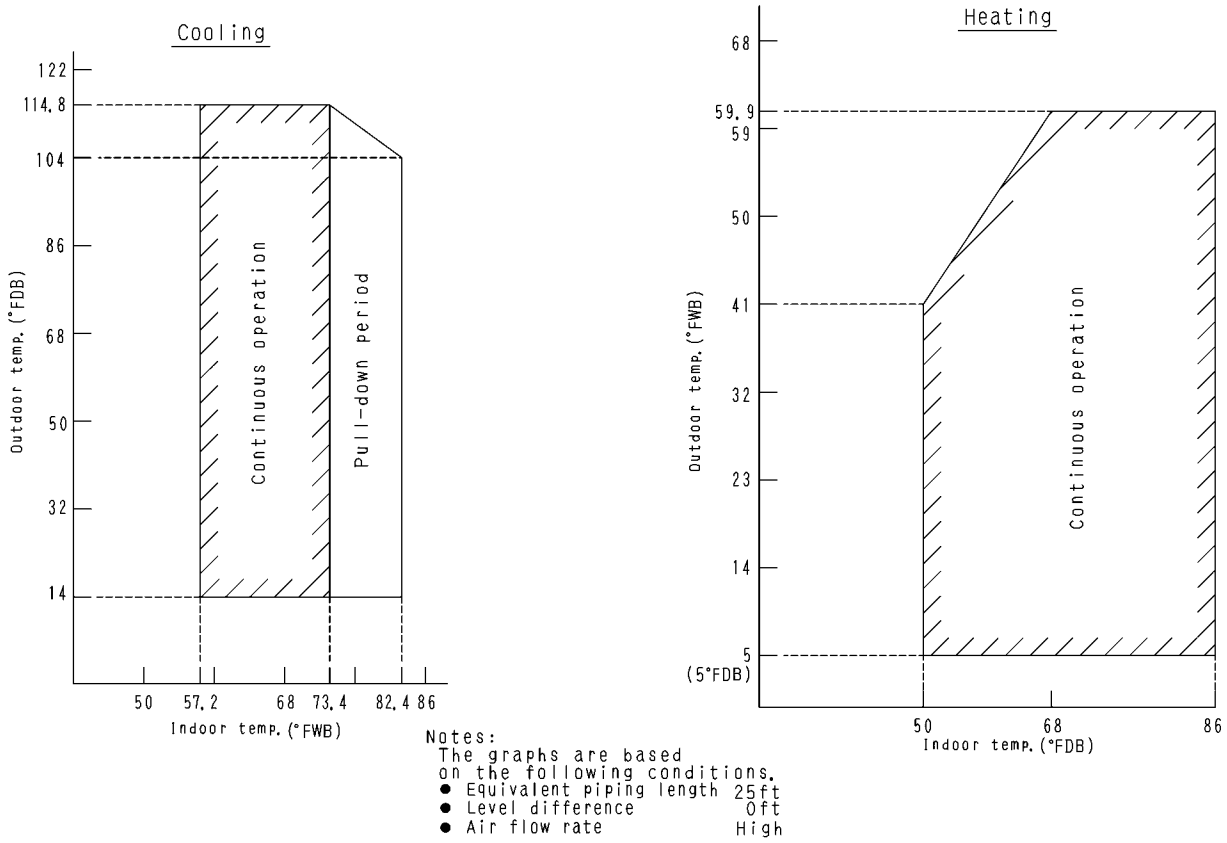
# 7. Capacity Table

Refer to Engineering Data books below for the Combination Capacity.

| Type | Model Name | Reference |
|---|---|---|
| Standard type | 2MXM18AVJU9(8)<br>3MXM24AVJU9(8)<br>4MXM36AVJU9(8)<br>5MXM48AVJU9(8) | EDUS122403C |
| Cold climate type | 2MXT18AVJU9(8)<br>3MXT24AVJU9(8)<br>4MXT36AVJU9(8)<br>5MXT40AVJU9(8)<br><br>2MXTH18AVJU9(8)<br>3MXTH24AVJU9(8)<br>4MXTH36AVJU9(8)<br>5MXTH40AVJU9(8) | EDUS122404C |

# 8. Operation Limit

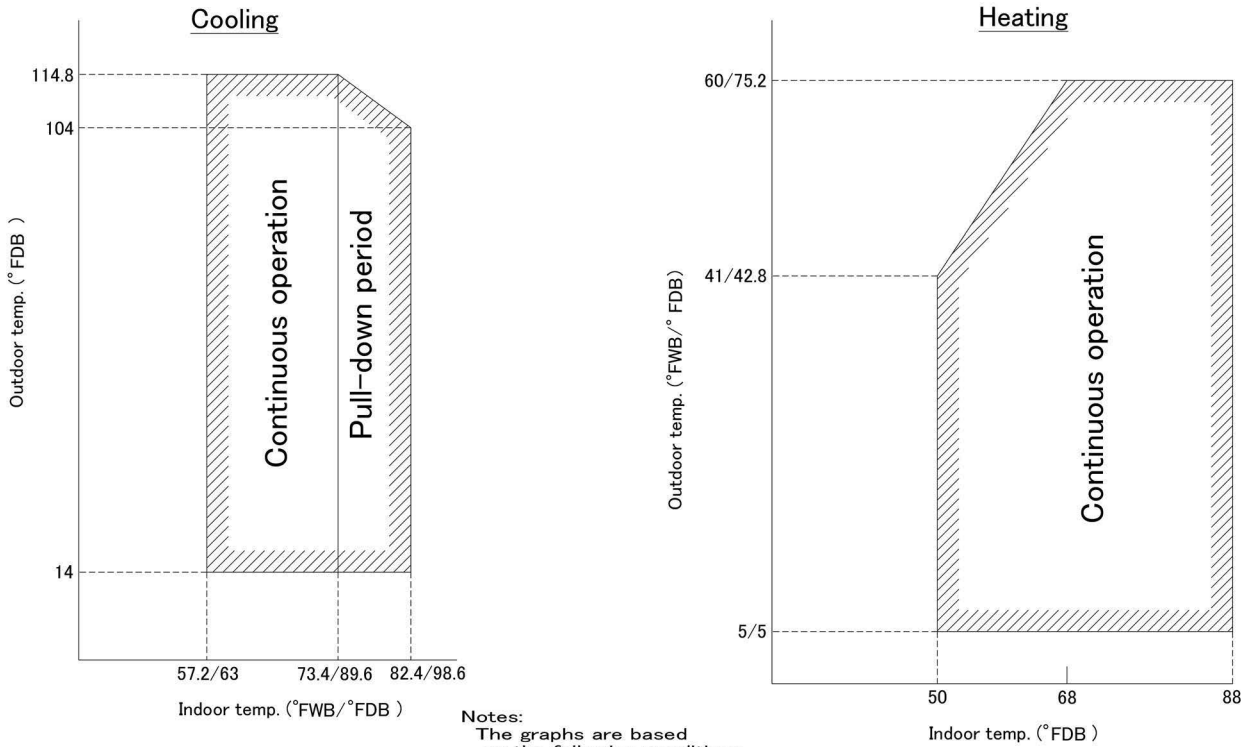
## 2MXM18AVJU9(8), 3MXM24AVJU9(8), 4MXM36AVJU9(8)




Notes:
The graphs are based on the following conditions.
- Equivalent piping length 25ft
- Level difference 0ft
- Air flow rate High

3D048149D

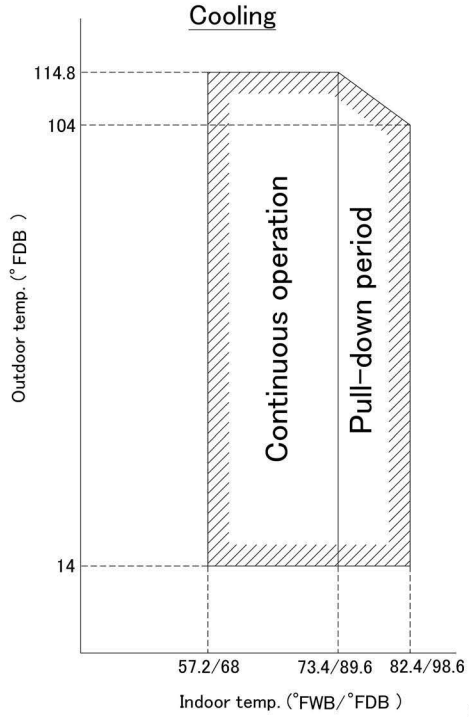
## 5MXM48AVJU9(8)

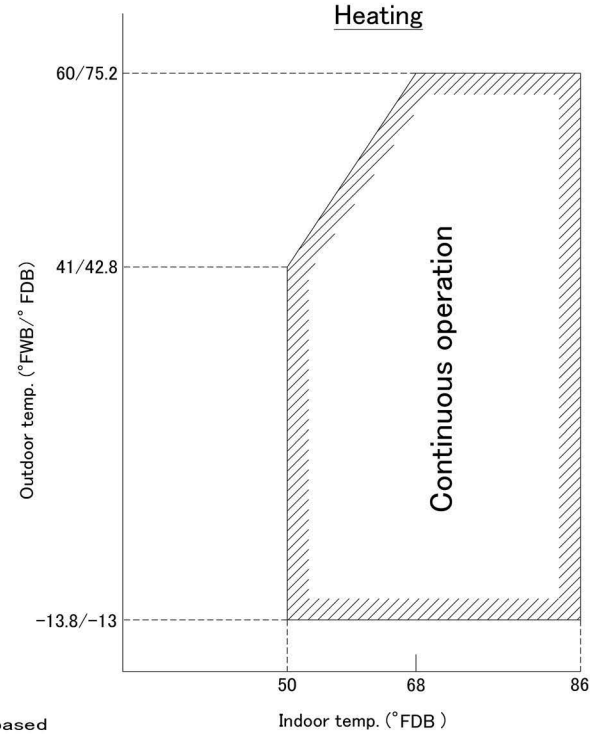



Notes:
The graphs are based on the following conditions.
- Equivalent piping length 25ft per room
- Level difference 0ft
- Air flow rate High
- All connection ports are connected to the indoor units.

3D158370

## 2MXT18AVJU9(8), 2MXTH18AVJU9(8)

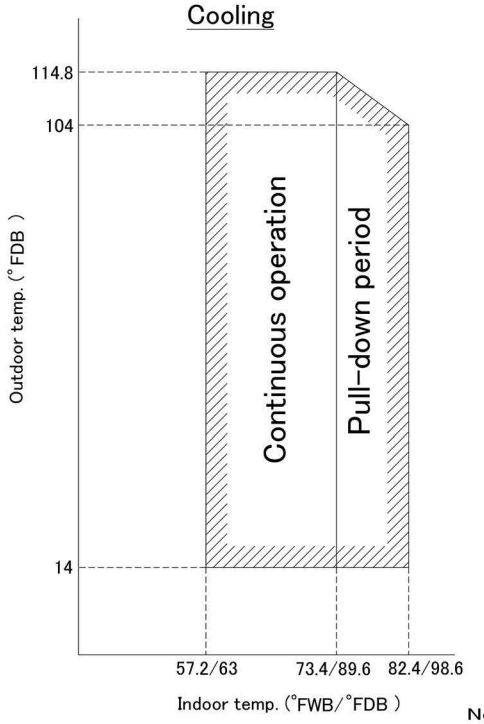


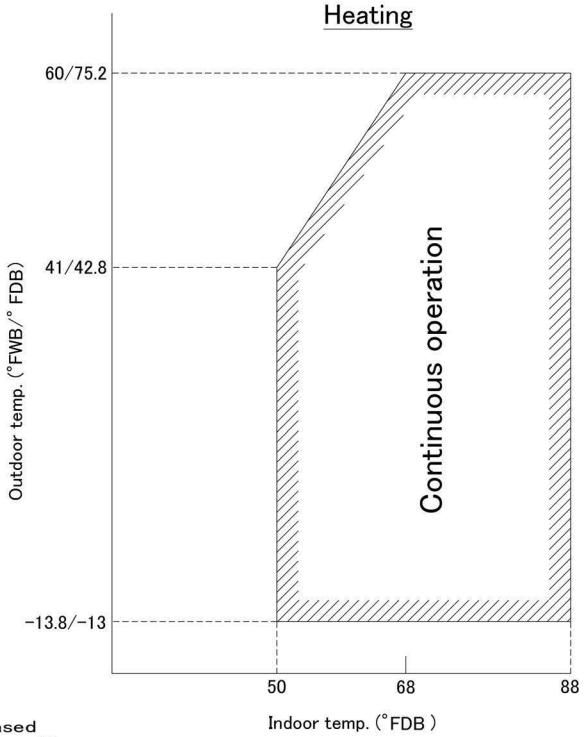




Notes:
The graphs are based on the following conditions.
- Equivalent piping length 25ft per room
- Level difference 0ft
- Air flow rate High
- All connection ports are connected to the indoor units.

3D163290

## 3MXT24AVJU9(8), 4MXT36AVJU9(8), 5MXT40AVJU9(8), 3MXTH24AVJU9(8), 4MXTH36AVJU9(8), 5MXTH40AVJU9(8)




Notes:
The graphs are based on the following conditions.
- Equivalent piping length 25ft per room
- Level difference 0ft
- Air flow rate High
- All connection ports are connected to the indoor units.

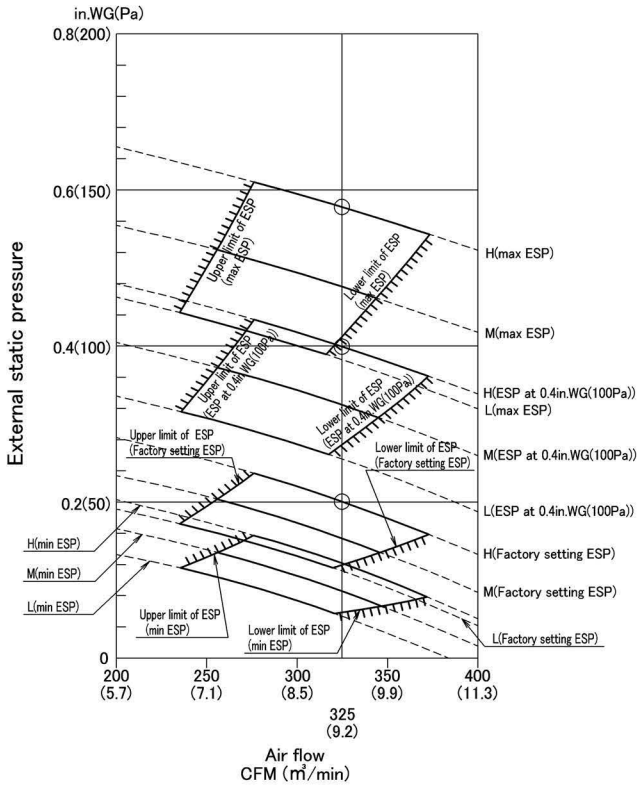
3D158371

# 9. Fan Characteristics

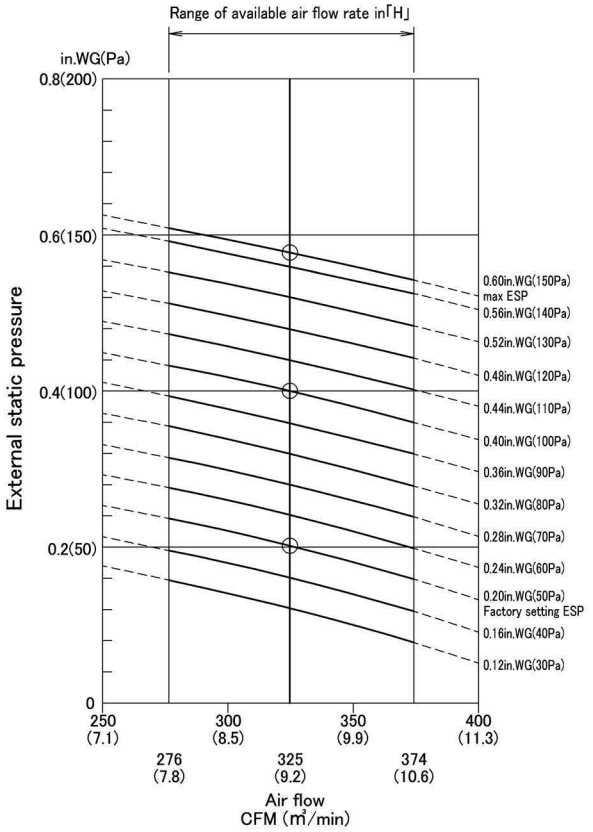
## 9.1 External Static Pressure

### CDMA07AVJU9

Fan characteristics ①




Fan characteristics ②
(For field setting of remote controller)



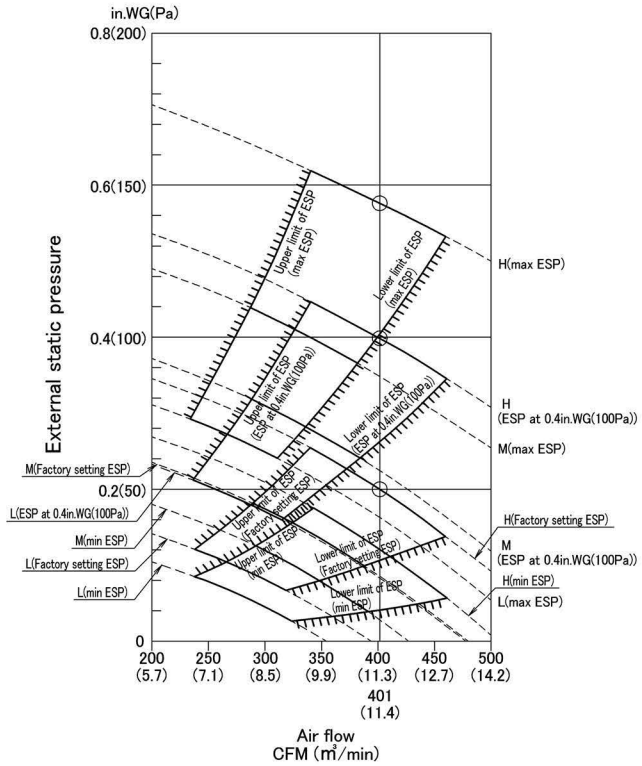

Notes:
1. Fan characteristics at the time of rear suction and bottom suction are similar to each other.
2. Fan characteristics①shows a representative of fan characteristics at the time of "Maximum ESP","ESP at 0.4in,WG(100Pa)" "Factory setting ESP"and"Minimum ESP".
3. A remote controller can be used to change airflow rate of "H","M" and "L".
4. Set the ESP on suction side to 0.4in.WG(100Pa) or less.
5. Fan characteristics②(for field setting of remote controller) shows fan characteristics of airflow "H" which can be changed in the field setting by a remote controller.
6. Select ESP setting in accordance with resistance of the connected duct by using Fan characteristics①and ②
(Factory setting ESP is 0.2in.WG(50Pa). See installation manual for ESP setting procedure.)
7. The ESP setting of this unit can be changed into 13 levels.
8. The value of Fan characteristics② mentioned in this drawing shows the ESP of rated airflow.

ESP : external static pressure

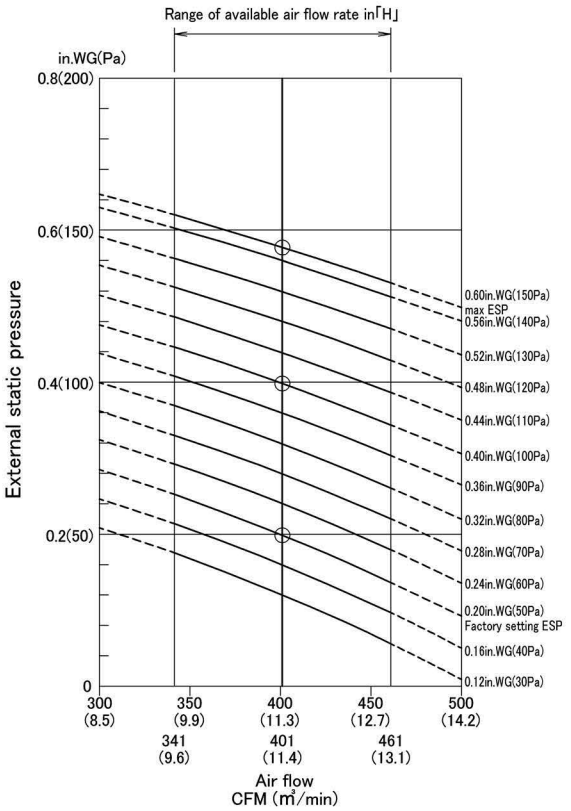
3D161619A

## FDMA09AVJU9

Fan characteristics ①




Fan characteristics ②
(For field setting of remote controller)



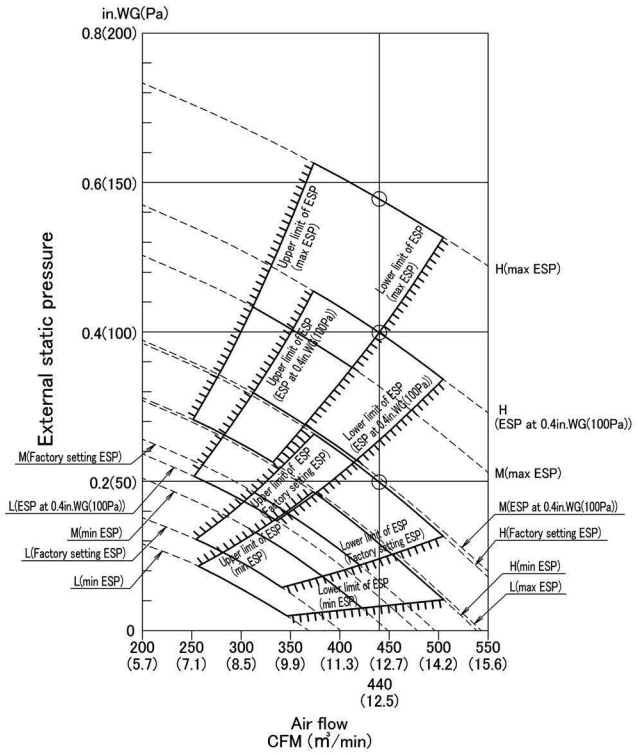

Notes:
1. Fan characteristics at the time of rear suction and bottom suction are similar to each other.
2. Fan characteristics①shows a representative of fan characteristics at the time of "Maximum ESP","ESP at 0.4in.WG(100Pa)" "Factory setting ESP"and"Minimum ESP".
3. A remote controller can be used to change airflow rate of "H","M" and "L".
4. Set the ESP on suction side to 0.4in.WG(100Pa) or less.
5. Fan characteristics②(for field setting of remote controller) shows fan characteristics of airflow "H" which can be changed in the field setting by a remote controller.
6. Select ESP setting in accordance with resistance of the connected duct by using Fan characteristics①and ②
(Factory setting ESP is 0.2in.WG(50Pa). See installation manual for ESP setting procedure.)
7. The ESP setting of this unit can be changed into 13 levels.
8. The value of Fan characteristics② mentioned in this drawing shows the ESP of rated airflow.

ESP : external static pressure

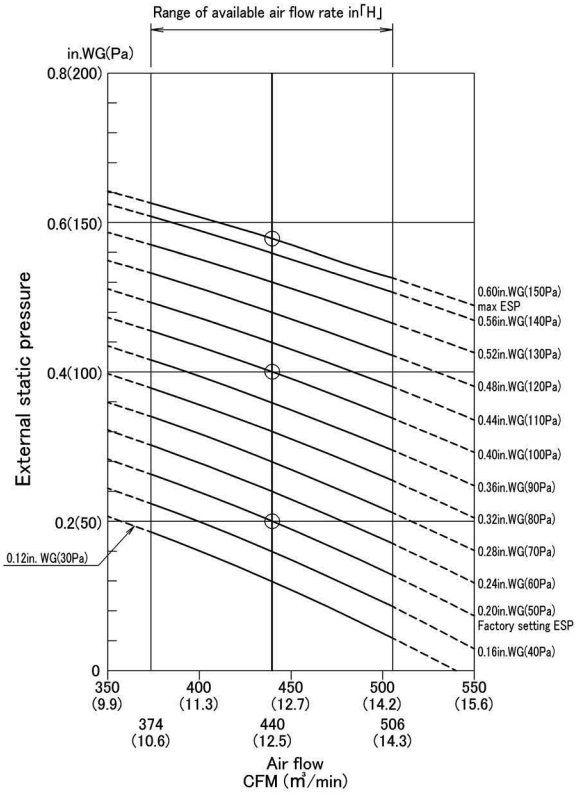
3D158857

## FDMA12AVJU9

Fan characteristics ①




Fan characteristics ②
(For field setting of remote controller)



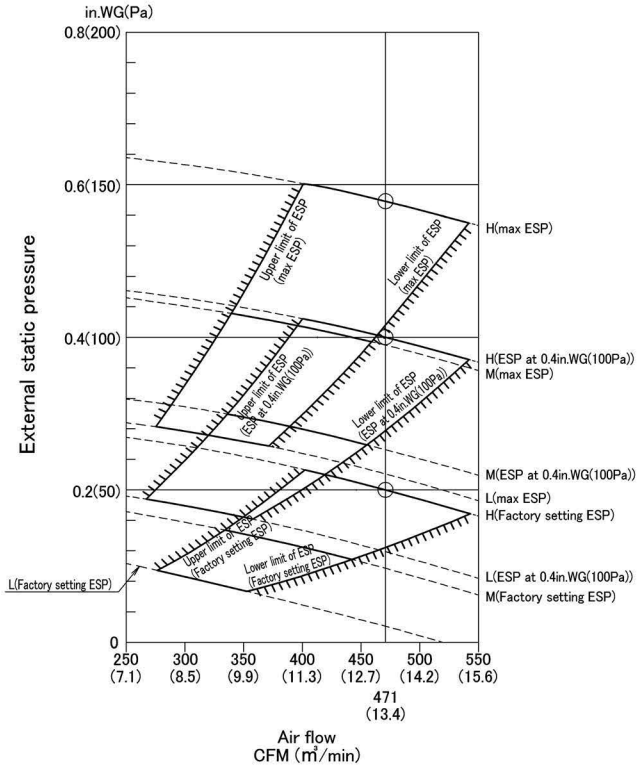

Notes:
1. Fan characteristics at the time of rear suction and bottom suction are similar to each other.
2. Fan characteristics①shows a representative of fan characteristics at the time of "Maximum ESP","ESP at 0.4in,WG(100Pa)" "Factory setting ESP"and"Minimum ESP".
3. A remote controller can be used to change airflow rate of "H","M" and "L".
4. Set the ESP on suction side to 0.4in.WG(100Pa) or less.
5. Fan characteristics②(for field setting of remote controller) shows fan characteristics of airflow "H" which can be changed in the field setting by a remote controller.
6. Select ESP setting in accordance with resistance of the connected duct by using Fan characteristics①and ② (Factory setting ESP is 0.2in.WG(50Pa). See installation manual for ESP setting procedure.)
7. The ESP setting of this unit can be changed into 13 levels.
8. The value of Fan characteristics② mentioned in this drawing shows the ESP of rated airflow.

ESP : external static pressure

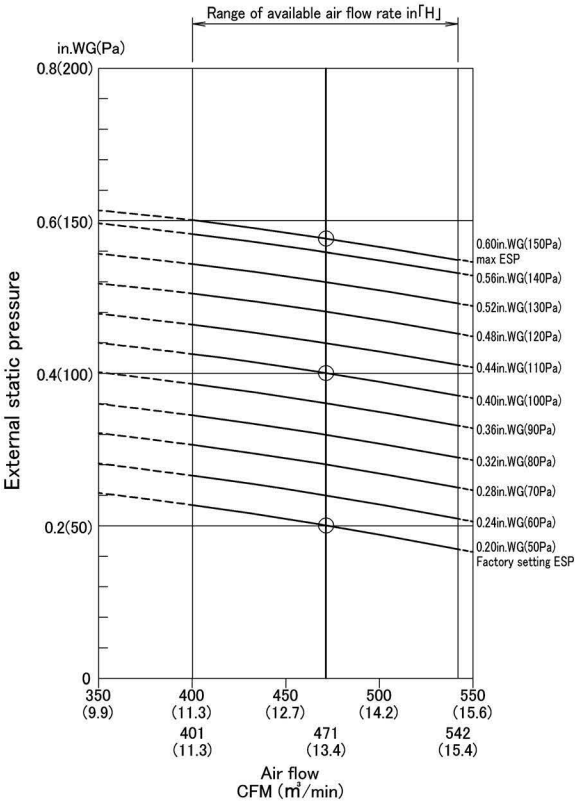
3D158858

## FDMA15AVJU9

Fan characteristics ①




Fan characteristics ②
(For field setting of remote controller)



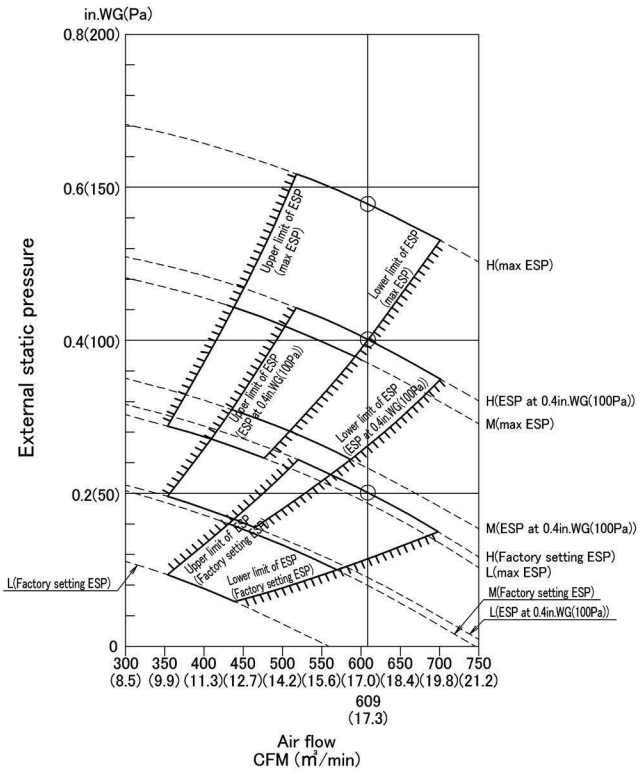

Notes:
1. Fan characteristics at the time of rear suction and bottom suction are similar to each other.
2. Fan characteristics①shows a representative of fan characteristics at the time of "Maximum ESP","ESP at 0.4in.WG(100Pa)" and "Factory setting ESP".
3. A remote controller can be used to change airflow rate of "H","M" and "L".
4. Set the ESP on suction side to 0.4in.WG(100Pa) or less.
5. Fan characteristics②(for field setting of remote controller) shows fan characteristics of airflow "H" which can be changed in the field setting by a remote controller.
6. Select ESP setting in accordance with resistance of the connected duct by using Fan characteristics①and② (Factory setting ESP is 0.2in.WG(50Pa). See installation manual for ESP setting procedure.)
7. The ESP setting of this unit can be changed into 11 levels.
8. The value of Fan characteristics② mentioned in this drawing shows the ESP of rated airflow.

ESP : external static pressure

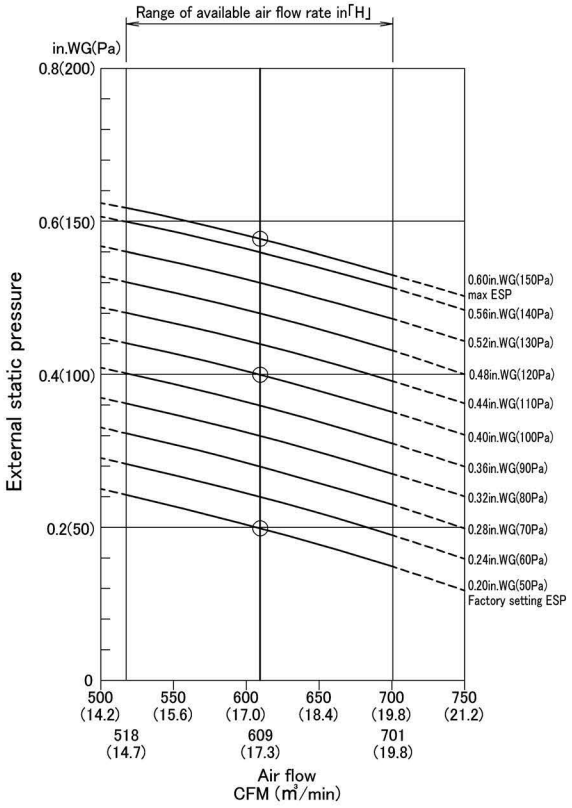
3D158859

## FDMA18AVJU9

Fan characteristics ①




Fan characteristics ②
(For field setting of remote controller)



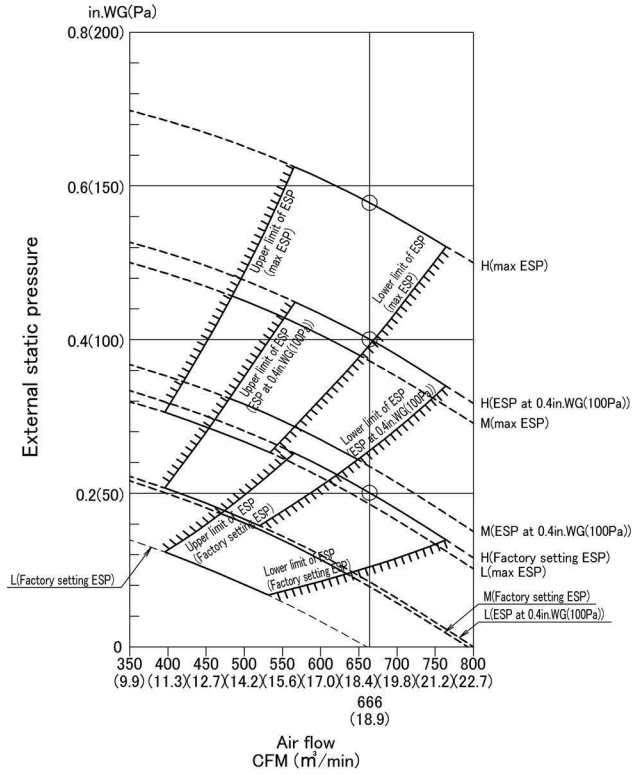

Notes:
1. Fan characteristics at the time of rear suction and bottom suction are similar to each other.
2. Fan characteristics①shows a representative of fan characteristics at the time of "Maximum ESP","ESP at 0.4in.WG(100Pa)" and "Factory setting ESP".
3. A remote controller can be used to change airflow rate of "H","M" and "L".
4. Set the ESP on suction side to 0.4in.WG(100Pa) or less.
5. Fan characteristics②(for field setting of remote controller) shows fan characteristics of airflow "H" which can be changed in the field setting by a remote controller.
6. Select ESP setting in accordance with resistance of the connected duct by using Fan characteristics①and②
(Factory setting ESP is 0.2in.WG(50Pa). See installation manual for ESP setting procedure.)
7. The ESP setting of this unit can be changed into 11 levels.
8. The value of Fan characteristics② mentioned in this drawing shows the ESP of rated airflow.

ESP : external static pressure

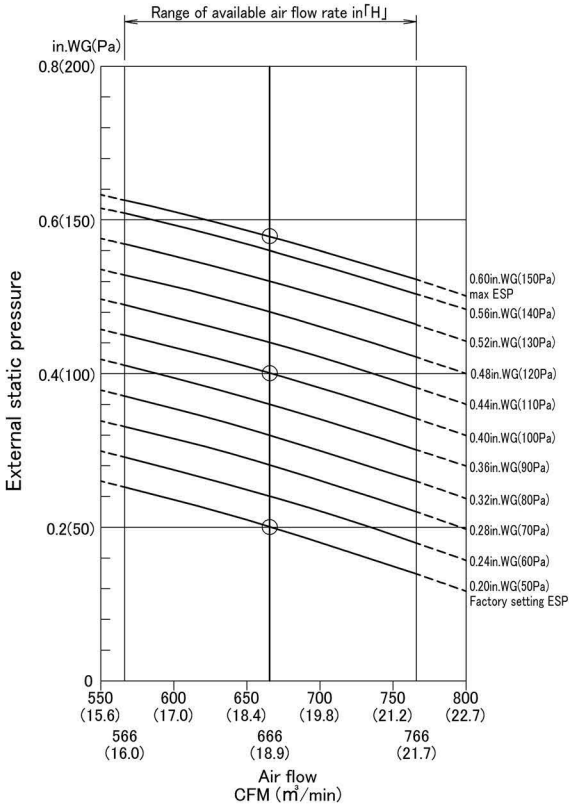
3D158860

## FDMA24AVJU9

Fan characteristics ①




Fan characteristics ②
(For field setting of remote controller)



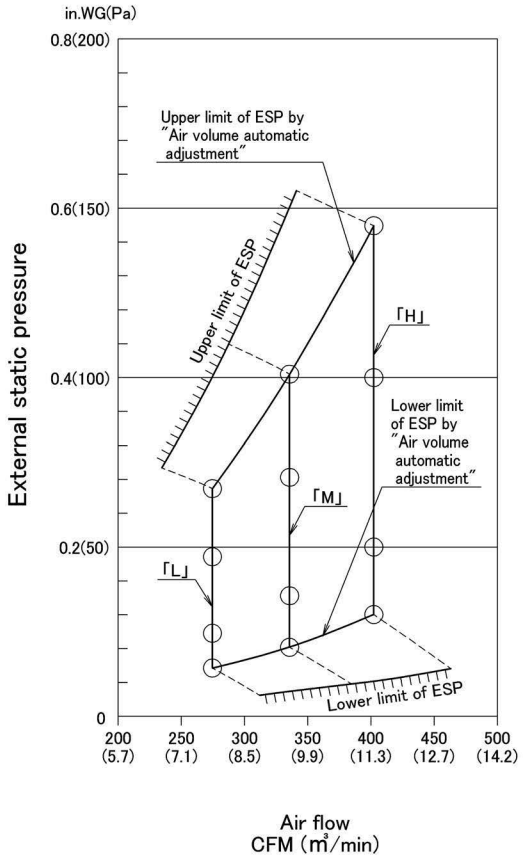

Notes:
1. Fan characteristics at the time of rear suction and bottom suction are similar to each other.
2. Fan characteristics① shows a representative of fan characteristics at the time of "Maximum ESP","ESP at 0.4in.WG(100Pa)" and "Factory setting ESP".
3. A remote controller can be used to change airflow rate of "H","M" and "L".
4. Set the ESP on suction side to 0.4in.WG(100Pa) or less.
5. Fan characteristics② (for field setting of remote controller) shows fan characteristics of airflow "H" which can be changed in the field setting by a remote controller.
6. Select ESP setting in accordance with resistance of the connected duct by using Fan characteristics① and② (Factory setting ESP is 0.2in.WG(50Pa). See installation manual for ESP setting procedure.)
7. The ESP setting of this unit can be changed into 11 levels.
8. The value of Fan characteristics② mentioned in this drawing shows the ESP of rated airflow.

ESP : external static pressure

3D158861

## 9.2 Airflow Auto Adjustment

### CDMA07AVJU9, FDMA09AVJU9

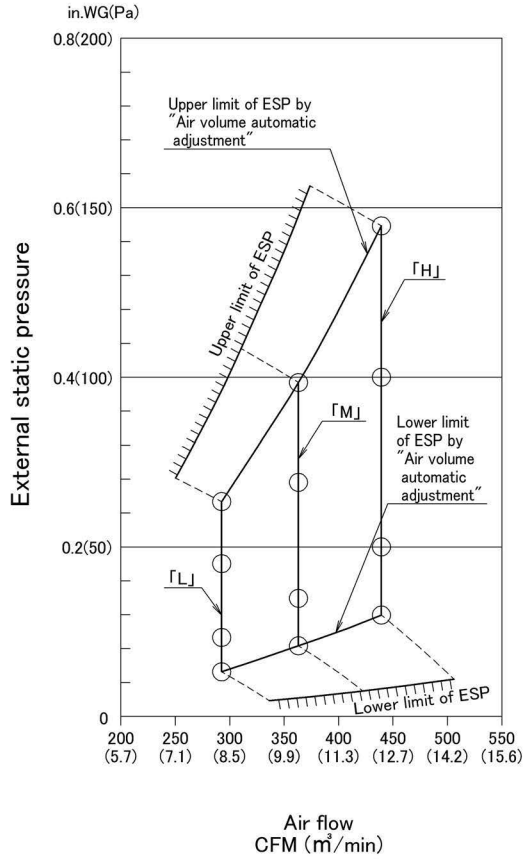



Notes :
1. This indoor unit has the "Air volume automatic adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
2. After duct construction completion, please perform field setting "Air volume automatic adjustment" by remote controller.
3. About the field setting method of the "Air volume automatic adjustment", look at the installation manual which is attached to an indoor unit.
4. ESP that can adjust by "Air volume automatic adjustment" function is 0.12in.WG(30Pa) – 0.6in.WG(150Pa) ( When air flow is "H" ).
5. If the unit is used beyond the range of the above-mentioned ESP, the air flow rate can not be well-adjusted automatically, and the unit will operate with the air flow rate different from the rated value.
6. This figure shows a fan characteristics at the time of "H" "M" and "L".
7. The remote controller can be used to change "H" "M" and "L".

ESP : external static pressure.

3D158872

### FDMA12AVJU9

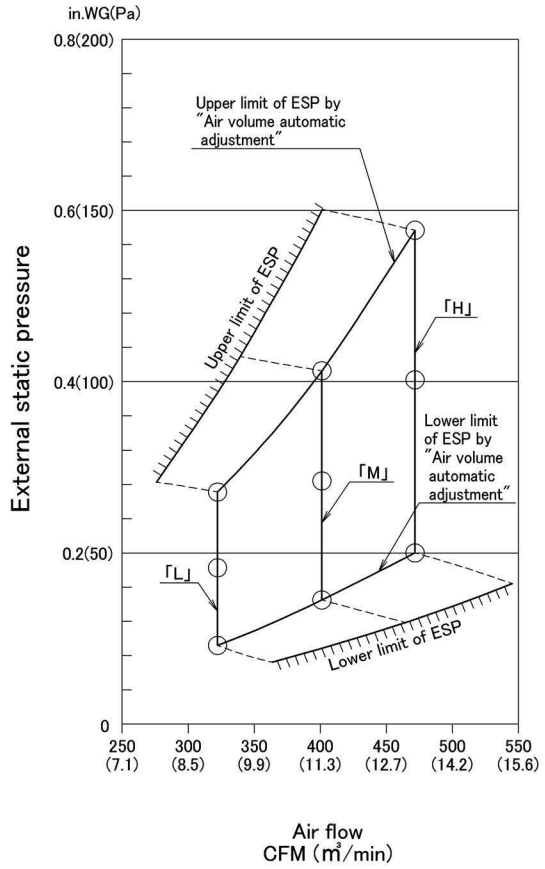



Notes :
1. This indoor unit has the "Air volume automatic adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
2. After duct construction completion, please perform field setting "Air volume automatic adjustment" by remote controller.
3. About the field setting method of the "Air volume automatic adjustment", look at the installation manual which is attached to an indoor unit.
4. ESP that can adjust by "Air volume automatic adjustment" function is 0.12in.WG(30Pa) – 0.6in.WG(150Pa) ( When air flow is "H" ).
5. If the unit is used beyond the range of the above-mentioned ESP, the air flow rate can not be well-adjusted automatically, and the unit will operate with the air flow rate different from the rated value.
6. This figure shows a fan characteristics at the time of "H" "M" and "L".
7. The remote controller can be used to change "H" "M" and "L".

ESP : external static pressure.

3D158873

## FDMA15AVJU9

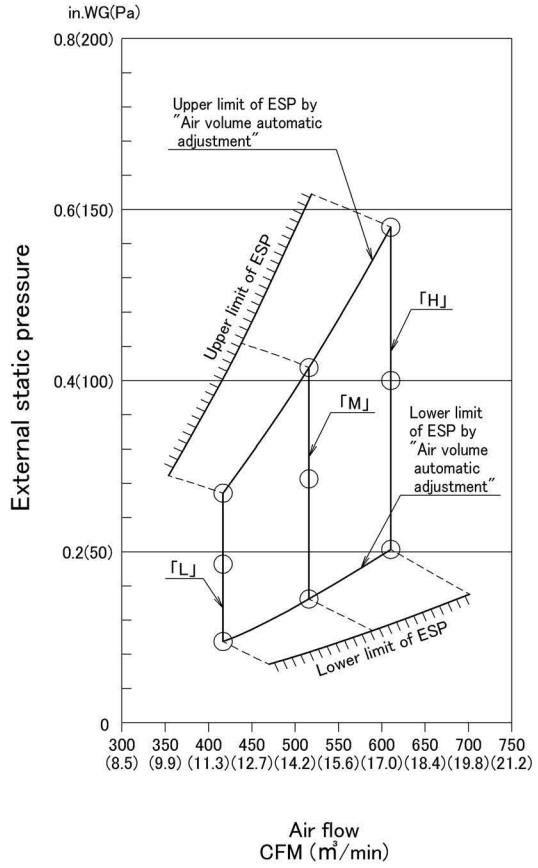



Notes :
1. This indoor unit has the "Air volume automatic adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
2. After duct construction completion, please perform field setting "Air volume automatic adjustment" by remote controller.
3. About the field setting method of the "Air volume automatic adjustment", look at the installation manual which is attached to an indoor unit.
4. ESP that can adjust by "Air volume automatic adjustment" function is 0.2in.WG(50Pa) – 0.6in.WG(150Pa) ( When air flow is "H" ).
5. If the unit is used beyond the range of the above-mentioned ESP, the air flow rate can not be well-adjusted automatically, and the unit will operate with the air flow rate different from the rated value.
6. This figure shows a fan characteristics at the time of "H" "M" and "L".
7. The remote controller can be used to change "H" "M" and "L".

ESP : external static pressure.

3D158874

## FDMA18AVJU9

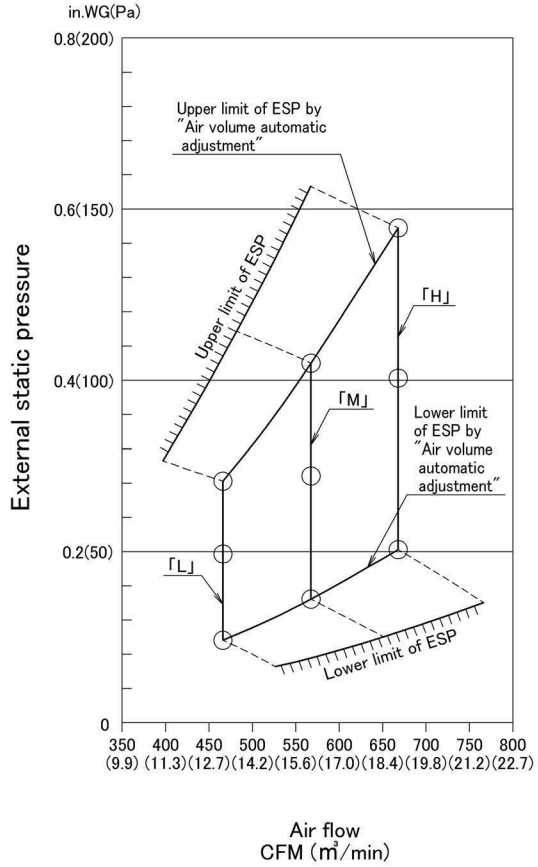



Notes :
1. This indoor unit has the "Air volume automatic adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
2. After duct construction completion, please perform field setting "Air volume automatic adjustment" by remote controller.
3. About the field setting method of the "Air volume automatic adjustment", look at the installation manual which is attached to an indoor unit.
4. ESP that can adjust by "Air volume automatic adjustment" function is 0.2in.WG(50Pa) – 0.6in.WG(150Pa) ( When air flow is "H" ).
5. If the unit is used beyond the range of the above-mentioned ESP, the air flow rate can not be well-adjusted automatically, and the unit will operate with the air flow rate different from the rated value.
6. This figure shows a fan characteristics at the time of "H" "M" and "L".
7. The remote controller can be used to change "H" "M" and "L".

ESP : external static pressure.

3D158875

## FDMA24AVJU9



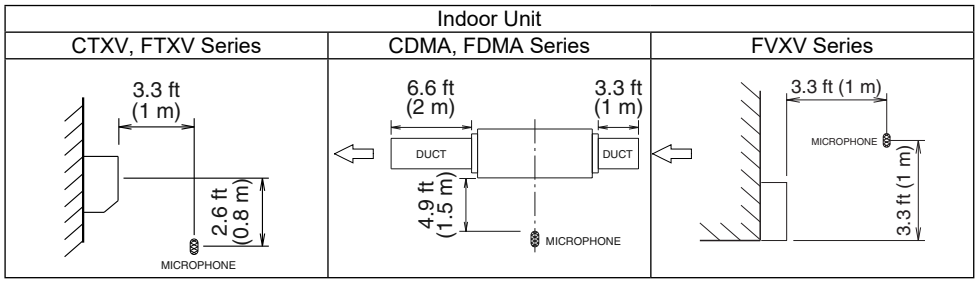

Notes :
1. This indoor unit has the "Air volume automatic adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
2. After duct construction completion, please perform field setting "Air volume automatic adjustment" by remote controller.
3. About the field setting method of the "Air volume automatic adjustment", look at the installation manual which is attached to an indoor unit.
4. ESP that can adjust by "Air volume automatic adjustment" function is 0.2in.WG(50Pa) – 0.6in.WG(150Pa) ( When air flow is "H" ).
5. If the unit is used beyond the range of the above-mentioned ESP, the air flow rate can not be well-adjusted automatically, and the unit will operate with the air flow rate different from the rated value.
6. This figure shows a fan characteristics at the time of "H" "M" and "L".
7. The remote controller can be used to change "H" "M" and "L".

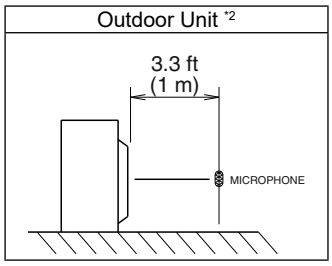
ESP : external static pressure.

3D158876

# 10. Sound Level

## 10.1 Measuring Location




**Notes:** 1. Operation sound is measured in an anechoic chamber.

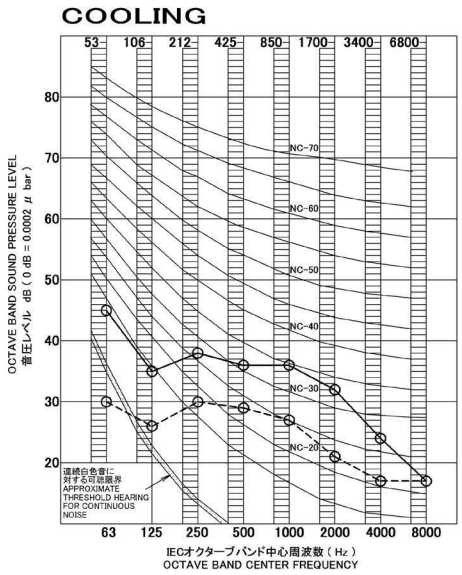
2. The operation sound measuring method is based on JIS standard.

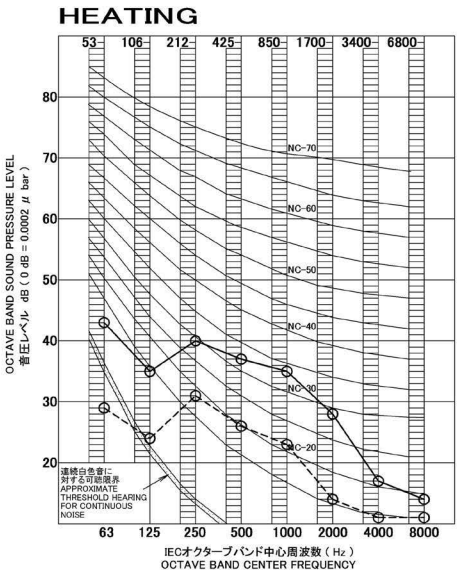
3. The data are based on the conditions shown in the table below.

| Cooling | Heating |
|---|---|
| Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (23.9°CWB) | Indoor ; 70°FDB (21.1°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6.1°CWB) |

## 10.2 Indoor unit

### CTXV07AVJU9




オーバーオール (dB) OVER ALL (dB)

| スケール SCALE | 60Hz 208/230 V (H) | 60Hz 208/230 V (L) |
|---|---|---|
| A | 40 | 31 |

(暗騒音は補正済 B.G.N IS ALREADY RECTIFIED)

運転条件 OPERATING CONDITIONS

| 電源 POWER SOURCE | 208/230V 60Hz |
|---|---|
| JIS標準 | |
| ○——○ | 60Hz 208/230V (H) |
| ○---○ | 60Hz 208/230V (L) |

Cooling

オーバーオール (dB) OVER ALL (dB)

| スケール SCALE | 60Hz 208/230 V (H) | 60Hz 208/230 V (L) |
|---|---|---|
| A | 39 | 28 |

(暗騒音は補正済 B.G.N IS ALREADY RECTIFIED)

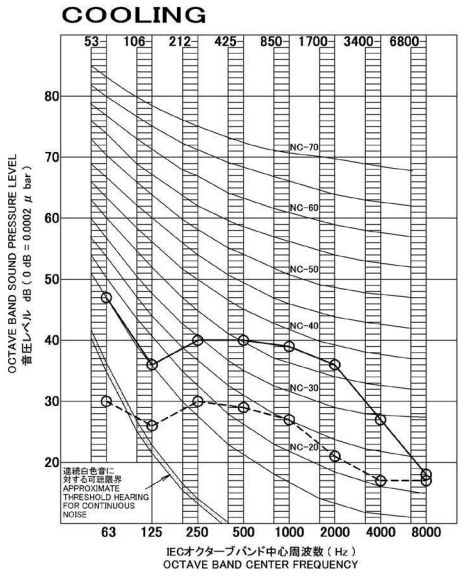
運転条件 OPERATING CONDITIONS

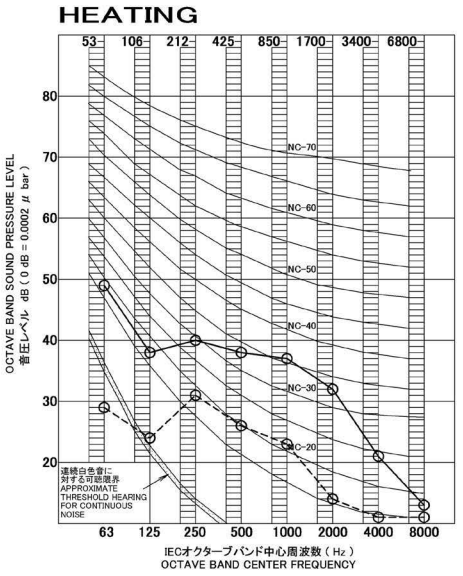
| 電源 POWER SOURCE | 208/230V 60Hz |
|---|---|
| JIS標準 | |
| ○——○ | 60Hz 208/230V (H) |
| ○---○ | 60Hz 208/230V (L) |

Heating

3D153119

### FTXV09AVJU9




オーバーオール (dB) OVER ALL (dB)

| スケール SCALE | 60Hz 208/230 V (H) | 60Hz 208/230 V (L) |
|---|---|---|
| A | 43 | 31 |

(暗騒音は補正済 B.G.N IS ALREADY RECTIFIED)

運転条件 OPERATING CONDITIONS

| 電源 POWER SOURCE | 208/230V 60Hz |
|---|---|
| JIS標準 | |
| ○——○ | 60Hz 208/230V (H) |
| ○---○ | 60Hz 208/230V (L) |

Cooling

オーバーオール (dB) OVER ALL (dB)

| スケール SCALE | 60Hz 208/230 V (H) | 60Hz 208/230 V (L) |
|---|---|---|
| A | 41 | 28 |

(暗騒音は補正済 B.G.N IS ALREADY RECTIFIED)

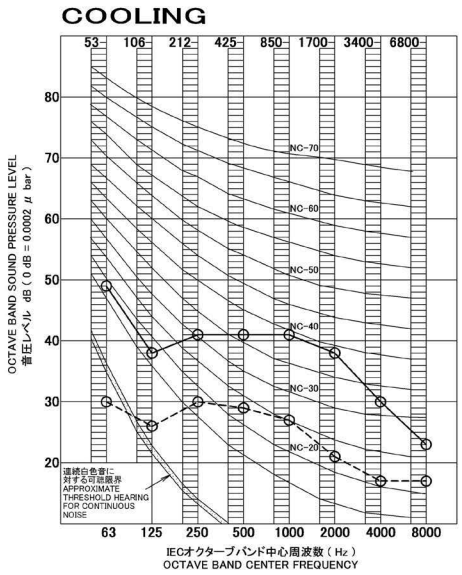
運転条件 OPERATING CONDITIONS

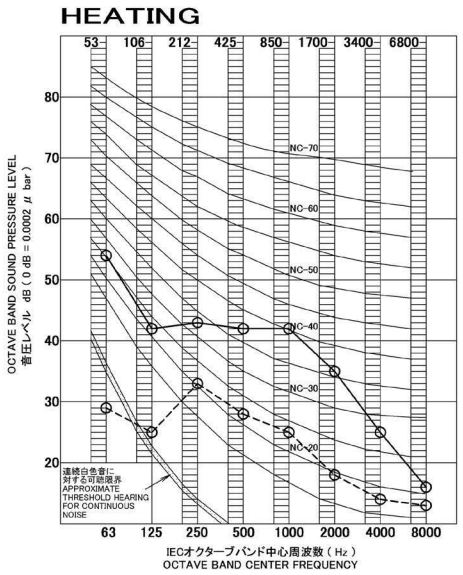
| 電源 POWER SOURCE | 208/230V 60Hz |
|---|---|
| JIS標準 | |
| ○——○ | 60Hz 208/230V (H) |
| ○---○ | 60Hz 208/230V (L) |

Heating

3D153120

## FTXV12AVJU9




オーバーオール (dB) OVER ALL (dB)

| スケール SCALE | 60Hz 208/230 V (H) | 60Hz 208/230 V (L) |
|---|---|---|
| A | 45 | 31 |

(暗騒音は補正済 B.G.N IS ALREADY RECTIFIED)

運転条件 OPERATING CONDITIONS

| 電源 POWER SOURCE | 208/230V 60Hz |
|---|---|
| JIS標準 | |
| ○——○ | 60Hz 208/230V (H) |
| ○---○ | 60Hz 208/230V (L) |

Cooling

オーバーオール (dB) OVER ALL (dB)

| スケール SCALE | 60Hz 208/230 V (H) | 60Hz 208/230 V (L) |
|---|---|---|
| A | 45 | 30 |

(暗騒音は補正済 B.G.N IS ALREADY RECTIFIED)

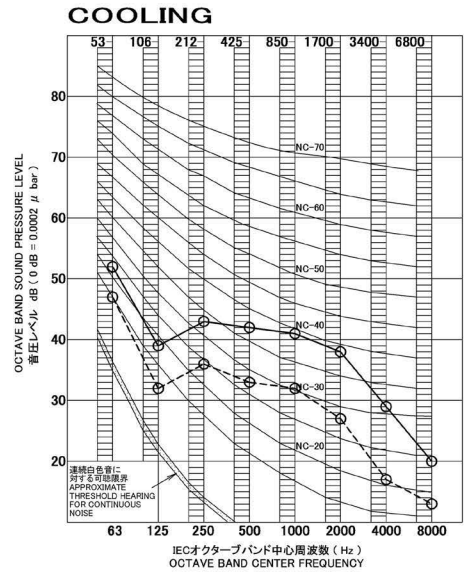
運転条件 OPERATING CONDITIONS

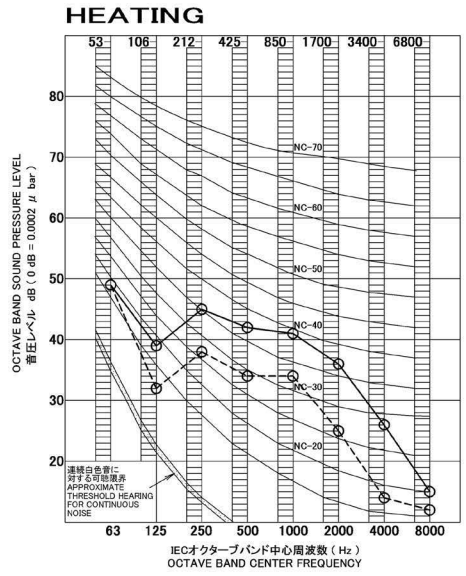
| 電源 POWER SOURCE | 208/230V 60Hz |
|---|---|
| JIS標準 | |
| ○——○ | 60Hz 208/230V (H) |
| ○---○ | 60Hz 208/230V (L) |

Heating

3D153121

## FTXV15AVJU9




オーバーオール (dB) OVER ALL (dB)

| スケール SCALE | 60Hz 208/230 V (H) | 60Hz 208/230 V (L) |
|---|---|---|
| A | 45 | 36 |

(暗騒音は補正済 B.G.N IS ALREADY RECTIFIED)

運転条件 OPERATING CONDITIONS

| 電源 POWER SOURCE | 208/230V 60Hz |
|---|---|
| JIS標準 | |
| ○——○ | 60Hz 208/230V (H) |
| ○---○ | 60Hz 208/230V (L) |

Cooling

オーバーオール (dB) OVER ALL (dB)

| スケール SCALE | 60Hz 208/230 V (H) | 60Hz 208/230 V (L) |
|---|---|---|
| A | 45 | 37 |

(暗騒音は補正済 B.G.N IS ALREADY RECTIFIED)

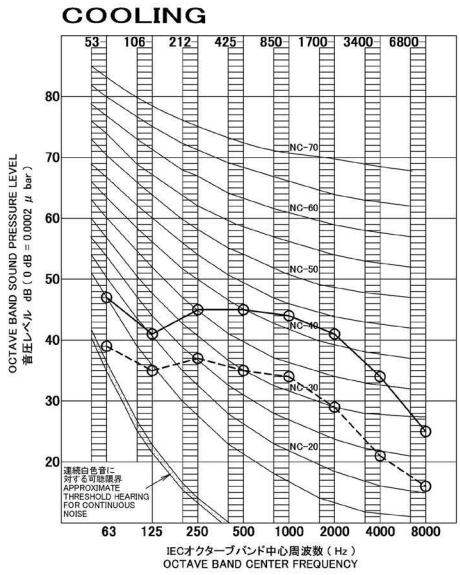
運転条件 OPERATING CONDITIONS

| 電源 POWER SOURCE | 208/230V 60Hz |
|---|---|
| JIS標準 | |
| ○——○ | 60Hz 208/230V (H) |
| ○---○ | 60Hz 208/230V (L) |

Heating

3D151900

## FTXV18AVJU9




オーバーオール (dB) OVER ALL (dB)

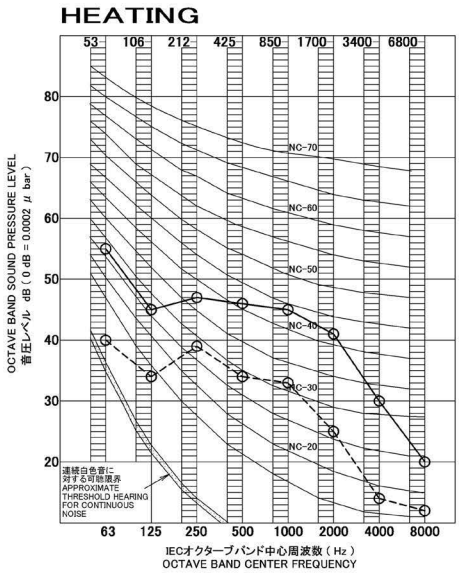
| スケール SCALE | 60Hz 208/230 V (H) | 60Hz 208/230 V (L) |
|---|---|---|
| A | 48 | 38 |

(暗騒音は補正済 B.G.N IS ALREADY RECTIFIED)

運転条件 OPERATING CONDITIONS

| 電源 POWER SOURCE | 208/230V 60Hz |
|---|---|
| JIS標準 | |
| ○——○ | 60Hz 208/230V (H) |
| ○- - -○ | 60Hz 208/230V (L) |

Cooling




オーバーオール (dB) OVER ALL (dB)

| スケール SCALE | 60Hz 208/230 V (H) | 60Hz 208/230 V (L) |
|---|---|---|
| A | 49 | 37 |

(暗騒音は補正済 B.G.N IS ALREADY RECTIFIED)

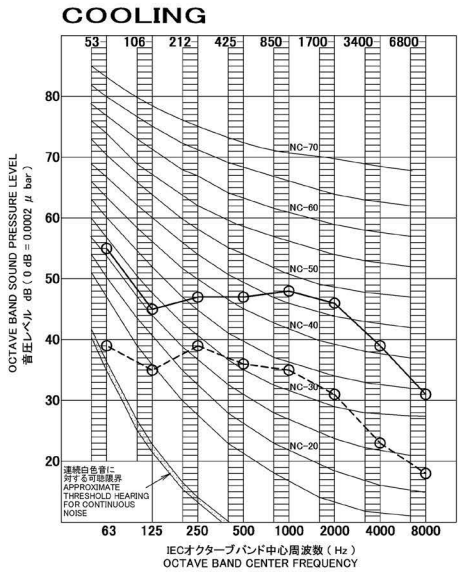
運転条件 OPERATING CONDITIONS

| 電源 POWER SOURCE | 208/230V 60Hz |
|---|---|
| JIS標準 | |
| ○——○ | 60Hz 208/230V (H) |
| ○- - -○ | 60Hz 208/230V (L) |

Heating

3D151901

## FTXV24AVJU9




オーバーオール (dB) OVER ALL (dB)

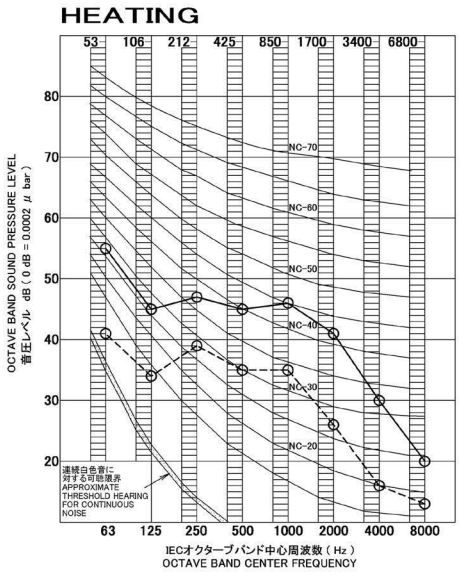
| スケール SCALE | 60Hz 208/230 V (H) | 60Hz 208/230 V (L) |
|---|---|---|
| A | 52 | 39 |

(暗騒音は補正済 B.G.N IS ALREADY RECTIFIED)

運転条件 OPERATING CONDITIONS

| 電源 POWER SOURCE | 208/230V 60Hz |
|---|---|
| JIS標準 | |
| ○——○ | 60Hz 208/230V (H) |
| ○- - -○ | 60Hz 208/230V (L) |

Cooling




オーバーオール (dB) OVER ALL (dB)

| スケール SCALE | 60Hz 208/230 V (H) | 60Hz 208/230 V (L) |
|---|---|---|
| A | 49 | 38 |

(暗騒音は補正済 B.G.N IS ALREADY RECTIFIED)

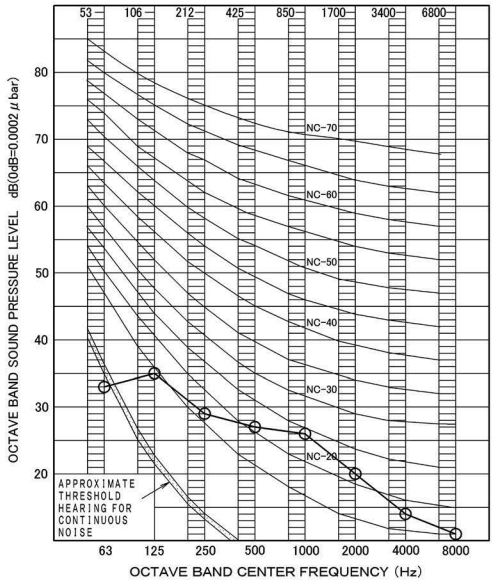
運転条件 OPERATING CONDITIONS

| 電源 POWER SOURCE | 208/230V 60Hz |
|---|---|
| JIS標準 | |
| ○——○ | 60Hz 208/230V (H) |
| ○- - -○ | 60Hz 208/230V (L) |

Heating

3D151902

## CDMA07AVJU9




OVER ALL(dB)

| SCALE | AIR FLOW RATE |
|---|---|
| | H |
| A | 30.0 |

(B.G.N IS ALREADY RECTIFIED)

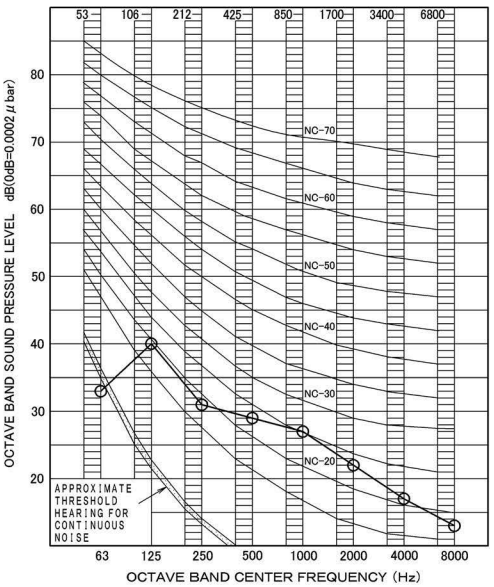
OPERATING CONDITIONS

POWER SOURCE 208/230V 60Hz

| | |
|---|---|
| COOLING | RETURN AIR TEMPERATURE : 80.0 °F(26.7 °C) DB, 67.0 °F(19.4 °C) WB<br>OUTDOOR TEMPERATURE : 95.0 °F(35.0 °C) DB, 75.0 °F(23.9 °C) WB |
| HEATING | RETURN AIR TEMPERATURE : 70.0 °F(21.1 °C) DB, 60.0 °F(15.6 °C) WB<br>OUTDOOR TEMPERATURE : 47.0 °F(8.3 °C) DB, 43.0 °F(6.1 °C) WB |

4D161721

## FDMA09AVJU9




OVER ALL(dB)

| SCALE | AIR FLOW RATE |
|---|---|
| | H |
| A | 32.0 |

(B.G.N IS ALREADY RECTIFIED)

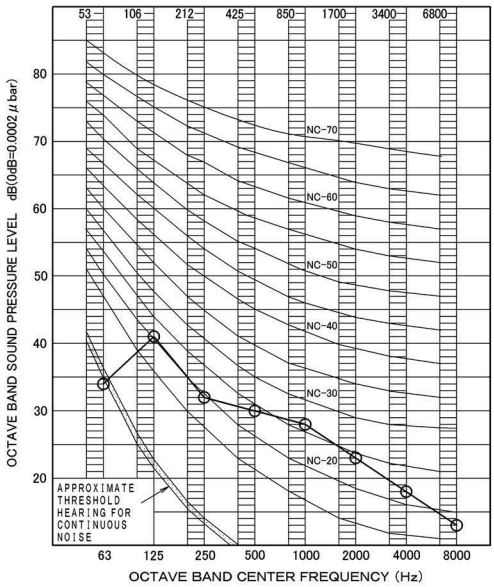
OPERATING CONDITIONS

POWER SOURCE 208/230V 60Hz

| | |
|---|---|
| COOLING | RETURN AIR TEMPERATURE : 80.0 °F(26.7 °C) DB, 67.0 °F(19.4 °C) WB<br>OUTDOOR TEMPERATURE : 95.0 °F(35.0 °C) DB, 75.0 °F(23.9 °C) WB |
| HEATING | RETURN AIR TEMPERATURE : 70.0 °F(21.1 °C) DB, 60.0 °F(15.6 °C) WB<br>OUTDOOR TEMPERATURE : 47.0 °F(8.3 °C) DB, 43.0 °F(6.1 °C) WB |

4D158169

## FDMA12AVJU9




OVER ALL(dB)

| SCALE | AIR FLOW RATE |
|---|---|
| | H |
| A | 33.0 |

(B.G.N IS ALREADY RECTIFIED)

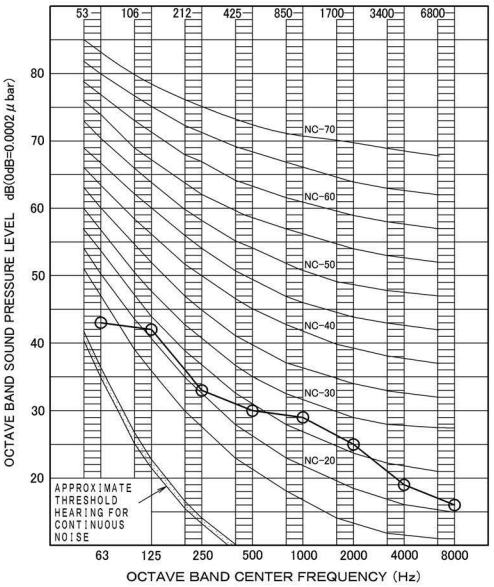
OPERATING CONDITIONS

POWER SOURCE 208/230V 60Hz

| | |
|---|---|
| COOLING | RETURN AIR TEMPERATURE : 80.0 °F(26.7 °C) DB, 67.0 °F(19.4 °C) WB<br>OUTDOOR TEMPERATURE : 95.0 °F(35.0 °C) DB, 75.0 °F(23.9 °C) WB |
| HEATING | RETURN AIR TEMPERATURE : 70.0 °F(21.1 °C) DB, 60.0 °F(15.6 °C) WB<br>OUTDOOR TEMPERATURE : 47.0 °F(8.3 °C) DB, 43.0 °F(6.1 °C) WB |

4D158170

## FDMA15AVJU9




OVER ALL(dB)

| SCALE | AIR FLOW RATE |
|---|---|
| | H |
| A | 34.0 |

(B.G.N IS ALREADY RECTIFIED)

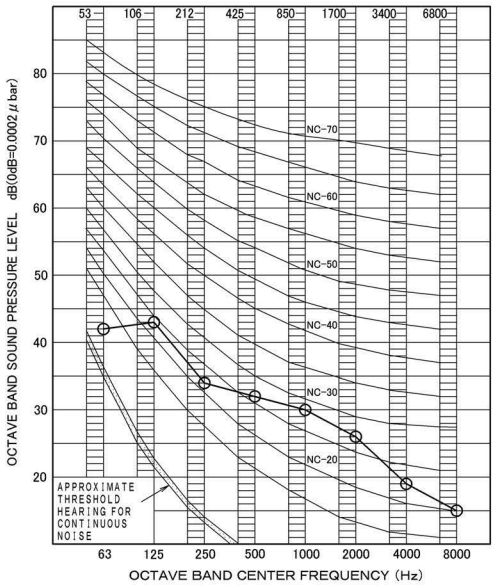
OPERATING CONDITIONS

POWER SOURCE 208/230V 60Hz

| | |
|---|---|
| COOLING | RETURN AIR TEMPERATURE : 80.0 °F(26.7 °C) DB, 67.0 °F(19.4 °C) WB<br>OUTDOOR TEMPERATURE : 95.0 °F(35.0 °C) DB, 75.0 °F(23.9 °C) WB |
| HEATING | RETURN AIR TEMPERATURE : 70.0 °F(21.1 °C) DB, 60.0 °F(15.6 °C) WB<br>OUTDOOR TEMPERATURE : 47.0 °F(8.3 °C) DB, 43.0 °F(6.1 °C) WB |

4D158171

## FDMA18AVJU9




OVER ALL(dB)

| SCALE | AIR FLOW RATE |
|---|---|
| | H |
| A | 35.0 |

(B.G.N IS ALREADY RECTIFIED)

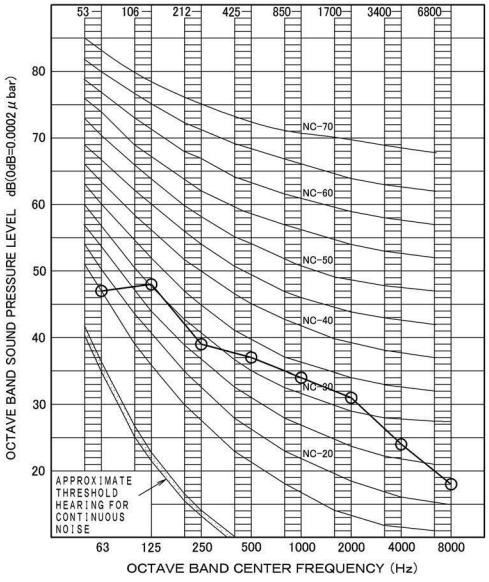
OPERATING CONDITIONS

POWER SOURCE 208/230V 60Hz

| | |
|---|---|
| COOLING | RETURN AIR TEMPERATURE : 80.0 °F(26.7 °C) DB, 67.0 °F(19.4 °C) WB<br>OUTDOOR TEMPERATURE : 95.0 °F(35.0 °C) DB, 75.0 °F(23.9 °C) WB |
| HEATING | RETURN AIR TEMPERATURE : 70.0 °F(21.1 °C) DB, 60.0 °F(15.6 °C) WB<br>OUTDOOR TEMPERATURE : 47.0 °F(8.3 °C) DB, 43.0 °F(6.1 °C) WB |

4D158172

## FDMA24AVJU9




OVER ALL(dB)

| SCALE | AIR FLOW RATE |
|---|---|
| | H |
| A | 40.0 |

(B.G.N IS ALREADY RECTIFIED)

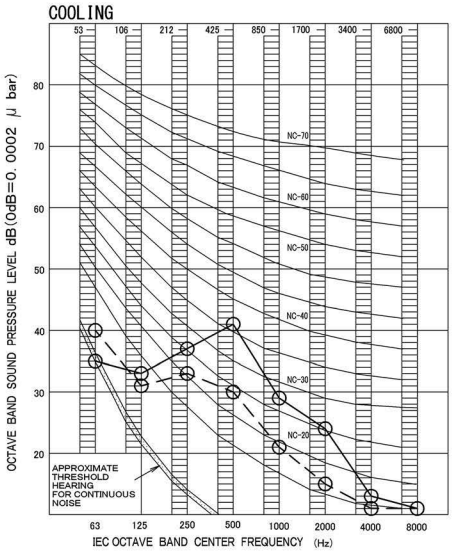
OPERATING CONDITIONS

POWER SOURCE 208/230V 60Hz

| | |
|---|---|
| COOLING | RETURN AIR TEMPERATURE : 80.0 °F(26.7 °C) DB, 67.0 °F(19.4 °C) WB<br>OUTDOOR TEMPERATURE : 95.0 °F(35.0 °C) DB, 75.0 °F(23.9 °C) WB |
| HEATING | RETURN AIR TEMPERATURE : 70.0 °F(21.1 °C) DB, 60.0 °F(15.6 °C) WB<br>OUTDOOR TEMPERATURE : 47.0 °F(8.3 °C) DB, 43.0 °F(6.1 °C) WB |

4D158173

## FVXV09AVJUW(T)9




OVER ALL(dB)

| SCALE | 60Hz 208/230V (H) | 60Hz 208/230V (L) |
|---|---|---|
| A | 39 | 30 |

(B. G. N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE 208/230V 60 Hz

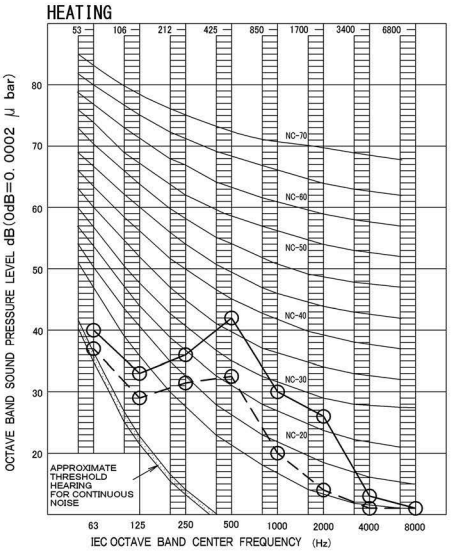
JIS STANDARD

STANDARD EXTERNAL STATIC PRESSURE

○——○ 60Hz 208/230V (H)

○- - -○ 60Hz 208/230V (L)

COOLING




OVER ALL(dB)

| SCALE | 60Hz 208/230V (H) | 60Hz 208/230V (L) |
|---|---|---|
| A | 40 | 31 |

(B. G. N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE 208/230V 60 Hz

JIS STANDARD

STANDARD EXTERNAL STATIC PRESSURE

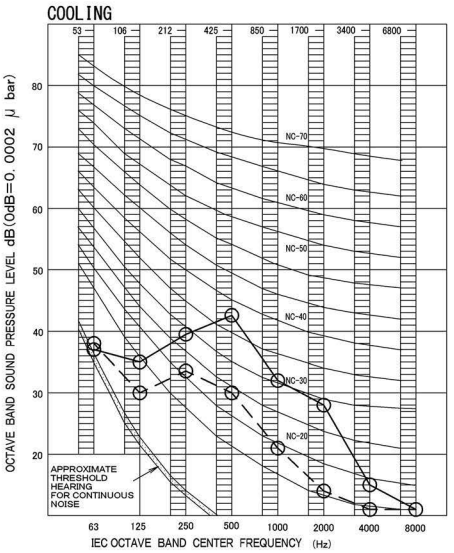
○——○ 60Hz 208/230V (H)

○- - -○ 60Hz 208/230V (L)

HEATING

3D159244

## FVXV12AVJUW(T)9




OVER ALL(dB)

| SCALE | 60Hz 208/230V (H) | 60Hz 208/230V (L) |
|---|---|---|
| A | 41 | 30 |

(B. G. N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE 208/230V 60 Hz

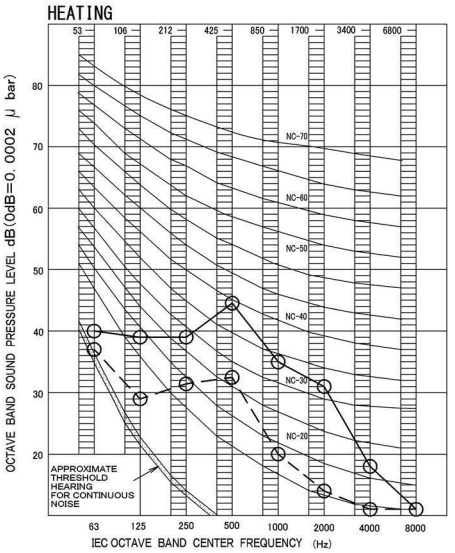
JIS STANDARD

STANDARD EXTERNAL STATIC PRESSURE

○——○ 60Hz 208/230V (H)

○- - -○ 60Hz 208/230V (L)

COOLING




OVER ALL(dB)

| SCALE | 60Hz 208/230V (H) | 60Hz 208/230V (L) |
|---|---|---|
| A | 43 | 31 |

(B. G. N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE 208/230V 60 Hz

JIS STANDARD

STANDARD EXTERNAL STATIC PRESSURE

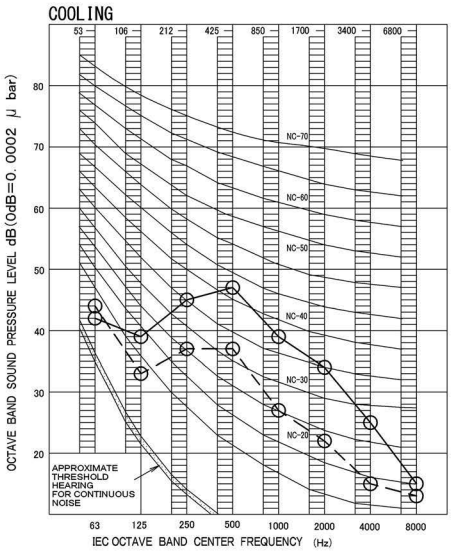
○——○ 60Hz 208/230V (H)

○- - -○ 60Hz 208/230V (L)

HEATING

3D159245

## FVXV15AVJUW(T)9




OVER ALL(dB)

| SCALE | 60Hz 208/230V (H) | 60Hz 208/230V (L) |
|---|---|---|
| A | 46 | 36 |

(B. G. N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE 208/230V 60 Hz

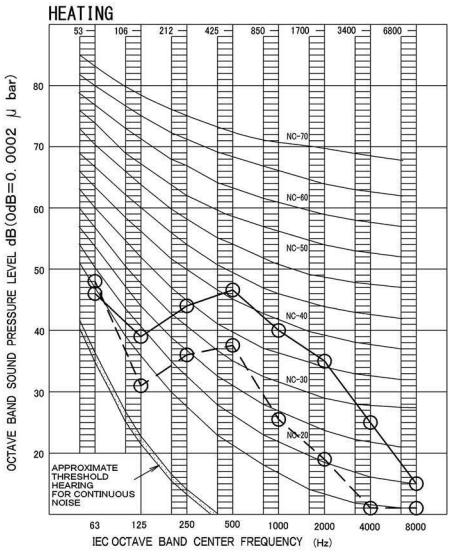
JIS STANDARD

STANDARD EXTERNAL STATIC PRESSURE

60Hz 208/230V (H)

60Hz 208/230V (L)

COOLING




OVER ALL(dB)

| SCALE | 60Hz 208/230V (H) | 60Hz 208/230V (L) |
|---|---|---|
| A | 46 | 36 |

(B. G. N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE 208/230V 60 Hz

JIS STANDARD

STANDARD EXTERNAL STATIC PRESSURE

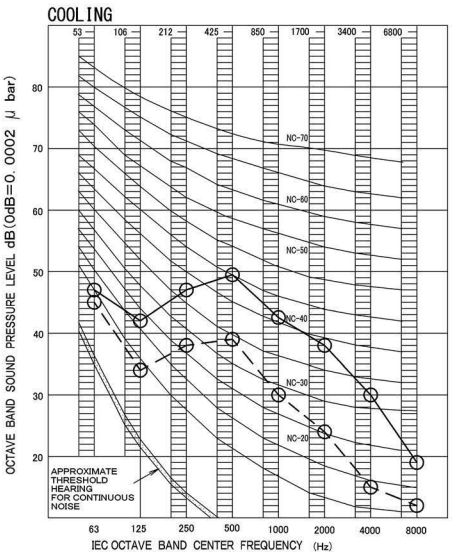
60Hz 208/230V (H)

60Hz 208/230V (L)

HEATING

3D159251

## FVXV18AVJUW(T)9




OVER ALL(dB)

| SCALE | 60Hz 208/230V (H) | 60Hz 208/230V (L) |
|---|---|---|
| A | 49 | 38 |

(B. G. N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE 208/230V 60 Hz

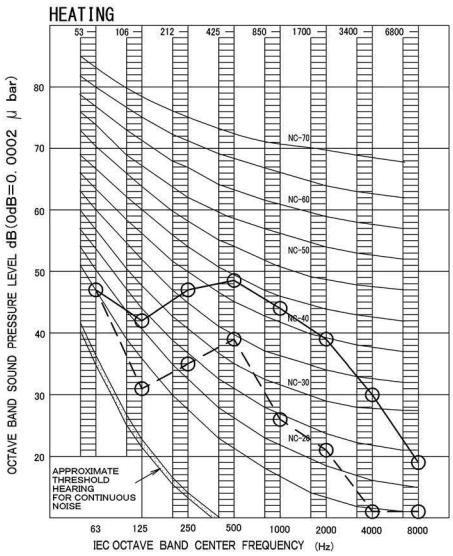
JIS STANDARD

STANDARD EXTERNAL STATIC PRESSURE

60Hz 208/230V (H)

60Hz 208/230V (L)

COOLING




OVER ALL(dB)

| SCALE | 60Hz 208/230V (H) | 60Hz 208/230V (L) |
|---|---|---|
| A | 49 | 37 |

(B. G. N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE 208/230V 60 Hz

JIS STANDARD

STANDARD EXTERNAL STATIC PRESSURE

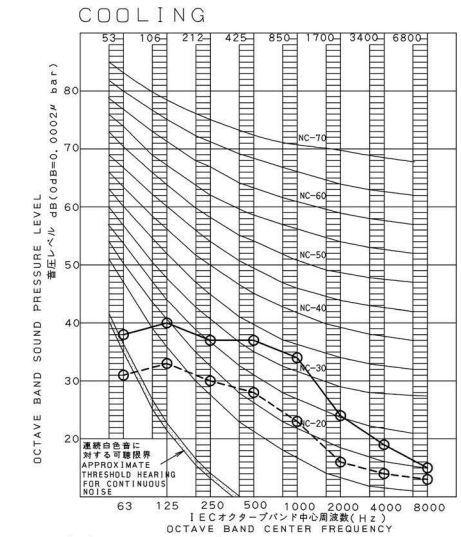
60Hz 208/230V (H)

60Hz 208/230V (L)

HEATING

3D159252

## FFA09AVJU9




オーバーオール(dB) OVER ALL (dB)

| スケール SCALE | 60Hz 208/230V (H) | 60Hz 208/230V (L) |
|---|---|---|
| A | 38 | 29 |

(暗騒音ハ補正済 B.G.N IS ALREADY RECTIFIED)

運転条件 OPERATING CONDITIONS

電 源 POWER SOURCE 208/230v 60 Hz

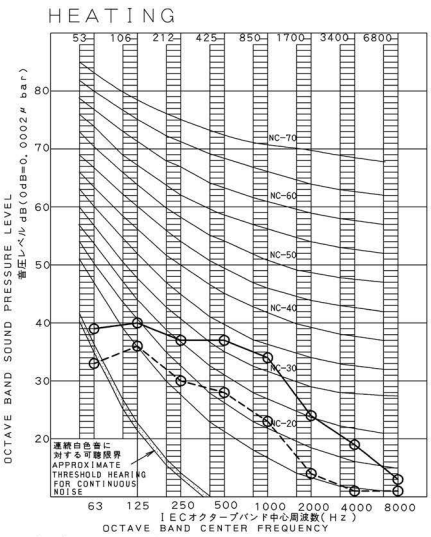
JIS標準 JIS STANDARD

STANDARD EXTERNAL STATIC PRESSURE

○——○ 60Hz 208/230V(H)

○----○ 60Hz 208/230V(L)

Cooling




オーバーオール(dB) OVER ALL (dB)

| スケール SCALE | 60Hz 208/230V (H) | 60Hz 208/230V (L) |
|---|---|---|
| A | 38 | 29 |

(暗騒音ハ補正済 B.G.N IS ALREADY RECTIFIED)

運転条件 OPERATING CONDITIONS

電 源 POWER SOURCE 208/230v 60 Hz

JIS標準 JIS STANDARD

STANDARD EXTERNAL STATIC PRESSURE

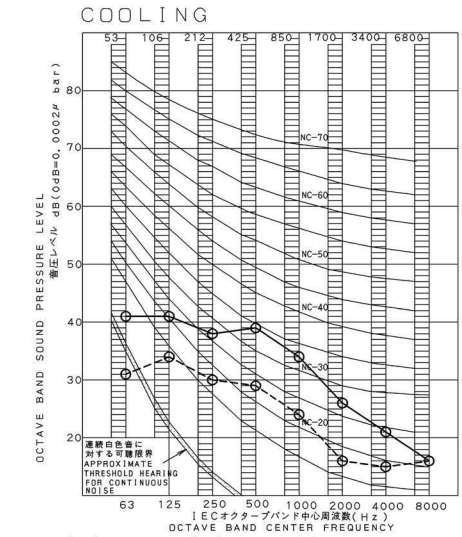
○——○ 60Hz 208/230V(H)

○----○ 60Hz 208/230V(L)

Heating

3D161946

## FFA12AVJU9




オーバーオール(dB) OVER ALL (dB)

| スケール SCALE | 60Hz 208/230V (H) | 60Hz 208/230V (L) |
|---|---|---|
| A | 39 | 30 |

(暗騒音ハ補正済 B.G.N IS ALREADY RECTIFIED)

運転条件 OPERATING CONDITIONS

電 源 POWER SOURCE 208/230v 60 Hz

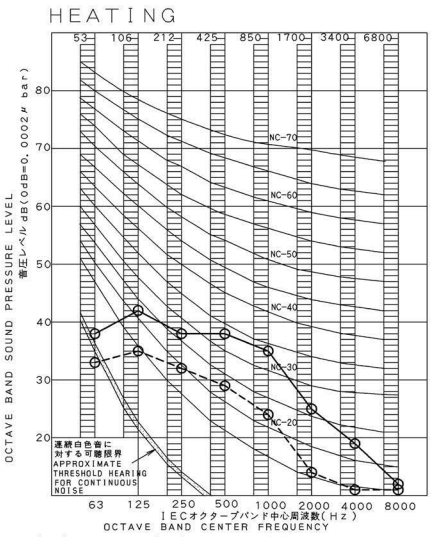
JIS標準 JIS STANDARD

STANDARD EXTERNAL STATIC PRESSURE

○——○ 60Hz 208/230V(H)

○----○ 60Hz 208/230V(L)

Cooling




オーバーオール(dB) OVER ALL (dB)

| スケール SCALE | 60Hz 208/230V (H) | 60Hz 208/230V (L) |
|---|---|---|
| A | 39 | 30 |

(暗騒音ハ補正済 B.G.N IS ALREADY RECTIFIED)

運転条件 OPERATING CONDITIONS

電 源 POWER SOURCE 208/230v 60 Hz

JIS標準 JIS STANDARD

STANDARD EXTERNAL STATIC PRESSURE

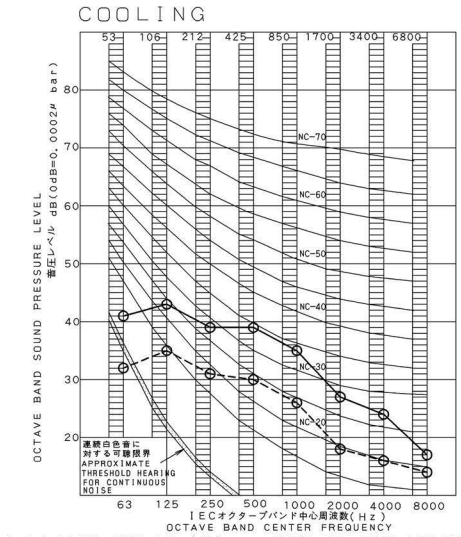
○——○ 60Hz 208/230V(H)

○----○ 60Hz 208/230V(L)

Heating

3D161947

## FFA18AVJU9




オーバーオール(dB) OVER ALL (dB)

| スケール SCALE | 60Hz 208/230V (H) | 60Hz 208/230V (L) |
|---|---|---|
| A | 40 | 31 |

(暗騒音ハ補正済 B.G.N IS ALREADY RECTIFIED)

運転条件 OPERATING CONDITIONS

電 源 POWER SOURCE 208/230v 60 Hz

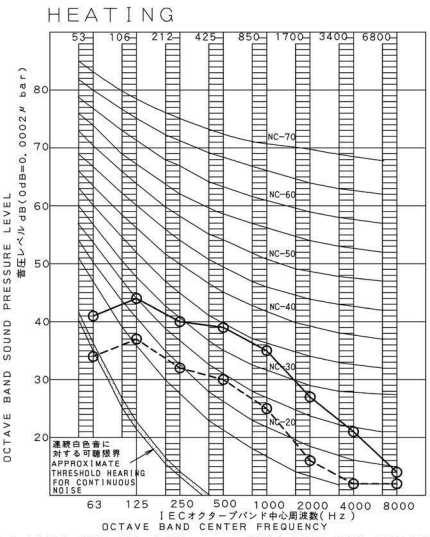
JIS標準 JIS STANDARD

STANDARD EXTERNAL STATIC PRESSURE

○——○ 60Hz 208/230V(H)

○----○ 60Hz 208/230V(L)

Cooling




オーバーオール(dB) OVER ALL (dB)

| スケール SCALE | 60Hz 208/230V (H) | 60Hz 208/230V (L) |
|---|---|---|
| A | 40 | 31 |

(暗騒音ハ補正済 B.G.N IS ALREADY RECTIFIED)

運転条件 OPERATING CONDITIONS

電 源 POWER SOURCE 208/230 v 60 Hz

JIS標準 JIS STANDARD

STANDARD EXTERNAL STATIC PRESSURE

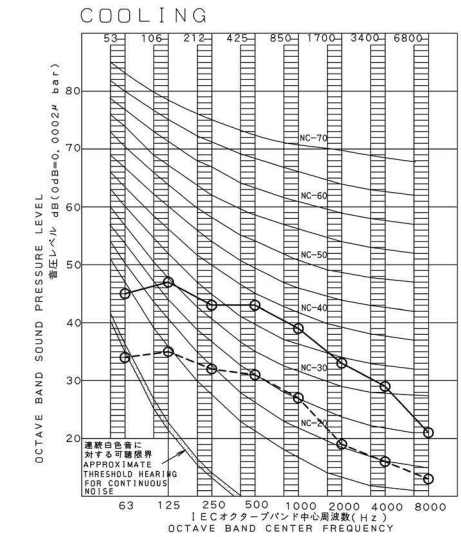
○——○ 60Hz 208/230V(H)

○----○ 60Hz 208/230V(L)

Heating

3D161948

## FFA24AVJU9




オーバーオール(dB) OVER ALL (dB)

| スケール SCALE | 60Hz 208/230V (H) | 60Hz 208/230V (L) |
|---|---|---|
| A | 44 | 32 |

(暗騒音ハ補正済 B.G.N IS ALREADY RECTIFIED)

運転条件 OPERATING CONDITIONS

電 源 POWER SOURCE 208/230v 60 Hz

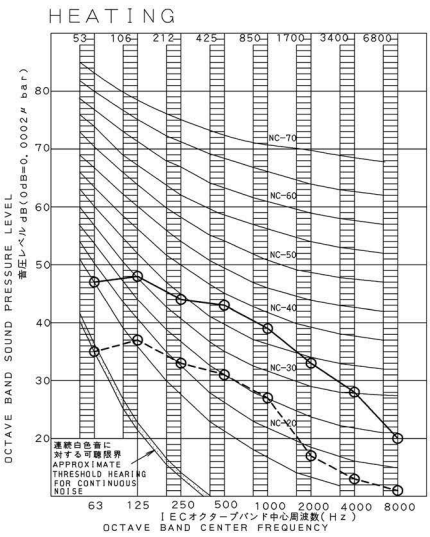
JIS標準 JIS STANDARD

STANDARD EXTERNAL STATIC PRESSURE

○——○ 60Hz 208/230V(H)

○----○ 60Hz 208/230V(L)

Cooling




オーバーオール(dB) OVER ALL (dB)

| スケール SCALE | 60Hz 208/230V (H) | 60Hz 208/230V (L) |
|---|---|---|
| A | 44 | 32 |

(暗騒音ハ補正済 B.G.N IS ALREADY RECTIFIED)

運転条件 OPERATING CONDITIONS

電 源 POWER SOURCE 208/230 v 60 Hz

JIS標準 JIS STANDARD

STANDARD EXTERNAL STATIC PRESSURE

○——○ 60Hz 208/230V(H)

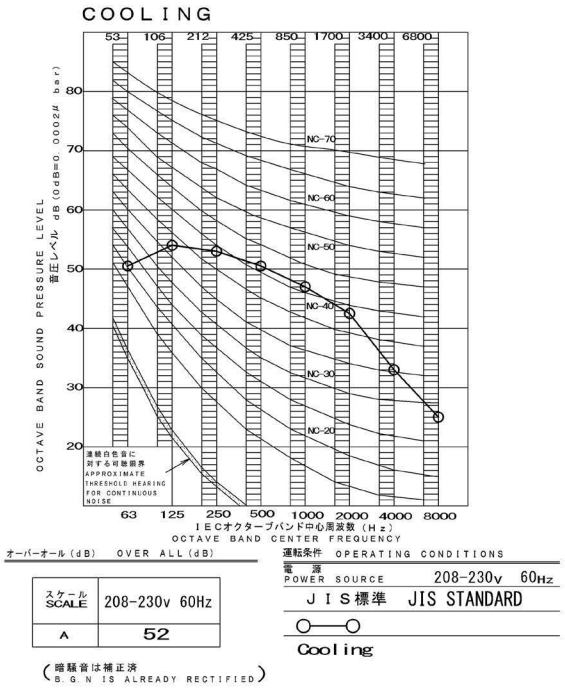
○----○ 60Hz 208/230V(L)

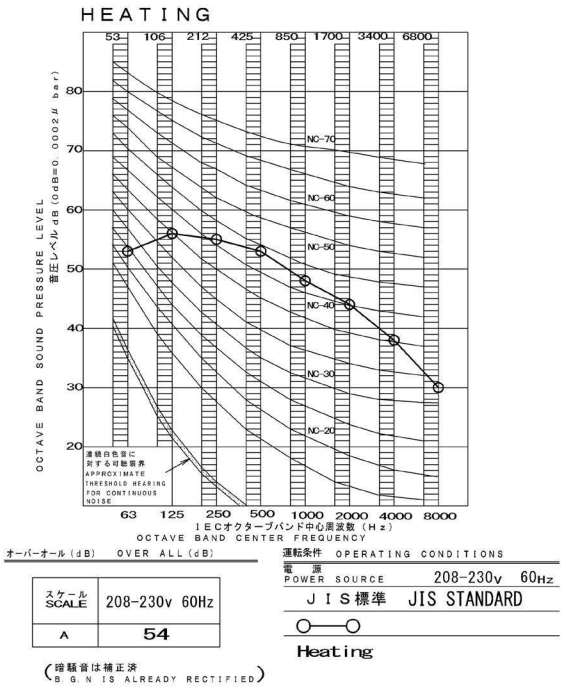
Heating

3D161949

## 10.3 Outdoor unit

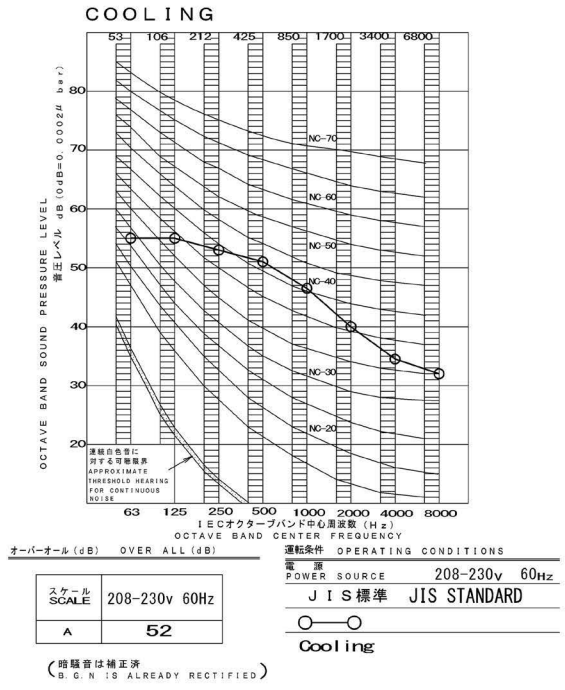
### 2MXM18AVJU9(8)

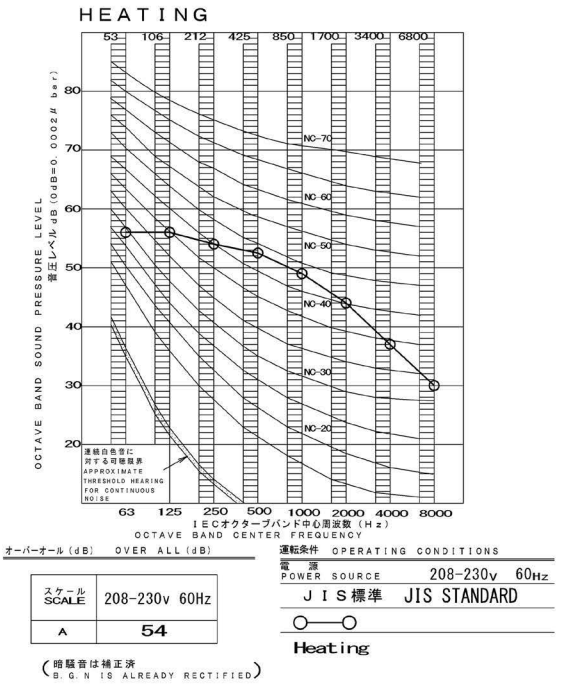



3D151393

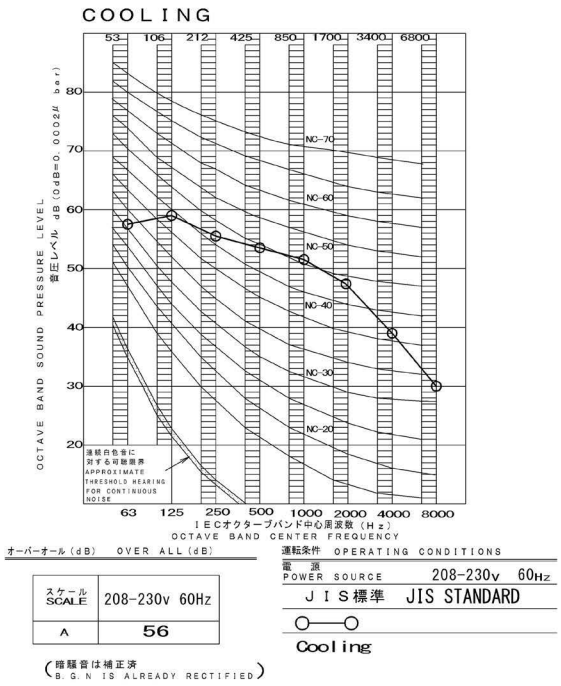
### 3MXM24AVJU9(8), 2MXT18AVJU9(8), 2MXTH18AVJU9(8)

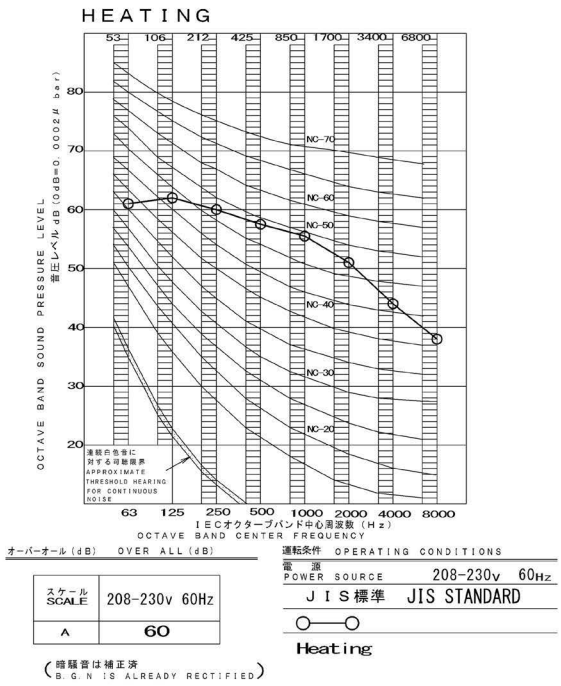



3D151394

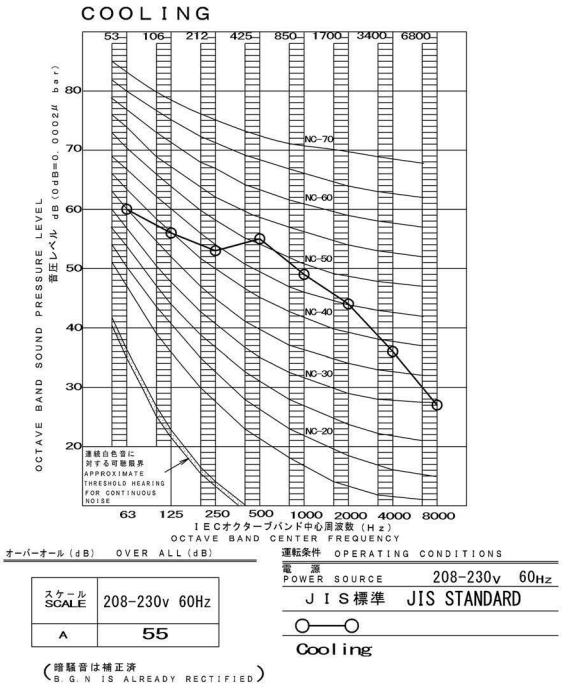
## 4MXM36AVJU9(8)

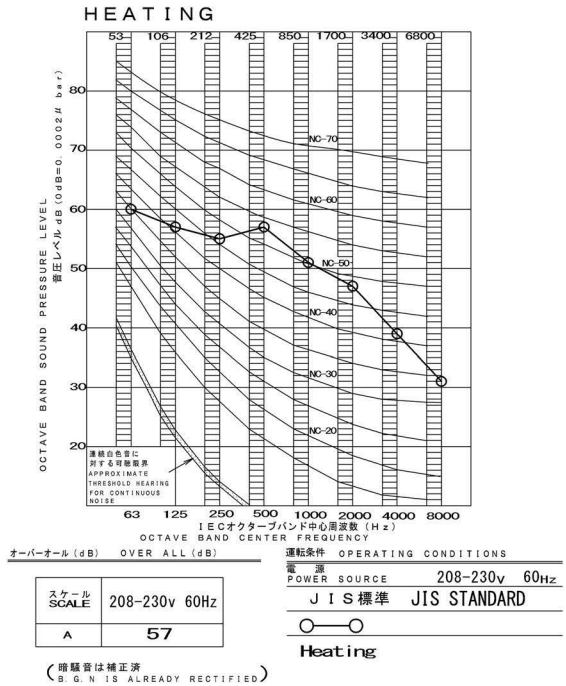



3D151395

## 5MXM48AVJU9(8), 3MXT24AVJU9(8), 4MXT36AVJU9(8), 5MXT40AVJU9(8), 3MXTH24AVJU9(8), 4MXTH36AVJU9(8), 5MXTH40AVJU9(8)




3D158362

# 11. Electric Characteristics

| Model | | Power Supply | | | | Fan/compressor |
|---|---|---|---|---|---|---|
| | | Hz - Volts | Voltage Range | MCA | MOP | Inverter drive input |
| MXM Series | 2MXM18AVJU9(8) | 60 Hz - 208 V<br>60 Hz - 230 V | Max. 60 Hz, 253 V<br>Min. 60 Hz, 187 V | 15.6 | 20.0 | 13.7 |
| | 3MXM24AVJU9(8) | 60 Hz - 208 V<br>60 Hz - 230 V | Max. 60 Hz, 253 V<br>Min. 60 Hz, 187 V | 19.9 | 25.0 | 17.4 |
| | 4MXM36AVJU9(8) | 60 Hz - 208 V<br>60 Hz - 230 V | Max. 60 Hz, 253 V<br>Min. 60 Hz, 187 V | 24.1 | 25.0 | 20.8 |
| | 5MXM48AVJU9(8) | 60 Hz - 208 V<br>60 Hz - 230 V | Max. 60 Hz, 253 V<br>Min. 60 Hz, 187 V | 38.1 | 40.0 | 31.6 |
| MXT Series | 2MXT18AVJU9(8) | 60 Hz - 208 V<br>60 Hz - 230 V | Max. 60 Hz, 253 V<br>Min. 60 Hz, 187 V | 18.7 | 20.0 | 14.2 |
| | 3MXT24AVJU9(8) | 60 Hz - 208 V<br>60 Hz - 230 V | Max. 60 Hz, 253 V<br>Min. 60 Hz, 187 V | 33.6 | 35.0 | 27.4 |
| | 4MXT36AVJU9(8) | 60 Hz - 208 V<br>60 Hz - 230 V | Max. 60 Hz, 253 V<br>Min. 60 Hz, 187 V | 37.5 | 40.0 | 31.0 |
| | 5MXT40AVJU9(8) | 60 Hz - 208 V<br>60 Hz - 230 V | Max. 60 Hz, 253 V<br>Min. 60 Hz, 187 V | 37.9 | 40.0 | 31.4 |
| MXTH Series | 2MXTH18AVJU9(8) | 60 Hz - 208 V<br>60 Hz - 230 V | Max. 60 Hz, 253 V<br>Min. 60 Hz, 187 V | 19.6 | 20.0 | 14.2 |
| | 3MXTH24AVJU9(8) | 60 Hz - 208 V<br>60 Hz - 230 V | Max. 60 Hz, 253 V<br>Min. 60 Hz, 187 V | 34.4 | 35.0 | 27.4 |
| | 4MXTH36AVJU9(8) | 60 Hz - 208 V<br>60 Hz - 230 V | Max. 60 Hz, 253 V<br>Min. 60 Hz, 187 V | 38.3 | 40.0 | 31.0 |
| | 5MXTH40AVJU9(8) | 60 Hz - 208 V<br>60 Hz - 230 V | Max. 60 Hz, 253 V<br>Min. 60 Hz, 187 V | 38.6 | 40.0 | 31.4 |

C: 3D151489

C: 3D157875

**Symbols:**

MCA : Min. circuit ampacity (A)

MOP : Max. overcurrent protective device (A)

**Notes:**

1. Inverter drive input is the current value specified in Annex 101.DVA.
2. Maximum allowable voltage variation between phases is 2%.
3. Select wire size based on the larger value of MCA.
4. Instead of fuse, use circuit breaker.
5. Be sure to install a ground leak detector.
   (This unit uses an inverter, which means that an earth leak detector capable of handling high harmonics must be used in order to prevent malfunctioning of the ground leak detector.)

# Part 2 Installation Manual

1. Indoor Unit ....80
1.1 CTXV07, FTXV09/12 ....80
1.2 FTXV15/18/24 ....94
1.3 CDMA07, FDMA09/12/15/18/24 ....108
1.4 FVXV09/12/15/18 ....133
1.5 CMXV12/18/24 ....155
1.6 FFA09/12/15/18AVJU9 ....184
2. Outdoor Unit ....205
2.1 2/3/4MXM, 2MXT, 2MXTH ....205
2.2 5MXM, 3/4/5MXT, 3/4/5MXTH ....224

# 1. Indoor Unit

## 1.1 CTXV07, FTXV09/12

# Contents

**Safety Considerations ..... 1**
**Accessories ..... 3**
**Choosing an Installation Site ..... 3**
1. Indoor unit ..... 3
2. Wireless remote controller ..... 3
**Indoor Unit Installation Diagram ..... 4**
**Indoor Unit Installation ..... 5**
1. Installing the mounting plate ..... 5
2. Drilling a wall hole and installing wall embedded pipe ... 5
3. Installing the indoor unit ..... 6
4. Wiring ..... 8
5. Drain piping ..... 9
**Refrigerant Piping Work ..... 10**
1. Flaring the pipe end ..... 10
2. Refrigerant piping ..... 10
**Installation Tips ..... 12**
1. Removing and installing the front panel ..... 12
2. Removing and installing the front grille ..... 12
3. How to set the different addresses ..... 13
4. Pump down operation ..... 13
**Trial Operation and Testing ..... 14**
1. Trial operation and testing ..... 14
2. Test items ..... 14

The pictures in this document are for illustrative purposes only.

# Safety Considerations

**Refer also to the General Safety Considerations in the separate booklet.**

| | |
|---|---|
|  | **Read the precautions in this manual carefully before operating the unit.** |
|   | **This appliance is filled with R32.** |

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.
Instruct the user on how to operate and maintain the unit. Inform users that they should store this installation manual with the operation manual for future reference.
Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion.
Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

**⚠ DANGER** ..... Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

**⚠ WARNING** ..... Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

**⚠ CAUTION** ..... Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

**⚠ NOTE** ..... Indicates situations that may result in equipment or property-damage accidents only.

**⚠ DANGER**

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death. Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injury or death by suffocation.
- All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal.

**⚠ WARNING**

- Only qualified personnel licensed or certified in their jurisdiction must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- Pipe-work including piping material, pipe routing, and installation shall include protection from physical damage in operation and service, and be in compliance with national and local codes and standards, such as ASHRAE 15, ASHRAE 15.2, IAPMO Uniform Mechanical Code, ICC International Mechanical Code, or CSA B52. All field joints shall be accessible for inspection prior to being covered or enclosed.
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injury.

- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel licensed or certified in their jurisdiction according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the service lid can be securely fastened. Improper positioning of the service lid may result in electric shock, fire, or the terminals overheating.
- Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit service lid. If the service lid is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R32) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, which may result in equipment damage and even injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.
- Do not use means to accelerate the defrosting process (if possible) or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.
- Comply with national gas regulations.
- The indoor equipment and pipes shall be securely mounted and guarded such that accidental rupture of equipment cannot occur from such events as moving furniture or reconstruction activities.

**⚠ CAUTION**

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- Wear adequate personal protective equipment (protective gloves, safety glasses,…) when installing, maintaining or servicing the system.
- The heat exchanger fins are sharp enough to cut. To avoid injury, wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to ensure proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R32 in the system must be kept clean, dry, and tight.

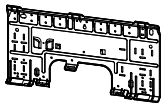
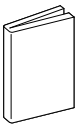
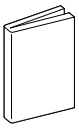
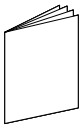
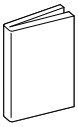
  (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.
  (b) Tight -- R32 does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R32 can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant Piping Work* and follow the procedures.
- The indoor unit is for R32. See the catalog for outdoor models that can be connected. Normal operation is not possible when connected to non-compatible outdoor units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors.
- Do not install the air conditioner or heat pump in the following locations:
  (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
  Plastic parts may deteriorate and fall off or result in water leakage.
  (b) Where corrosive gas, such as sulfurous acid gas, is produced.
  Corroding copper pipes or soldered parts may result in refrigerant leakage.
  (c) Near machinery emitting electromagnetic waves.
  Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
  (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled.
  Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.
- Servicing shall be performed only as recommended by the manufacturer and licensed or certified in their jurisdiction.

**⚠ NOTE**

- The indoor unit should be positioned where the unit and interunit wires (outdoor to indoor) are at least 3.3ft (1m) away from any televisions or radios. (The unit may cause interference with the picture or sound.) Depending on the radio waves, a distance of 3.3ft (1m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Only use tools for R32, such as a gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R32, the refrigerant may deteriorate.
- As maximum allowable pressure is 604psi (4.17MPa), the wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.

FTN006(R32)-U

# Accessories

| | | | | | |
|---|---|---|---|---|---|
| Ⓐ Mounting plate  | 1 | Ⓑ Mounting plate fixing screw M4 × 1” (M4 × 25mm)  | 7 | Ⓒ Titanium apatite deodorizing filter  | 2 |
| Ⓓ Wireless remote controller  | 1 | Ⓔ Remote controller holder  | 1 | Ⓕ Remote controller holder fixing screw M3 × 13/16” (M3 × 20mm)  | 2 |
| Ⓖ Dry battery AAA. LR03 (alkaline)  | 2 | Ⓗ Indoor unit fixing screw M4 × 1/2” (M4 × 12mm)  | 2 | Ⓙ Insulation tape  | 1 |
| Ⓚ Operation manual  | 1 | Ⓛ Installation manual  | 1 | Ⓜ Warranty  | 1 |
| Ⓝ General safety considerations  | 1 | | | | |

# Choosing an Installation Site

• Before choosing the installation site, obtain user approval.

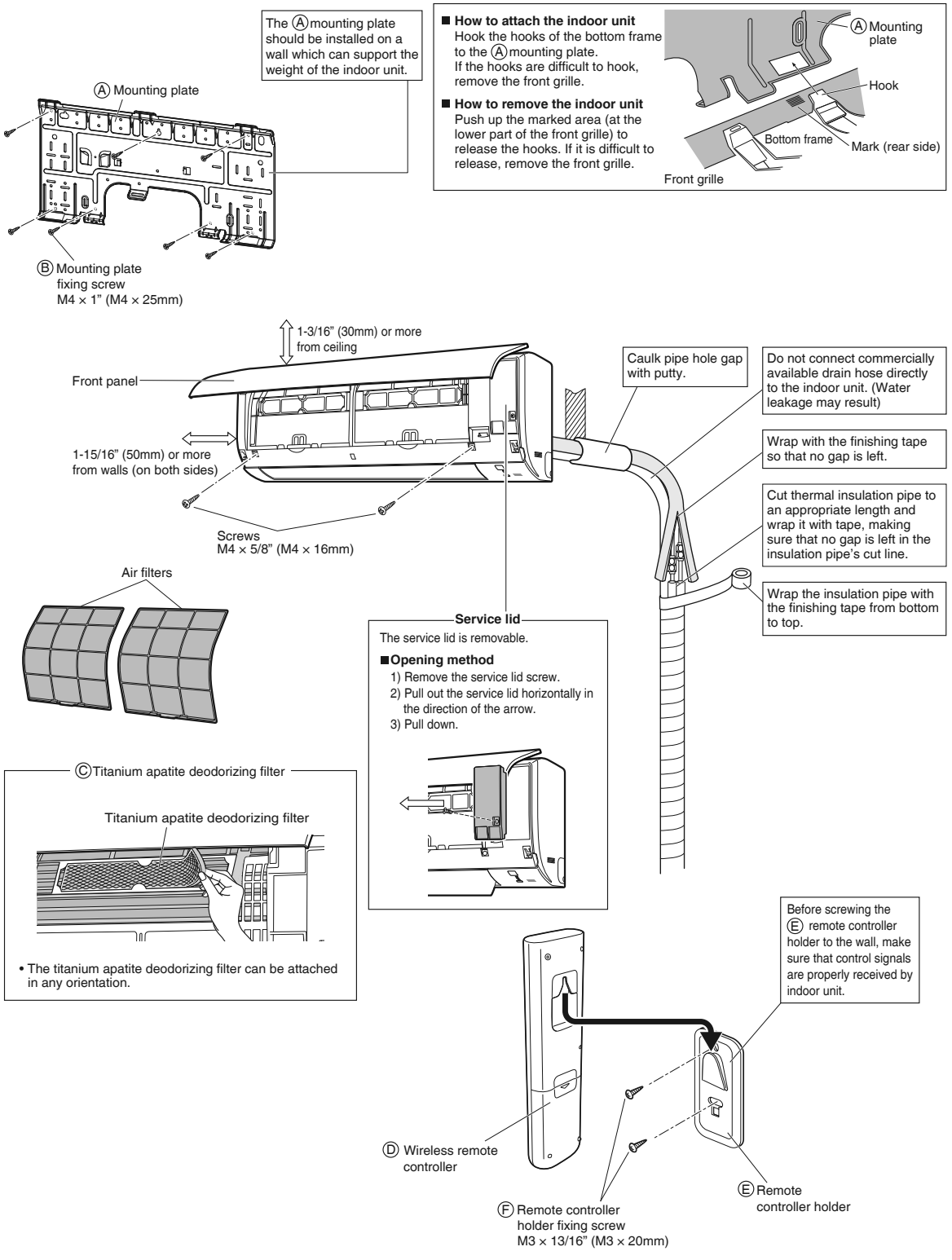
## 1. Indoor unit

• The indoor unit should be positioned in a place where:
1) the restrictions on the installation requirements specified in **“Indoor Unit Installation Diagram”** on page 4 are met,
2) both the air inlet and air outlet are unobstructed,
3) the unit is not exposed to direct sunlight,
4) drainage occurs easily,
5) the unit is away from sources of heat or steam,
6) there is no source of machine oil vapor (this may shorten the indoor unit service life),
7) cool/warm air is circulated throughout the room,
8) the unit is away from electronic ignition type fluorescent lamps (inverter or rapid start type) as they may affect the remote controller range,
9) the unit is at least 3.3ft (1m) away from any television or radio set (the unit may cause interference with the picture or sound),
10) no laundry equipment is nearby,
11) the signal strength of the router is stable (insufficient signal strength can prevent stable communication).

## 2. Wireless remote controller

• Turn on all the fluorescent lamps in the room, if any, and find a location where the remote controller signals are properly received by the indoor unit (within 23ft (7m)).

# Indoor Unit Installation Diagram




4

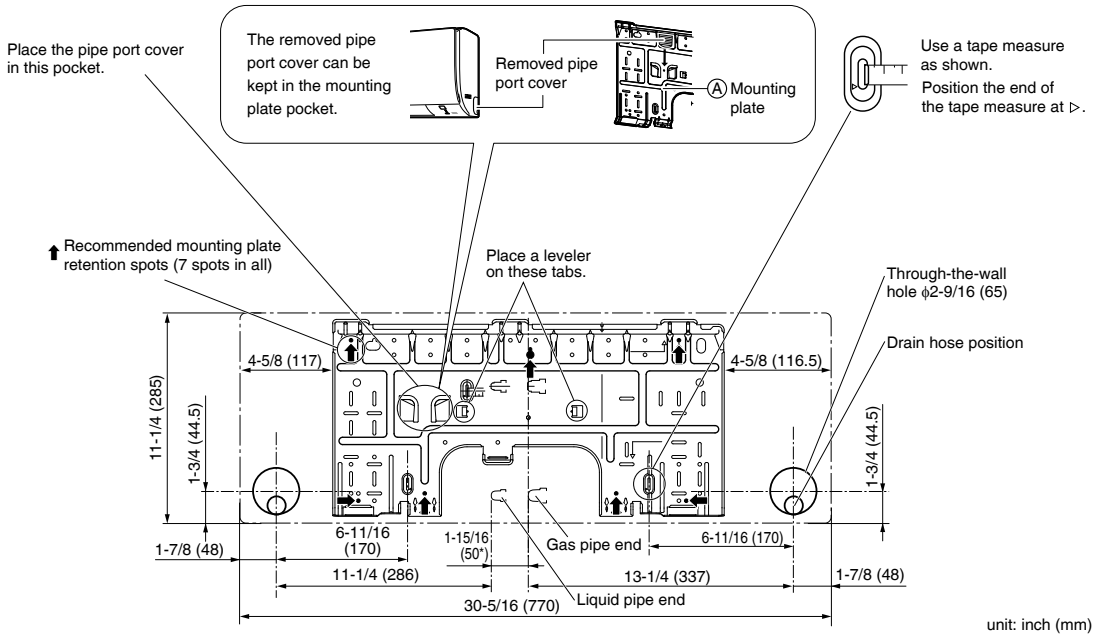
3P741458-1G

# Indoor Unit Installation

## 1. Installing the mounting plate

- The mounting plate should be installed on a wall which can support the weight of the indoor unit.
  1) Temporarily secure the mounting plate to the wall, make sure that the panel is completely level, and mark the drilling points on the wall.
  2) Secure the mounting plate to the wall with screws.

### Recommended mounting plate retention spots and dimensions



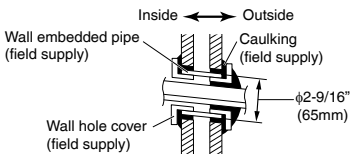

* Depending on the model, the actual distance between the liquid pipe end and gas pipe end may differ from the distance between those symbols on the mounting plate (the distance listed in this manual).
Always measure the actual distance between the liquid pipe end and gas pipe end before installing refrigerant pipes.

## 2. Drilling a wall hole and installing wall embedded pipe

**⚠ WARNING**

For metal frame or metal board walls, be sure to use a wall embedded pipe and wall hole cover in the feed-through hole to prevent possible heat, electric shock, or fire.

- Be sure to caulk the gaps around the pipes with caulking material to prevent condensation.
  1) Drill a feed-through hole with a ϕ2-9/16 inch (65mm) diameter through the wall at a downward angle toward the outside.
  2) Insert a wall embedded pipe into the hole.
  3) Insert a wall hole cover into wall pipe.
  4) After completing refrigerant piping, wiring, and drain piping, caulk the pipe hole gap with putty.




**Even if a wall hole cover is not used, caulk both the outdoor and indoor sides with putty.**

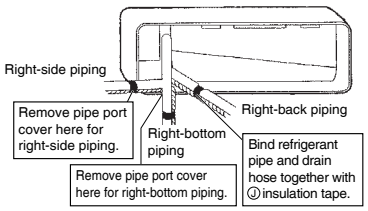
# 3. Installing the indoor unit

In the case of bending or curing refrigerant pipes, keep the following precautions in mind.
Abnormal sound may be generated if improper work is conducted.

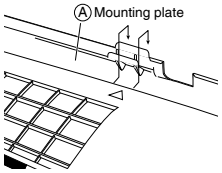
- Do not strongly press the refrigerant pipes onto the bottom frame.
- Do not strongly press the refrigerant pipes on the front grille, either.

## 3-1. Right-side, right-back, or right-bottom piping

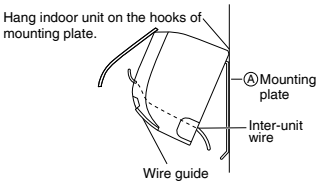
1) Attach the drain hose to the underside of the refrigerant pipes with adhesive vinyl tape.
2) Wrap the refrigerant pipes and drain hose together with Ⓙ insulation tape.




3) Pass the drain hose and refrigerant pipes through the wall hole, then position the indoor unit on the Ⓐ mounting plate hooks by using the △ markings at the top of the indoor unit as a guide.




4) Open the front panel (Refer to **"Installation Tips"** on page 12), then open the service lid (Refer to **"Indoor Unit Installation Diagram"** on page 4).
5) Pass the inter-unit wire from the outdoor unit through the feed-through wall hole and pass to the front of indoor unit from the back. Then pull them at front side. Bend the ends of cable tie wires upward for easier work in advance. (If the interunit wire ends are to be stripped first, bundle wire ends with adhesive tape.)
6) Press the bottom frame of the indoor unit with both hands until it is firmly caught by the Ⓐ mounting plate hooks. Make sure the wire leads do not catch on the edge of the indoor unit.

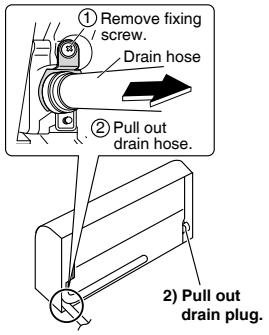



## 3-2. Left-side, left-back, or left-bottom piping

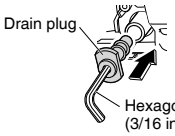
1) Switch around the drain plug and drain hose.

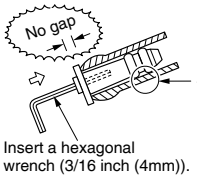
**How to switch around the drain plug and drain hose**

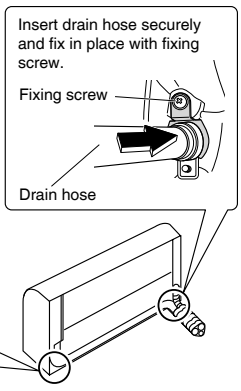
**1) Remove the fixing screw and pull out the drain hose.**




**3) Switch around the drain hose and drain plug.**



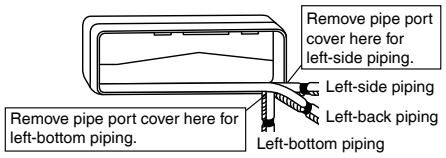




6

3P741458-1G

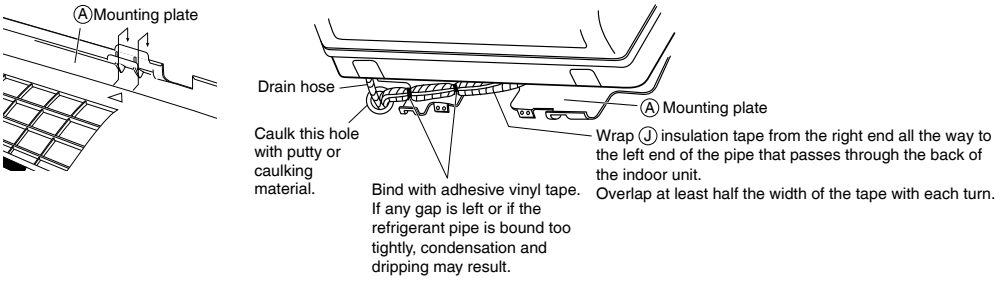
# Indoor Unit Installation

2) Attach the drain hose to the underside of the refrigerant pipes with adhesive vinyl tape.




3) Shape the refrigerant pipes along the pipe path marking on the Ⓐ mounting plate.

4) Pass the drain hose and refrigerant pipes through the wall hole, then position the indoor unit on the Ⓐ mounting plate hooks, using the △ markings at the top of the indoor unit as a guide.



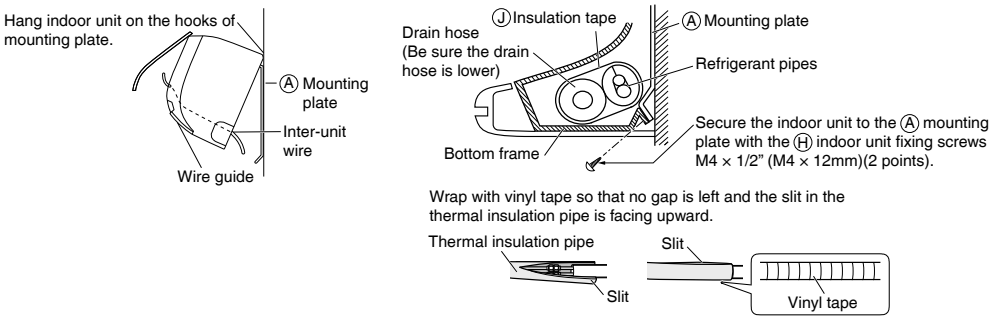

5) Open the front panel (Refer to "**Installation Tips**" on page 12), then open the service lid (Refer to "**Indoor Unit Installation Diagram**" on page 4).

6) Pass the inter-unit wire from the outdoor unit through the feed-through wall hole and pass to the front of indoor unit from the back. Then pull them at front side. Bend the ends of cable tie wires upward for easier work in advance. (If the interunit wire ends are to be stripped first, bundle wire ends with adhesive tape.)

7) Connect the refrigerant pipes.

8) In case of pulling the drain hose through the back of the indoor unit, wrap the refrigerant pipes and drain hose together with Ⓙ insulation tape as shown in the figure below.

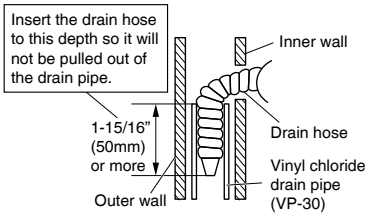
9) Press the bottom frame of the indoor unit with both hands until it is firmly caught by the Ⓐ mounting plate hooks. Make sure that the wires do not catch on the edge of the indoor unit.




## 3-3. Wall embedded piping

Follow the instructions given under left-side, left-back, or left-bottom piping.

1) Insert the drain hose to a depth of 1-15/16 inches (50mm) or more so it will not be pulled out of the drain pipe.




7

3P741458-1G

# 4. Wiring

**Refer to the installation manual for the outdoor unit also.**

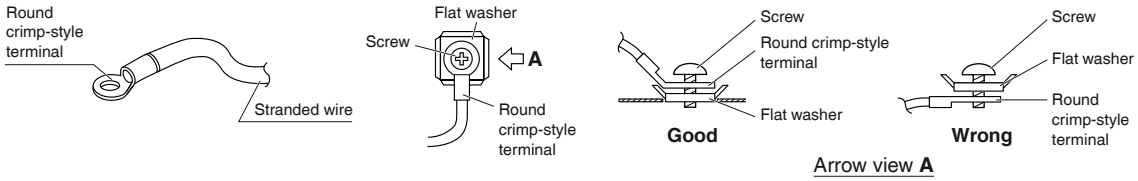
## ⚠WARNING

- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.

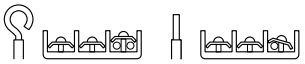
## ⚠CAUTION

Recommend stranded cable for interunit wiring. Local code always supersedes recommendation.

- For stranded wires, make sure to use the round crimp-style terminal for connection to the power supply terminal block. Place the round crimp-style terminals on the wires up to the covered part and secure in place.

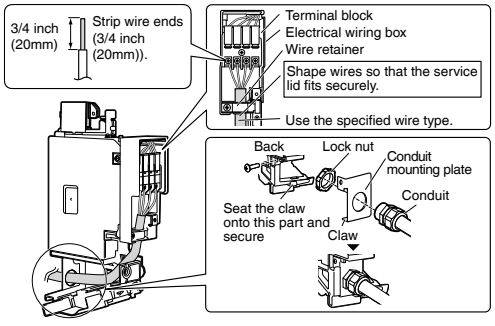


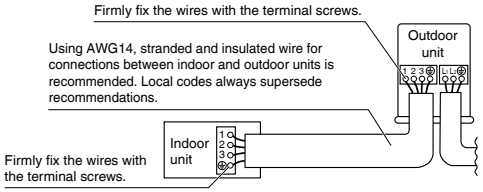

Arrow view **A**




- If solid core wire must be used, be sure to curl the end of the lead. Improper work may cause heat and fire.

1) Remove the front grille. (Refer to **"2. Removing and installing the front grille"** on page 12.)
2) Remove the conduit mounting plate and then secure the conduit to the conduit mounting plate with the lock nut, as shown in the illustration.
3) Strip wire ends (3/4 inch (20mm)).
4) Match wire colors with terminal numbers on the indoor and outdoor unit's terminal blocks and firmly secure the wires in the corresponding terminals with the screws.
5) Connect the ground wires to the corresponding terminals.
6) Pull the wires lightly to make sure they are securely connected.
7) Attach the conduit mounting plate.
8) Shape the wires so that the service lid fits securely.
9) Attach the front grille. (Refer to **"2. Removing and installing the front grille"** on page 12.)
10) Take care to ensure that all wiring between the indoor unit and the outdoor unit has a consistent connection. Any splices can cause communication errors.



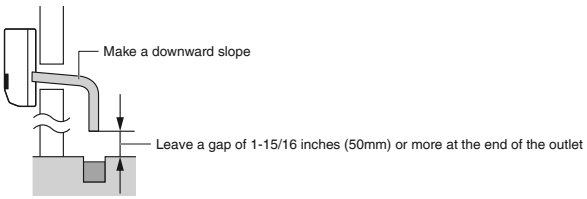

8

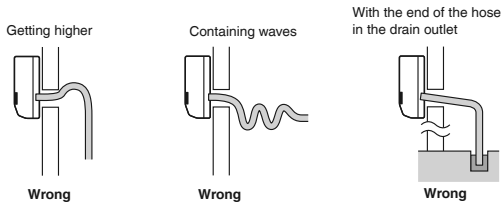
3P741458-1G

# Indoor Unit Installation

## 5. Drain piping

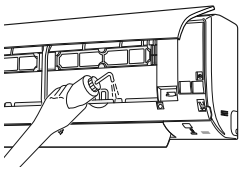
1) Connect the drain hose, as shown below.
- Avoid placing the end of the drain hose in a drainage location that could cause bad odors or corrosive gas to flow backward into the outlet.
- The drainage water may change color due to bacteria or other organisms. Place in a location where the flow of drainage water will not cause a problem.
- Minimize the number of bends in the drain hose as much as possible.
  If bending the drain hose, bend it gently.



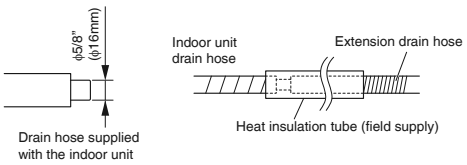




2) Remove the air filters and transfer some water to the indoor heat exchanger by pouring water into the drain pan.

3) Make sure that water flows out of the drain hose.



4) If drain hose extension or embedded drain piping is required, use appropriate parts that match the hose front end.
- When drain hose requires extension, obtain an extension hose with an inner diameter of 5/8 inch (16mm).
  Be sure to thermally insulate the indoor section of the extension hose.




9

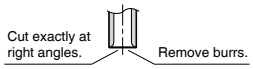
# Refrigerant Piping Work

**⚠WARNING**

- Do not apply mineral oil to the flare.
- Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with this unit.
- Never install a dryer to this R32 unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- Improper flaring may result in refrigerant gas leakage.

## 1. Flaring the pipe end

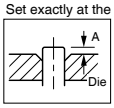
1) Cut the pipe end with a pipe cutter.
2) Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.




3) Put the flare nut on the pipe.
4) Flare the pipe.
5) Check that the flaring has been done correctly.

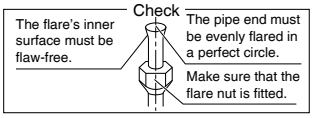
Flaring

Set exactly at the position shown below.




| | Flare tool for R32 or R410A | Conventional flare tool | |
|---|---|---|---|
| | Clutch-type | Clutch-type (Rigid-type) | Wing-nut type (Imperial-type) |
| A | 0-0.020 inch (0-0.5mm) | 0.039-0.059 inch (1.0-1.5mm) | 0.059-0.079 inch (1.5-2.0mm) |

Check

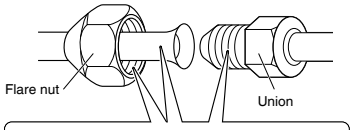



## 2. Refrigerant piping

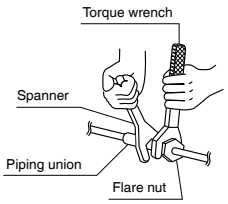
**⚠CAUTION**

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.
- Excessive tightening of the flare nut can result in the flare nut cracking in the long term, leading to gas leakage.

- Align the centers of both flares and tighten the flare nuts 3 or 4 turns by hand, then tighten them fully with a spanner and a torque wrench.



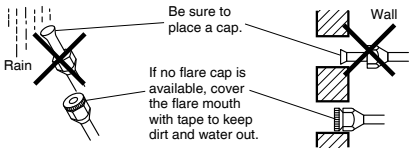

Do not apply refrigeration oil, gas leak prevention agent, etc., to the outer surface of the flare or threads (flare nut, union).
(May result in cracking of the flare nut or damage to the threads)




| | Piping size | Flare nut tightening torque |
|---|---|---|
| Gas side | O.D. 3/8 inch (9.5mm) | 24-1/8–29-1/2lbf • ft (32.7-39.9N • m) |
| Liquid side | O.D. 1/4 inch (6.4mm) | 10-1/2–12-3/4lbf • ft (14.2-17.2 N • m) |

### Caution on piping handling

- Protect the open end of the pipe against dust and moisture.
- All pipe bends should be as gentle as possible. Use a pipe bender for bending.

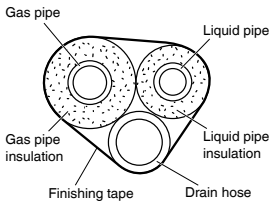


# Refrigerant Piping Work

## Selection of copper and heat insulation materials

When using commercial copper pipes and fittings, observe the following:

- Insulation material: Polyethylene foam
  Heat transfer rate: 0.041 to 0.052W/mK (0.024 to 0.030Btu/fth°F (0.035 to 0.045kcal/mh°C))
  Be sure to use insulation that is designed for use with HVAC Systems.
- ACR Copper only.




- Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below.

| | Piping size | Minimum bend radius | Piping thickness | Thermal insulation size | Thermal insulation thickness |
|---|---|---|---|---|---|
| Gas side | O.D. 3/8 inch (9.5mm) | 1-3/16 inch (30mm) or more | 0.031 inch (0.8mm) (C1220T-O) | I.D. 15/32-19/32 inch (12-15mm) | 13/32 inch (10mm) Min. |
| Liquid side | O.D. 1/4 inch (6.4mm) | 1-3/16 inch (30mm) or more | 0.031 inch (0.8mm) (C1220T-O) | I.D. 5/16-13/32 inch (8-10mm) | |

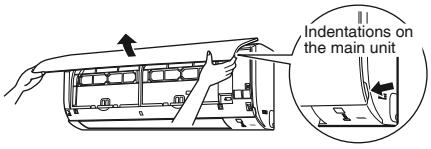
- Use separate thermal insulation pipes for gas and liquid refrigerant pipes.
- Using finishing tape, bundle and wrap the indoor unit piping and drain hose together so that the drain hose is below the other piping.

# Installation Tips

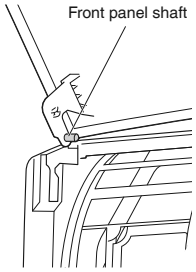
## 1. Removing and installing the front panel

- **Removal method**

1) Place your fingers in the indentations on the main unit (one each on the left and right sides), and open the front panel until it stops.




2) While pushing the left side front panel shaft outward, push up the front panel and remove it. (Remove the right side front panel shaft in the same manner.)
3) After removing both front panel shafts, pull the front panel toward yourself and remove it.



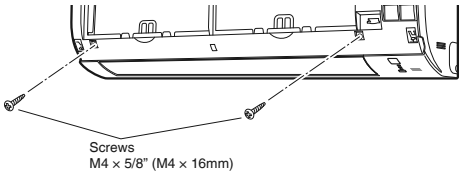

- **Installation method**

Align the front panel shaft of the front panel with the grooves of grille, and push all the way in, then close slowly.
Push the center of the lower panel surface firmly to engage the tabs.

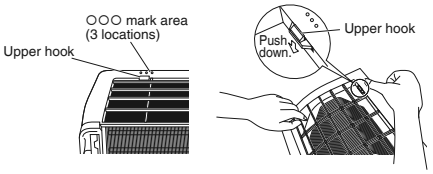
## 2. Removing and installing the front grille

- **Removal method**

1) Remove the front panel and air filters.
2) Remove the 2 screws from the front grille.




3) In front of the ○○○ mark on the front grille, there are 3 upper hooks. Lightly pull the front grille toward you with one hand, and push down on the hooks with the fingers of your other hand.

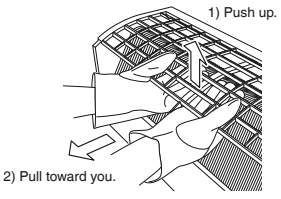



**When there is insufficient work space because the unit is close to ceiling**

**⚠CAUTION**

Be sure to wear protection gloves.

Place both hands under the center of the front grille, and while pushing up, pull it toward you.




- **Installation method**

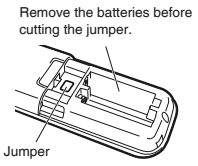
1) Install the front grille and firmly engage the upper hooks (3 locations).
2) Install 2 screws of the front grille.
3) Install the air filters and then mount the front panel.

# Installation Tips

## 3. How to set the different addresses

When 2 indoor units are installed in one room, the 2 wireless remote controllers can be set for different addresses. Change the address setting of one of the 2 units. When cutting the jumper, be careful not to damage any of the surrounding parts.

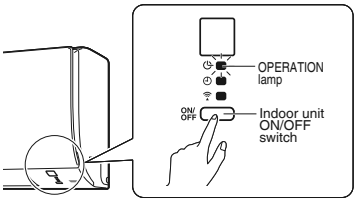
1) Remove the battery cover on the remote controller and cut the address jumper.
2) Press TEMP , TEMP and OFF at the same time.
3) Press TEMP , then select R , press FAN .
   (The indoor unit OPERATION lamp will blink for about 1 minute.)
4) Press the indoor unit ON/OFF switch while the OPERATION lamp is blinking.




| | Address | |
|---|---|---|
| | 1 | 2 |
| Jumper | EXIST | CUT |




- If setting could not be carried out completely while the OPERATION lamp was blinking, carry out the setting process once again from the beginning.
- After setting is complete, pressing FAN for about 5 seconds will cause the remote controller to return to the previous display.




## 4. Pump down operation

**In order to protect the environment, be sure to pump down when relocating or disposing of the unit.**
**For instructions on how to pump down, refer to the installation manual for the outdoor unit to be connected.**

### Forced cooling operation

**For pair connections**

**■Using the indoor unit ON/OFF switch**

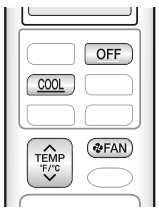
Press the indoor unit ON/OFF switch for at least 5 seconds. (The operation will start.)

- Forced cooling operation will stop automatically after about 15 minutes.
  To stop the operation, press the indoor unit ON/OFF switch.

**■Using the indoor unit's remote controller**

1) Press TEMP , TEMP and OFF at the same time.
2) Press TEMP , then select ❄ , press FAN .
3) Press COOL to turn on the system.

- Forced cooling operation will stop automatically after about 30 minutes.
  To stop the operation, press OFF.




**For multi connections**

For instructions on how to perform forced cooling operation, refer to the installation manual for the outdoor unit.

# Trial Operation and Testing

## 1. Trial operation and testing

- Trial operation should be carried out in either COOL or HEAT operation.

**1-1. Measure the supply voltage and make sure that it is within the specified range.**

**1-2. In COOL operation, select the lowest programmable temperature; in HEAT operation, select the highest programmable temperature.**

**1-3. Carry out the trial operation following the instructions in the operation manual to ensure that all functions and parts, such as the movement of the flap, are working properly.**

- To protect the air conditioner, restart operation is disabled for 3 minutes after the system has been turned off.

**1-4. After trial operation is complete, set the temperature to a normal level (78°F to 82°F (26°C to 28°C) in COOL operation, 68°F to 75°F (20°C to 24°C) in HEAT operation).**

- When operating the air conditioner in COOL operation in winter, or HEAT operation in summer, set it to the trial operation mode using the following method.
  1) Press TEMP F/C , TEMP F/C and OFF at the same time.
  2) Press TEMP F/C , then select 77 , press FAN .
  3) Press COOL or HEAT to turn on the system.
  - Trial operation will stop automatically after about 30 minutes. To stop the operation, press OFF .
  - Some of the functions cannot be used in the trial operation mode.




- The air conditioner draws a small amount of power in its standby mode. If the system is not to be used for some time after installation, shut off the circuit breaker to eliminate unnecessary power consumption.
- If the circuit breaker trips to shut off the power to the air conditioner, the system will restore the original operation mode when the circuit breaker is turned on again.

## 2. Test items

| Test items | Symptom | Check |
|---|---|---|
| Indoor and outdoor units are installed securely. | Fall, vibration, noise | |
| No refrigerant gas leaks. | Incomplete cooling/heating function | |
| Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated. | Water leakage | |
| Draining line is properly installed. | Water leakage | |
| System is properly grounded. | Electrical leakage | |
| Only specified wires are used for all wiring, and all wires are connected correctly. | No operation or burn damage | |
| Indoor or outdoor unit's air inlet or air outlet are unobstructed. | Incomplete cooling/heating function | |
| Stop valves are opened. | Incomplete cooling/heating function | |
| Indoor unit properly receives remote control commands. | No operation | |
| Explain to the user that when using a smartphone for operation, it is necessary to prepare a repeater, or similar device, if the signal from the wireless LAN router is weak near the air conditioner. | Air conditioner not responding to smartphone | |

## 1.2 FTXV15/18/24

# Contents

**Safety Considerations** ..... 1
**Accessories** ..... 3
**Choosing an Installation Site** ..... 3
1. Indoor unit ..... 3
2. Wireless remote controller ..... 3
**Indoor Unit Installation Diagram** ..... 4
**Indoor Unit Installation** ..... 5
1. Installing the mounting plate ..... 5
2. Drilling a wall hole and installing wall embedded pipe ..... 5
3. Installing the indoor unit ..... 6
4. Wiring ..... 8
5. Drain piping ..... 9
**Refrigerant Piping Work** ..... 10
1. Flaring the pipe end ..... 10
2. Refrigerant piping ..... 10
**Installation Tips** ..... 12
1. Removing and installing the front panel ..... 12
2. Removing and installing the front grille ..... 12
3. How to set the different addresses ..... 13
4. Pump down operation ..... 13
**Trial Operation and Testing** ..... 14
1. Trial operation and testing ..... 14
2. Test items ..... 14

The pictures in this document are for illustrative purposes only.

# Safety Considerations

**Refer also to the General Safety Considerations in the separate booklet.**

| | |
|---|---|
|  | **Read the precautions in this manual carefully before operating the unit.** |
|   | **This appliance is filled with R32.** |

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.
Instruct the user on how to operate and maintain the unit. Inform users that they should store this installation manual with the operation manual for future reference.
Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion.
Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

**⚠ DANGER** ..... Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

**⚠ WARNING** ..... Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

**⚠ CAUTION** ..... Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

**⚠ NOTE** ..... Indicates situations that may result in equipment or property-damage accidents only.

**⚠ DANGER**

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death. Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injury or death by suffocation.
- All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal.

**⚠ WARNING**

- Only qualified personnel licensed or certified in their jurisdiction must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- Pipe-work including piping material, pipe routing, and installation shall include protection from physical damage in operation and service, and be in compliance with national and local codes and standards, such as ASHRAE 15, ASHRAE 15.2, IAPMO Uniform Mechanical Code, ICC International Mechanical Code, or CSA B52. All field joints shall be accessible for inspection prior to being covered or enclosed.
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injury.

- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel licensed or certified in their jurisdiction according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the service lid can be securely fastened. Improper positioning of the service lid may result in electric shock, fire, or the terminals overheating.
- Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit service lid. If the service lid is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R32) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, which may result in equipment damage and even injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.
- Do not use means to accelerate the defrosting process (if possible) or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.
- Comply with national gas regulations.
- The indoor equipment and pipes shall be securely mounted and guarded such that accidental rupture of equipment cannot occur from such events as moving furniture or reconstruction activities.

**⚠ CAUTION**

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- Wear adequate personal protective equipment (protective gloves, safety glasses,…) when installing, maintaining or servicing the system.
- The heat exchanger fins are sharp enough to cut. To avoid injury, wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to ensure proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R32 in the system must be kept clean, dry, and tight.

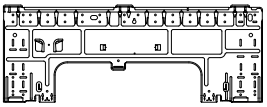
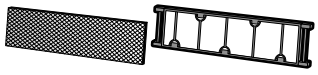
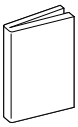
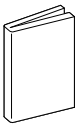
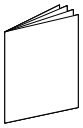
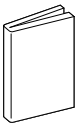
  (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.
  (b) Tight -- R32 does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R32 can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant Piping Work* and follow the procedures.
- The indoor unit is for R32. See the catalog for outdoor models that can be connected. Normal operation is not possible when connected to non-compatible outdoor units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors.
- Do not install the air conditioner or heat pump in the following locations:
  (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
  Plastic parts may deteriorate and fall off or result in water leakage.
  (b) Where corrosive gas, such as sulfurous acid gas, is produced.
  Corroding copper pipes or soldered parts may result in refrigerant leakage.
  (c) Near machinery emitting electromagnetic waves.
  Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
  (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled.
  Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.
- Servicing shall be performed only as recommended by the manufacturer and licensed or certified in their jurisdiction.

**⚠ NOTE**

- The indoor unit should be positioned where the unit and interunit wires (outdoor to indoor) are at least 3.3ft (1m) away from any televisions or radios. (The unit may cause interference with the picture or sound.) Depending on the radio waves, a distance of 3.3ft (1m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Only use tools for R32, such as a gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R32, the refrigerant may deteriorate.
- As maximum allowable pressure is 604psi (4.17MPa), the wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.

FTN006(R32)-U

# Accessories

| | | | | | |
|---|---|---|---|---|---|
| Ⓐ Mounting plate  | 1 | Ⓑ Mounting plate fixing screw M4 × 1" (M4 × 25mm)  | 7 | Ⓒ Titanium apatite deodorizing filter  | 2 each |
| Ⓓ Wireless remote controller  | 1 | Ⓔ Remote controller holder  | 1 | Ⓕ Remote controller holder fixing screw M3 × 13/16" (M3 × 20mm)  | 2 |
| Ⓖ Dry battery AAA. LR03 (alkaline)  | 2 | Ⓗ Indoor unit fixing screw M4 × 1/2" (M4 × 12mm)  | 2 | Ⓙ Insulation tape  | 1 |
| Ⓚ Operation manual  | 1 | Ⓛ Installation manual  | 1 | Ⓜ Warranty  | 1 |
| Ⓝ General safety considerations  | 1 | | | | |

# Choosing an Installation Site

• Before choosing the installation site, obtain user approval.

## 1. Indoor unit

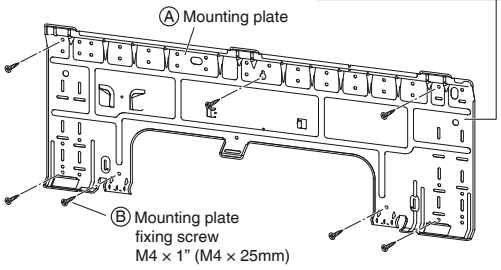
- The indoor unit should be positioned in a place where:
  1) the restrictions on the installation requirements specified in **"Indoor Unit Installation Diagram"** on page 4 are met,
  2) both the air inlet and air outlet are unobstructed,
  3) the unit is not exposed to direct sunlight,
  4) drainage occurs easily,
  5) the unit is away from sources of heat or steam,
  6) there is no source of machine oil vapor (this may shorten the indoor unit service life),
  7) cool/warm air is circulated throughout the room,
  8) the unit is away from electronic ignition type fluorescent lamps (inverter or rapid start type) as they may affect the remote controller range,
  9) the unit is at least 3.3ft (1m) away from any television or radio set (the unit may cause interference with the picture or sound),
  10) no laundry equipment is nearby,
  11) the signal strength of the router is stable (insufficient signal strength can prevent stable communication).

## 2. Wireless remote controller

- Turn on all the fluorescent lamps in the room, if any, and find a location where the remote controller signals are properly received by the indoor unit (within 23ft (7m)).

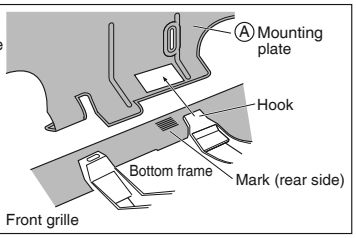
# Indoor Unit Installation Diagram

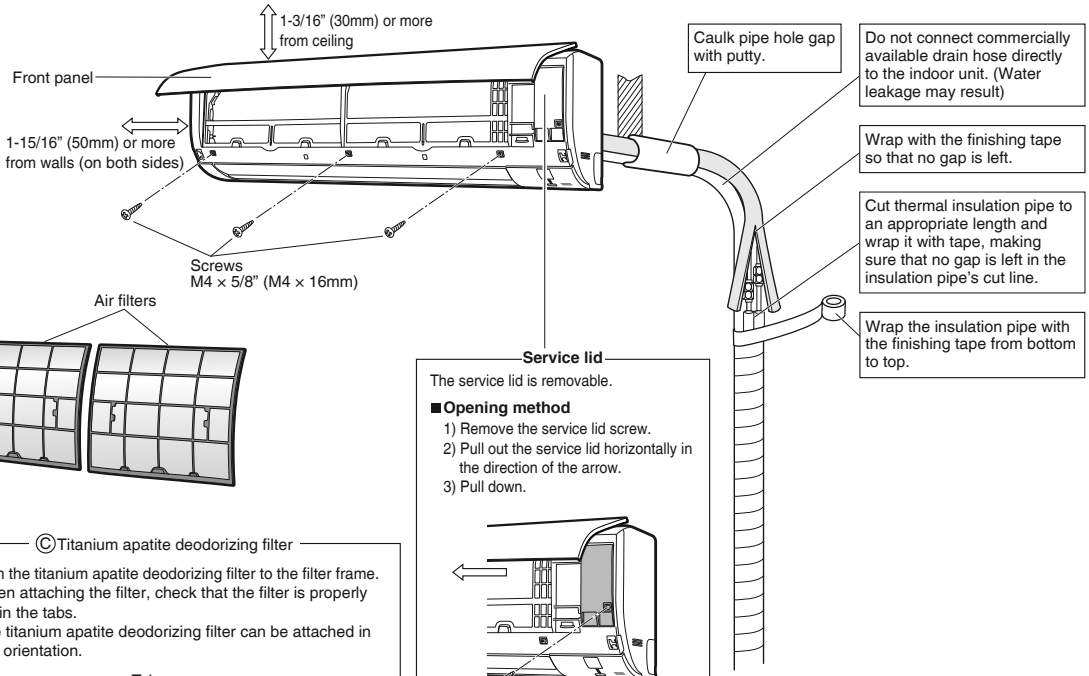
The Ⓐ mounting plate should be installed on a wall which can support the weight of the indoor unit.

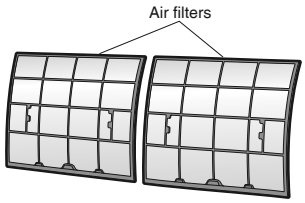



■ **How to attach the indoor unit**
Hook the hooks of the bottom frame to the Ⓐ mounting plate.
If the hooks are difficult to hook, remove the front grille.

■ **How to remove the indoor unit**
Push up the marked area (at the lower part of the front grille) to release the hooks. If it is difficult to release, remove the front grille.



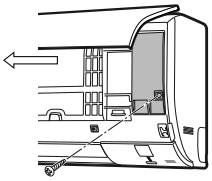




**Service lid**

The service lid is removable.

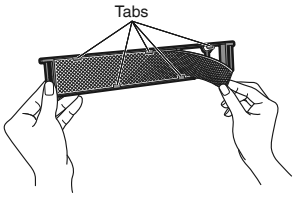
■ **Opening method**

1) Remove the service lid screw.
2) Pull out the service lid horizontally in the direction of the arrow.
3) Pull down.

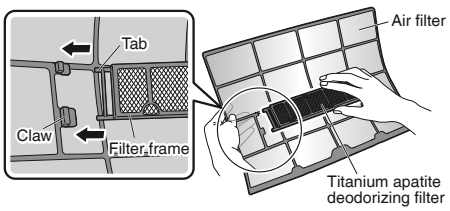


Ⓒ Titanium apatite deodorizing filter

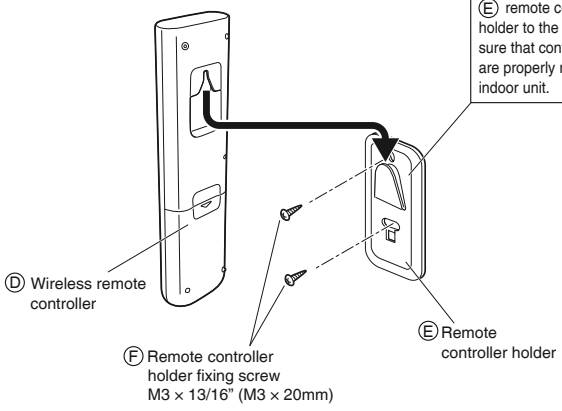
1) Attach the titanium apatite deodorizing filter to the filter frame.
- When attaching the filter, check that the filter is properly set in the tabs.
- The titanium apatite deodorizing filter can be attached in any orientation.




2) Set the tabs of the filter frame in the claws of the air filter. (4 places)




Before screwing the Ⓔ remote controller holder to the wall, make sure that control signals are properly received by indoor unit.



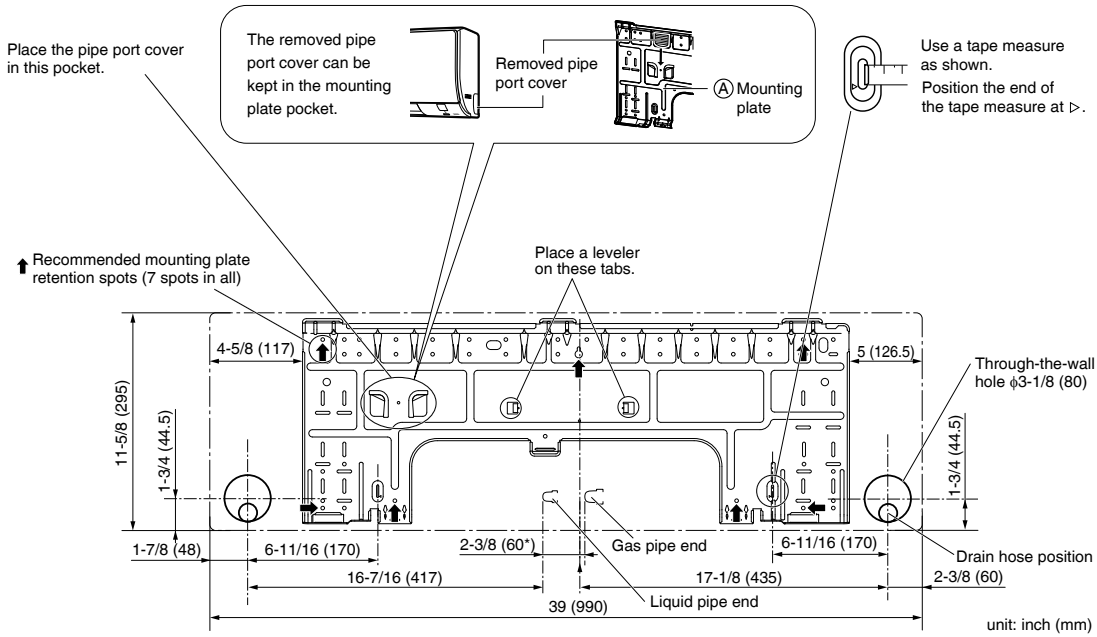

4

# Indoor Unit Installation

## 1. Installing the mounting plate

- The mounting plate should be installed on a wall which can support the weight of the indoor unit.
  1) Temporarily secure the mounting plate to the wall, make sure that the panel is completely level, and mark the drilling points on the wall.
  2) Secure the mounting plate to the wall with screws.

### Recommended mounting plate retention spots and dimensions



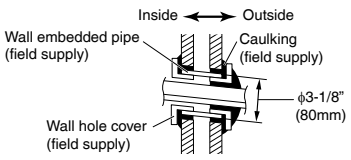

* Depending on the model, the actual distance between the liquid pipe end and gas pipe end may differ from the distance between those symbols on the mounting plate (the distance listed in this manual).
Always measure the actual distance between the liquid pipe end and gas pipe end before installing refrigerant pipes.

## 2. Drilling a wall hole and installing wall embedded pipe

**⚠ WARNING**

For metal frame or metal board walls, be sure to use a wall embedded pipe and wall hole cover in the feed-through hole to prevent possible heat, electric shock, or fire.

- Be sure to caulk the gaps around the pipes with caulking material to prevent condensation.
  1) Drill a feed-through hole with a ϕ3-1/8 inch (80mm) diameter through the wall at a downward angle toward the outside.
  2) Insert a wall embedded pipe into the hole.
  3) Insert a wall hole cover into wall pipe.
  4) After completing refrigerant piping, wiring, and drain piping, caulk the pipe hole gap with putty.




**Even if a wall hole cover is not used, caulk both the outdoor and indoor sides with putty.**

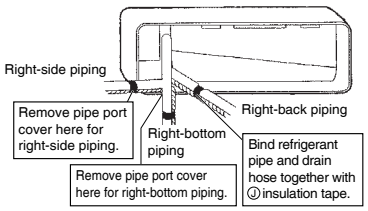
# 3. Installing the indoor unit

In the case of bending or curing refrigerant pipes, keep the following precautions in mind.
Abnormal sound may be generated if improper work is conducted.

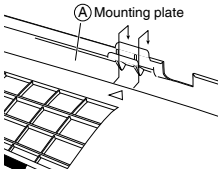
- Do not strongly press the refrigerant pipes onto the bottom frame.
- Do not strongly press the refrigerant pipes on the front grille, either.

## 3-1. Right-side, right-back, or right-bottom piping

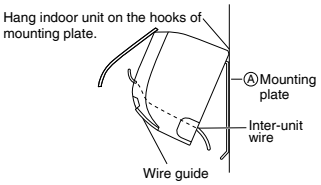
1) Attach the drain hose to the underside of the refrigerant pipes with adhesive vinyl tape.
2) Wrap the refrigerant pipes and drain hose together with Ⓙ insulation tape.




3) Pass the drain hose and refrigerant pipes through the wall hole, then position the indoor unit on the Ⓐ mounting plate hooks by using the △ markings at the top of the indoor unit as a guide.




4) Open the front panel (Refer to **"Installation Tips"** on page 12), then open the service lid (Refer to **"Indoor Unit Installation Diagram"** on page 4).
5) Pass the inter-unit wire from the outdoor unit through the feed-through wall hole and pass to the front of indoor unit from the back. Then pull them at front side. Bend the ends of cable tie wires upward for easier work in advance. (If the interunit wire ends are to be stripped first, bundle wire ends with adhesive tape.)
6) Press the bottom frame of the indoor unit with both hands until it is firmly caught by the Ⓐ mounting plate hooks. Make sure the wire leads do not catch on the edge of the indoor unit.

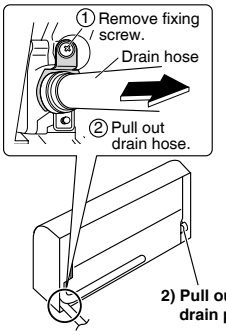



## 3-2. Left-side, left-back, or left-bottom piping

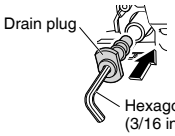
1) Switch around the drain plug and drain hose.

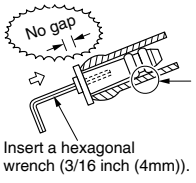
**How to switch around the drain plug and drain hose**

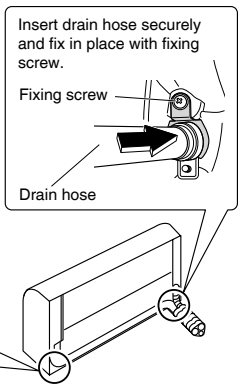
**1) Remove the fixing screw and pull out the drain hose.**




**3) Switch around the drain hose and drain plug.**



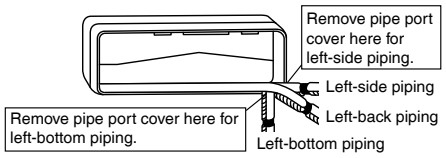




6

3P741458-2G

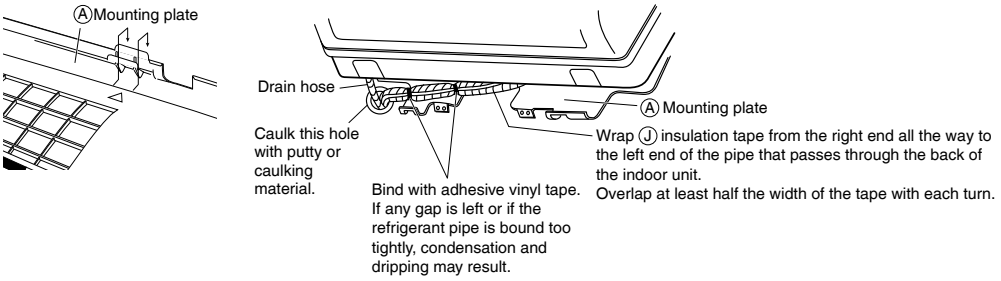
# Indoor Unit Installation

2) Attach the drain hose to the underside of the refrigerant pipes with adhesive vinyl tape.




3) Shape the refrigerant pipes along the pipe path marking on the Ⓐ mounting plate.

4) Pass the drain hose and refrigerant pipes through the wall hole, then position the indoor unit on the Ⓐ mounting plate hooks, using the △ markings at the top of the indoor unit as a guide.



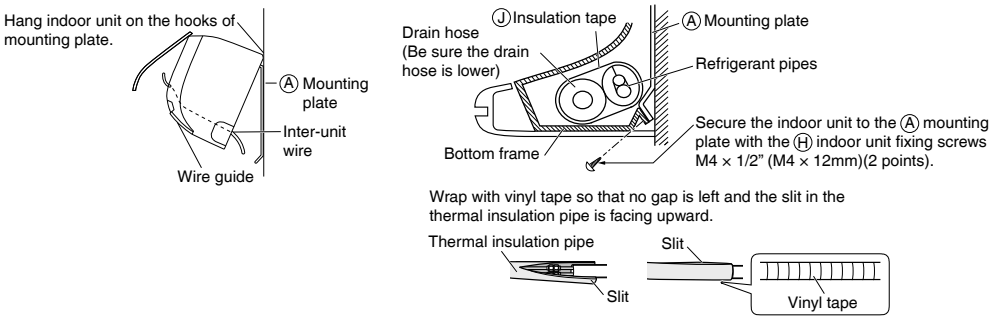

5) Open the front panel (Refer to "**Installation Tips**" on page 12), then open the service lid (Refer to "**Indoor Unit Installation Diagram**" on page 4).

6) Pass the inter-unit wire from the outdoor unit through the feed-through wall hole and pass to the front of indoor unit from the back. Then pull them at front side. Bend the ends of cable tie wires upward for easier work in advance. (If the interunit wire ends are to be stripped first, bundle wire ends with adhesive tape.)

7) Connect the refrigerant pipes.

8) In case of pulling the drain hose through the back of the indoor unit, wrap the refrigerant pipes and drain hose together with Ⓙ insulation tape as shown in the figure below.

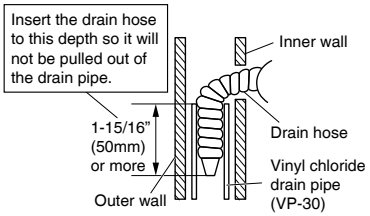
9) Press the bottom frame of the indoor unit with both hands until it is firmly caught by the Ⓐ mounting plate hooks. Make sure that the wires do not catch on the edge of the indoor unit.




## 3-3. Wall embedded piping

Follow the instructions given under left-side, left-back, or left-bottom piping.

1) Insert the drain hose to a depth of 1-15/16 inches (50mm) or more so it will not be pulled out of the drain pipe.




7

3P741458-2G

# 4. Wiring

**Refer to the installation manual for the outdoor unit also.**

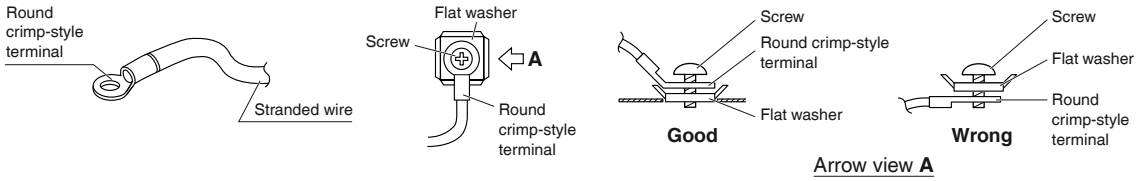
## ⚠WARNING

- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.

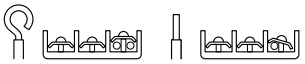
## ⚠CAUTION

Recommend stranded cable for interunit wiring. Local code always supersedes recommendation.

- For stranded wires, make sure to use the round crimp-style terminal for connection to the power supply terminal block. Place the round crimp-style terminals on the wires up to the covered part and secure in place.

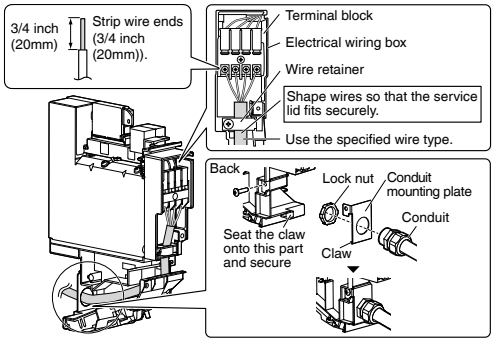


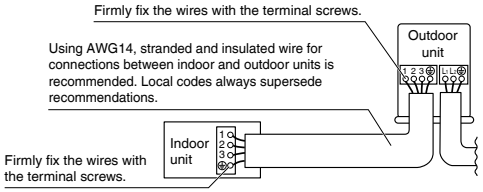

Arrow view **A**




- If solid core wire must be used, be sure to curl the end of the lead. Improper work may cause heat and fire.

1) Remove the front grille. (Refer to **"2. Removing and installing the front grille"** on page 12.)
2) Remove the conduit mounting plate and then secure the conduit to the conduit mounting plate with the lock nut, as shown in the illustration.
3) Strip wire ends (3/4 inch (20mm)).
4) Match wire colors with terminal numbers on the indoor and outdoor unit's terminal blocks and firmly secure the wires in the corresponding terminals with the screws.
5) Connect the ground wires to the corresponding terminals.
6) Pull the wires lightly to make sure they are securely connected.
7) Attach the conduit mounting plate.
8) Shape the wires so that the service lid fits securely.
9) Attach the front grille. (Refer to **"2. Removing and installing the front grille"** on page 12.)
10) Take care to ensure that all wiring between the indoor unit and the outdoor unit has a consistent connection. Any splices can cause communication errors.

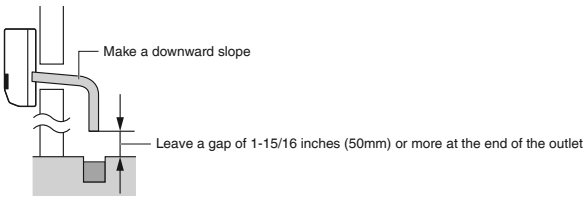


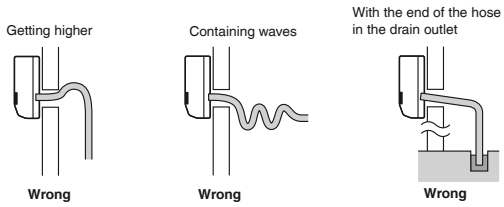



# Indoor Unit Installation

## 5. Drain piping

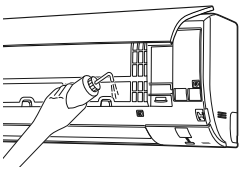
1) Connect the drain hose, as shown below.
- Avoid placing the end of the drain hose in a drainage location that could cause bad odors or corrosive gas to flow backward into the outlet.
- The drainage water may change color due to bacteria or other organisms. Place in a location where the flow of drainage water will not cause a problem.
- Minimize the number of bends in the drain hose as much as possible.
  If bending the drain hose, bend it gently.



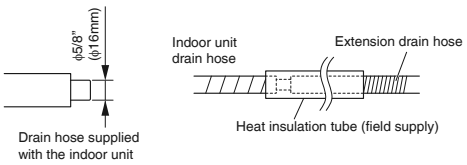




2) Remove the air filters and transfer some water to the indoor heat exchanger by pouring water into the drain pan.

3) Make sure that water flows out of the drain hose.



4) If drain hose extension or embedded drain piping is required, use appropriate parts that match the hose front end.
- When drain hose requires extension, obtain an extension hose with an inner diameter of 5/8 inch (16mm).
  Be sure to thermally insulate the indoor section of the extension hose.




9

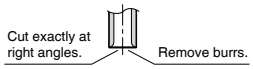
# Refrigerant Piping Work

**⚠WARNING**

- Do not apply mineral oil to the flare.
- Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with this unit.
- Never install a dryer to this R32 unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- Improper flaring may result in refrigerant gas leakage.

## 1. Flaring the pipe end

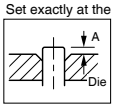
1) Cut the pipe end with a pipe cutter.
2) Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.




3) Put the flare nut on the pipe.
4) Flare the pipe.
5) Check that the flaring has been done correctly.

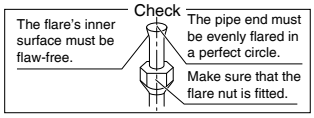
Flaring

Set exactly at the position shown below.




| | Flare tool for R32 or R410A | Conventional flare tool | |
|---|---|---|---|
| | Clutch-type | Clutch-type (Rigid-type) | Wing-nut type (Imperial-type) |
| A | 0-0.020 inch (0-0.5mm) | 0.039-0.059 inch (1.0-1.5mm) | 0.059-0.079 inch (1.5-2.0mm) |

Check

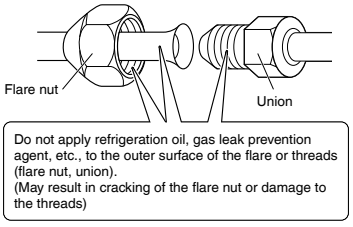


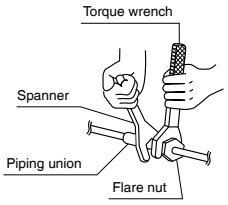

## 2. Refrigerant piping

**⚠CAUTION**

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.
- Excessive tightening of the flare nut can result in the flare nut cracking in the long term, leading to gas leakage.

- Align the centers of both flares and tighten the flare nuts 3 or 4 turns by hand, then tighten them fully with a spanner and a torque wrench.

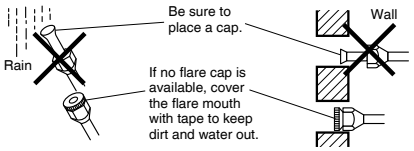



| | Piping size | Flare nut tightening torque |
|---|---|---|
| Gas side | O.D. 1/2 inch (12.7mm) | 36-1/2–44-1/2lbf • ft (49.5-60.3N • m) |
| | O.D. 5/8 inch (15.9mm) | 45-5/8–55-5/8lbf • ft (61.8-75.4N • m) |
| Liquid side | O.D. 1/4 inch (6.4mm) | 10-1/2–12-3/4lbf • ft (14.2-17.2 N • m) |

### Caution on piping handling

- Protect the open end of the pipe against dust and moisture.
- All pipe bends should be as gentle as possible. Use a pipe bender for bending.

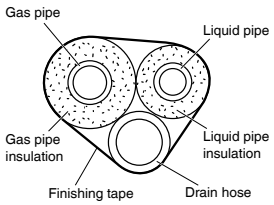


# Refrigerant Piping Work

## Selection of copper and heat insulation materials

When using commercial copper pipes and fittings, observe the following:

- Insulation material: Polyethylene foam
  Heat transfer rate: 0.041 to 0.052W/mK (0.024 to 0.030Btu/fth°F (0.035 to 0.045kcal/mh°C))
  Be sure to use insulation that is designed for use with HVAC Systems.
- ACR Copper only.




- Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below.

| | Piping size | Minimum bend radius | Piping thickness | Thermal insulation size | Thermal insulation thickness |
|---|---|---|---|---|---|
| Gas side | O.D. 1/2 inch (12.7mm) | 1-9/16 inch (40mm) or more | 0.031 inch (0.8mm) (C1220T-O) | I.D. 9/16-5/8 inch (14-16mm) | 13/32 inch (10mm) Min. |
| | O.D. 5/8 inch (15.9mm) | 1-15/16 inch (50mm) or more | 0.039 inch (1.0mm) (C1220T-O) | I.D. 5/8-13/16 inch (16-20mm) | |
| Liquid side | O.D. 1/4 inch (6.4mm) | 1-3/16 inch (30mm) or more | 0.031 inch (0.8mm) (C1220T-O) | I.D. 5/16-13/32 inch (8-10mm) | |

- Use separate thermal insulation pipes for gas and liquid refrigerant pipes.
- Using finishing tape, bundle and wrap the indoor unit piping and drain hose together so that the drain hose is below the other piping.

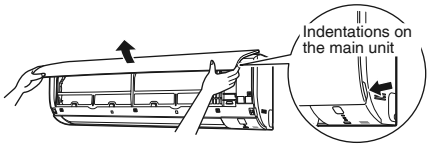
11

# Installation Tips

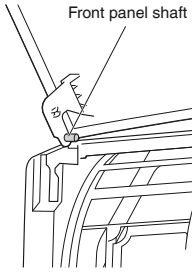
## 1. Removing and installing the front panel

- **Removal method**

1) Place your fingers in the indentations on the main unit (one each on the left and right sides), and open the front panel until it stops.




2) While pushing the left side front panel shaft outward, push up the front panel and remove it. (Remove the right side front panel shaft in the same manner.)
3) After removing both front panel shafts, pull the front panel toward yourself and remove it.



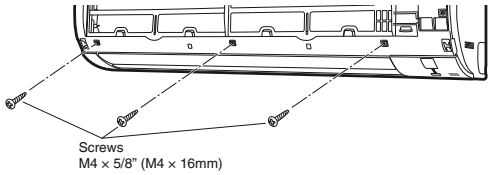

- **Installation method**

Align the front panel shaft of the front panel with the grooves of grille, and push all the way in, then close slowly.
Push the center of the lower panel surface firmly to engage the tabs.

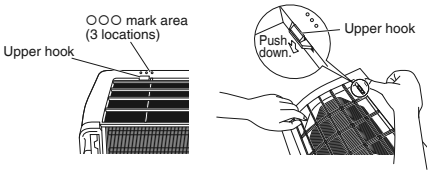
## 2. Removing and installing the front grille

- **Removal method**

1) Remove the front panel and air filters.
2) Remove the 3 screws from the front grille.




3) In front of the ○○○ mark on the front grille, there are 3 upper hooks. Lightly pull the front grille toward you with one hand, and push down on the hooks with the fingers of your other hand.

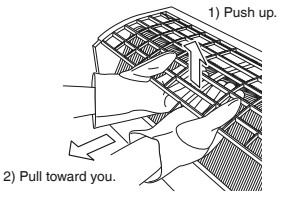



**When there is insufficient work space because the unit is close to ceiling**

**⚠CAUTION**

Be sure to wear protection gloves.

Place both hands under the center of the front grille, and while pushing up, pull it toward you.




- **Installation method**

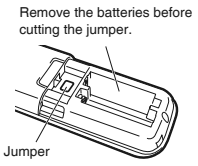
1) Install the front grille and firmly engage the upper hooks (3 locations).
2) Install 3 screws of the front grille.
3) Install the air filters and then mount the front panel.

# Installation Tips

## 3. How to set the different addresses

When 2 indoor units are installed in one room, the 2 wireless remote controllers can be set for different addresses. Change the address setting of one of the 2 units. When cutting the jumper, be careful not to damage any of the surrounding parts.

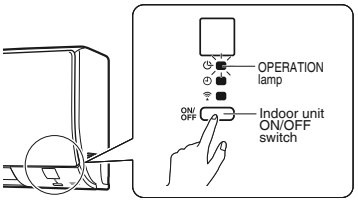
1) Remove the battery cover on the remote controller and cut the address jumper.
2) Press TEMP , TEMP and OFF at the same time.
3) Press TEMP , then select A , press FAN .
   (The indoor unit OPERATION lamp will blink for about 1 minute.)
4) Press the indoor unit ON/OFF switch while the OPERATION lamp is blinking.




| | Address | |
|---|---|---|
| | 1 | 2 |
| Jumper | EXIST | CUT |




- If setting could not be carried out completely while the OPERATION lamp was blinking, carry out the setting process once again from the beginning.
- After setting is complete, pressing FAN for about 5 seconds will cause the remote controller to return to the previous display.




## 4. Pump down operation

**In order to protect the environment, be sure to pump down when relocating or disposing of the unit.**
**For instructions on how to pump down, refer to the installation manual for the outdoor unit to be connected.**

### Forced cooling operation

**For pair connections**

**■Using the indoor unit ON/OFF switch**

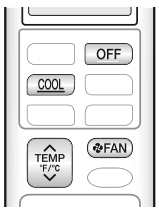
Press the indoor unit ON/OFF switch for at least 5 seconds. (The operation will start.)

- Forced cooling operation will stop automatically after about 15 minutes.
  To stop the operation, press the indoor unit ON/OFF switch.

**■Using the indoor unit's remote controller**

1) Press TEMP , TEMP and OFF at the same time.
2) Press TEMP , then select 1 , press FAN .
3) Press COOL to turn on the system.

- Forced cooling operation will stop automatically after about 30 minutes.
  To stop the operation, press OFF.




**For multi connections**

For instructions on how to perform forced cooling operation, refer to the installation manual for the outdoor unit.

# Trial Operation and Testing

## 1. Trial operation and testing

- Trial operation should be carried out in either COOL or HEAT operation.

### 1-1. Measure the supply voltage and make sure that it is within the specified range.

### 1-2. In COOL operation, select the lowest programmable temperature; in HEAT operation, select the highest programmable temperature.

### 1-3. Carry out the trial operation following the instructions in the operation manual to ensure that all functions and parts, such as the movement of the flap, are working properly.

- To protect the air conditioner, restart operation is disabled for 3 minutes after the system has been turned off.

### 1-4. After trial operation is complete, set the temperature to a normal level (78°F to 82°F (26°C to 28°C) in COOL operation, 68°F to 75°F (20°C to 24°C) in HEAT operation).

- When operating the air conditioner in COOL operation in winter, or HEAT operation in summer, set it to the trial operation mode using the following method.
  1) Press TEMP F/C , TEMP F/C and OFF at the same time.
  2) Press TEMP F/C , then select 7 , press FAN .
  3) Press COOL or HEAT to turn on the system.
  - Trial operation will stop automatically after about 30 minutes. To stop the operation, press OFF .
  - Some of the functions cannot be used in the trial operation mode.




- The air conditioner draws a small amount of power in its standby mode. If the system is not to be used for some time after installation, shut off the circuit breaker to eliminate unnecessary power consumption.
- If the circuit breaker trips to shut off the power to the air conditioner, the system will restore the original operation mode when the circuit breaker is turned on again.

## 2. Test items

| Test items | Symptom | Check |
|---|---|---|
| Indoor and outdoor units are installed securely. | Fall, vibration, noise | |
| No refrigerant gas leaks. | Incomplete cooling/heating function | |
| Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated. | Water leakage | |
| Draining line is properly installed. | Water leakage | |
| System is properly grounded. | Electrical leakage | |
| Only specified wires are used for all wiring, and all wires are connected correctly. | No operation or burn damage | |
| Indoor or outdoor unit's air inlet or air outlet are unobstructed. | Incomplete cooling/heating function | |
| Stop valves are opened. | Incomplete cooling/heating function | |
| Indoor unit properly receives remote control commands. | No operation | |
| Explain to the user that when using a smartphone for operation, it is necessary to prepare a repeater, or similar device, if the signal from the wireless LAN router is weak near the air conditioner. | Air conditioner not responding to smartphone | |

## 1.3 CDMA07, FDMA09/12/15/18/24

# Contents

**Safety Considerations ..... 1**
**Before Installation ..... 3**
**Accessories ..... 4**
**Choosing an Installation Site ..... 5**
**Indoor Unit Installation ..... 6**
1. Check the relation of location between the ceiling opening and the indoor unit suspension bolts. (unit: inch (mm)) ..... 6
2. Mount canvas ducts, sound absorbing material and anti-vibration rubber. ..... 7
3. The indoor unit is set to standard external static pressure ..... 7
4. Open installation holes (in the case of installation onto the existing ceiling) ..... 7
5. Installing the suspension bolts ..... 7
6. In the case of changing the preset suction to underside suction, replace the chamber cover and the suction flange ..... 7
7. Installing the indoor unit ..... 8
8. Drain piping work ..... 9
9. Wiring ..... 12
10. Duct work ..... 16

**Refrigerant Piping Work ..... 17**
1. Flaring the pipe end ..... 17
2. Refrigerant piping ..... 17

**Field Settings ..... 19**
1. Settings for external static pressure ..... 19
2. Setting for options ..... 20
3. Setting air filter sign ..... 20

**Test operation and Testing ..... 21**
1. Test operation and testing ..... 21
2. Test items ..... 22
3. How to diagnose for malfunction ..... 24
4. Malfunction code ..... 24
5. Pump down operation ..... 25

The pictures in this document are for illustrative purposes only.

# Safety Considerations

**Refer also to the General Safety Considerations in the separate booklet.**

| | |
|---|---|
|  | **Read the precautions in this manual carefully before operating the unit.** |
|   | **This appliance is filled with R32.** |

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.
Instruct the user on how to operate and maintain the unit.
Inform users that they should store this installation manual with the operation manual for future reference.
Always use a licensed installer or contractor to install this product.
Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion.
Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

⚠ **DANGER** ····· Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING** ····· Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** ····· Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ **NOTE** ····· Indicates situations that may result in equipment or property-damage accidents only.

### ⚠ DANGER

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death. Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injury or death by suffocation.
- All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal.

### ⚠ WARNING

- Only qualified personnel licensed or certified in their jurisdiction must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- Pipe-work including piping material, pipe routing, and installation shall include protection from physical damage in operation and service, and be in compliance with national and local codes and standards, such as ASHRAE 15, ASHRAE 15.2, IAPMO Uniform Mechanical Code, ICC International Mechanical Code, or CSA B52. All field joints shall be accessible for inspection prior to being covered or enclosed.

- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injury.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.
- The unit must have an uninterrupted, unbroken electrical ground to minimize the possibility of personal injury if an electrical fault should occur.
  The electrical ground circuit may consist of an appropriately sized electrical wire connecting the ground lug in the unit and control box wire to the building's electrical service panel.
  Other methods of grounding are permitted if performed in accordance with the "National Electrical Code" (NEC)/ "American National Standards Institute" (ANSI)/ "National Fire Protection Association" (NFPA) 70 and local/state codes.
  In CANADA, electrical grounding is to be in accordance with the Canadian Electrical Code CSA C22.1.
  Failure to observe this warning can result in electrical shock that can cause personal injury or death.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel licensed or certified in their jurisdiction according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the electrical wiring box cover can be securely fastened. Improper positioning of the electrical wiring box cover may result in electric shock, fire, or the terminals overheating.
- Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit terminal cover (panel). If the terminal cover/panel is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R32) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, which may result in equipment damage and even injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.
- Do not use means to accelerate the defrosting process (if possible) or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.
- Comply with national gas regulations.
- The indoor equipment and pipes shall be securely mounted and guarded such that accidental rupture of equipment cannot occur from such events as moving furniture or reconstruction activities.
- When mechanical connectors are reused indoors, sealing parts shall be renewed.
- When flared joints are reused indoors, the flared part shall be refabricated.

**⚠ CAUTION**

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- Wear adequate personal protective equipment (protective gloves, safety glasses,…) when installing, maintaining or servicing the system.
- The heat exchanger fins are sharp enough to cut. To avoid injury, wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to ensure proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R32 in the system must be kept clean, dry, and tight.
  (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.
  (b) Tight -- R32 does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R32 can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant piping* and follow the procedures.
- The indoor unit is for R32. See the catalog for outdoor models that can be connected. Normal operation is not possible when connected to non-compatible outdoor units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors.

# Safety Considerations

- Do not install the air conditioner or heat pump in the following locations:
  (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
  Plastic parts may deteriorate and fall off or result in water leakage.
  (b) Where corrosive gas, such as sulfurous acid gas, is produced.
  Corroding copper pipes or soldered parts may result in refrigerant leakage.
  (c) Near machinery emitting electromagnetic waves.
  Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
  (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled.
  Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.
- Servicing shall be performed only as recommended by the manufacturer and licensed or certified in their jurisdiction.

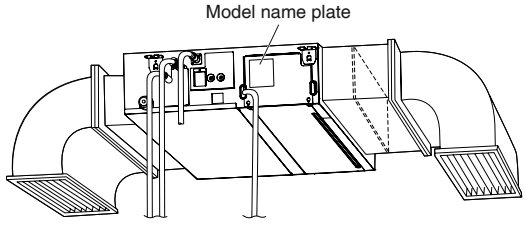
**⚠ NOTE**

- The indoor unit should be positioned where the unit and interunit wires (outdoor to indoor) are at least 3.3ft (1m) away from any televisions or radios. (The unit may cause interference with the picture or sound.) Depending on the radio waves, a distance of 3.3ft (1m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Only use tools for R32, such as a gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R32, the refrigerant may deteriorate.
- As maximum allowable pressure is 604psi (4.17MPa), the wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.

FTN007(R32)-U

# Before Installation

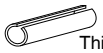
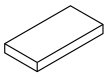
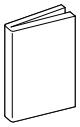
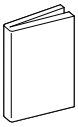
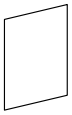
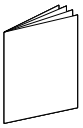
- Leave the unit inside its packaging until you reach the installation site. Where unpacking is unavoidable, use a sling of soft material or protective plates together with a rope when lifting, this to avoid damage or scratches to the unit.
  When unpacking the unit or when moving the unit after unpacking, be sure to lift the unit by holding on to the hanger bracket without exerting any pressure on other parts, especially on refrigerant piping, drain piping and other resin parts.
- Refer to the installation manual of the outdoor unit for items not described in this manual.
- Caution concerning refrigerant series R32:
  The connectable outdoor units must be designed exclusively for R32.
- Check the General Safety Considerations and enter the values in the blanks on the model name plate.




### Precautions

- Do not install or operate the unit in places mentioned below.
  - Places with mineral oil, or filled with oil vapor or spray like in kitchens. (Plastic parts may deteriorate.)
  - Where corrosive gas like sulphurous gas exists. (Copper tubing and brazed spots may corrode.)
  - Where volatile flammable gas like thinner or gasoline is used.
  - Where machines generating electromagnetic waves exist. (Control system may malfunction.)
  - Where the air contains high levels of salt such as near the ocean and where voltage fluctuates a lot (e.g. in factories). Also inside vehicles or vessels.
- Do not install accessories on the casing directly. Drilling holes in the casing may damage electrical wires and consequently cause fire.
- Take off static electricity from the body when carrying out wiring and the electrical wiring box cover is removed.
  The electric parts may be damaged.

# Accessories

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Ⓐ Clamp metal  | 1 | Ⓑ Drain hose  | 1 | Ⓒ Duct flange connection screw  | 10* | Ⓓ Fitting insulation (for liquid pipe)  Thin | 1 |
| Ⓔ Fitting insulation (for gas pipe)  Thick | 1 | Ⓕ Sealing pad (large) (Dark gray)  | 1 | Ⓖ Sealing pad (medium) (Dark gray)  | 2 | Ⓗ Clamp  | 8 |
| Ⓙ Washer fixing plate  | 4 | Ⓚ Wire sealing pad (small) (Gray)  | 2 | Ⓛ Washer (for hanger bracket)  | 8 | Ⓜ Conduit mounting plate  | 1 |
| Ⓝ Operation manual  | 1 | Ⓟ Installation manual  | 1 | Ⓠ Warranty  | 1 | Ⓡ General Safety Considerations  | 1 |

*The 15/18/24 class models have 18 screws.

## Optional Accessories

**A remote controller is required for the indoor unit.**

| Model name |
|---|
| BRC1NRV71 |

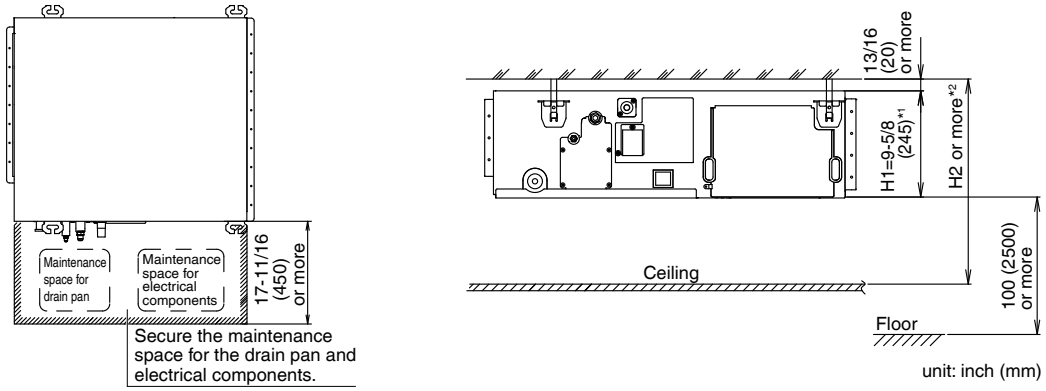
- The indoor unit can be switched to lower suction. (Refer to "**6. In the case of changing the preset suction to underside suction, replace the chamber cover and the suction flange.**" (page 7))
  The side cover plate (KDBD63A160) is required in the case of wiring from the bottom for underside suction.
  For installation work, refer to the instruction sheet provided with the side cover plate.

# Choosing an Installation Site

**R32 refrigerant is a mildly flammable refrigerant. Do not install indoor or outdoor units in areas where, in the event of a refrigerant leakage, refrigerant concentrations could exceed flammable concentrations.**
Hold the unit by the 4 hanger brackets when opening the box and moving it, and do not exert pressure on to any other part, piping (refrigerant, drain, etc.), and air outlet flange.
If the temperature or humidity inside the ceiling might rise above 86°F (30°C) or RH 80%, respectively, add extra insulation to the unit.
Use polyethylene foam as insulation and make sure it is at least 3/8 inch (10mm) thick and fits inside the ceiling opening.

- Before choosing the installation site, obtain user approval.
  The indoor unit should be positioned in a place where:
  1) both the air inlet and air outlet are unobstructed,
  2) the unit is not exposed to direct sunlight,
  3) the unit is away from the source of heat or steam,
  4) there is no source of machine oil vapor (this may shorten the indoor unit service life),
  5) cool/warm air is circulated throughout the room,
  6) no laundry equipment is nearby,
  7) drainage can be performed without any problem,
  8) the weight of the indoor unit can be adequately supported,
  9) the wall and the ceiling's lower surface are not significantly tilted,
  10) room can be left for installation and service work,
  11) there is no risk of flammable gas leaking,
  12) the required length of indoor-outdoor piping would not exceed the specified maximum length (see the installation manual that came with the outdoor unit for details).

**[ Installation Space Requirements ]**




*1 Dimension H1 indicates the product height.
*2 Secure a downward slope of at least 1/100 specified in "**8. Drain piping work**" (page 9) and determine dimension H2.

**<Failure example>**
If there is an obstacle in the airflow path or proper installation space is not provided, the indoor unit will cause air volume reduction and take in air blown out of the indoor unit, thus resulting in performance degradation or turning the thermostat OFF frequently.

**Use suspension bolts for installation. Check whether the ceiling is strong enough to support the weight of the unit or not. If there is a risk, reinforce the ceiling before installing the unit.**

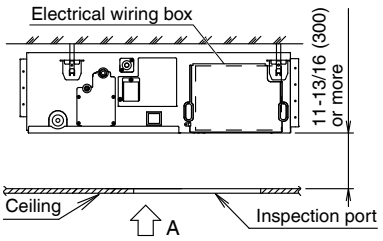
# Indoor Unit Installation

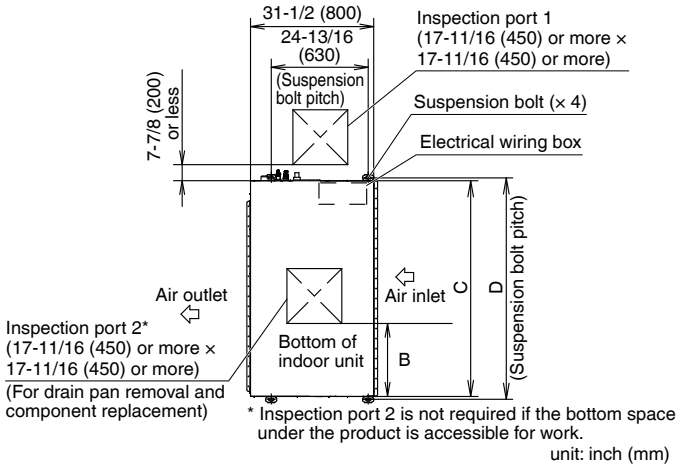
## 1. Check the relation of location between the ceiling opening and the indoor unit suspension bolts. (unit: inch (mm))

Provide one of the following service spaces for the maintenance and inspection of the electrical wiring box and drain pump or for other services.

**If a space of 300mm or more under the product can be secured**

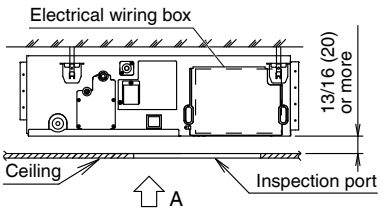
- Inspection ports 1 and 2 (17-11/16 inch (450mm) × 17-11/16 inch (450mm)) and a minimum space of 11-13/16 inch (300mm) at the bottom of the product.



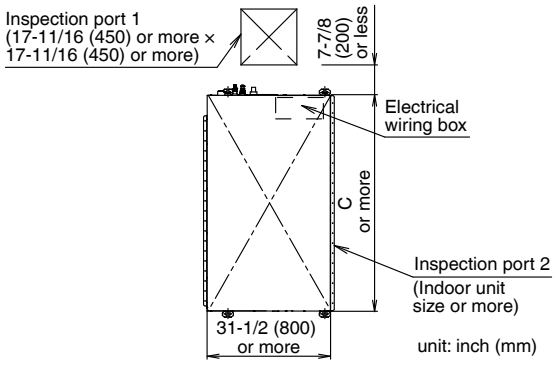




View A

**If a space of 300mm or more under the product can not be secured**

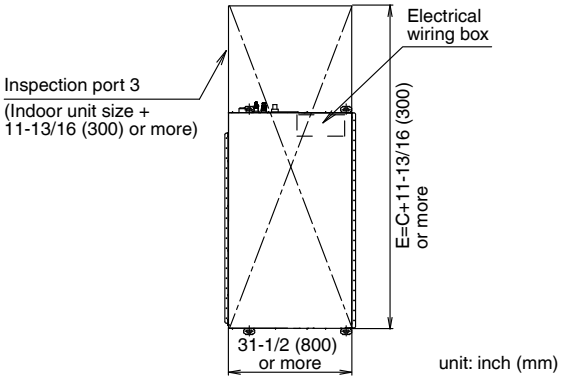



1) Inspection port 1 (17-11/16 inch (450mm) × 17-11/16 inch (450mm)) on the electrical wiring box side and inspection port 2 on the bottom of the product. (View A-1))




View A-1)

2) Inspection port 3 on the bottom of the product and on the bottom side of the electrical wiring box. (View A-2))




View A-2)

| | B | C | D | E |
|---|---|---|---|---|
| 07/09/12 class | (0) | 27-9/16 (700) | 29-1/16 (738) | 39-3/8 (1000) |
| 15/18/24 class | 1-15/16 (50) | 39-3/8 (1000) | 40-7/8 (1038) | 51-3/16 (1300) |

unit: inch (mm)

# Indoor Unit Installation

## 2. Mount canvas ducts, sound absorbing material and anti-vibration rubber.

- Mount canvas ducts to the air outlet and inlet so that the vibration of the indoor unit will not be transmitted to the ducts or ceiling.
  Furthermore, attach sound absorbing material (thermal insulation material) to the duct inner walls and anti-vibration rubber to the suspension bolts (refer to **"10. Duct work"** (page 16)).

## 3. The indoor unit is set to standard external static pressure.

- If external static pressure is higher or lower than the standard set value, the remote controller may be used to make on-site setting change in the external static pressure.
  Refer to **"Field Settings"** (page 19).

## 4. Open installation holes (in the case of installation onto the existing ceiling).

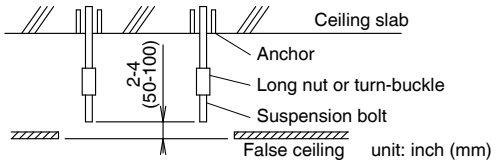
- Open the installation holes on the ceiling of the installation location, and work on the refrigerant piping, drain piping, remote controller wiring, and wiring between the indoor and outdoor units to the piping connection port and wiring connection port of the indoor unit (refer to each piping and wiring procedure items).
- Ceiling framework reinforcement may be required in order to keep the ceiling horizontal and prevent ceiling vibration after opening the ceiling holes. For details, consult your building and upholstery work contractors.

## 5. Installing the suspension bolts

(Use either a M8-M10 size bolt or the equivalent)
Use a hole-in anchor for existing ceilings, and a sunken insert, sunken anchor or other field supplied parts for new ceilings to reinforce the ceiling to bear the weight of the unit. Adjust clearance (2-4 inch (50-100mm)) from the ceiling before proceeding further.

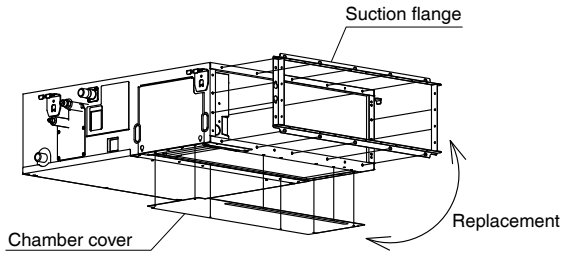
- All the above parts are field supplied.

**Installation Example**




## 6. In the case of changing the preset suction to underside suction, replace the chamber cover and the suction flange.

1. Remove the suction flange and chamber cover.
2. Replace the suction flange and the chamber cover.




### ⚠ CAUTION

- Secure a sufficient maintenance space for the drain pan and electrical components before installing the indoor unit.
- Secure a sufficient maintenance space for the filter chamber, and peripheral components before installing the indoor unit.

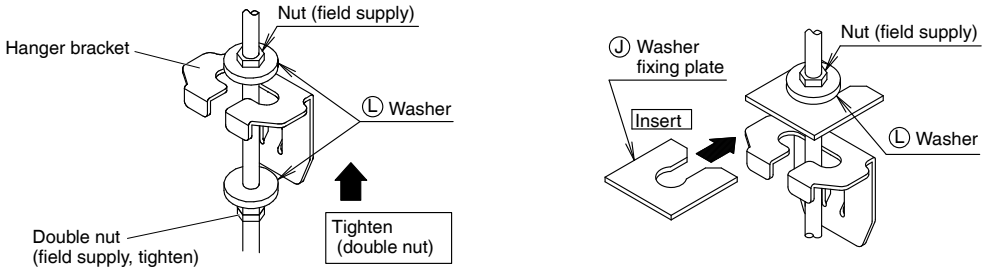
# 7. Installing the indoor unit

**When installing optional accessories, read also the installation manual of the optional accessories. Depending on the field conditions, it may be easier to install optional accessories before the indoor unit is installed.**
As for the parts to be used for installation work, be sure to use the provided accessories and specified parts designated by Daikin.

1) Install the indoor unit temporarily.

- Attach the hanger bracket to the suspension bolt. Be sure to fix it securely by using a nut and (L) washer from the upper and lower sides of the hanger bracket.
  If the (J) washer fixing plate is used, the upper side (L) washer may be protected from falling off.

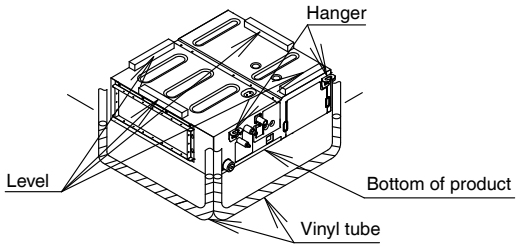
**Securing the hanger bracket**




- Keep the air outlet covered with a protective sheet to prevent weld spatter and other foreign materials from entering the indoor unit and damaging the resin drain pan.
  (If holes or cracks are generated in the resin drain pan, water can leak.)

2) Adjust the height of the unit.

3) Check the unit is horizontally level.




Feed water into the tube and set the indoor unit to the water levels on the left and right.

4) Remove the (J) washer fixing plate used for preventing the (L) washer from dropping and tighten the upper side nut.

## ⚠ CAUTION

- **Install the indoor unit leveled.**
  If the indoor unit is inclined and the drain piping side gets high, it may cause malfunction of float switch and result in water leakage.
- **Attach nuts on the upper and lower side of hanger.**
  If there is no upper nut and the lower nut is over-tightened, the hanger and the top plate will deform and cause abnormal sound.
- **Do not insert materials other than that specified into the clearance between the hanger and the (L) washer for hanger bracket.**
  Unless the washers are properly attached, the suspension bolts may come off from the hanger.

## ⚠ WARNING

**The indoor unit must be securely installed on a place that can withstand the mass.**
If the strength is insufficient, the indoor unit may fall down and cause injuries.

# Indoor Unit Installation

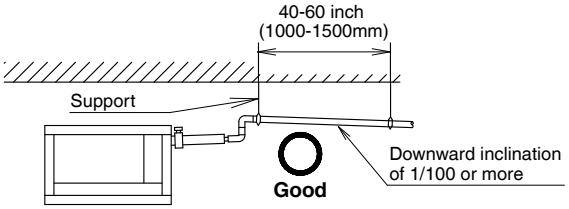
## 8. Drain piping work

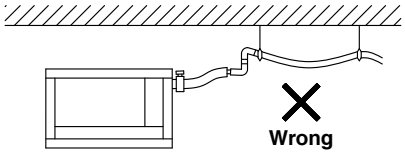
**⚠CAUTION**

- Water pooling in the drainage piping can cause the drain to clog.
- Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.
- Keep in mind that the drain pipe becomes blocked if water collects on it.
- Do not tighten the Ⓐ clamp metal with the torque more than the specified value. The Ⓑ drain hose , the socket or the Ⓐ clamp metal may be damaged.

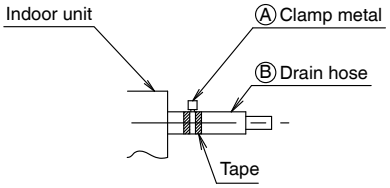
### 1. Install of drain piping

- Install the drain piping as shown in the figure and take measures against condensation. Improperly rigged piping could lead to leaks and eventually wet furniture and belongings.
- Keep piping as short as possible and slope it downwards at a gradient of at least 1/100 so that air may not remain trapped inside the pipe.
- Select the piping diameter equal to or larger than (except for riser) that of the connection piping (polyvinyl chloride piping, nominal diameter 1 inch (25mm), outside diameter 1-1/4 inch (32mm)).
- If the drain hose cannot be sufficiently set on a slope, refer to **"Precautions for drain raising piping"** (page 10).
- To keep the drain hose from sagging, space hanger bracket every 40-60 inch (1000-1500mm).



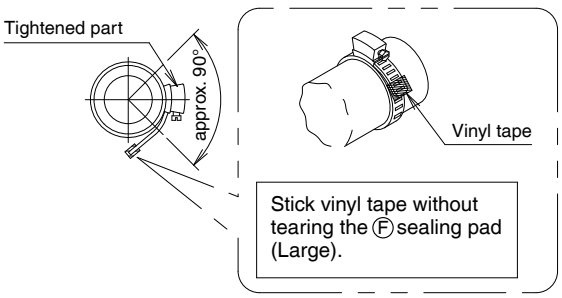




- Make sure to use the attached Ⓑ drain hose and the Ⓐ clamp metal.
  Insert the Ⓑ drain hose into the drain socket up to the point where the socket diameter becomes larger.
  Put the Ⓐ clamp metal to the taped hose end and tighten the Ⓐ clamp metal with torque 0.89~1.11 lbf • ft (120~150 N·cm).

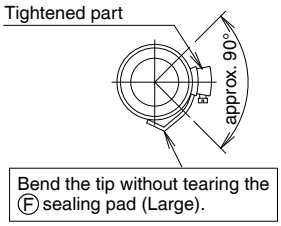



- Wrap the vinyl tape around the end of the Ⓐ clamp metal so that the Ⓕ sealing pad (Large) to be used at the next process may not be damaged with the clamp end or bend the tip of the Ⓐ clamp metal inward as shown.

**<In case of sticking vinyl tape>**

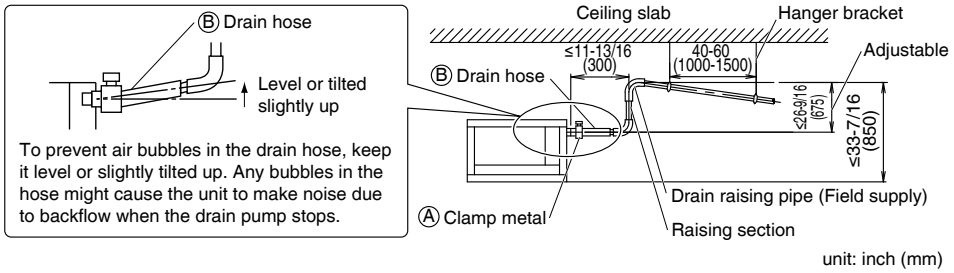



**<In case of bending the tip>**



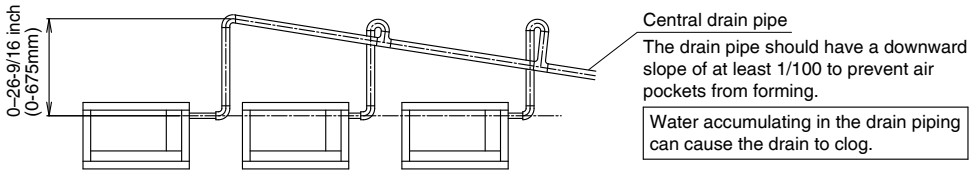
### Precautions for drain raising piping

- The maximum height of the drain riser is 26-9/16 inch (675mm). Since the drain pump mounted on this indoor unit is a high head type, from the characteristic point of view, the higher the drain riser the lower the draining noise. Therefore, the drain riser of 11-13/16 inch (300mm) or higher is recommended.
- For upward drain piping, keep the horizontal piping distance of 11-13/16 inch (300mm) or less between the drain socket root to the drain riser.




unit: inch (mm)

- To ensure no excessive pressure is applied to the included Ⓑ drain hose, do not bend or twist the hose when installing as it could cause leakage.
- If converging multiple drain pipes, install according to the procedure shown below.



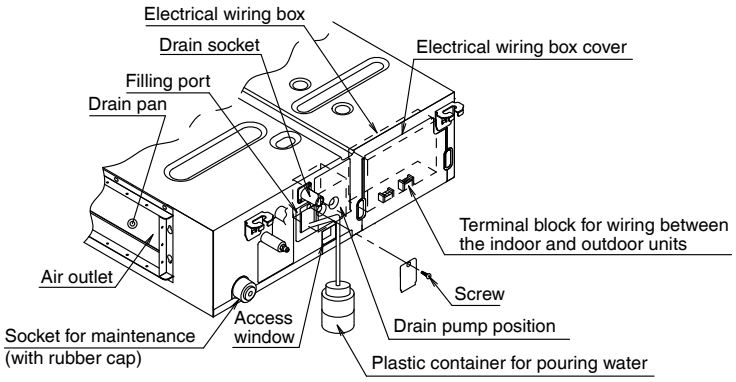

Select converging drain pipes with gauges is suitable for the operating capacity of the unit.

- Positioning the upward drain piping at an angle may cause float switch malfunction and lead to water leakage.
- While replacing with new indoor unit, use the attached new Ⓑ drain hose and the Ⓐ clamp metal. If an old drain hose or a clamp metal is used, it may cause water leakage.

## 2. After piping work is finished, check if drainage flows smoothly

### When electric wiring work is finished

- Gradually pour 1/4 gal of water from the inspection port at the bottom of the drain socket on the left side of the drain socket into the drain pan giving caution to avoid splashing water on the electric components such as drain pump and confirm drainage by operating the indoor unit under cooling mode according to **Field settings**.




[Method of adding water]

# Indoor Unit Installation

**When electric wiring work is not finished**

- The electric wiring works (including grounding) must be carried out by a qualified electrician.
- If a qualified person is not present, after the electric wiring work is finished, check the drainage according to the method specified in **[When the electric wiring work is finished]**.

**1.** Open the electrical wiring box cover and connect the ground wiring to the ground terminal.

**2.** Make sure the electrical wiring box cover is closed before turning on the power supply.
- Throughout the whole process, carry out the work giving caution to the wiring around the electrical wiring box so that the connectors may not come off.

**3.** Gradually pour 1 litre of water from the air outlet on the left side of the drain socket into the drain pan giving caution to avoid splashing water on the electric components such as drain pump.

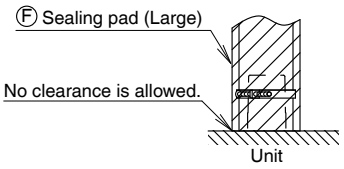
**4.** When the power supply is turned on, the drain pump will operate. Drainage can be checked at the transparent part of the drain socket.
(The drain pump will automatically stop after 10 minutes.)
The drainage of water can be confirmed with water level change in the drain pan through the access window.
- Do not connect the drain piping directly to the sewage that gives off ammonia odor.
  The ammonia in the sewage may go through the drain piping and corrode the heat exchanger of the indoor unit.
- Do not apply external force to the float switch. (It may result in malfunction)
- Do not touch the drain pump.
  Touching the drain pump may cause electric shock.

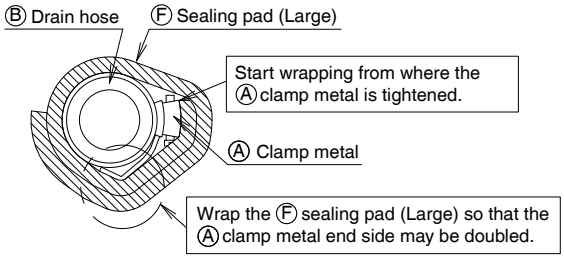
**5.** Turn off the power supply after checking drainage, and remove the power supply wiring.

**6.** Attach the electrical wiring box cover as before.

**3. Sweating may occur and result in water leakage. Therefore, make sure to insulate the following 2 locations (drain piping that laid indoors and drain sockets).**

- Use the provided Ⓕ sealing pad (large), and perform the thermal insulation of the Ⓐ clamp metal and Ⓑ drain hose after checking the drainage of water.




11

3P805334-1

# 9. Wiring

## 1. General instructions

- Make certain that all electric wiring work is carried out by qualified personnel according to the applicable legislation and this installation manual, using a separate dedicated circuit.
  Insufficient capacity of the power supply circuit or improper electrical construction may lead to electric shock or a fire.
- Make sure to install a ground fault circuit interrupter.
  Failure to do so may cause electric shock and a fire.
- Do not turn on the power supply (branch switch, branch overcurrent circuit breaker) until all the works are finished.
- Multiple number of indoor units are connected to one outdoor unit. Name each indoor unit as A-unit, B-unit ….. and the like. When these indoor units are wired to the outdoor unit, always wire the indoor unit to the terminal indicated with the same symbol on the terminal block. If the wiring and the piping are connected to the different indoor units and operated, it will result in malfunction.
- Make sure to ground the air conditioner.
  Grounding resistance should be according to applicable legislation.
- Do not connect the ground wiring to gas or water pipings, lightning conductor or telephone ground wiring.
  - Gas piping .....Ignition or explosion may occur if the gas leaks.
  - Water piping.....Hard vinyl tubes are not effective grounds.
  - Lightning conductor or telephone ground wiring.....Electric potential may rise abnormally if struck by a lightning bolt.
- For electric wiring work, refer to also the “WIRING DIAGRAM” attached to the electrical wiring box cover.
- Carry out wiring between the outdoor units, indoor units and the remote controllers according to the wiring diagram.
- Carry out installation and wiring of the remote controller according to the “installation manual” attached to the remote controller.
- Do not touch the Printed Circuit Board assembly. It may cause malfunction.

### ⚠ WARNING

- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.

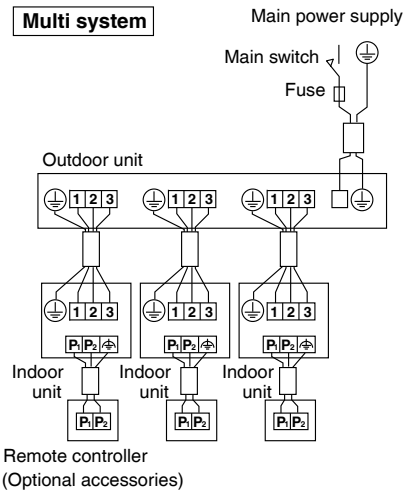
### ⚠ CAUTION

- When clamping wiring, use the included clamping material to prevent outside pressure being exerted on the wiring connections and clamp firmly. When doing the wiring, make sure the wiring is neat and does not cause the electrical wiring box cover to stick up, then close the cover firmly.
- Outside the unit, separate the low voltage wiring (remote controller wiring) and high voltage wiring (wiring between units, ground, and other power wiring) at least 2 in. so that they do not pass through the same place together. Proximity may cause electrical interference, malfunctions, and breakage.

## 2. Wiring example

For the wiring of outdoor units, refer to the installation manual attached to the outdoor units.
**Confirm the system type.**

- **Multi system:** 2 through 5 (The number of connectable units will vary according to model) indoor units connect to 1 outdoor unit. The indoor unit is controlled by remote controller connected to each indoor unit.




## NOTE

1. All transmission wiring except for the remote controller wires is polarized and must match the terminal symbol.
2. In case a shielding wire is to be used, connect a shielded portion with the ⏚ of a remote controller terminal block.(Also, connect the ground for the remote control to a grounded metal part.)

# Indoor Unit Installation

### 3. Specification for field wire

| | Wire | Size | Length |
|---|---|---|---|
| Wiring between units | Recommend stranded and shielded.<br>Local code supersedes recommendation. | AWG 14 | – |
| Remote controller wiring | Sheathed (2 wire) | AWG 18 - 16 | Max. 1640ft (500m)* |
| Wiring to ground terminal | Recommend stranded and shielded.<br>Local code supersedes recommendation. | – | – |

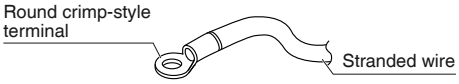
* This will be the total extended length in the system when doing group control.

### 4. Wiring connection method

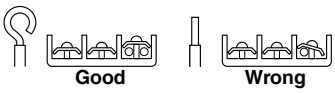
**⚠ CAUTION**

**Precautions to be taken for wiring**

- Recommend stranded cable for interunit wiring. Local code always supersedes recommendation.
- For stranded wires, make sure to use the round crimp-style terminal for connection to the power supply terminal block. Place the round crimp-style terminals on the wires up to the covered part and secure in place.




- If solid core wire must be used, be sure to curl the end of the lead. Improper work may cause heat and fire.




#### Tightening torque for the terminal blocks

- Use the correct screwdriver for tightening the terminal screws. If the blade of screwdriver is too small, the head of the screw might be damaged, and the screw will not be properly tightened.
- If the terminal screws are tightened too hard, screws might be damaged.
- Refer to the table below for the tightening torque of the terminal screws.

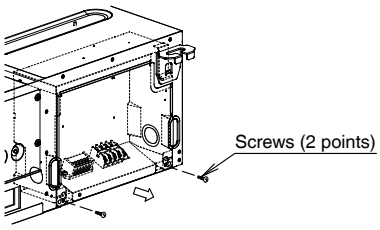
unit: lbf • ft (N • m)

| | Tightening torque |
|---|---|
| Terminal block for remote controller (6P) | 0.58 - 0.72 (0.79 - 0.98) |
| Terminal block for power supply (4P) | 0.87 - 1.06 (1.18 - 1.44) |

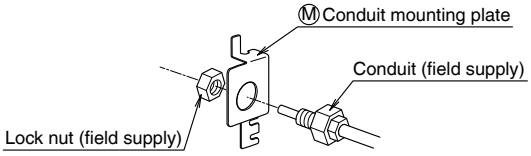
**⚠ WARNING**

- When wiring, form the wirings orderly so that the electrical wiring box cover can be securely fastened. If the electrical wiring box cover is not in place, the wirings may come out or be sandwiched by the box and the lid and cause electric shock or a fire.

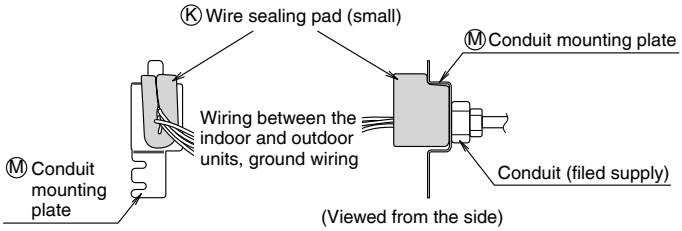
**1) Remove the electrical wiring box cover.**



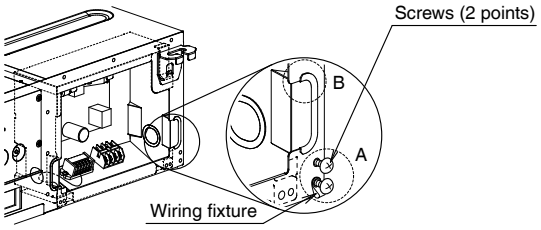
**2) Attach the conduit to the Ⓜ conduit mounting plate.**




- Attach the Ⓚ wire sealing pad (small) to the conduit, the wiring between the indoor and outdoor units, and the ground wiring.



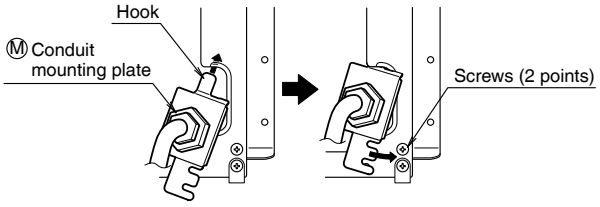

- Loosen the screws (2 points) in part A.



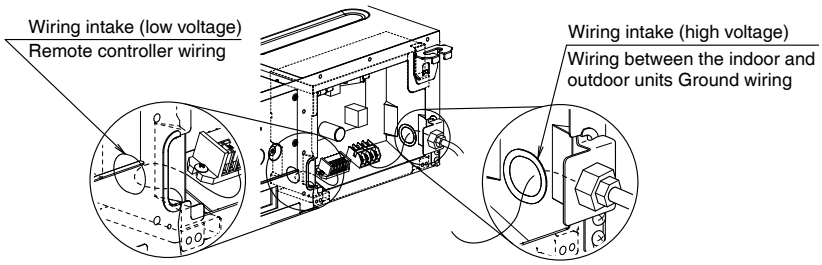

- Insert the hook part of the Ⓜ conduit mounting plate into part B and secure the Ⓜ conduit mounting plate with the screws loosened (2 points).

## NOTE

Remove the wiring fixture if you have difficulty performing this step.

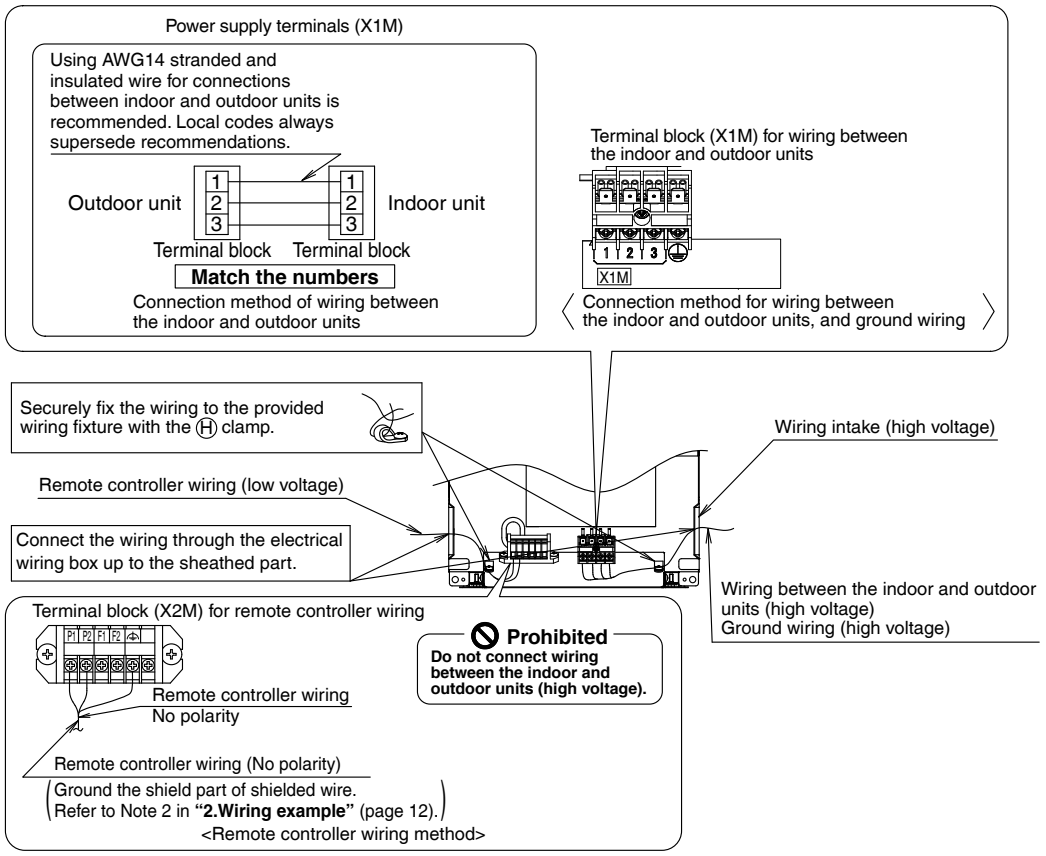



**3) Connect the wiring into the electrical wiring box through the wiring intake beside the electrical wiring box.**



# Indoor Unit Installation

**4) Follow the instructions below and perform wiring in the electrical wiring box.**

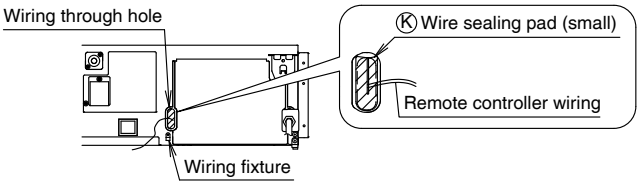



## NOTE

Secure the wiring between the wiring intake and conduit with the Ⓗ clamp so that the wiring will not become loose.

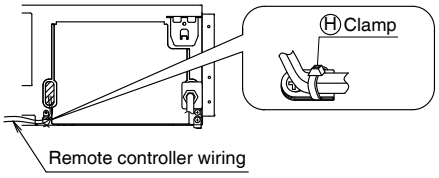
**5) Mount the electrical wiring box cover and wrap the Ⓚ wire sealing pad (small) so that the wiring through hole will be covered by the sealing pad.**

- Seal the clearance around the wirings with putty or insulating material (field supply). (If insects and small animals get into the indoor unit, short-circuiting may occur inside the electrical wiring box.)




**6) Securely fix each wiring with the provided Ⓗ clamp material.**

- See the installation manual supplied with the outdoor unit.



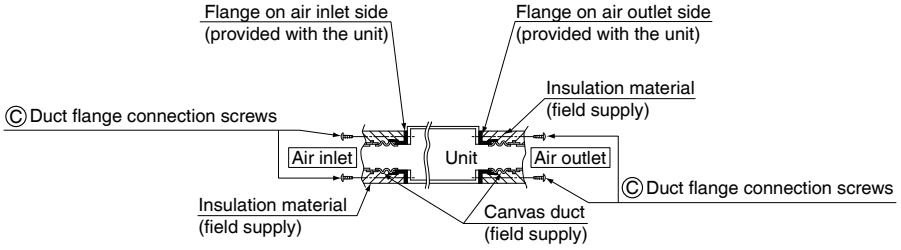
# 10. Duct work

**Pay the utmost attention to the following items and conduct the duct work.**

- Check that the duct is not in excess of the setting range of external static pressure for the unit. (Refer to the technical datasheet for the setting range.)
- Attach a canvas duct each to the air outlet and air inlet so that the vibration of the equipment will not be transmitted to the duct or ceiling.
  Use a sound-absorbing material (insulation material) for the lining of the duct and apply vibration insulation rubber to the suspension bolts.
- At the time of duct welding, perform the curing of the duct so that the sputter will not come in contact with the drain pan for the filter.
- If the metal duct passes through a metal lath, wire lath, or plate of a wooden structure, separate the duct and wall electrically.
- Be sure to heat insulate the duct for the prevention of dew condensation. (Material: Glass wool or styrene foam; Thickness: 1 inch (25mm))
- Be sure to attach the field supply air filter to the air inlet of the unit or field supply inlet in the air passage on the air suction side. (Be sure to select an air filter with a duct collection efficiency of 50 weight percent.)
- Explain the operation and washing methods of the locally procured components (i.e., the air filter, air inlet grille, and air outlet grille) to the user.
- Locate the air outlet grille on the indoor side for the prevention of drafts in a position where indirect contact with people.
- The air conditioner incorporates a function to adjust the fan to rated speed automatically. (Field settings)
  Therefore, do not use booster fans midway in the duct.

**Connection method of ducts on air inlet and outlet sides.**

- Connect the field supply duct in alignment with the inner side of the flange.
- Connect the flange and unit with the Ⓒ duct flange connection screw.
- Wrap aluminium tape around the flange and duct joint in order to prevent air leakage.




## ⚠ CAUTION

Connect the flange and unit with the Ⓒ duct flange connection screw regardless of whether the duct is connected to the air inlet side.

# Refrigerant Piping Work

**Refer also to the installation manual for the outdoor unit.**

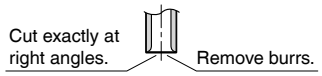
## ⚠ WARNING

- Do not apply mineral oil on flared part.
- Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with the unit.
- Never install a dryer to this R32 unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- Incomplete flaring may result in refrigerant gas leakage.

**Execute thermal insulation work completely on both sides of the gas and the liquid piping. Otherwise, a water leakage can result sometimes.**
**For gas piping, use insulation material of which heat resistant temperature is not less than 230°F (110°C).**
**Also, in cases where the temperature and humidity of the refrigerant piping sections might exceed 86°F (30°C) or RH80%, reinforce the refrigerant insulation. (13/16 inch (20mm) or thicker) Condensation may form on the surface of the insulating material.**
**Before refrigerant piping work, check which type of refrigerant is used. Proper operation is not possible if the types of refrigerant are not the same.**

## 1. Flaring the pipe end

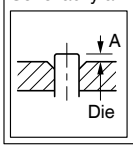
1) Cut the pipe end with a pipe cutter.
2) Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.




3) Put the flare nut on the pipe.
4) Flare the pipe.
5) Check that the flaring has been done correctly.

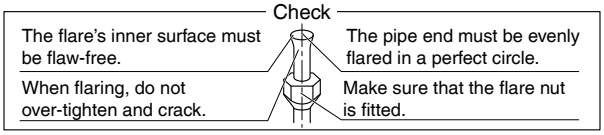
Flaring

Set exactly at the position shown below.




| | Flare tool for R32 or R410A | Conventional flare tool | |
|---|---|---|---|
| | Clutch-type | Clutch-type (Rigid-type) | Wing-nut type (Imperial-type) |
| A | 0-0.020 inch (0-0.5mm) | 0.039-0.059 inch (1.0-1.5mm) | 0.059-0.079 inch (1.5-2.0mm) |

Check

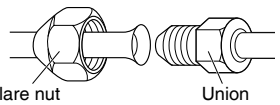



## 2. Refrigerant piping

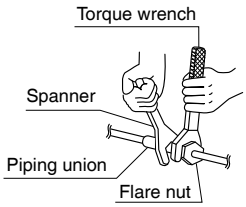
## ⚠ CAUTION

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.
- Excessive tightening of the flare nut can result in the flare nut cracking in the long term, leading to gas leakage.
- Do not have oil adhere to the screw fixing part of resin parts.
  If oil adheres, it may weaken the strength of screwed part.

- For refrigerant pipe connections, align the center of the flare and the union, tighten the flare nut 3 to 4 turns by hand, and then use a torque wrench and a spanner to firmly tighten to the specified torque.



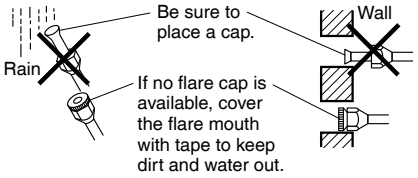

Do not apply refrigeration oil, gas leak prevention agent, etc., to the outer surface of the flare or threads (flare nut, union).
(May result in cracking of the flare nut or damage to the threads)




| | Piping size | Flare nut tightening torque |
|---|---|---|
| Gas side | O.D. 3/8 inch (9.5mm) | 24-1/8–29-1/2lbf • ft (32.7-39.9N • m) |
| | O.D. 1/2 inch (12.7mm) | 36-1/2–44-1/2lbf • ft (49.5-60.3N • m) |
| | O.D. 5/8 inch (15.9mm) | 45-5/8–55-5/8lbf • ft (61.8-75.4N • m) |
| Liquid side | O.D. 1/4 inch (6.4mm) | 10-1/2–12-3/4lbf • ft (14.2-17.2N • m) |

## Cautions on piping handling

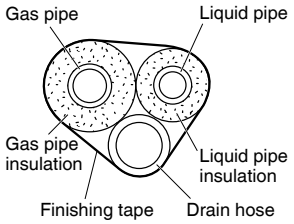
- Protect the open end of the pipe from dust and moisture.
- All pipe bends should be as gentle as possible. Use a pipe bender for bending.




## Selection of copper and heat insulation materials

When using commercial copper pipes and fittings, observe the following:

- Insulation material: Polyethylene foam
  Heat transfer rate: 0.041 to 0.052W/mK (0.024 to 0.030Btu/fth°F (0.035 to 0.045kcal/mh°C))
  Be sure to use insulation that is designed for use with HVAC Systems.
- ACR Copper pipe only.



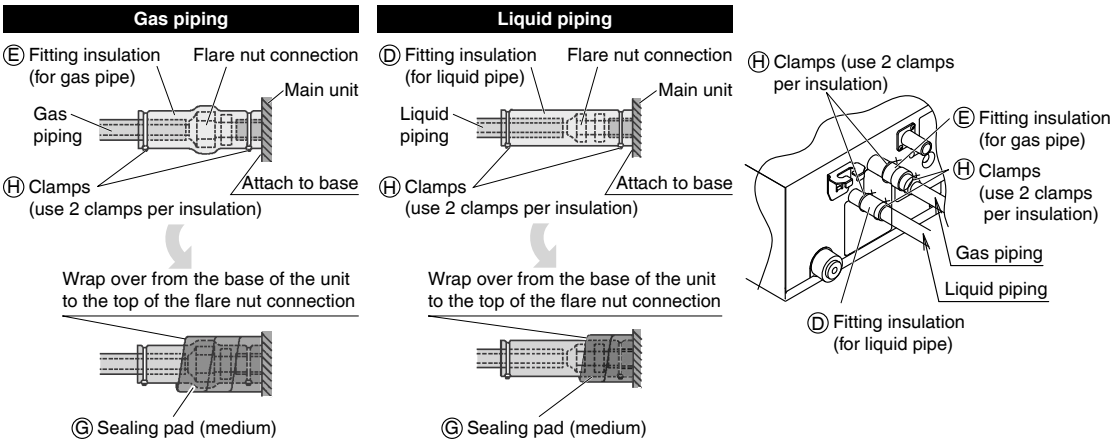

- Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below.

| | Piping size | Minimum bend radius | Piping thickness | Thermal insulation size | Thermal insulation thickness |
|---|---|---|---|---|---|
| Gas side | O.D. 3/8 inch (9.5mm) | 1-3/16 inch (30mm) or more | 0.031 inch (0.8mm) (C1220T-O) | I.D. 15/32-19/32 inch (12-15mm) | 13/32 inch (10mm) Min. |
| | O.D. 1/2 inch (12.7mm) | 1-9/16 inch (40mm) or more | | I.D. 9/16-5/8 inch (14-16mm) | |
| | O.D. 5/8 inch (15.9mm) | 1-15/16 inch (50mm) or more | 0.039 inch (1.0mm) (C1220T-O) | I.D. 5/8-13/16 inch (16-20mm) | |
| Liquid side | O.D. 1/4 inch (6.4mm) | 1-3/16 inch (30mm) or more | 0.031 inch (0.8mm) (C1220T-O) | I.D. 5/16-13/32 inch (8-10mm) | |

- Use separate thermal insulation pipes for gas and liquid refrigerant pipes.

- Make absolutely sure to execute thermal insulation works on the pipe-connecting section, after checking for gas leakage, by thoroughly studying the following figures and using the included thermal insulating materials Ⓓ fitting insulation and Ⓔ fitting insulation. Fasten both ends with the Ⓗ clamps.
- Make sure to bring the seam of Ⓓ fitting insulation and Ⓔ fitting insulation to the top.

**Piping insulation procedure**




**⚠ CAUTION**

Be sure to insulate any field piping all the way to the piping connection inside the unit. Any exposed piping may cause condensation or burns if touched.

# Field Settings

## ⚠ CAUTION

Before carrying out field setting, check the items mentioned in **"2. Test items"** (page 22).

- Check if all the installation and piping works for the air conditioner are completed.
- Check that the outside panel and piping cover of the indoor and outdoor units are closed.

**After turning on the power supply, carry out field setting from the remote controller according to the installation state.**

- The settings shown by ▭ in the following tables indicate those when shipped from the factory.
- Carry out setting at 3 places, "Mode No.", "FIRST CODE No." and "SECOND CODE No.".
- The method of setting procedure and operation is shown in the installation manual attached to the remote controller.
- Ask the user to keep the manual attached to the remote controller together with the operation manual.
- Do not carry out settings other than those shown in the table.

## NOTE

- Though setting of "Mode No." is carried out as a group, if you intend to carry out individual setting by each indoor unit or confirmation after setting, carry out setting with the Mode No. shown in the parenthesis ( ).

## 1. Settings for external static pressure

Make settings in either method (a) or method (b).

**(a) Make settings with Air volume automatic adjustment function.**

"Air volume automatic adjustment" function: The air volume is adjusted to the rated air volume automatically.

### ⚠ CAUTION

- Be sure to check that the external static pressure is within the specification range before making settings. The external static pressure will not be automatically adjusted and air volume insufficiency or water leakage may result if the external static pressure is outside the range. (Refer to the technical document for the setting range of external static pressure.)

**1)** Check that the electrical wiring and duct work have been completed.
(If the closing damper is set midway, be sure to check that the damper is opened. Furthermore, check that the air passage on the suction side is provided with an air filter (field supply)).

**2)** If air conditioner has more than one air outlet and air inlet, be sure to make adjustments so that the air volume ratio of each air outlet and the corresponding air inlet will conform to the designed air volume ratio.
In that case, set the operating mode to "Fan". (In the case of changing the air volume, press Fan Speed button on the remote controller and change the current selection to "High", "Medium", or "Low".)

**3)** Make settings to adjust the air volume automatically.
After setting the operating mode to "Fan", set the air conditioner to field setting mode with the operation of the air conditioner stopped. Select Mode No. [21] (11 in the case of batch settings), select FIRST CODE No. "7", and set the SECOND CODE No. to "03".
Return to the "Basic screen" and press On/Off button.
The operation lamp is lit, and the indoor unit will go into fan operation for air volume automatic adjustments (at which time, do not adjust the opening of the air outlet or inlet). The air volume adjustments will automatically terminate approximately 1 to 15 minutes after the indoor unit comes into operation, and the operation lamp will be OFF and the indoor unit will come to a stop.

**Air volume adjustment**

| Setting content | Mode No. | FIRST CODE No. | SECOND CODE No. |
|---|---|---|---|
| OFF | 11 (21) | 7 | 01 |
| Air volume adjustment completion | | | 02 |
| Air volume adjustment start | | | 03 |

## ⚠ CAUTION

- If airflow pathway changes, such as duct and air outlet changes, are made after air volume adjustments, be sure to make “Air volume automatic adjustment” again.
- If airflow pathway changes, such as duct and air outlet changes, are made after **“Test operation and Testing”** (page 21) or air conditioner relocation, contact your dealer.

**(b) Select external static pressure with the remote controller.**

Check with Mode No. [21] per indoor unit that the SECOND CODE No. for the above “Air volume adjustment” is set to “01” (OFF). (The SECOND CODE No. is factory set to “01” (OFF).)

Change the SECOND CODE No. by referring to the table below according to the external static pressure of the duct to be connected.

**External static pressure**

For 07/09/12 class

| Setting content | Mode No. | FIRST CODE NO. | SECOND CODE NO. |
|---|---|---|---|
| 0.12 in. WG (30Pa) | 13 (23) | 6 | 03 |
| 0.16 in. WG (40Pa) | | | 04 |
| 0.20 in. WG (50Pa) | | | 05 |
| 0.24 in. WG (60Pa) | | | 06 |
| 0.28 in. WG (70Pa) | | | 07 |
| 0.32 in. WG (80Pa) | | | 08 |
| 0.36 in. WG (90Pa) | | | 09 |
| 0.40 in. WG (100Pa) | | | 10 |
| 0.44 in. WG (110Pa) | | | 11 |
| 0.48 in. WG (120Pa) | | | 12 |
| 0.52 in. WG (130Pa) | | | 13 |
| 0.56 in. WG (140Pa) | | | 14 |
| 0.60 in. WG (150Pa) | | | 15 |

For 15/18/24 class

| Setting content | Mode No. | FIRST CODE NO. | SECOND CODE NO. |
|---|---|---|---|
| 0.20 in. WG (50Pa) | 13 (23) | 6 | 05 |
| 0.24 in. WG (60Pa) | | | 06 |
| 0.28 in. WG (70Pa) | | | 07 |
| 0.32 in. WG (80Pa) | | | 08 |
| 0.36 in. WG (90Pa) | | | 09 |
| 0.40 in. WG (100Pa) | | | 10 |
| 0.44 in. WG (110Pa) | | | 11 |
| 0.48 in. WG (120Pa) | | | 12 |
| 0.52 in. WG (130Pa) | | | 13 |
| 0.56 in. WG (140Pa) | | | 14 |
| 0.60 in. WG (150Pa) | | | 15 |

# 2. Setting for options

- For settings for options, see the installation manual provided with the option.

# 3. Setting air filter sign

- Remote controllers are equipped with liquid crystal display air filter signs to display the time to clean air filters.
- Change the SECOND CODE NO. depending on the amount of dirt or dust in the room.

**AIR FILTER CLEANING TIME INDICATOR lamp display interval**

| Setting content | Contamination | Mode No. | FIRST CODE NO. | SECOND CODE NO. |
|---|---|---|---|---|
| Approx. 2500 hrs | Contamination-light | 10 (20) | 0 | 01 |
| Approx. 1250 hrs | Contamination-heavy | | | 02 |

**AIR FILTER CLEANING TIME INDICATOR lamp display**

| Setting content | Mode No. | FIRST CODE NO. | SECOND CODE NO. |
|---|---|---|---|
| Display ON | 10 (20) | 3 | 01 |
| Display OFF* | | | 02 |

* Use “Display OFF” setting when cleaning indication is not necessary such as the case of periodical cleaning being carried out.

# Test operation and Testing

After finishing the construction of refrigerant piping, drain piping, and electric wiring, conduct test operation accordingly to protect the unit.

## 1. Test operation and testing

**⚠ CAUTION**

After test operation is completed, check the items mentioned **"Items to be checked at time of delivery"** (page 23).
If the interior finish work is not completed when the test operation is finished, for protection of the air conditioner, ask the user not operate the air conditioner until the interior finish work is completed.
If the air conditioner is operated, the inside of the indoor units may be polluted by substances generated from the coating and adhesives used for the interior finish work and cause water splash and leakage.

Test operation should be carried out in either COOL or HEAT operation.

**1-1. Measure the supply voltage and make sure that it is within the specified range.**

**1-2. In COOL operation, select the lowest programmable temperature; in HEAT operation, select the highest programmable temperature.**

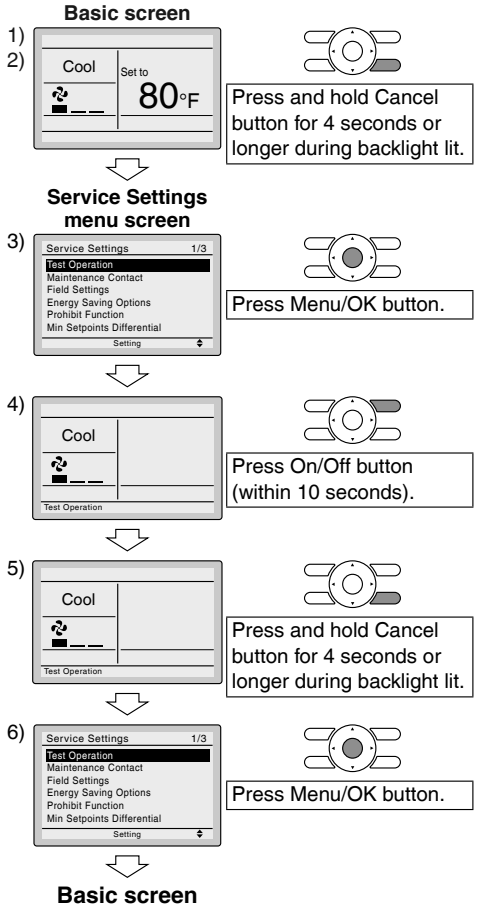
**1-3. Carry out the test operation following the instructions in the operation manual to ensure that all functions and parts are working properly.**

- To protect the air conditioner, restart operation is disabled for 3 minutes after the system has been turned off.

**1-4. After test operation is complete, set the temperature to a normal level (78°F to 82°F (26°C to 28°C) in COOL operation, 68°F to 75°F (20°C to 24°C) in HEAT operation).**

- When operating the air conditioner in COOL operation in winter, or HEAT operation in summer, set it to the test operation mode using the following method.

1) Set to COOL or HEAT operation using the remote controller.
2) Press and hold Cancel button for 4 seconds or longer. Service settings menu is displayed.
3) Select Test Operation in the service settings menu, and press Menu/OK button. Basic screen returns and "Test Operation" is displayed at the bottom.
4) Press On/Off button within 10 seconds, and the test operation starts.
   Monitor the operation of the indoor unit for a minimum of 10 minutes. During test operation, the indoor unit will continue to cool/heat regardless of the temperature setpoint and room temperature.
   - In the case of above-mentioned procedures 3) and 4) in reverse order, test operation can start as well.
5) Press and hold Cancel button for 4 seconds or longer in the basic screen.
   Service settings menu is displayed.
6) Select Test Operation in the service settings menu, and press Menu/OK button. Basic screen returns and normal operation is conducted.
   - Test operation will stop automatically after 15-30 minutes. To stop the operation, press On/Off button.




### Precautions

Refer to "**3. How to diagnose for malfunction**" (page 24) if the unit does not operate properly.

## 2. Test items

| Test items | Symptom | Check |
|---|---|---|
| Indoor and outdoor units are installed securely. | Fall, vibration, noise | |
| No refrigerant gas leaks. | Incomplete cooling/heating function | |
| Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated. | Water leakage | |
| Draining line is properly installed. | Water leakage | |
| The power supply voltage corresponds to that shown on the name plate. | No operation or burn damage | |
| System is properly grounded. | Electrical leakage | |
| Only specified wires are used for all wiring, and all wires are connected correctly. | No operation or burn damage | |
| Indoor or outdoor unit's air inlet or air outlet are unobstructed. | Incomplete cooling/heating function | |
| Refrigerant piping length and additional refrigerant charge are noted down. | The refrigerant charge in the system is not clear | |
| Pipes and wires are connected to the corresponding connection ports / terminal blocks for the connected unit. | No cooling/heating | |
| Stop valves are opened. | Incomplete cooling/heating function | |
| The external static pressure is set correctly. | Incomplete cooling/heating function or water leakage | |

# Test operation and Testing

### Items to be checked at time of delivery

Also review the **"Precautions"** (page 3)

| Test items | Check |
|---|---|
| The electrical wiring box cover and air filter are attached. | |
| I explained about operations while showing the operation manual to the user. | |
| Field setting has been carried out. (if necessary) | |
| It has been confirmed that the cool air discharges during the COOL operation and the warm air discharges during the HEAT operation.<br>The indoor unit does not make unpleasant sounds of air discharge. | |
| I explained the set fan speed to the user (if the fan speed was set at thermostat OFF). | |
| I handed the operation manual over to the user. | |
| I have checked that there is no generation of abnormal noise (i.e., noise resulting from contamination or missing parts). | |
| The printed circuit board switch is not on the emergency (EMG.) side.<br>The switch is factory set to the normal (NORM.) side. | |
| I have checked the operation of the optional accessory and made field settings as needed (if an optional accessory is in use). | |
| I have explained failure examples of **"3.How to diagnose for malfunction"** (page 24)**.** | |
| I explained the power supply status (power supply ON/OFF) to the user. | |

### Points for explanation about operations

The items with ⚠ WARNING and ⚠ CAUTION marks in the operation manual are the items pertaining to possibilities for bodily injury and material damage in addition to the general usage of the product. Accordingly, it is necessary that you make a full explanation about the described contents and also ask your user to read the operation manual.

### Note to the installer

Be sure to instruct user how to properly operate the unit (especially cleaning the filter, operating different functions, and adjusting the temperature) by having them carry out operations while looking at the manual.

### ⚠ To the operator carrying out test operation

After test operation is completed, before delivering the air conditioner to the user, confirm that the electrical wiring box cover is closed.
In addition, explain the power supply status (power supply ON/OFF) to the user.

- If the test operation is completed with no malfunction code shown on the remote controller, the system is confirmed to be ready for activating safety measures when refrigerant is detected by the built-in refrigerant sensor.
- When the remote controller operation lamp blinks, it shows that something is abnormal.
  Check the malfunction codes on the remote controller (refer to **"4. Malfunction code"** (page 24)).
  Particularly, if the indication is one of those shown in the table, it may be an error in the electrical wiring or the power supply is disconnected. Therefore, recheck wiring.

| Remote controller indication | Details |
|---|---|
| "U4" turns on | • The power supply to the outdoor unit is not connected.<br>• The power supply wiring to the outdoor unit is not carried out.<br>• The transmission wiring and the remote controller wiring and FORCED OFF wiring are connected wrongly.<br>• The transmission wiring is disconnected. |
| No indication | • The power supply to the indoor unit is not connected.<br>• The power supply wiring to the indoor unit is not carried out.<br>• The remote controller wiring and the transmission wiring and FORCED OFF wiring are connected wrongly.<br>• The remote controller wiring is disconnected. |

# 3. How to diagnose for malfunction

• If the air conditioner does not operate normally after installing the air conditioner, a malfunction shown in the table below may happen.

| Remote controller display | Description |
|---|---|
| No display | • Power outage, power voltage error or open-phase<br>• Incorrect wiring (between indoor and outdoor units)<br>• Indoor PCB assembly failure<br>• Remote controller wiring not connected<br>• Remote controller failure<br>• Open fuse or tripped circuit breaker (outdoor unit) |
| "Checking the connection. Please stand by." * | • Indoor PCB assembly failure<br>• Wrong wiring (between indoor and outdoor units) |

* "Checking the connection. Please stand by" will be displayed for up to 90 seconds following the application of power to the indoor unit. This is normal and does not indicate a malfunction.

■ Diagnose with the display on the liquid crystal display remote controller.
When the operation stops due to a malfunction, operation lamp blinks, and the malfunction code is indicated on the liquid crystal display. In such a case, diagnose the fault contents by referring to Error History in the service settings menu.
In the case of group control, the unit No. is displayed so that the indoor unit with the trouble can be identified.

# 4. Malfunction code

• Depending on the type of indoor or outdoor unit, the malfunction code may or may not be displayed.

| Malfunction code | Descriptions and measures | Remarks |
|---|---|---|
| A0 | Refrigerant Leak Detection | |
| A1 | Indoor Printed Circuit Board failure | |
| A3 | Drain level abnormal | |
| A5 | Freeze-up protection control/heating peak-cut control | |
| A6 | Indoor fan motor overload, over current, lock | |
| | Indoor Printed Circuit Board connection failure | |
| A8 | Indoor unit power supply voltage abnormal | |
| AJ | Capacity setting failure | Capacity setting adapter or capacity data error, or disconnection of the capacity setting adapter, failure to connect the adapter, or the capacity is not set to the data-retention IC. |
| C1 | Transmission error between indoor Printed Circuit Board (Master) and indoor Printed Circuit Board (Slave) | |
| C4 | Indoor heat exchanger liquid pipe temperature sensor malfunction | Abnormal stop is applied depending on the model or condition. |
| C5 | Indoor heat exchanger condenser / evaporator temperature sensor malfunction | Abnormal stop is applied depending on the model or condition. |
| C9 | Suction air thermistor malfunction | Abnormal stop is applied depending on the model or condition. |
| CH | Refrigerant Sensor disconnect or malfunction | |
| CJ | Remote controller air thermistor malfunction | Remote controller thermo does not function, but body thermo operation is enabled. |
| E1 | Outdoor Printed Circuit Board failure (Outdoor unit) | |
| E3 | High pressure switch (HPS) activated | |
| E5 | OL (compressor overload) started | |
| E6 | Compressor motor lock by over current (Outdoor unit) | |

# Test operation and Testing

| Malfunction code | Descriptions and measures | Remarks |
|---|---|---|
| E7 | Outdoor fan motor lock malfunction (Outdoor unit) | |
| | Outdoor fan instant overcurrent malfunction (Outdoor unit) | |
| E8 | Input overcurrent (Outdoor unit) | |
| E9 | Electronic expansion valve abnormality | |
| EA | Cooling/heating switch malfunction (Outdoor unit) | |
| F3 | Discharge piping temperature malfunction (Outdoor unit) | |
| F6 | High pressure control (in cooling) (Outdoor unit) | |
| F8 | Operation halt due to compressor internal temperature abnormality | |
| H0 | Sensor fault for inverter (Outdoor unit) | |
| H3 | High pressure switch system abnormality | |
| H6 | Operation halt due to faulty position detection sensor | |
| H7 | Fan IPM temperature error | |
| H8 | CT abnormality (Outdoor unit) | |
| H9 | Outdoor air thermistor system malfunction (Outdoor unit) | Abnormal stop is applied depending on the model or condition. |
| J3 | Discharge piping thermistor system malfunction (Outdoor unit) | Abnormal stop is applied depending on the model or condition. |
| J6 | Outdoor heat exchanger distributor liquid piping thermistor malfunction (Outdoor unit) | Abnormal stop is applied depending on the model or condition. |
| L3 | Reactor thermistor malfunction (Outdoor unit) | |
| L4 | Overheated heat-radiating fin (Outdoor unit) | Inverter cooling failure. |
| L5 | Instantaneous overcurrent (Outdoor unit) | The compressor engines and turbines may be experiencing a ground fault or short circuit. |
| P4 | Heat-radiating fin thermistor malfunction (Outdoor unit) | Abnormal stop is applied depending on the model or condition. |
| U0 | Suction piping temperature abnormal (Outdoor unit) | The refrigerant may be insufficient.<br>Abnormal stop is applied depending on the model or condition. |
| U2 | Power voltage malfunction (Outdoor unit) | The inverter open-phase or main circuit condenser may be malfunctioning.<br>Abnormal stop is applied depending on the model or condition. |
| U4 | Transmission error (between indoor and outdoor units) | Wiring error between indoor and outdoor unit. Or Indoor and outdoor Printed Circuit Board failure. |
| U5 | Transmission error (between indoor and remote controller units) | Transmission between indoor unit and remote controller is not performed properly. |
| U7 | Transmission error of the inverter module | |
| UA | Field setting error | System setting error of the simultaneous on/off multi-split type. |
| UE | Transmission error (between indoor unit and centralized remote controller) | |
| UC | Remote controller address setting error | |

## 5. Pump down operation

Be sure to pump down when relocating or disposing of the unit.
For instructions on how to pump down, refer to the service manual.

## 1.4 FVXV09/12/15/18

# Contents

**Safety Considerations ..... 1**
**Accessories ..... 3**
**Choosing an Installation Site ..... 4**
1. Indoor unit ..... 4
2. Wireless remote controller ..... 4

**Indoor Unit Installation Diagram ..... 4**
**Indoor Unit Installation ..... 5**
1. Refrigerant piping ..... 5
2. Drilling a wall hole and installing wall embedded pipe ... 8
3. Remove the front grille ..... 8
4. Routing pipes and drain hose ..... 10
5. Drain piping ..... 11
6. Refrigerant piping ..... 13
7. Wiring ..... 14
8. Installing the indoor unit ..... 15
9. Completing the pipework ..... 16
10. Attaching the front grille and front panel ..... 16
11. Restricting upward airflow (for concealed installations etc.) ..... 16

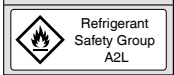
**Installation Tips ..... 17**
1. When connecting to an HA system ..... 17
2. How to set the different addresses ..... 18
3. Pump down operation ..... 18
4. Room temperature adjustment ..... 19

**Trial Operation and Testing ..... 20**
1. Attaching the titanium apatite deodorizing filter ..... 20
2. Trial operation and testing ..... 21
3. Test items ..... 22

The pictures in this document are for illustrative purposes only.

# Safety Considerations

**Refer also to the General Safety Considerations in the separate booklet.**

| | |
|---|---|
|  | **Read the precautions in this manual carefully before operating the unit.** |
|   | **This appliance is filled with R32.** |

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.
Instruct the user on how to operate and maintain the unit. Inform users that they should store this installation manual with the operation manual for future reference.
Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion.
Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

⚠ **DANGER** ..... Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING** ..... Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** ..... Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ **NOTE** ..... Indicates situations that may result in equipment or property-damage accidents only.

⚠ **DANGER**

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death. Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injury or death by suffocation.
- All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal.

### ⚠ WARNING

- Only qualified personnel licensed or certified in their jurisdiction must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- Pipe-work including piping material, pipe routing, and installation shall include protection from physical damage in operation and service, and be in compliance with national and local codes and standards, such as ASHRAE 15, ASHRAE 15.2, IAPMO Uniform Mechanical Code, ICC International Mechanical Code, or CSA B52. All field joints shall be accessible for inspection prior to being covered or enclosed.
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injury.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.
- The unit must have an uninterrupted, unbroken electrical ground to minimize the possibility of personal injury if an electrical fault should occur.
  The electrical ground circuit may consist of an appropriately sized electrical wire connecting the ground lug in the unit and control box wire to the building's electrical service panel.
  Other methods of grounding are permitted if performed in accordance with the "National Electrical Code" (NEC)/ "American National Standards Institute" (ANSI)/ "National Fire Protection Association" (NFPA) 70 and local/state codes.
  In CANADA, electrical grounding is to be in accordance with the Canadian Electrical Code CSA C22.1.
  Failure to observe this warning can result in electrical shock that can cause personal injury or death.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel licensed or certified in their jurisdiction according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the service lid can be securely fastened. Improper positioning of the service lid may result in electric shock, fire, or the terminals overheating.
- Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit service lid. If the service lid is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R32) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, which may result in equipment damage and even injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.
- Do not use means to accelerate the defrosting process (if possible) or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.
- Comply with national gas regulations.
- The indoor equipment and pipes shall be securely mounted and guarded such that accidental rupture of equipment cannot occur from such events as moving furniture or reconstruction activities.
- When mechanical connectors are reused indoors, sealing parts shall be renewed.
- When flared joints are reused indoors, the flared part shall be refabricated.

### ⚠ CAUTION

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- Wear adequate personal protective equipment (protective gloves, safety glasses,…) when installing, maintaining or servicing the system.
- The heat exchanger fins are sharp enough to cut. To avoid injury, wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to ensure proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R32 in the system must be kept clean, dry, and tight.

  (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.
  (b) Tight -- R32 does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R32 can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant piping* and follow the procedures.

# Safety Considerations

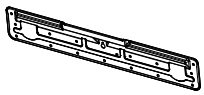
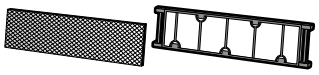
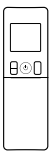
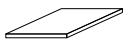
- The indoor unit is for R32. See the catalog for outdoor models that can be connected. Normal operation is not possible when connected to non-compatible outdoor units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors.
- Do not install the air conditioner or heat pump in the following locations:
  (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
  Plastic parts may deteriorate and fall off or result in water leakage.
  (b) Where corrosive gas, such as sulfurous acid gas, is produced.
  Corroding copper pipes or soldered parts may result in refrigerant leakage.
  (c) Near machinery emitting electromagnetic waves.
  Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
  (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled.
  Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.
- Servicing shall be performed only as recommended by the manufacturer and licensed or certified in their jurisdiction.

**⚠ NOTE**

- The indoor unit should be positioned where the unit and interunit wires (outdoor to indoor) are at least 3.3 ft (1 m) away from any televisions or radios. (The unit may cause interference with the picture or sound.) Depending on the radio waves, a distance of 3.3 ft (1 m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Only use tools for R32, such as a gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R32, the refrigerant may deteriorate.
- As maximum allowable pressure is 604 psi (4.17 MPa), the wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.

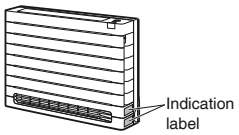
FTN007(R32)-U

# Accessories

| | | | | | |
|---|---|---|---|---|---|
| Ⓐ Mounting plate  | 1 | Ⓑ Mounting plate fixing screw M4 × 1” (M4 × 25 mm)  | 5 | Ⓒ Titanium apatite deodorizing filter  | 2 each |
| Ⓓ Wireless remote controller  | 1 | Ⓔ Remote controller holder  | 1 | Ⓕ Remote controller holder fixing screw M3 × 13/16” (M3 × 20 mm)  | 2 |
| Ⓖ Dry battery AAA. LR03 (alkaline)  | 2 | Ⓗ Insulation sheet  | 2 | Ⓙ Operation manual<br>Ⓚ Installation manual<br>Ⓛ Warranty<br>Ⓜ General Safety Considerations | 1 each |

# Choosing an Installation Site

**R32 refrigerant is a mildly flammable refrigerant. Do not install indoor or outdoor units in areas where, in the event of a refrigerant leakage, refrigerant concentrations could exceed flammable concentrations.**




- Before choosing the installation site, obtain user approval.
- Check the General Safety Considerations and enter the values in the blanks on the indication label.

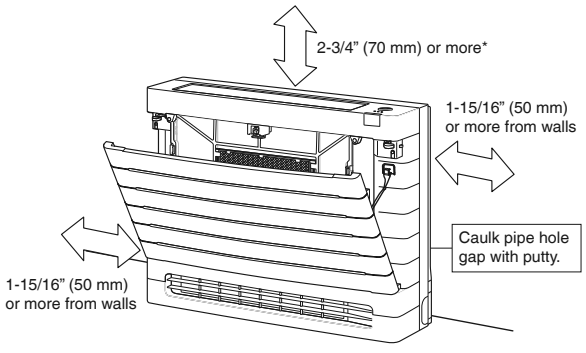
## 1. Indoor unit

- The indoor unit should be positioned in a place where:
  1) the restrictions on the installation requirements specified in **"Indoor Unit Installation Diagram"** on page 4 are met,
  2) both the air inlet and air outlet are unobstructed,
  3) the unit is not exposed to direct sunlight,
  4) drainage occurs easily,
  5) the unit is away from sources of heat or steam,
  6) the unit is not exposed to direct airflow from other air blowing devices,
  7) there is no source of machine oil vapor (this may shorten the indoor unit service life),
  8) cool/warm air is circulated throughout the room,
  9) the unit is away from electronic ignition type fluorescent lamps (inverter or rapid start type) as they may affect the remote controller range,
  10) the unit is at least 3.3 ft (1 m) away from any television or radio set (the unit may cause interference with the picture or sound),
  11) no laundry equipment is nearby,
  12) the signal strength of the router is stable (insufficient signal strength can prevent stable communication).
- Do not seal gaps in any doors (including sliding doors) of the room in which the unit is installed. (If refrigerant leaks, it may accumulate in the room and contact with flames could result in toxic gas emission or a fire.)

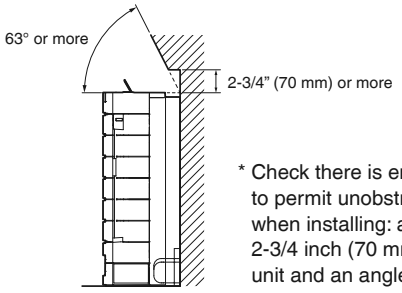
## 2. Wireless remote controller

Turn on all the fluorescent lamps in the room, if any, and find a location where the remote controller signals are properly received by the indoor unit (within 19-11/16 ft (7 m)).

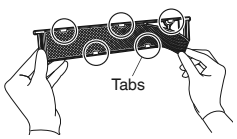
# Indoor Unit Installation Diagram



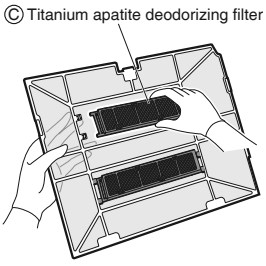

To ensure efficient operation and maintenance/serviceability, ensure that there is sufficient space surrounding the unit.

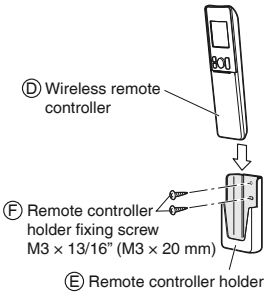



* Check there is enough clearance to permit unobstructed airflow when installing: at least 2-3/4 inch (70 mm) above the unit and an angle of at least 63°.




- When attaching the filter, check that the filter is properly set in the tabs.



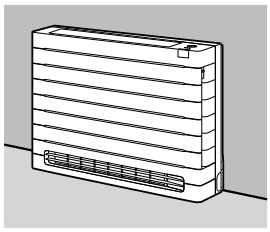

4

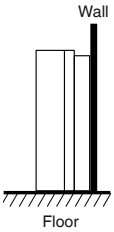
3P813498-1A

# Indoor Unit Installation Diagram

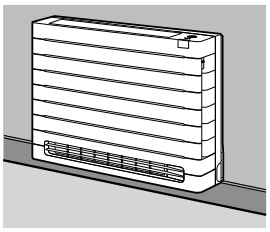
• The indoor unit may be mounted in any of the 4 styles shown here.

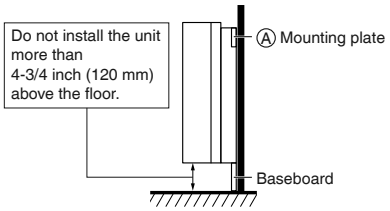
**Configuration A floor exposed installation**



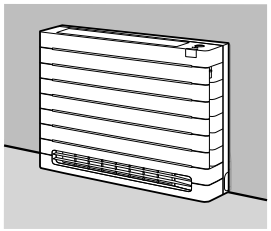


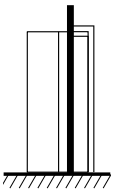

**Configuration B wall exposed installation**



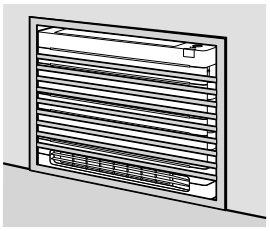


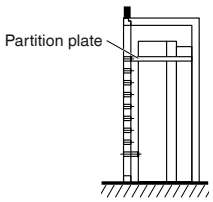

**Configuration C floor half concealed installation**





**Configuration D concealed installation**






# Indoor Unit Installation

## 1. Refrigerant piping

**⚠ CAUTION**

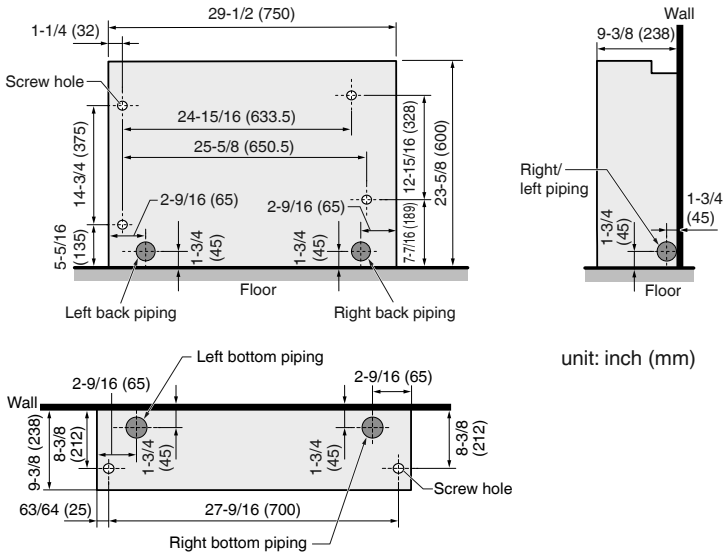
**Minimum allowable length**

- The suggested shortest pipe length is 8.2 ft (2.5 m), in order to avoid noise from the outdoor unit and vibration. (Mechanical noise and vibration may occur depending on how the unit is installed and the environment in which it is used.)
- Refer to the installation manual for the outdoor unit for the maximum pipe length.
- For multi-connections, refer to the installation manual for the multi outdoor unit.

• For piping, refer to **"6. Refrigerant piping"** on page 13.

- Allow space around the pipe for a easier indoor unit pipe connection.

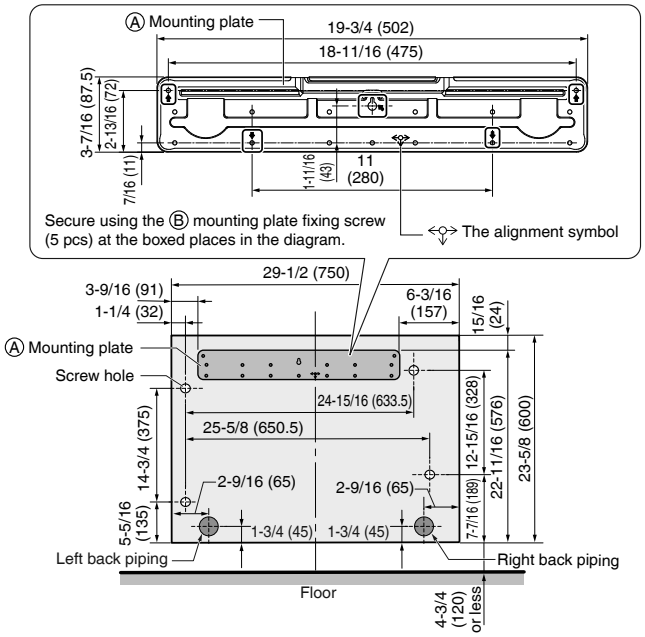
### Configuration A floor exposed installation




unit: inch (mm)

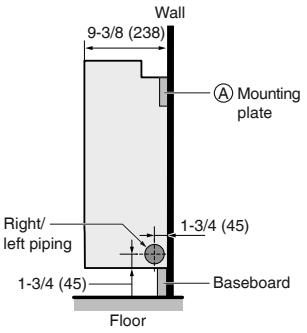
- Drill a hole (ϕ2-9/16 inch (65 mm) in diameter) in the spot indicated by the ⊕ symbol in the illustration.
  - The location of the hole is different depending on which side of the pipe is taken out.

### Configuration B wall exposed installation




- As a measure against water leakage, make sure to apply a level to the underside of the Ⓐ mounting plate when installing it.
- Drill a hole (ϕ2-9/16 inch (65 mm) in diameter) in the spot indicated by the ⊕ symbol in the illustration.
  - The location of the hole is different depending on which side of the pipe is taken out.

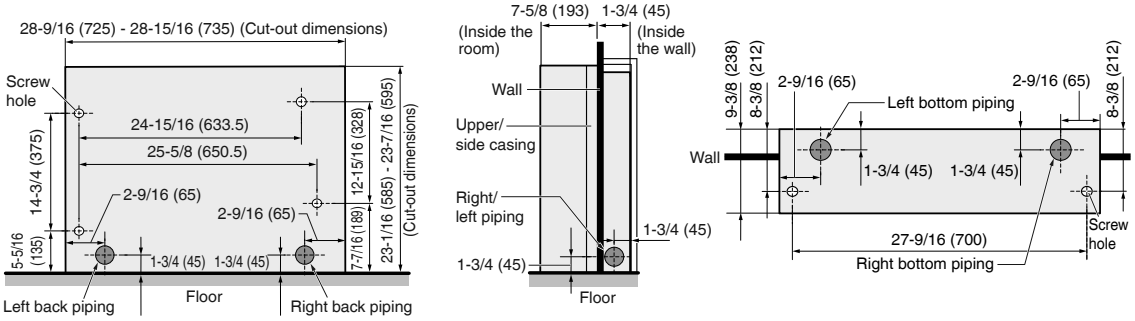
unit: inch (mm)

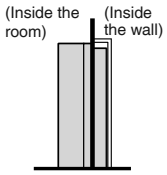


# Indoor Unit Installation

### Configuration C floor half concealed installation

unit: inch (mm)

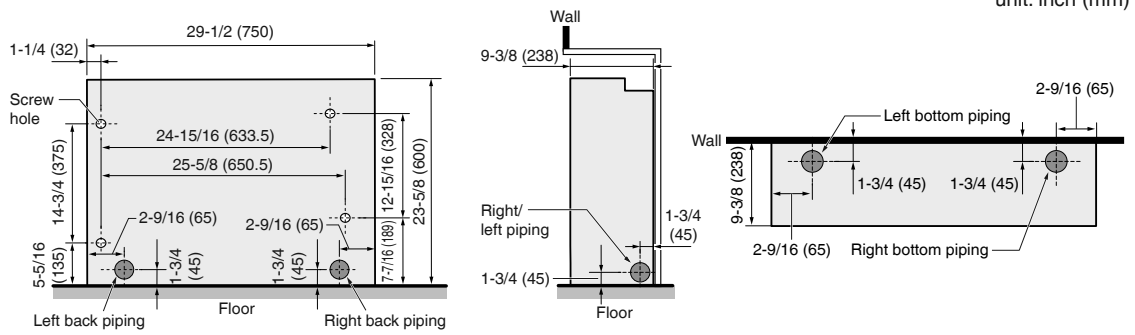



- Make the wall opening in accordance with the cut-out dimensions.
- Drill a hole (ϕ2-9/16 inch (65 mm) in diameter) in the spot indicated by the ⊕ symbol in the illustration.
  · The location of the hole is different depending on which side of the pipe is taken out.
- Install so that there is no gap between the back of the unit and the wall.

### Configuration D concealed installation

unit: inch (mm)



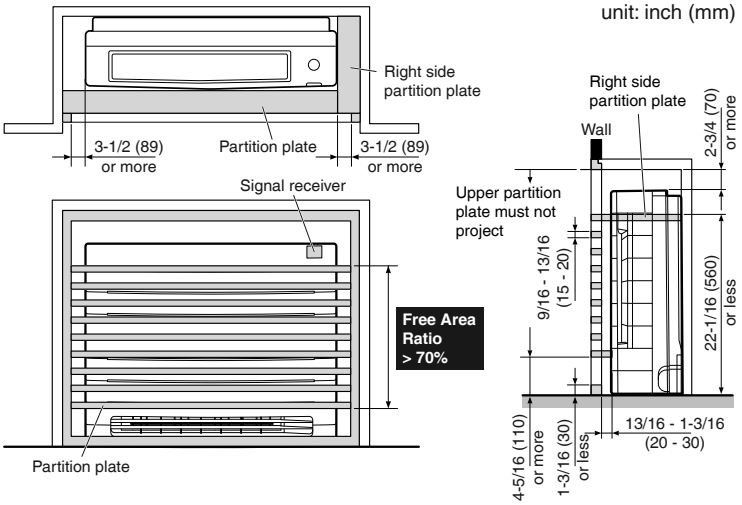

- Drill a hole (ϕ2-9/16 inch (65 mm) in diameter) in the spot indicated by the ⊕ symbol in the illustration.
  · The location of the hole is different depending on which side of the pipe is taken out.
- Restrict upward airflow via remote controller settings.
  (Refer to **"11. Restricting upward airflow (for concealed installations etc.)"**)

**Requirements for concealed installations**

**If the following requirements are not observed, cooling/heating performance and remote controller reception may be impaired. (May result in failure to cool/warm, condensation on house structure, etc.)**

- Allow enough space between the main unit and ceiling not to obstruct the flow of cool/warm air.
- Place a partition plate on the right side.
- Place a partition plate between outlet and inlet sections.
- Partition plates must not cover the air outlets.
- Partition plates must not be positioned above the signal receiver.
- Partition plates must not be positioned at a height between 1-3/16 inch (30 mm) and 4-5/16 inch (110 mm) above the floor.
- Ensure that the free area ratio of the partition plates is 70% or more.
- Install so that there is no gap between the back of the unit and the wall.

unit: inch (mm)

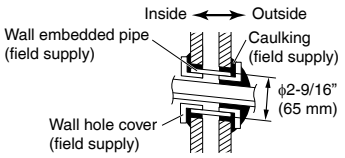


## 2. Drilling a wall hole and installing wall embedded pipe

**⚠WARNING**

For metal frame or metal board walls, be sure to use a wall embedded pipe and wall hole cover in the feed-through hole to prevent possible heat, electric shock, or fire.

- Be sure to caulk the gaps around the pipes with caulking material. (to prevent condensation caused by intrusion of air from outside or within the wall)
  1) Drill a feed-through hole with a ϕ2-9/16 inch (65 mm) diameter through the wall at a downward angle toward the outside.
  2) Insert a wall embedded pipe into the hole.
  3) Insert a wall hole cover into wall pipe.
  4) After completing refrigerant piping, wiring, and drain piping, caulk the pipe hole gap with putty.



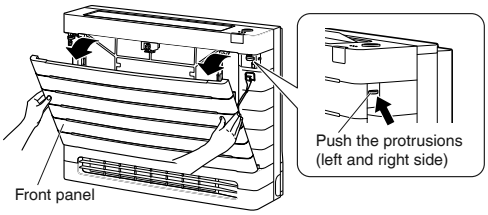

**Even if a wall hole cover is not used, caulk both the outdoor and indoor sides with putty.**

## 3. Remove the front grille

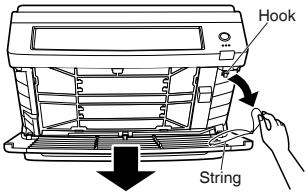
The surfaces of the front grille and front panel of the indoor unit are easily scratched, so do not place them directly on the floor, etc.

### 3-1. Remove the front panel.

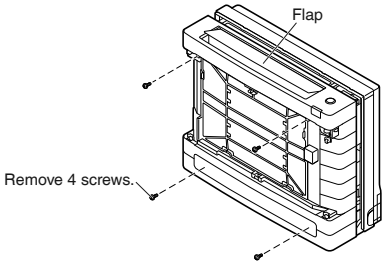
1) Push in the protrusions on the unit (the left and right sides).



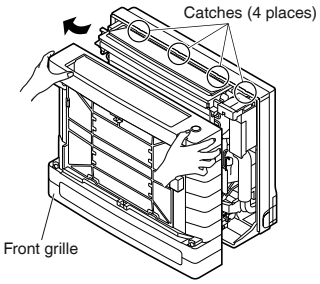

2) Unhook the string and tilt the front panel toward you to remove it.

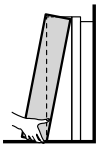



### 3-2. Remove the 4 screws and open the flap.




### 3-3. Hold the upper part of the front grille, pull it slightly toward you to release the front grille catches, and pull it out diagonally upward so as to avoid the flap.



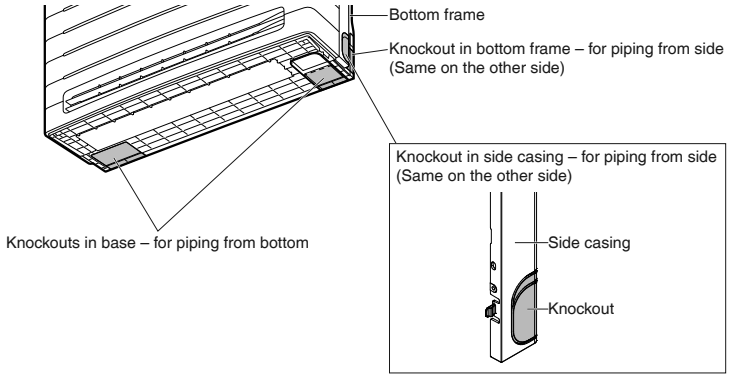
**Wrong**

Do not attempt to remove the front grille from the bottom. The grille may be damaged.

# Indoor Unit Installation

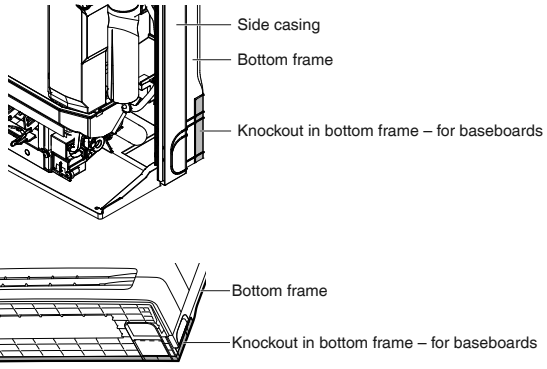
**Cut out the appropriate knockout**

- Cut out the knockout for piping at the side (left or right) or at the base (left or right) where the piping is to be routed out.
  (1) Use nippers or a metal saw to cut out the knockout.
  (2) Remove burrs on the cut edges.




If a knockout for piping was removed, make sure to block any gaps between the indoor unit and piping after pipework is complete.
(Any gaps may result in air infiltration leading to condensation, misdetection of indoor temperature, or the ingress of small animals.)

- **For Exposed floor installation (Configuration A)**, if there is a baseboard, cut out the knockout in the bottom frame using nippers or a metal saw.




9

# 4. Routing pipes and drain hose

## Selection of copper and heat insulation materials

When using commercial copper pipes and fittings, observe the following:

- Insulation material: Polyethylene foam
  Heat transfer rate: 0.041 to 0.052 W/mK (0.024 to 0.030 Btu/fth°F (0.035 to 0.045 kcal/mh°C))
  Be sure to use insulation that is designed for use with HVAC Systems.
- ACR Copper only.
- Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below.

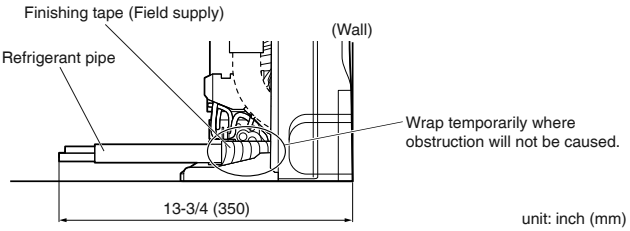
| | Piping size | Minimum bend radius | Piping thickness | Thermal insulation size | Thermal insulation thickness |
|---|---|---|---|---|---|
| Gas side | O.D. 3/8 inch (9.5 mm) | 1-3/16 inch (30 mm) or more | 0.031 inch (0.8 mm) (C1220T-O) | I.D. 15/32-19/32 inch (12-15 mm) | 13/32 inch (10 mm) Min. |
| | O.D. 1/2 inch (12.7 mm) | 1-9/16 inch (40 mm) or more | | I.D. 9/16-5/8 inch (14-16 mm) | |
| Liquid side | O.D. 1/4 inch (6.4 mm) | 1-3/16 inch (30 mm) or more | 0.031 inch (0.8 mm) (C1220T-O) | I.D. 5/16-13/32 inch (8-10 mm) | |

- Use separate thermal insulation pipes for gas and liquid refrigerant pipes.
- Using finishing tape, bundle and wrap the indoor unit piping and drain hose together so that the drain hose is below the other piping.

**Route the pipes and drain hose in the direction shown in the diagrams, and wrap them together with finishing tape (field supply) such that the drain hose is underneath the pipes.**

- The drain hose must slope downward.
  · Do not connect a commercially available drain hose directly to the indoor unit.
  (Water leakage may result.)
- Route the refrigerant pipes in and wrap the pipes and drain hose with finishing tape until they exit the unit.
  · When routing refrigerant pipes, do so in such a way that the pipes do not press against indoor unit structural components (e.g. bottom frame, insulation, etc.).
  (Condensation and abnormal noises may result.)
- When routing through the back of the unit, bending the piping to match the structure of the unit can make pipework easier.
- For pipe lengths, observe the installation manual supplied with the outdoor unit.
- To make it easier to connect the pipes to the indoor unit, the pipes should be able to move somewhat freely backward and forward, left and right.
  The finishing tape bundling the refrigerant pipes should be temporarily fixed where it will not obstruct connection with the indoor unit.

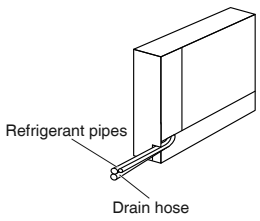
Refrigerant pipe connections must be of a length of at least 13-3/4 inch (350 mm) from the wall.



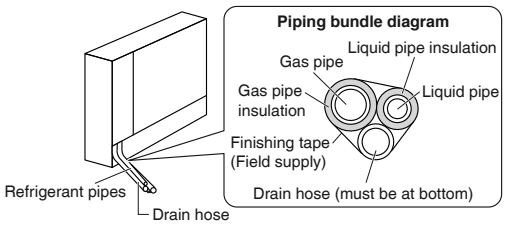

unit: inch (mm)

- Seal pipe ends with a cap or vinyl tape to prevent ingress of dust and moisture.

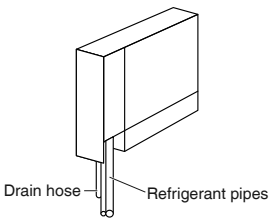
**Routing from the side (right)**




**Routing from the rear (right)**

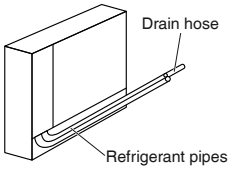



**Routing from the bottom (right)**

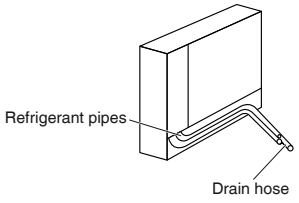


# Indoor Unit Installation

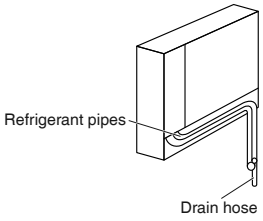
**Routing from the side (left)**



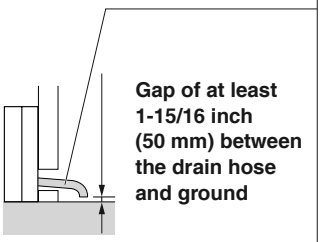

**Routing from the rear (left)**



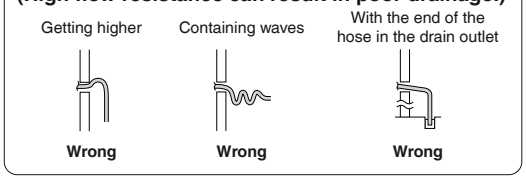

**Routing from the bottom (left)**




## 5. Drain piping

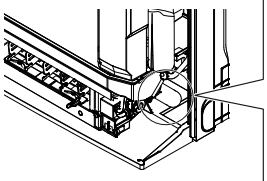



**Drain pipe must slope downward.**
**Even small traps are not acceptable.**
**Descending gradient of 1:100 or more**
**(High flow resistance can result in poor drainage.)**

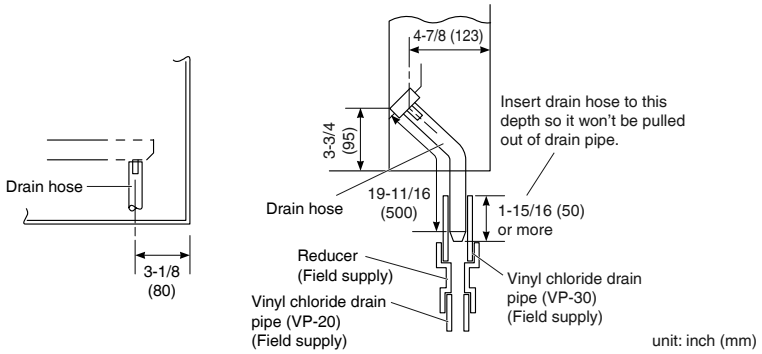



- Avoid placing the end of the drain hose in a drainage location that could cause bad odors or corrosive gas to flow backward into the outlet.
- The drainage water may change color due to bacteria or other organisms. Place in a location where the flow of drainage water will not cause a problem.
- Minimize the number of bends in the drain hose as much as possible.
  If bending the drain hose, bend it gently.
- Do not connect a commercially available drain hose directly to the indoor unit as this can result in water leakage.
- Do not apply any coatings etc., to drain hose connections as this may result in product damage or water leakage.
- Once pipework is complete, check that drainage is smooth and seal with vinyl tape etc., to prevent the ingress of debris.

1) Connect the drain hose (outer diameter ϕ11/16 inch (ϕ18 mm) at connecting end, 19-11/16 inch (500 mm) long) is supplied with the indoor unit, as described below.



- For drain pipes, use commercially available rigid PVC pipe general pipe VP20 (outer diameter ϕ1 inch (ϕ26 mm), inner diameter ϕ13/16 inch (ϕ20 mm)).



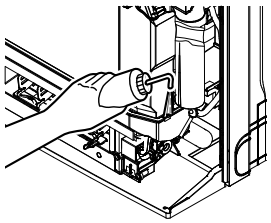

**⚠ CAUTION**

Use polyvinyl chloride adhesive agent for gluing. Failure to do so may cause water leakage.

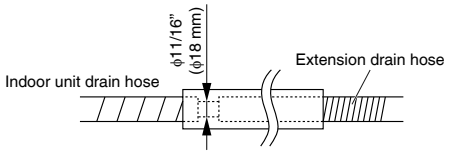
**If the indoor the drain pipe is routed sideways, insulate it so that the wall thickness of the insulation (heat transfer rate: 0.043 W/mK (0.025 Btu/fth°F (0.037 kcal/mh°C)) K or less) is at least 3/8 inch (10 mm) to prevent condensation.**

- If on-site pipes are to be concealed in the ceiling or inside walls, wrap them in additional insulation (material: foamed polyethylene foam, 3/16 inch (4 mm) or thicker) to prevent condensation.

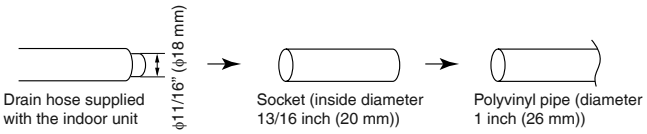
2) Transfer some water to the indoor heat exchanger by pouring water into the drain pan.
3) Make sure that water flows out of the drain hose.



4) When drain hose requires extension, obtain an extension hose commercially available.
Be sure to thermally insulate the indoor section of the extension hose with 3/8 inch (10 mm) or more insulation material to prevent condensation.




5) When connecting a rigid polyvinyl chloride pipe (diameter 1 inch (26 mm)) directly to the drain hose attached to the indoor unit as with embedded piping work, use any commercially available drain socket (inside diameter 13/16 inch (20 mm)) as a joint.



# Indoor Unit Installation

## 6. Refrigerant piping

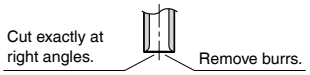
### ⚠WARNING

- Do not apply mineral oil on flared part.
- Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with the unit.
- Never install a dryer to this R32 unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- Improper flaring may result in refrigerant gas leakage.

**With a multi indoor unit , install as described in the installation manual supplied with the multi outdoor unit.**

### 6-1. Flaring the pipe end

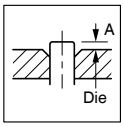
1) Remove the flare nut at the end of the auxiliary piping using 2 spanners.
2) Cut the pipe end with a pipe cutter.
3) Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.




4) Put the flare nut on the pipe.
5) Flare the pipe.
6) Check that the flaring has been done correctly.

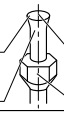
Flaring

Set exactly at the position shown below.




| | Flare tool for R32 or R410A | Conventional flare tool | |
|---|---|---|---|
| | Clutch-type | Clutch-type (Rigid-type) | Wing-nut type (Imperial-type) |
| A | 0-0.020 inch (0-0.5 mm) | 0.039-0.059 inch (1.0-1.5 mm) | 0.059-0.079 inch (1.5-2.0 mm) |

Check



The flare's inner surface must be flaw-free.

The pipe end must be evenly flared in a perfect circle.

When flaring, do not over-tighten and crack.

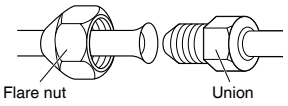
Make sure that the flare nut is fitted.

### 6-2. Refrigerant piping

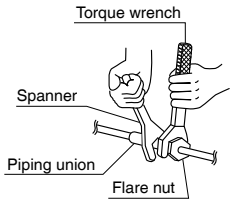
### ⚠CAUTION

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.
- Excessive tightening of the flare nut can result in the flare nut cracking in the long term, leading to gas leakage.

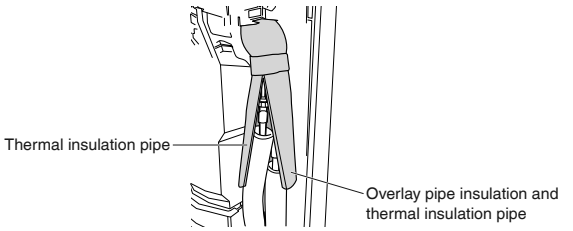
- For refrigerant pipe connections, align the center of the flare and the union, tighten the flare nut 3 to 4 turns by hand, and then use a torque wrench and a spanner to firmly tighten to the specified torque.

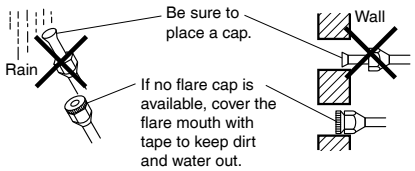



Do not apply refrigeration oil, gas leak prevention agent, etc., to the outer surface of the flare or threads (flare nut, union). (May result in cracking of the flare nut or damage to the threads)




| | Piping size | Flare nut tightening torque |
|---|---|---|
| Gas side | O.D. 3/8 inch (9.5 mm) | 24-1/8–29-1/2 ft • lbf (32.7-39.9 N • m) |
| | O.D. 1/2 inch (12.7 mm) | 36-1/2–44-1/2 ft • lbf (49.5-60.3 N • m) |
| Liquid side | O.D. 1/4 inch (6.4 mm) | 10-1/2–12-3/4 ft • lbf (14.2-17.2 N • m) |




### Cautions on pipe handling

- Protect the open end of the pipe from dust and moisture.
- All pipe bends should be as gentle as possible. Use a pipe bender for bending.

# 7. Wiring

**Refer to the installation manual for the outdoor unit also.**

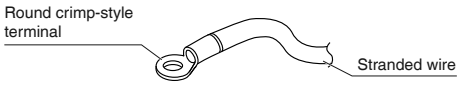
## ⚠WARNING

- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.

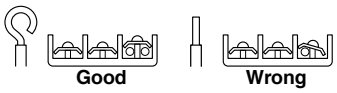
## ⚠CAUTION

**Precautions to be taken for wiring**

- Recommend stranded cable for interunit wiring. Local code always supersedes recommendation.
- For stranded wires, make sure to use the round crimp-style terminal for connection to the power supply terminal block. Place the round crimp-style terminals on the wires up to the covered part and secure in place.

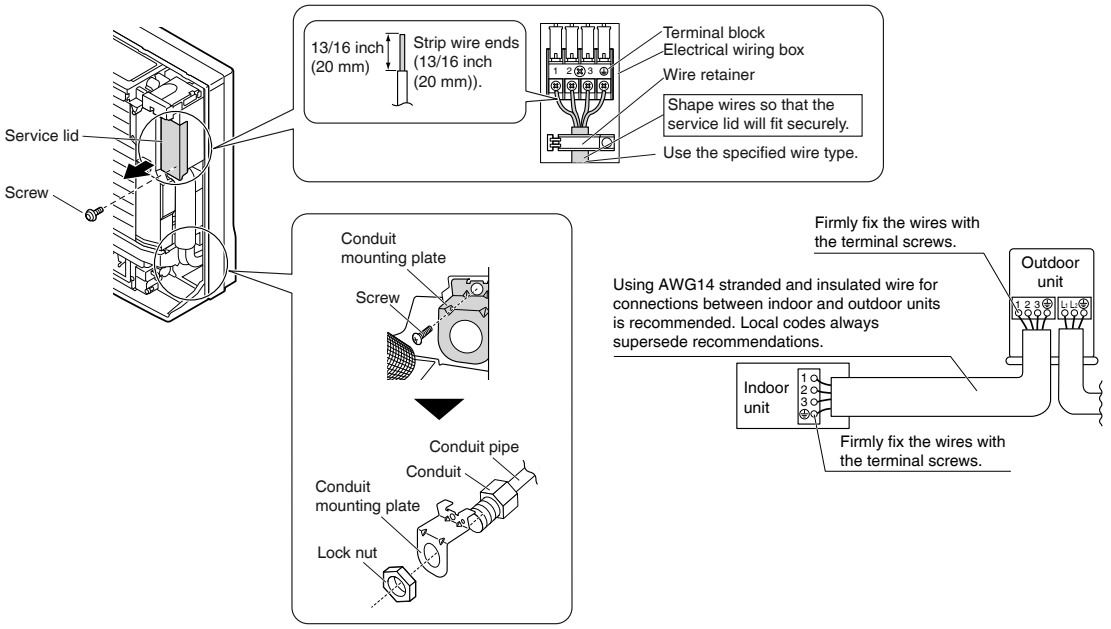



- If solid core wire must be used, be sure to curl the end of the lead. Improper work may cause heat and fire.



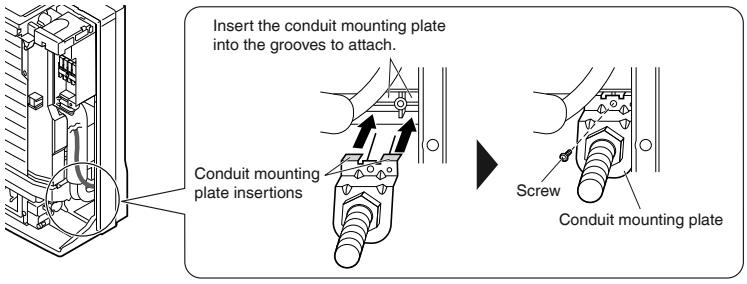

**With a multi indoor unit , install as described in the installation manual supplied with the multi outdoor unit.**

1) Remove the service lid (1 screw).
2) Remove the conduit mounting plate and then secure the conduit to the conduit mounting plate with the lock nut, as shown in the illustration.
3) Strip wire ends (13/16 inch (20 mm)).
4) Match wire colors with terminal numbers on the indoor and outdoor unit's terminal blocks and firmly secure the wires in the corresponding terminals with the screws.
5) Connect the ground wire to the corresponding terminals.
6) Pull the wires lightly to make sure they are securely connected.

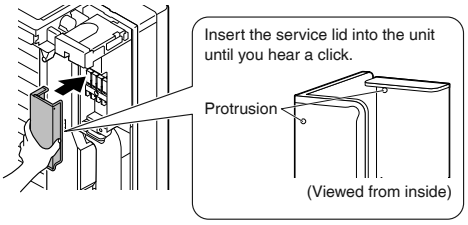


# Indoor Unit Installation

7) In case of connecting to an adapter system, run the remote controller cable and attach the S21 conversion connector. (Refer to **"1. When connecting to an HA system"** on page 17.)
8) Attach the conduit mounting plate.




9) Shape the wires so that the service lid fits securely.
10) Attach the service lid (1 screw).



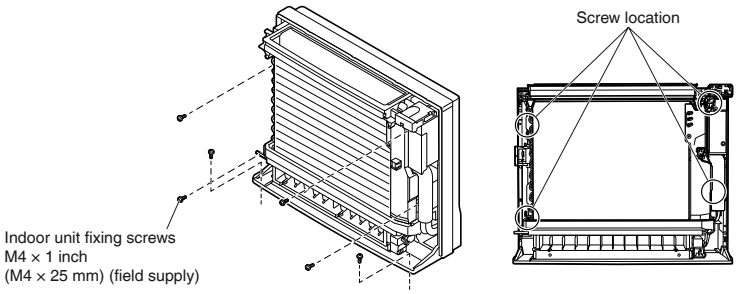

11) Take care to ensure that all wiring between the indoor unit and the outdoor unit has a consistent connection. Any splices can cause communication errors.

## 8. Installing the indoor unit

**Once the indoor unit has been mounted, fix it to the floor and wall with installation screws M4 × 1 inch (M4 × 25 mm) screws (field supply).**

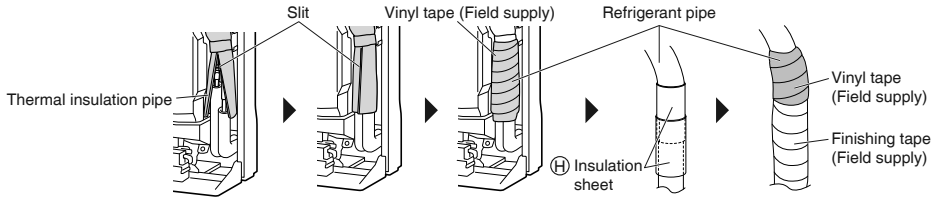
- Use the front part of the bottom frame to level the indoor unit.
- The number of screws used for indoor unit installation varies by installation configuration.

| | |
|---|---|
| When wall mounting | 4 screws for the main body<br>• For wall-mounted installations, mount the indoor unit on the Ⓐ mounting plate before screwing it in. |
| Other installation configurations | 4 screws for the main body, 2 screws for the floor |



# 9. Completing the pipework

1) After connecting the pipes, overlap the edges of the slit in the thermal insulation pipe and wrap it with vinyl tape ensuring no gaps remain.
   • Gaps or over-tightening can result in condensation or dripping.
2) Wrap with Ⓗ insulation sheet so that the vinyl tape is not visible.
3) Finish by wrapping with finishing tape from bottom to top and securing with vinyl tape.
4) Push in firmly so that the front grille does not get pushed out.




**Ensure that the piping is fully insulated so that bare pipe is not visible. Incomplete insulation may result in water leakage.**

# 10. Attaching the front grille and front panel

1) After connecting the refrigerant pipes and drain pipes, fill through-holes with putty or caulking material so that there are no gaps.

**Any gaps may result in air infiltration leading to condensation, misdetection of indoor temperature, or the ingress of small animals.**

2) Attach the front grille and the front panel.

# 11. Restricting upward airflow (for concealed installations etc.)

Turn “ON” the circuit breaker and keep the remote controller pointed at the unit when performing operations.
For concealed installations, fix the flap of the upper air outlet in the down position by setting the restriction on upward airflow.
If the restriction on upward airflow remains disabled, it may result in a failure to cool/warm, condensation on the house structure, etc.

**Settings must be made on the remote controllers for each indoor unit. (Failure to do so will result in a mismatch between the remote controller display and the actual operation of the indoor unit.)**

• Measure the supply voltage and make sure that it is within the specified range.

1) Stop unit operation using the remote controller.
2) Press Temp ▲, Temp ▼ and Mode at the same time.
3) Press Temp ▲ and Temp ▼, select SU, press Mode.
4) Press Temp ▲ and Temp ▼, select 27, press Mode.
5) Press Temp ▲ and Temp ▼, select 1, press Mode.



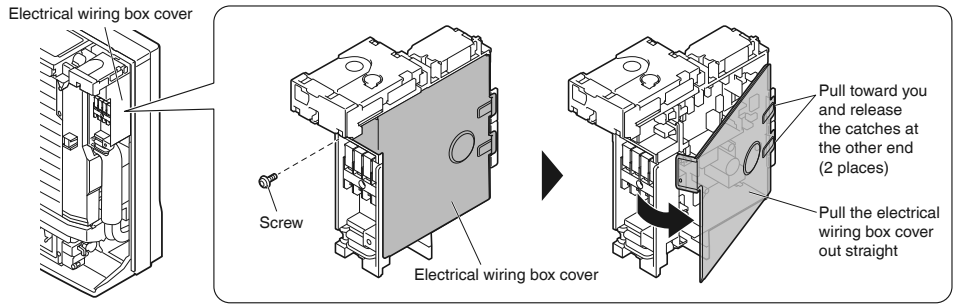

   • To disable the restriction on upward airflow, press Temp ▲ and Temp ▼ to select 0, and then press Mode.
6) When the indoor unit emits a short beep, press Cancel twice.
7) Use the remote controller to start operation, check that the flap stays in the down position, and then stop operation.
   • If the restriction on upward airflow was disabled, use the remote controller to start operation, check that flap position changes when Swing is pushed, and then stop operation.
8) Be sure to explain to the customer that while the restriction on upward airflow is enabled, airflow direction cannot be changed and auto swing cannot be used.

# Installation Tips

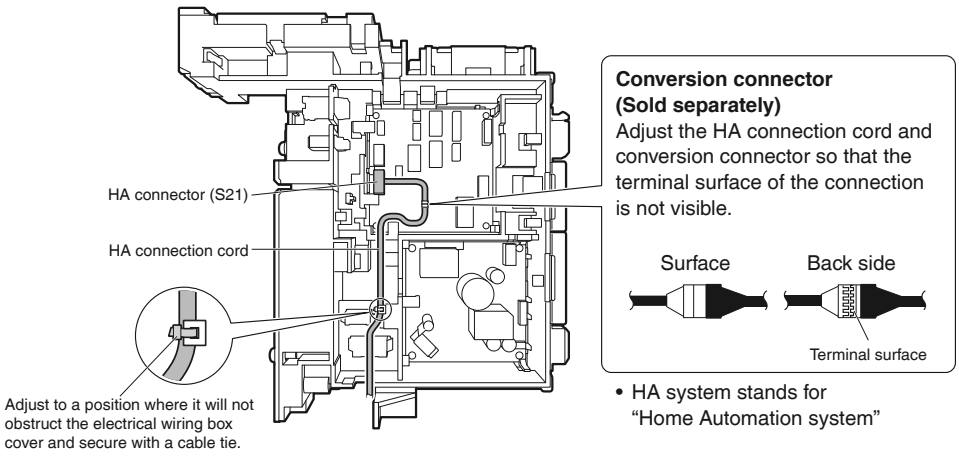
## 1. When connecting to an HA system

**For this procedure, accessories which are sold separately are needed. (wired remote controller, central remote controller, etc.)**

- **Removal method for metal plate electrical wiring box cover**
  1) Remove the front panel and front grille.
     (Refer to the removal method on page 8.)
  2) Remove the service lid.
     (Refer to the removal method on page 14.)
  3) Remove the screw and pull the tab on the metal plate electrical wiring box cover.
  4) Remove the 2 hooks and dismount the metal plate electrical wiring box cover.




- **Attachment methods of connection cord**
  1) Attach the S21 conversion connector to the HA connector (S21).
  2) Attach the connection cord to the S21 conversion connector.
  3) Pull the harness out through the notched part in the figure.




• HA system stands for "Home Automation system"

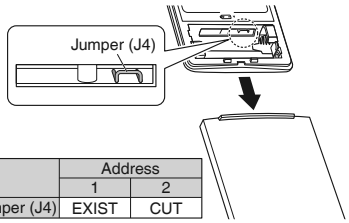
  4) Secure the HA connection cord with a cable tie (field supplied) to prevent external forces being applied directly to the HA connector.

- **Attachment method for metal plate electrical wiring box cover**
  1) Attach the metal plate electrical wiring box cover to the 2 hooks and fasten it with screw.
  2) Attach the service lid.
     (Refer to the installation method on page 15.)
  3) Install the front grille and front panel.
     (Refer to the installation method on page 8.)

## 2. How to set the different addresses

When 2 indoor units are installed in one room, the 2 wireless remote controllers can be set for different addresses. Change the address setting of one of the 2 units. When cutting the jumper, be careful not to damage any of the surrounding parts.

1) Remove the battery cover on the remote controller and cut the address jumper (J4).



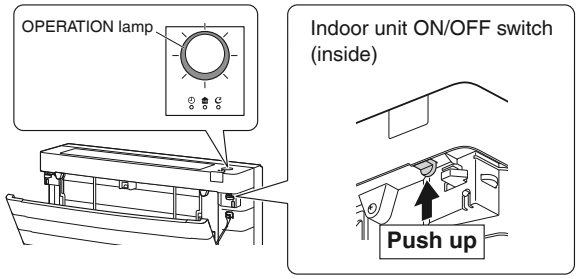

| | Address | |
|---|---|---|
| | 1 | 2 |
| Jumper (J4) | EXIST | CUT |

2) Press Temp ▲ / Temp ▼ and Mode at the same time.

3) Press Temp ▲, select A, press Mode.
(The indoor unit OPERATION lamp will blink for about 1 minute.)

4) Press the indoor unit ON/OFF switch while the OPERATION lamp is blinking.

- If setting could not be carried out completely while the OPERATION lamp was blinking, carry out the setting process once again from the beginning.
- After setting is complete, pressing Cancel will cause the remote controller to return to the previous display.




## 3. Pump down operation

**In order to protect the environment, be sure to pump down when relocating or disposing of the unit.**
**For instructions on how to pump down, refer to the installation manual for the outdoor unit to be connected.**

### Forced cooling operation

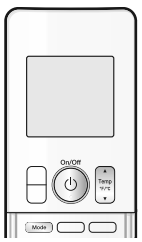
**For pair connections**

**■Using the indoor unit ON/OFF switch**

Press the indoor unit ON/OFF switch for at least 5 seconds. (The operation will start.)

- Forced cooling operation will stop automatically after about 15 minutes.
  To stop the operation, press the indoor unit ON/OFF switch.

**■Using the indoor unit's remote controller**




1) Press Temp ▲ / Temp ▼ and Mode at the same time.
2) Press Temp ▲, then select 17, press Mode.
3) Press Mode and select the COOL operation.
4) Press On/Off to turn on the system.

- Forced cooling operation will stop automatically after about 30 minutes.
  To stop the operation, press On/Off.

**For multi connections**

For instructions on how to perform forced cooling operation, refer to the installation manual for the outdoor unit.

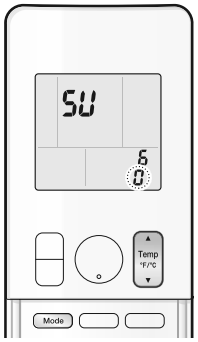
# Installation Tips

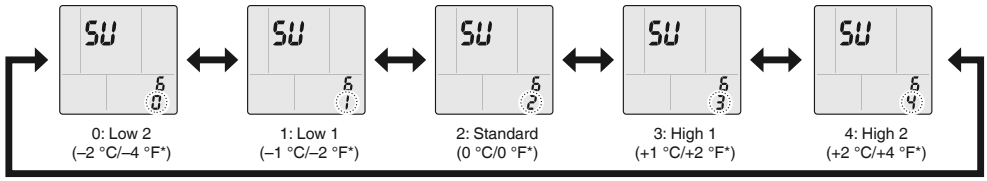
## 4. Room temperature adjustment

Adjustment of indoor temperature thermistor in cooling/heating operation.
Used for adjustment of room temperature control.

**■Cooling**

1) Press Temp, Temp and Mode at the same time.
2) Press Temp, select SU, and press Mode for confirmation.
3) Press Temp, select 6, and press Mode for confirmation.
4) Press Temp, select the setting values, and press Mode for confirmation.



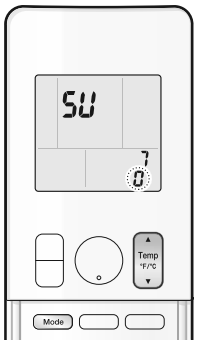



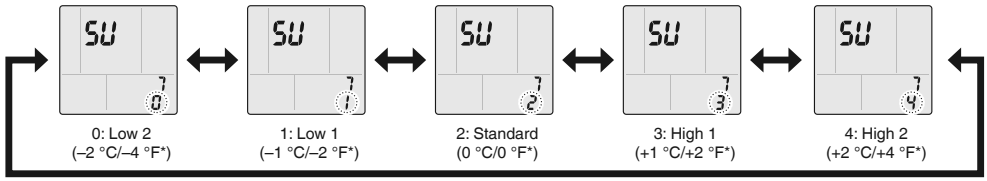

0: Low 2 (–2 °C/–4 °F*) | 1: Low 1 (–1 °C/–2 °F*) | 2: Standard (0 °C/0 °F*) | 3: High 1 (+1 °C/+2 °F*) | 4: High 2 (+2 °C/+4 °F*)

* Fahrenheit values are for reference only and actual temperature changes may deviate from them.

**■Heating**

1) Press Temp, Temp and Mode at the same time.
2) Press Temp, select SU, and press Mode for confirmation.
3) Press Temp, select 7, and press Mode for confirmation.
4) Press Temp, select the setting values, and press Mode for confirmation.




0: Low 2 (–2 °C/–4 °F*) | 1: Low 1 (–1 °C/–2 °F*) | 2: Standard (0 °C/0 °F*) | 3: High 1 (+1 °C/+2 °F*) | 4: High 2 (+2 °C/+4 °F*)

* Fahrenheit values are for reference only and actual temperature changes may deviate from them.

After setting is complete, pressing Cancel twice will cause the remote controller to return to the previous display.

**NOTE**
To display the room temperature detected by the unit, it is necessary to connect the optional wired remote controller (BRC073A6) and S21 conversion connector (KER087A41).

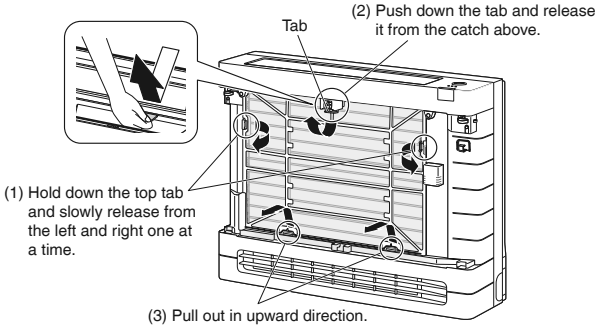
# Trial Operation and Testing

## 1. Attaching the titanium apatite deodorizing filter

Remove any packaging tape attached to the front panel and air filter.

### 1-1. Open the front panel and remove the air filter.

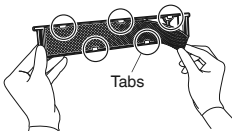
- Release from the catches on the left and right.



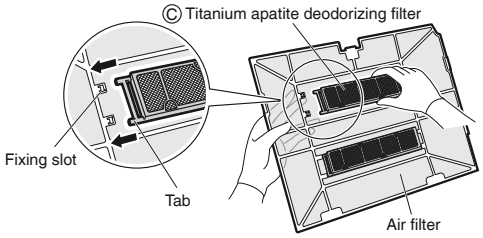

### 1-2. Attach the Ⓒ titanium apatite deodorizing filter.

- Attach the titanium apatite deodorizing filter to the filter frame.
- Insert the juts (4 places) on the filter frame into the fixing slots (4 places) on the underside of the air filter.

Wear gloves when working.
(Your hands may get dirty with particles from the titanium apatite deodorizing filter.)

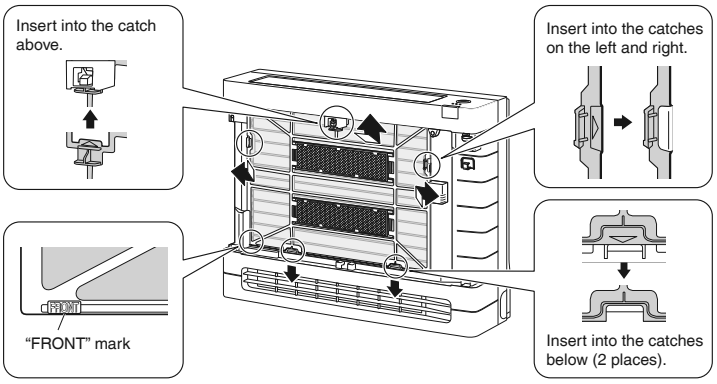



- When attaching the filter, check that the filter is properly set in the tabs.




### 1-3. Attach the air filter and front panel.

- Insert the air filter with the “FRONT” mark facing you.
- Insert the tabs (2 at the bottom, and 1 at the left, right and top) using the △ mark as a guide.



# Trial Operation and Testing

## 2. Trial operation and testing

- Trial operation should be carried out in either COOL or HEAT operation.

**2-1. Measure the supply voltage and make sure that it is within the specified range.**

**2-2. In COOL operation, select the lowest programmable temperature; in HEAT operation, select the highest programmable temperature.**

**2-3. Carry out the trial operation following the instructions in the operation manual to ensure that all functions and parts, such as the movement of the louvers, are working properly.**

- To protect the air conditioner, restart operation is disabled for 3 minutes after the system has been turned off.

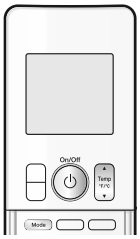
**2-4. After trial operation is complete, set the temperature to a normal level (78 °F to 82 °F (26.0 °C to 28.0 °C) in COOL operation, 68 °F to 75 °F (20.0 °C to 24.0 °C) in HEAT operation).**

- When operating the air conditioner in COOL operation in winter, or HEAT operation in summer, set it to the trial operation mode using the following method.

1) Press Temp °F/°C , Temp °F/°C and Mode at the same time.

2) Press Temp °F/°C , select "ﾃｽﾄ", and press Mode for confirmation.

3) Press On/Off to turn on the system.




- Trial operation will stop automatically after about 30 minutes.

  To stop the operation, press On/Off.

- Some of the functions cannot be used in the trial operation mode.

- If the circuit breaker trips to shut off the power to the air conditioner, the system will restore the original operation mode when the circuit breaker is opened again.

**If the LED flashes and the fan of the indoor unit turns by itself when the unit is off, the refrigerant sensor is operating.**

- **If long beeps are heard.**
  **There is a possibility of refrigerant leakage. Ventilate the room, do not switch off the circuit breaker and contact your dealer.**
- **If there are no beeps.**
  **Refrigerant leak detection is in progress.**
  **If the flashing does not stop after 10 minutes or more, there may be a refrigerant leak.**
  **Do not switch off the circuit breaker and contact your dealer.**
  **In addition to refrigerants, insecticides, hairspray etc., can also cause the refrigerant sensor to generate a false alarm.**

# 3. Test items

| Test items | Symptom | Check |
|---|---|---|
| Indoor and outdoor units are installed securely. | Fall, vibration, noise | |
| The titanium apatite deodorizing filter is properly attached to the air filter. | Unusual noise, condensation | |
| The air filter is properly attached. | Unusual noise, condensation | |
| No refrigerant gas leaks. | Incomplete cooling/heating function | |
| Refrigerant gas and liquid pipes, and indoor drain hose extension are thermally insulated. | Water leakage | |
| Draining line is properly installed. | Water leakage | |
| System is properly grounded. | Electrical leakage | |
| Only specified wires are used for all wiring, and all wires are connected correctly. | Unit not operating or burn damage | |
| Indoor and outdoor unit air inlets and air outlets are unobstructed. | Incomplete cooling/heating function | |
| Stop valves are opened. | Incomplete cooling/heating function | |
| Indoor unit properly receives remote controller commands. | Unit not operating | |
| Pipes and wires are connected to the corresponding terminal blocks/ connection ports for the connected unit. | Not cooling/heating | |
| Explain to the user that when using a smartphone for operation, it is necessary to prepare a repeater, or similar device, if the signal from the wireless LAN router is weak near the air conditioner. | Air conditioner not responding to smartphone | |
| The setting for restriction on upward airflow is configured correctly. (Applicable to concealed installations, etc.) Explained to the customer that while the restriction on upward airflow is enabled, airflow direction cannot be changed and auto swing cannot be used. | Failure to cool/warm, condensation on the house structure, etc. | |
| Address settings are correct. (If installing 2 indoor units in the same room.) | Unit not operating | |
| All through-holes are completely sealed with putty. | Failure to detect refrigerant leakages, ingress of insects etc. | |
| All packaging tape attached to the front panel and air filter has been removed. | Unusual noise | |

## 1.5 CMXV12/18/24

DAIKIN

INSTALLATION INSTRUCTIONS

# CMXV**AVJU* (MULTI-SPLIT AIR HANDLERS)

**WARNING**

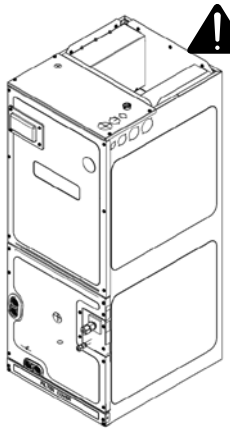
ONLY PERSONNEL THAT HAVE BEEN TRAINED TO INSTALL, ADJUST, SERVICE, MAINTENANCE OR REPAIR (HEREINAFTER, "SERVICE") THE EQUIPMENT SPECIFIED IN THIS MANUAL SHOULD SERVICE THE EQUIPMENT.

THIS EQUIPMENT IS NOT INTENDED FOR USE BY PERSONS (INCLUDING CHILDREN) WITH REDUCED PHYSICAL, SENSORY OR MENTAL CAPACITIES, OR LACK OF EXPERIENCE AND KNOWLEDGE, UNLESS THEY HAVE BEEN GIVEN SUPERVISION OR INSTRUCTION CONCERNING USE OF THE APPLIANCE BY A PERSON RESPONSIBLE FOR THEIR SAFETY. CHILDREN SHOULD BE SUPERVISED TO ENSURE THAT THEY DO NOT PLAY WITH THE EQUIPMENT.

THE MANUFACTURER WILL NOT BE RESPONSIBLE FOR ANY INJURY OR PROPERTY DAMAGE ARISING FROM IMPROPER SUPERVISION, SERVICE OR SERVICE PROCEDURES. IF YOU SERVICE THIS UNIT, YOU ASSUME RESPONSIBILITY FOR ANY INJURY OR PROPERTY DAMAGE WHICH MAY RESULT. IN ADDITION, IN JURISDICTIONS THAT REQUIRE ONE OR MORE LICENSES TO SERVICE THE EQUIPMENT SPECIFIED IN THIS MANUAL, ONLY LICENSED PERSONNEL SHOULD SERVICE THE EQUIPMENT. IMPROPER SUPERVISION, INSTALLATION, ADJUSTMENT, SERVICING, MAINTENANCE OR REPAIR OF THE EQUIPMENT SPECIFIED IN THIS MANUAL, OR ATTEMPTING TO INSTALL, ADJUST, SERVICE OR REPAIR THE EQUIPMENT SPECIFIED IN THIS MANUAL WITHOUT PROPER SUPERVISION OR TRAINING MAY RESULT IN PRODUCT DAMAGE, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

**WARNING**

DO NOT BYPASS SAFETY DEVICES.



**RECOGNIZE THIS SYMBOL AS A SAFETY PRECAUTION.**

**NOTE**

**Specifications and performance data listed herein are subject to change without notice.**
**This equipment is only approved for use with R-32 Refrigerant.**

**NOTE**

**The installer must refer to section "refrigerant detection system (RDS)" for the minimum air conditioned room area and total system refrigerant charge which must be recorded on the serial plate.**

***QUEBEC DISCLOSURE REGARDING AVAILABILITY OF REPLACEMENT PARTS, REPAIR SERVICES AND INFORMATION FOR MAINTENANCE AND REPAIR: Daikin Comfort Technologies Manufacturing, Inc. (Daikin) does not guarantee the availability of (1) replacement parts; (2) repair services; and (3) information necessary to maintain or repair products, within the meaning of section 39.1 of the Consumer Protection Act, CQLR, c P-40.1 and section 79.18 of the Regulation respecting the application of the Consumer Protection Act, CQLR, c P-40.1, r. 3.***

***AVIS POUR LE QUÉBEC CONCERNANT LA DISPONIBILITÉ DES PIÈCES DE RECHANGE, DES SERVICES DE RÉPARATION ET DES RENSEIGNEMENTS POUR L'ENTRETIEN ET LA RÉPARATION : Daikin Comfort Technologies Manufacturing, Inc. (Daikin) ne garantit pas la disponibilité (1) des pièces de rechange, (2) des services de réparation et (3) des renseignements pour l'entretien et la réparation, au sens de l'article 39.1 de la Loi sur la protection du consommateur, RLRQ c P-40.1 et de l'article 79.18 du Règlement d'application de la Loi sur la protection du consommateur, RLRQ c P-40.1, r 3.***


***1 Important Safety Instructions ..... 2***
***2 Shipping Inspection ..... 3***
*2.1 Parts ..... 3*
*2.2 Handling ..... 3*
***3 Codes & Regulations ..... 3***
***4 Replacement Parts ..... 4***
***5 Pre-Installation Considerations ..... 4***
*5.1 Preparation ..... 4*
*5.2 System Matches ..... 4*
*5.3 Interconnecting Tubing ..... 4*
*5.4 Clearances ..... 4*
*5.5 Horizontal Applications ..... 4*
***6 Installation Location ..... 4***
*6.1 Upflow Installation ..... 5*
*6.2 Horizontal Left Installation ..... 5*
*6.2.1 Instructions To Relocate A2L Sensor Bracket Assembly From Upflow to Horizontal Left ..... 5*
*6.3 Downflow/Horizontal Right Installation ..... 5*
*6.3.1 Instructions to Relocate A2L Sensor Bracket Assembly From Downflow to Horizontal Right ..... 9*
***7 Refrigerant Lines ..... 10***
*7.1 Tubing Size ..... 10*
*7.2 Tubing Preparation ..... 10*
*7.3 Tubing Connections ..... 10*
*7.3.1 Flaring the Pipe End ..... 10*
*7.3.2 Refrigerant Piping ..... 10*
*7.4 Selection of Copper and Heat Insulation Materials ..... 11*
*7.5 Other Pipework Considerations ..... 11*


IOD-4065B
12/2025

Our continuing commitment to quality products may mean a change in specifications without notice.
© 2025 Daikin Comfort Technologies Manufacturing, Inc.
19001 Kermier Rd., Waller, TX 77484
www.daikincomfort.com

*7.6 Standing Pressure Test of Field Connections* ..... *11*
*7.7 Procedure for Breaking into Refrigerant Circuit* ..... *11*
***8 Condensate Drain Lines*** ..... ***12***
***9 Ductwork*** ..... ***12***
*9.1 Return Ductwork* ..... *13*
***10 Return Air Filters*** ..... ***13***
***11 Electric Heat*** ..... ***13***
***12 Electrical and Control Wiring*** ..... ***14***
*12.1 Building Electrical Service Inspection* ..... *14*
*12.2 Wire Sizing* ..... *14*
*12.3 Maximum Overcurrent Protection (MOP)* ..... *14*
*12.4 Electrical Connections – Supply Voltage* ..... *14*
*12.4.1 Air Handler Only (Non-Heat Kit Models)* ..... *14*
*12.4.2 Air Handler - Non-Circuit Breaker Heat Kits* ..... *15*
*12.4.3 Air Handler With Circuit Breaker Heat Kit* ..... *16*
*12.5 General Instructions* ..... *15*
*12.6 Wiring Example* ..... *15*
*12.6.1 Specification for Field Wire* ..... *17*
*12.6.2 Wiring Connection Method* ..... *17*
*12.7 Low Voltage Connections* ..... *17*
*12.8 Leak Detection Output (Relay K6R)* ..... *17*
*12.8.1 Refrigerant Leak Test* ..... *17*
*12.8.2 Refrigerant Leak Test through Indoor PCB* ..... *18*
*12.9 Wiring for Daikin One Thermostat* ..... *18*
***13 Achieving 1.4% & 2% Low Leakage Rate*** ..... ***18***
***14 Refrigeration Detection System (RDS)*** ..... ***18***
*14.1 Altitude Adjustment Factor* ..... *20*
***15 Miscellaneous Start-Up Checklist*** ..... ***20***
*15.1 Auxiliary Alarm Switch* ..... *21*
*15.2 Accessory Contacts (Humidifier Relay)* ..... *21*
***16 Setting*** ..... ***22***
*16.1 Heater Kit Selection* ..... *22*
*16.2 Accessory Contacts* ..... *22*
*16.3 Error Priority Setting* ..... *22*
***17 Troubleshooting*** ..... ***22***
*17.1 Electrostatic Discharge (ESD) Precautions* ..... *22*
*17.2 Diagnostic Chart* ..... *22*
***Troubleshooting*** ..... ***23***
***Diagnostic Codes*** ..... ***26***
***Wiring Diagram*** ..... ***27***
***Routine Maintenance*** ..... ***28***
***Start-Up Checklist*** ..... ***30***

## 1 IMPORTANT SAFETY INSTRUCTIONS

The following symbols and labels are used throughout this manual to indicate immediate or potential safety hazards. It is the owner's and installer's responsibility to read and comply with all safety information and instructions accompanying these symbols. Failure to heed safety information increases the risk of personal injury, property damage, and/or product damage.

**NOTICE:** THIS PRODUCT CONTAINS ELECTRONIC COMPONENTS WHICH REQUIRE A DEFINITE GROUND. PROVISIONS ARE MADE FOR CONNECTION OF THE GROUND. A DEDICATED GROUND FROM THE MAIN POWER SUPPLY OR AN EARTH GROUND MUST BE PROVIDED.

**WARNING**

**HIGH VOLTAGE**
**Disconnect all power before servicing or installing this unit. Multiple power source may be present. Failure to do so may cause property damage, personal injury or death.**



**WARNING**

**To prevent the risk of property damage, personal injury, or death, do not store combustible materials or use gasoline or other flammable liquids or vapors in the vicinity of this unit.**

**WARNING**

**To avoid property damage, personal injury or death due to electrical shock, this unit MUST have an uninterrupted, unbroken electrical ground. The electrical ground circuit may consist of an appropriately sized electrical wire connecting the ground lug in the unit control box to the building electrical service panel.**
**Other methods of grounding are permitted if performed in accordance with the National Electric Code (NEC)/American National Standards Institute (ANSI)/National Fire Protection Association (NFPA) 70 and local/state codes. In Canada, electrical grounding is to be in accordance with the Canadian Electric Code (CSA) C22.1.**

**CAUTION**

**When installing or servicing this equipment, safety clothing, including hand and eye protection, is strongly recommended. If installing in an area that has special safety requirements (hard hats, etc.), observe these requirements.**

**WARNING**

**This product is factory-shipped for use with 208V/230V/1PH/60Hz electrical power supply. DO NOT reconfigure this CMXV air handler to operate with any other power supply.**

**WARNING**

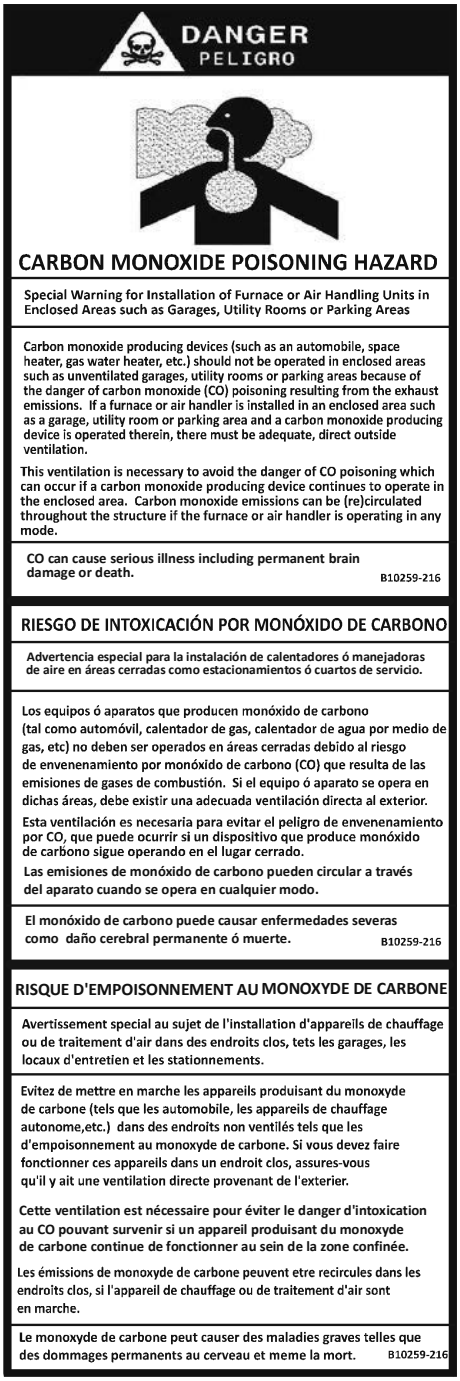
**A refrigerant leak detection system is installed. The unit must be powered on all times except for service.**

**WARNING**

**Do not connect to or use any device that is not listed in the applicable product specifications as acceptable for use with this unit. Serious property damage, personal injury, reduced unit performance and/or hazardous conditions may result from the use of such non-approved devices.**

**WARNING**

**Failure to properly reconnect sensor wires may result in Error codes and the unit not operating.**




## 2 SHIPPING INSPECTION

Always transport the unit upright; laying the unit on its side or top during transit may cause equipment damage. The installer should inspect the product upon receipt for shipping damage and subsequent investigation is the responsibility of the carrier. The installer must verify the model number, specifications, electrical characteristics, and accessories are correct prior to installation. The distributor or manufacturer will not accept claims from dealers for transportation damage or installation of incorrectly shipped units.

### *2.1 Parts*

Inspect the unit to verify all required components are present and intact. Report any missing components immediately to Daikin or to the distributor. Use only factory authorized replacement parts (see Section 4). Make sure to include the full product model number and serial number when reporting and/or obtaining service parts.

### *2.2 Handling*

Use caution when transporting/carrying the unit. Do not move unit using shipping straps. Do not carry unit with hooks or sharp objects. The preferred method of carrying the unit after arrival at the job site is to carry via a two-wheel hand truck from the back or sides or via hand by carrying at the cabinet corners. If carrying by hand, carry at the cabinet corners with two people. Avoid holding the unit by piping or mechanical joints.

**WARNING**

**If any hot work is to be conducted on the refrigerating equipment or any associated parts, appropriate fire extinguishing equipment shall be available on hand. Have a dry powder or CO2 fire extinguisher adjacent to the hot work area.**

**Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferable expel it externally into the atmosphere.**

## 3 CODES & REGULATIONS

This product is designed and manufactured to comply with national codes such as UL60335 2-40, ASHRAE 15, ASHRAE 15.2, IAPMO Uniform Mechanical Code, ICC International Mechanical Code or CSA B52. Installation in accordance with such codes and/or prevailing local codes/regulations is the responsibility of the installer. The manufacturer assumes no responsibility for equipment installed in violation of any codes or regulations.

**The United States Environmental Protection Agency (EPA) has issued various regulations regarding the introduction and disposal of refrigerants. Failure to follow these regulations may harm the environment and can lead to the imposition of substantial fines.** Should you have any questions please contact the local office of the EPA and/or refer to EPA's website www.epa.gov.

## 4 REPLACEMENT PARTS

When reporting shortages or damages, or ordering repair parts, give the complete product model and serial numbers as stamped on the product. Replacement parts for this product are available through your contractor or local distributor.

## 5 PRE-INSTALLATION CONSIDERATIONS

### *5.1 Preparation*

Keep this document with the unit. Carefully read all instructions for the installation prior to installing product. Make sure each step or procedure is understood and any special considerations are taken into account before starting installation. Assemble all tools, hardware and supplies needed to complete the installation. Some items may need to be purchased locally. Make sure everything needed to install the product is on hand before starting.

### *5.2 System Matches*

**WARNING**

**Partial units shall only be connected to an appliance suitable for the same refrigerant. This unit is a PARTIAL UNIT AIR CONDITIONER, complying with PARTIAL UNIT requirements of this International Standard, and must only be connected to other units that have been confirmed as complying to corresponding PARTIAL UNIT requirements of this International Standard.**

The entire system (combination of indoor and outdoor sections) must be manufacturer approved and Air-Conditioning, Heating, and Refrigeration Institute (AHRI) listed.

**NOTE:** Installation of unmatched systems is not permitted. Damage or repairs due to installation of unmatched systems is not covered under the warranty.

### *5.3 Interconnecting Tubing*

Give special consideration to minimize the length of refrigerant tubing when installing CMXV air handlers. Refer to outdoor Multi-split Type Air Conditioners for line set configuration guidelines. If possible, allow adequate length of tubing such that the coil may be removed (for inspection or cleaning services) from the cabinet without disconnecting the tubing.

### *5.4 Clearances*

**WARNING**

**When installed in a room with an area less than that outlined in table 12, that room shall be without continuously operating open flames (for example an operating gas appliance) or other potential ignition sources (for example an operating electric heater, hot surfaces).**

**WARNING**

**Auxiliary devices which may be a potential ignition source are not to be installed in the duct work. Such potential-ignition sources include hot surfaces with a temperature exceeding 650°C and electric switching devices. For example electronic air filters are a potential ignition source.**

The unit clearance from a combustible surface may be 0”. However, service clearance must take precedence. A minimum of 24” in front of the unit for service clearance is required. Additional clearance on one side or top will be required for electrical wiring connections. Consult all appropriate regulatory codes prior to determining final clearances. When installing this unit in an area that may become wet (such as crawl spaces), elevate the unit with a sturdy, non-porous material. In installations that may lead to physical damage (i.e. a garage) it is advised to install a protective barrier to prevent such damage. Always install units such that a positive slope in condensate line (1/4” per foot) is allowed.
Further, any joints made in the installation between parts of the refrigerating system must be accessible for maintenance purposes.

### *5.5 Horizontal Applications*

If installed above a finished living space a secondary drain pan with float switch, as required by many building codes, must be installed under the entire unit and its condensate drain line must be routed to a location such that the user will see the condensate discharge.

## 6 INSTALLATION LOCATION

**NOTE: These air handlers are designed for indoor installation only at a max altitude of 10,500 feet above sea level or a min altitude of -184 feet below sea level**
If the unit is located in an unconditioned area with high ambient temperature and/or high humidity, the CMXV air handler may be subject to nuisance sweating of the casing. On these installations, a wrap of 2” fiberglass insulation with a vapor barrier is recommended. Do not cover warning labels or serial plate.

Maximum operating pressure is considered when connecting to any condenser unit or evaporator unit.

The CMXV* Series Air Handler product line may be installed in one of the upflow, downflow, horizontal left or horizontal right orientations as shown in Figures 2, 3, 5 and 6. The unit may be installed in upflow or horizontal left orientation as shipped (refer to specific sections for more information).

Minor field modifications are necessary to convert to downflow or horizontal right as indicated in below sections. For CMXV* installations in areas where the return air environment sees humidity levels above 65% relative humidity, a High Humidity Kit (HHK) must be used. See Table 2 for Model and Kit assignment.

Before disconnecting the tubing panel from the unit, the insulation seals around the liquid and suction tubes need to be removed. When reattaching tubing panel, ensure that the seal, both liquid and gas piping, is replaced by the insulation provided in the literature kit to maintain system performance and prevent condensation.

### *6.1 Upflow Installation*

No field modifications are mandatory however to obtain maximum efficiency, the horizontal drip shield and, side drain pan, can be removed.

### *6.2 Horizontal Left Installation*

***No field modifications are permissible for this application.***

Drain port labeled (B) in Figure 4 is the primary drain for this application and condensate drain line must be attached to this drain port. Drain port (b) is for the secondary drain line (if used).

In applications where the CMXV air handler is installed in the horizontal left or right position, and the return air environment see humidity levels above 65% relative humidity coupled with total external static levels above 0.5" e.s.p., a Condensate Management Kit (CMK) is available for field application. Kit nomenclature can be found in the Table 2.

| DRAIN PORT PLUG | | |
|---|---|---|
| **Kit Number** | **Description** | **Application** |
| DPK1 | Side Drain Port Plug | All Models |

**Table 1**

#### *6.2.1 Instructions To Relocate A2L Sensor Bracket Assembly From Upflow To Horizontal Left*

1. Take off the coil access panel
2. Take off the drain port gaskets from Figure 4, drain port labeled (A) and (B) on main drain pan and side drain pan
3. Take off the A2L sensor bracket assembly as shown in Figure 4
4. Put A2L sensor bracket assembly to the side drain port correctly as shown in the Figure 5. The "FRONT 0121A*****" print on sensor bracket should be in the front
5. Place gaskets back to the drain ports correctly. The "FRONT" print on the gaskets should be in the front.
6. Sensor wiring should be routed as shown in Figure 5.
7. Reassemble the blower access panel to the unit.

### *6.3 Downflow/Horizontal Right Installation*

**IMPORTANT NOTE:** In the downflow application, to prevent coil pan "sweating", the mandatory downflow kit (DFK) is available through your local Daikin distributor. The DFK is not supplied with the CMXV air handler and is required to minimize pan sweating on all downflow installations. See Table 2 for the correct DFK and follow the instructions provided for installation.

**NOTE:** For CMXV* only: If installing a filter, an external filter must be used when installing the unit in Horizontal Right (Figure 6), or if the side drain pan is not removed for downflow application. A filter will not fit on the internal filter rails in these applications.

Refer to Figure 7 and 8 for the location of the components referenced in the following steps.

1. Before flipping the CMXV air handler, remove blower access panel and coil access panel. The coil access panel and tubing panel may remain screwed together during this procedure. Remove and retain the seven (7) screws securing the coil access panel to the cabinet and the six (6) screws securing the blower access panel to the cabinet.
2. Before removing the coil, Cut Wire Tie 1, 2 shown in Figure 3 and disconnect sensor wires (Thermistor Wire Harness, A2L Sensor Wire Harness, and Pressure sensor Wire Harness) from wire harnesses connectors connected to PCB and secure. Unbundled the wires by cutting Wire Tie.
   **NOTE:** Do not use manifolds, copper lines or the flowrator to pull the coil assembly out. Failure to do so may result in braze joint damage and leaks.
3. Remove tubing panel assy from the unit. Slide the coil assembly out using the bottom drain pan to pull the assembly from the cabinet.
4. Using the bottom drain pan to hold the coil assembly, slide the coil assembly back into the cabinet on the downflow brackets as shown in Figure 12.
5. Reroute the wire harnesses shown in Figure 3 (Downflow) and Figure 6 (Horizontal Right), secure with wire tie 1 and 2 shown in Figure 3, connect sensor wires (Thermistor Wire Harness, A2L Sensor Wire Harness, and Pressure sensor Wire Harness) with wire harnesses connectors connected to PCB and secure bundled wires after the installation with a Wire Tie according to the requirement of the wire lengths.
6. Re-install the access panels removed in Step 1 as shown in Figure 14. When reattaching tubing panel, ensure that the seal, both liquid and gas piping, is replaced by the insulation provided in the literature kit to maintain system performance and prevent condensation.
7. As shown in Figure 11, two drain ports located at the bottom drain pan (horizontally oriented) are to be used for upflow and downflow applications and the two on the side drain pan (vertically oriented) are to be used when the unit is in horizontal right or left configuration. When the unit is in upflow or downflow configuration, the drain ports located on bottom drain pan must be plugged and vice versa. Drain ports located at lower elevation (closer to the ground) in either configuration must be connected to the main drain line and the higher is for the secondary drain line.

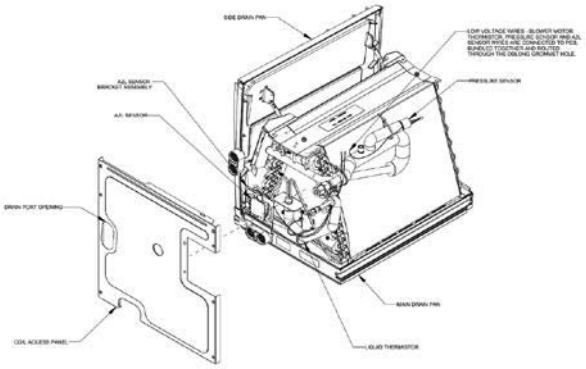



Figure 1

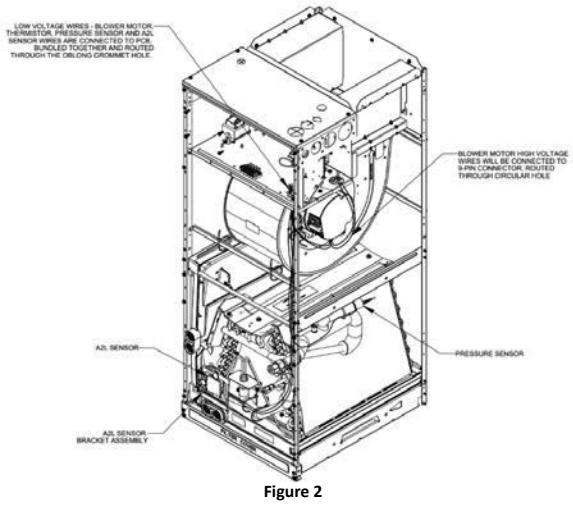



Figure 2

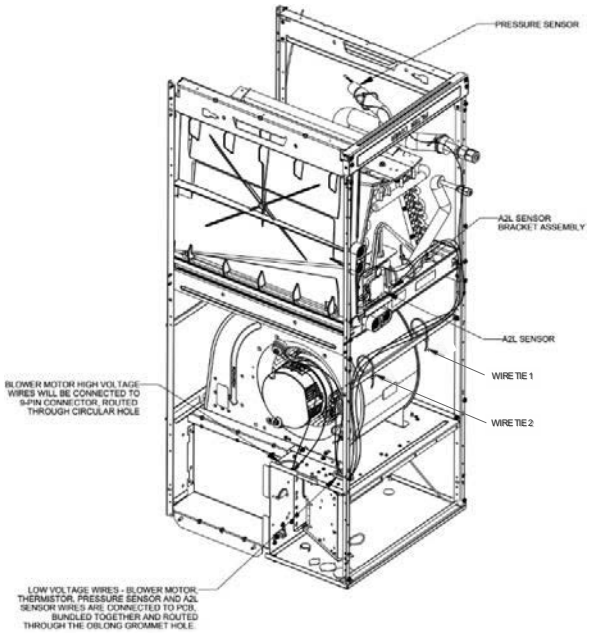



Figure 3

| | High Humidity Kit | Condensate Kit | Downflow Kit |
|---|---|---|---|
| CMXV12AVJUA | HHK0001 | CMK0015 | DFKE-02 |
| CMXV18AVJUA | HHK0001 | CMK0015 | DFKE-02 |
| CMXV24AVJUA | HHK0001 | CMK0015 | DFKE-02 |

Table 2 - Condensate Management Kits

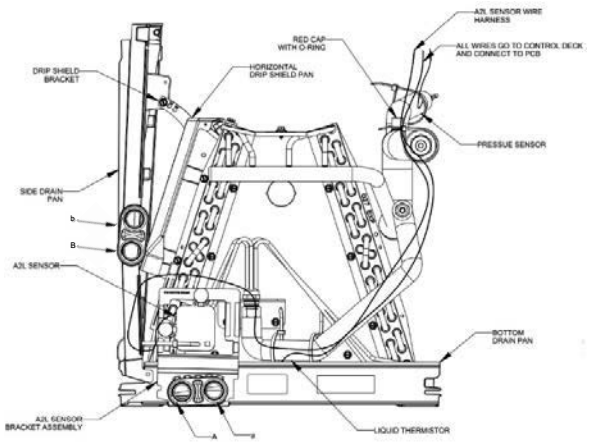



Figure 4

**NOTE:** If removing only the coil access panel from the unit, the filter access panel must be removed first. Failure to do so may result in panel damage.

6

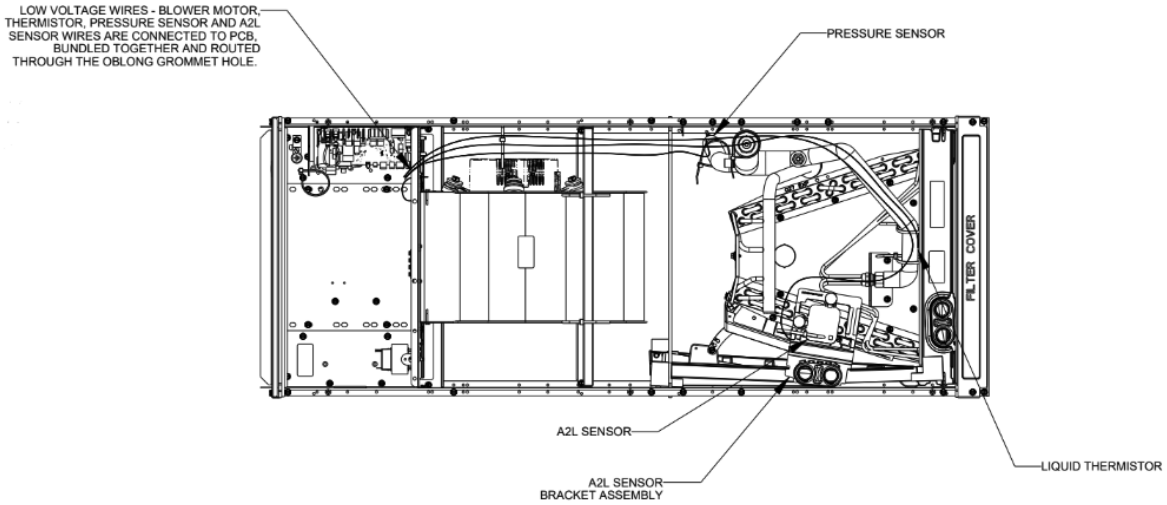



**Figure 5**

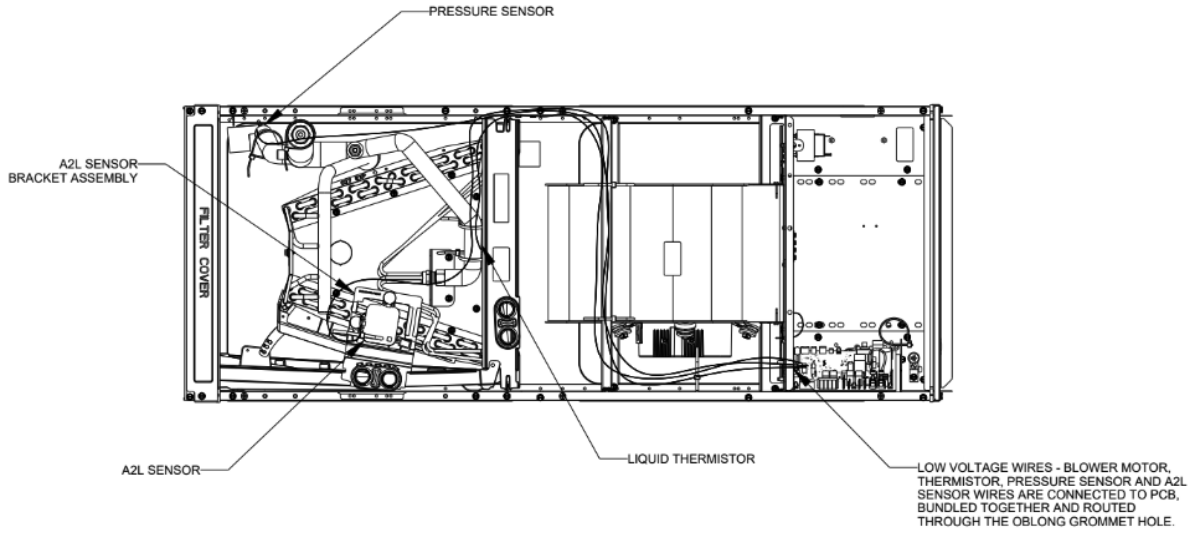



**Figure 6**

**NOTE:** If removing only the coil access panel from the unit, the filter access panel must be removed first. Failure to do so may result in panel damage.

7

**NOTE:** When installing the CMXV air handler in the horizontal right position in high temperature/high humidity conditions it is recommended to relocate the PCB 90 degrees and attach to blower deck or top plate if heat kit is installed. See instructions below to relocate the PCB.

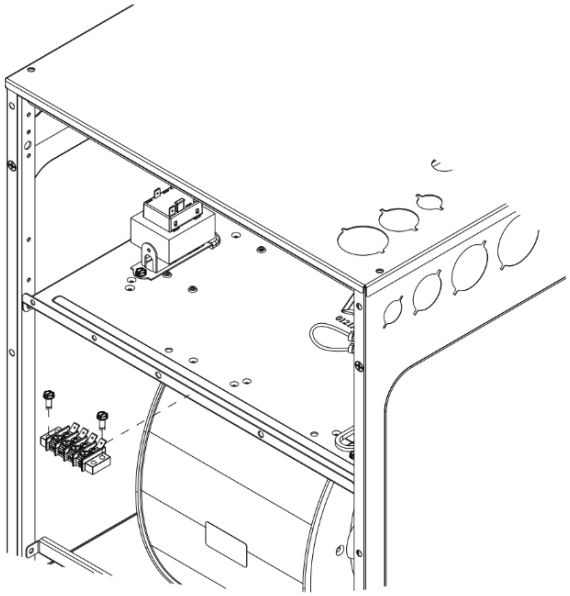


Figure 7

1. Remove the mounting screws on the side of the PCB and the screw on the bottom side attaching bracket to the blower deck. **NOTE:** Remove top plate for easier access to screw behind board.



Figure 8

2. Cut the wire tie to allow excess wire to rotate the PCB.



Figure 9

3. Rotate 90 degrees and attach to blower deck. Using two self-tapping screws.

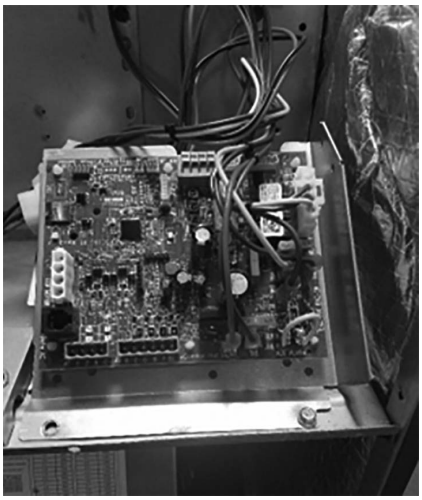


Figure 10

4. Bundle excess wire using wire tie.
5. Make sure to check all wiring connections are secure and tight.

**NOTE: Figures 8, 9 and 10 are from a representative model and not CMXV.**

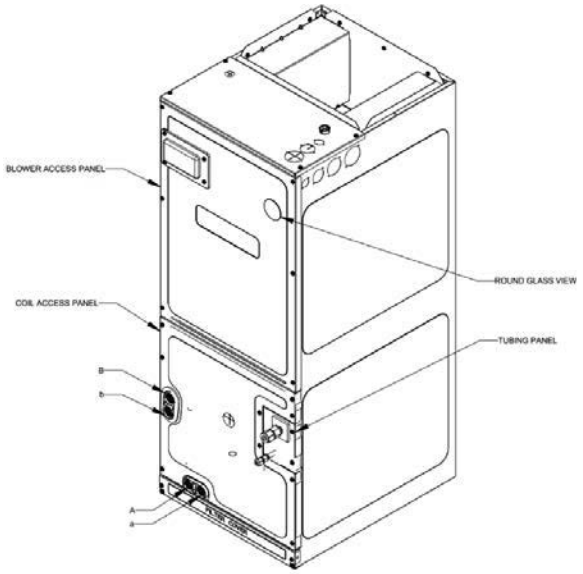



**Figure 11**

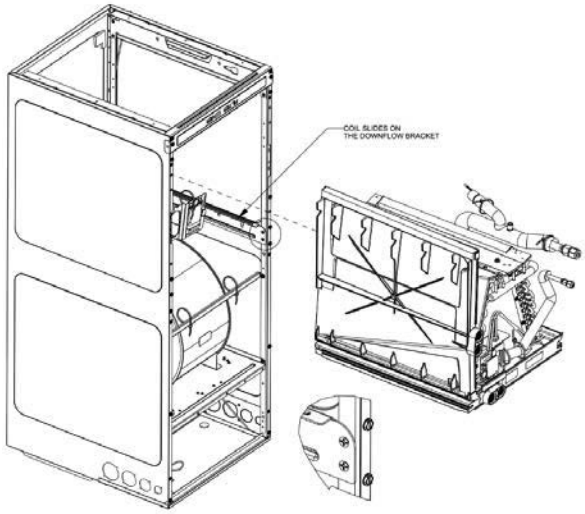
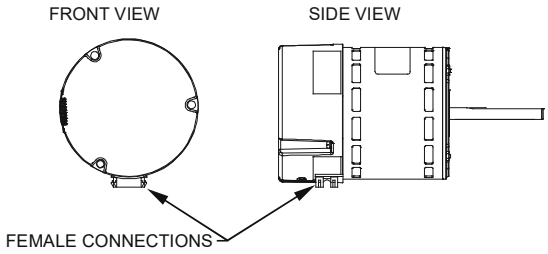



**Figure 12**

If the unit is in the upflow position, there is no need to rotate the motor. If the unit is in the downflow position, loosen motor mount and rotate motor as shown in the *Motor Orientation,* Figure 13. Be sure motor is oriented with the female connections on the casing down. If the motor is not oriented with the connections down, water could collect in the motor and may cause premature failure.




**Motor Orientation**
**Figure 13**

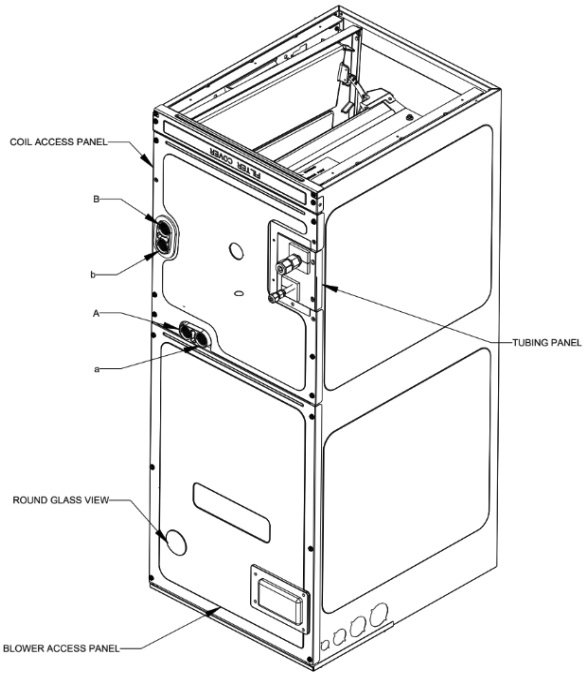



**Figure 14**

### *6.3.1 Instruction To Relocate A2L Sensor Bracket Assembly From Downflow To Horizontal Right*

1. Take off the coil access panel
2. Take off the drain port gaskets from Figure 4, drain port labeled (A) and (B) on main drain pan and side drain pan
3. Take off the A2L sensor bracket assembly as shown in Figure 4
4. Put A2L sensor bracket assembly to the side drain port correctly as shown in the figure 6. The “FRONT 0121A*****” print on sensor bracket should be in the front
5. Place gaskets back to the drain ports correctly. The “FRONT” print on the gaskets should be in the front.
6. Sensor wiring should be rerouted as shown in Figure 6.
7. Reassemble the blower access panel to the unit.

## 7 REFRIGERANT LINES

**NOTE:** Care should be taken to route refrigerant tubing in a way which allows adequate access for servicing and maintenance of the air handling unit.

**WARNING**

DO NOT USE MEANS TO ACCELERATE THE DEFROSTING PROCESS OR TO CLEAN, OTHER THAN THOSE RECOMMENDED BY THE MANUFACTURER.

THE APPLIANCE SHALL BE STORED IN A ROOM WITHOUT CONTINUOUSLY OPERATING IGNITION SOURCES (FOR EXAMPLE: OPEN FLAMES, AN OPERATING GAS APPLIANCE OR AN OPERATING ELECTRIC HEATER.) DO NO PIERCE OR BURN. BE AWARE THAT REFRIGERANTS MAY NOT CONTAIN AN ODOR.

**WARNING**

THIS PRODUCT IS FACTORY-SHIPPED WITH DRY NITROGEN MIXTURE GAS UNDER PRESSURE. USE APPROPRIATE SERVICE TOOLS AND FOLLOW THESE INSTRUCTIONS TO PREVENT INJURY.

### *7.1 Tubing Size*

For the correct tubing size, refer to the outdoor Multi-split type air conditioners.

| | Piping Side | Minimum Bend Radius | Piping Thickness | Thermal Insulation Size | Thermal Insulation Thickness |
|---|---|---|---|---|---|
| Gas Side | O.D. 1/2 inch (12.7mm) | 1-9/16 inch (40mm) or more | 0.031 inch (0.8 mm) (C1220T-O) | I.D 9/16-5/8 (14-16mm) | 13/32 inch (10mm)min. |
| | O.D. 5/8 inch (15.9mm | 1-15/16 inch (50mm) or more | 0.039 inch (1.0mm) (C1220T-O) | I.D 9/16-5/8 (16-20mm) | |
| Liquid Side | O.D. 1/4 inch (6.4mm) | 1-3/16 inch (30mm) or more | 0.031 inch (0.8mm) (C1220T-O) | I.D 5/16-13/32 (8-10mm) | |

**Table 3 - CMXV* Line Set Specs**

Consult outdoor spec sheet for maximum length lineset per unit and ensure that the absolute length lineset across all indoor units is not exceeded.

### *7.2 Tubing Preparation*

This unit is equipped with mechanical connection points at the Liquid and Suction tubes for splicing with the lineset.

**NOTE:** To prevent possible damage to the tubing joints, do not handle coil assembly with manifold or flowrator tubes. Always use clean gloves when handling coil assemblies.

### *7.3 Tubing Connections*

Refrigerant modulation for CMXV* models occurs at the EEV of the outdoor unit. Ensure that any inert gas left in the product is purged, and that the outdoor valve is closed before attempting to connect any tubing. Ensure that the flared joins are accessible for maintenance purposes.

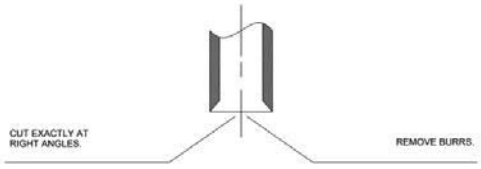
**WARNING**

DO NOT APPLY MINERAL OIL ON FLARED PART. PREVENT MINERAL OIL FROM GETTING INTO THE SYSTEM AS THIS WOULD REDUCE THE SERVICE LIFE OF THE UNITS. NEVER USE PIPING WHICH HAS BEEN USED FOR PREVIOUS INSTALLATIONS. ONLY USE PARTS WHICH ARE DELIVERED WITH THE UNIT. NEVER INSTALL A DRYER TO THIS R-32 UNIT IN ORDER TO GUARANTEE ITS SERVICE LIFE. THE FRYING MATERIAL MAY DISSOLVE AND DAMAGE THE SYSTEM. INCOMPLETE FLARING MAY RESULT IN REFRIGERANT GAS LEAKAGE.

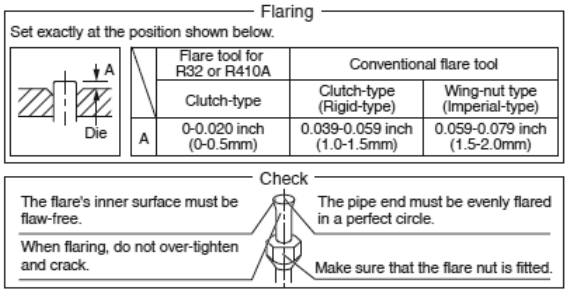
Before refrigerant piping work, check which type of refrigerant is used. Proper operation is not possible if the types of refrigerant are not the same.

#### *7.3.1 FLARING THE PIPE END*

1. Cut the pipe with a pipe cutter.
2. Remove burrs with the cut surface facing downward, so that the fillings do not enter the pipe.




3. Put the flare nut on the pipe.
4. Flare the pipe.
5. Check that the flaring has been done correctly.

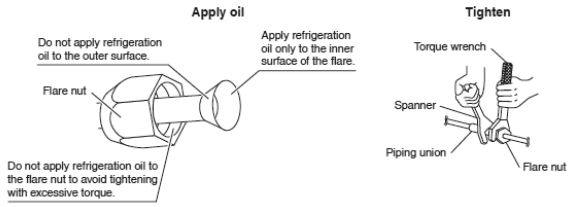



#### *7.3.2 Refrigerant Piping*

**CAUTION**

USE THE FLARE NUT FIXED TO THE MAIN UNIT. (THIS IS TO PREVENT THE FLARE NUT FROM CRACKING AS A RESULT OF DETERIORATION OVER TIME.) TO PREVENT GAS LEAKAGE, APPLY REFRIGERATION OIL ONLY TO THE INNER SURFACE OF THE FLARE. (USE REFRIGERATION OIL FOR R-32.) USE A TORQUE WRENCH WHEN TIGHTENING THE FLARE NUTS TO PREVENT DAMAGE TO THE FLARE NUTS AND GAS LEAKAGE. DO NOT HAVE OIL ADHERE TO THE SCREW FIXING PART OF RESIN PARTS. IF OIL ADHERES, IT MAY WEAKEN THE STRENGTH OF SCREWED PART.

- Align the centers of both flares and tighten the flare nuts 3 or 4 turns by hand, then tighten them fully with a spanner and a torque wrench.




**NOTE:** Use the same refrigerant oil type as specified for the outdoor unit compressor when connecting the refrigerant pipes. Refer to the outdoor unit specifications for details

| | Piping Size | Flare nut tightening torque |
|---|---|---|
| Gas Side | O.D. 1/2 inch (12.7mm) | 36-1/2 – 44-1/2 lbf * ft (49.5-60.3N*m) |
| | O.D. 5/8 inch (15.9mm) | 45.6 – 55.6 lbf * ft (61.8-75.4N*m) |
| Liquid Side | O.D. 1/4 inch (6.4mm) | 10-1/2 – 12-3/4 lbf * ft (14.2-17.2N*m) |

**Table 4 - Flare Nut Torque**

### *7.4 Selection of copper and heat insulation materials*

When using commercial copper pipes and fittings, observe the following:

- Insulation material: Polyethylene foam Heat transfer rate: 0.041 to 0.052W/mK (0.024 to 0.030Btu/fth°F (0.035 to 0.045kcal/mh°C)) Be sure to use insulation that is designed for use with HVAC Systems.
- Air conditioning and refrigeration (ACR) Copper pipe only.

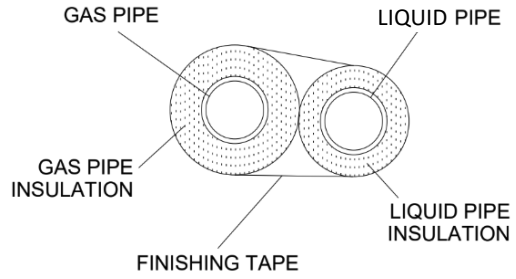



**Figure 15**

Execute thermal insulation work completely on both sides of the gas and the liquid piping. Otherwise, a water leakage can result sometimes.

For gas piping, use insulation material of which heat resistant temperate is not less than 230° F (110° C).

Also, in cases where the temperature and humidity of the refrigerant piping sections might exceed 86° F (30° C) or RH80%, reinforce the refrigerant insulation. (13/16 inch (20mm) or thicker) Condensation may form on the surface of the insulating material.

### *7.5 Other Pipework Considerations*

Installation of pipe-work must be kept to a minimum. Pipe-work including piping material, pipe routing and installation must be protected from physical damage and shall not be installed in an unventilated space. Equipment piping in any occupied space shall be installed in such a way to protect against accidental damage in operation and service. Precautions must be taken to avoid excessive vibration or pulsation to refrigeration piping. Protection devices, piping and fittings shall be protected as far as possible against adverse environmental effects, for example, the danger of water collecting and freezing in relief pipes or the accumulation of dirt and debris.

Follow standards related to ASHRAE 15, ASHRAE 15.2, IAPMO Uniform Mechanical Code, ICC International Mechanical Code or CSA B52 during any installation. Piping must be accessible for inspection prior to being covered or enclosed in compliance with national and local codes.

Flexible pipe elements must be protected against mechanical damage, excessive stress by torsion, or other forces. They should be checked for mechanical damage annually. The indoor equipment and pipes must be securely mounted and guarded such that accidental rupture of equipment cannot occur from such events as moving furniture or reconstruction activities. Field-made refrigerant joints indoors shall be tightness tested.

### *7.6 Standing Pressure Test of Field Connections*

Field pipework must be pressure tested with an inert gas and then vacuum tested prior to refrigerant charging according to the following requirements:

Pressurize the system to the maximum allowable pressure listed in the serial plate using dry nitrogen or dry helium. Allow the pressure to stabilize and hold for at least 15 minutes. The system is considered leak-free if the pressure does not drop below the selected maximum allowable pressure. If, after 15 minutes, the pressure drops, it implies a leak in the system. Proceed with identifying and sealing the leak and repeating the Standing Pressure Test. Proceed to system evacuation using the Deep Vacuum Method. Leak test the system using dry nitrogen or dry helium and soapy water to identify leaks. NO REFRIGERANT SHALL BE USED FOR PRESSURE TESTING TO DETECT LEAKS. Proceed to system evacuation using the Deep Vacuum Method.

Field-made refrigerant joints indoors shall be tightness tested. The test method shall have a sensitivity of 5 grams (0.176 oz) per year of refrigerant or better under a pressure of at least 0.25 times the maximum allowable pressure. No leak shall be detected.

### *7.7 Procedure for Breaking into Refrigerant Circuit*

Before breaking into the refrigerant circuit to make repairs – or for any other purpose – conventional procedures shall be used. Additionally, the following procedure shall be adhered to:

1. Remove refrigerant;
2. Purge the circuit with inert gas
3. Evacuate
4. Purge with inert gas
5. Continuously flush or purge with inert gas
6. Open the circuit by removing the flare nuts
7. The flare on the line set must be remade before reconnecting to the system

## 8 CONDENSATE DRAIN LINES

The coil drain pan has a primary and a secondary drain with ¾" NPT female connections. The connectors required are ¾" NPT male, either PVC or metal pipe, and should be hand tightened to a torque of no more than 37 in-lbs. to prevent damage to the drain pan connection. An insertion depth of approximately ⅜" to ½" (3-5 turns) should be expected at this torque.

1. Ensure drain pan hole is not obstructed.
2. To prevent potential sweating and dripping on to finished space, it may be necessary to insulate the condensate drain line located inside the building. Use Armaflex® or similar material.

A secondary condensate drain connection has been provided for areas where the building codes require it. Pitch all drain lines a minimum of ¼" per foot to provide free drainage. Provide required support to the drain line to prevent bowing. If the secondary drain line is required, run the line separately from the primary drain and end it where condensate discharge can be easily seen.

**NOTE:** Water coming from secondary line means the coil primary drain is plugged and needs immediate attention.

Insulate drain lines located inside the building or above a finished living space to prevent sweating. Install a condensate trap to ensure proper drainage.

**NOTE:** When units are installed above ceilings, or in other locations where damage from condensate overflow may occur, it is **MANDATORY** to install a field fabricated or supplied auxiliary drain pan under the coil cabinet enclosure.

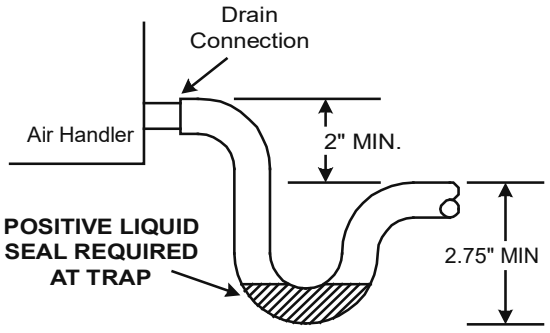



**Figure 16**

The installation must include a "P" style trap that is located as close as is practical to the indoor unit coil. See Figure 16 for details of a typical condensate line "P" trap.

**NOTE:** Units operating in high static pressure applications may require a deeper field constructed "P" style trap than is shown in Figure 16 to allow proper drainage and prevent condensate overflow.

**NOTE:** Trapped lines are required by many local codes. In the absence of any prevailing local codes, please refer to the requirements listed in the Uniform Mechanical Building Code.

A drain trap in a **draw-through** application prevents air from being drawn back through the drain line during fan operation thus preventing condensate from draining, and if connected to a sewer line to prevent sewer gases from being drawn into the airstream during blower operation.

Use of a condensate removal pump is permitted when necessary. This condensate pump should have provisions for shutting off the control voltage should a blocked drain occur. See Auxiliary Alarm Switch section for more details. A trap must be installed between the unit and the condensate pump.

**IMPORTANT NOTE:** The evaporator coil is fabricated with oils that may dissolve styrofoam and certain types of plastics. Therefore, a removal pump or float switch must not contain any of these materials.

**NOTE:** Do not take outdoor air directly into the unit. It could cause condensation. Unless a fresh air intake is mandated by local codes and regulation.

## 9 DUCTWORK

**⚠ CAUTION**

**DO NOT OPERATE THIS PRODUCT WITHOUT ALL THE DUCTWORK ATTACHED.**

This CMXV air handler is designed for a complete supply and return ductwork system.

This unit is rated and certified as a mid-static blower-coil system under AHRI Standard 210/240.
The rated operating range is based on the cooling configuration only, with a specified full-load airflow not exceeding 400 scfm per ton and an external static pressure between 0.21 and 0.6 in $H_2O$.

When installed with an optional electric heater kit, the system may require higher airflow and external static pressure to maintain acceptable heater element temperature limits. Operation under those conditions is outside the scope of the AHRI performance rating.
The base system classification and AHRI rating apply only to cooling and heat pump operation without the heater

energized. Refer to ACCA Manual D, Manual S and Manual RS for information on duct sizing and application. Flame retardant ductwork is to be used and sealed to the unit in a manner that will prevent leakage.

**NOTE:** A downflow application with electric heat must have an L-shaped sheet metal supply duct without any outlets or registers located directly below the heater.

***9.1 Return Ductwork***

For appliances using R-32 REFRIGERANTS, connected via an air duct system to one or more rooms, the supply and return air shall be directly ducted to the space. Open areas such as false ceilings shall not be used as a return air duct.

For mechanical ventilation the lower edge of the air extraction opening where air is exhausted from the room shall not be more than 100 mm above the floor. The location where the mechanical ventilation air extracted from the space is discharged shall be separated by a sufficient distance, but not less than 3 m, from the mechanical ventilation air intake openings, to prevent re-circulation to the space.

DO NOT LOCATE THE RETURN DUCTWORK IN AN AREA THAT CAN INTRODUCE TOXIC, OR OBJECTIONABLE FUMES/ODORS INTO THE DUCTWORK. The return ductwork is to be connected to the CMXV air handler bottom (upflow configuration).

## 10 RETURN AIR FILTERS

Each installation must include a return air filter. This filtering may be performed at the CMXV air handler using the factory filter rails or externally such as a return air filter grille measured with a nominal 16x20x1". Washable versions are available through your local Daikin distributor.

**NOTE:** If installing a filter, an external filter must be used when installing the unit in Horizontal Right (Figure 6), or if the side drain pan is not removed for Down Flow application. A filter will not fit on the internal filter rails in these applications.

**IMPORTANT NOTE:** If appliance is equipped with UVC coil and air purifier, turn off the appliance before opening filter access door panel to change and install filter.

## 11 ELECTRIC HEAT

Refer to the installation manual provided with the electric heat kit for the correct installation procedure. All electric heat must be field installed. If installing this option, the ONLY heat kits that are permitted to be used are the Daikin produced HKTS series. Refer to the CMXV*unit's Serial and Rating plate or the HKTS specification sheets to determine the heat kits compatible with a given CMXV air handler. No other accessory heat kit besides the HKTS series may be installed in these air handlers. Refer to Table 7 for absolute minimum allowable airflow for CMXV air handler and heat kit combination.

Before installing the Heat Kit, disconnect the harness from S101 connector on PCB (refer to wiring diagram). Accommodate the wires on the bottom of the blower deck assy. Disconnect the 12 pin harness (PL3 and PL4 as shown on wiring diagram) to facilitate access. Follow the instructions on the Heat Kit installation manual. Once Heat kit is installed reconnect all the harnesses that were disconnected previously.

The heating mode temperature rise is dependent upon the system airflow, the supply voltage, and the heat kit size (kW) selected. Use data provided in Tables 5 and 6 to determine the temperature rise (°F).
For installations not indicated above the following formula is to be used:

TR = (kW x 3412) x (Voltage Correction) / (1.08 x CFM)

Where:
- TR = Temperature Rise
- kW = Heater Kit Actual kW
- 3412 = Btu per kW
- VC* = 1.0 (240 Supply Volts)
  - = .92 (230 Supply Volts)
  - = .84 (220 Supply Volts)
  - = .77 (210 Supply Volts)
  - = .75 (208 Supply Volts)
- 1.08 = Constant
- CFM = Measured Airflow

**VC (Voltage Correction)*

***For heater kit selection see section 17.**

| CFM | HEAT KIT NOMINAL KW | | | | |
|---|---|---|---|---|---|
| | 3 | 5 | 6 | 8 | 10 |
| 400 | 23 | 38 | 45 | - | - |
| 600 | 15 | 25 | 30 | 40 | - |
| 800 | 11 | 19 | 23 | 30 | 38 |
| 1000 | 9 | 15 | 18 | 24 | 30 |
| 1200 | 8 | 13 | 15 | 20 | 25 |
| 1400 | 6 | 11 | 13 | 17 | 22 |

**Table 5 - 230/1/60 SUPPLY VOLTAGE - TEMP. RISE ºF**

| CFM | HEAT KIT NOMINAL KW | | | | |
|---|---|---|---|---|---|
| | 3 | 5 | 6 | 8 | 10 |
| 400 | 21 | 34 | 41 | - | - |
| 600 | 14 | 23 | 27 | 37 | 46 |
| 800 | 10 | 17 | 21 | 27 | 34 |
| 1000 | 8 | 14 | 16 | 22 | 27 |
| 1200 | 7 | 11 | 14 | 18 | 23 |
| 1400 | 6 | 10 | 12 | 16 | 20 |

**Table 6 - 208/1/60 SUPPLY VOLTAGE - TEMP. RISE ºF**

| ELECTRIC HEAT AIRFLOW TABLE | | | |
|---|---|---|---|
| HTR KW | CMXV12AVJUA | CMXV18AVJUA | CMXV24AVJUA |
| 3 | 400 | 600 | NR |
| 5 | 450 | 650 | 800 |
| 8 | NR | 700 | 800 |
| 10 | NR | NR | 850 |

**Table 7 - Electric Heat Airflow Table**

**NOTE:** The Temperature Rise Tables can also be used to estimate the CMXV air handler airflow delivery. When using these tables for this purpose set the room thermostat to maximum heat and allow the system to reach steady state conditions. Insert two thermometers, one in the return air and one in the supply air. The temperature rise is the supply air temperature minus the return air temperature. Using the temperature rise calculated, CFM can be estimated from the TR formula above.

## 12 ELECTRICAL AND CONTROL WIRING

**IMPORTANT:** All routing of electrical wiring must be made through provided electrical knockouts. When removing the electrical knockouts, take care not to damage the PCB. Do not cut, puncture or alter the cabinet for electrical wiring.

### *12.1 Building Electrical Inspection*

This unit is designed for single-phase electrical supply only. DO NOT OPERATE CMXV AIR HANDLER ON A THREE-PHASE POWER SUPPLY. Measure the power supply to the unit. The supply voltage **must** be measured and be in agreement with the unit nameplate power requirements and within the range shown. Refer to Table 8.

| Nominal Input | Minimum Voltage | Maximum Voltage |
|---|---|---|
| 208/230 VAC | 197 | 253 |

**ELECTRICAL VOLTAGE**
**Table 8**

### *12.2 Wire Sizing*

Wire size is important to the operation of your equipment. Use the following check list when selecting the appropriate wire size for your unit.

- **Wire used must be sized to carry the Minimum Circuit Ampacity (MCA) listed on the equipment's Serial and Rating Plate.**
- Refer to the NEC (USA) or CSA (Canada) for wire sizing. The unit MCA for the CMXV air handler and the optional electric heat kit can be found on the unit Serial and Rating Plate.
- **Wire must be sized to allow no more than a 2% voltage drop from the building breaker/fuse panel to the unit.**
- Wires with different insulation temperature rating have varying ampacities - be sure to check the temperature rating used.
- Refer to the latest edition of the National Electric Code or in Canada the Canadian Electric Code when determining the correct wire size.

### *12.3 Maximum Overcurrent Protection (MOP)*

Every installation must include an NEC (USA) or CEC (Canada) approved overcurrent protection device. Also, check with local or state codes for any special regional requirements. Protection can be in the form of fusing or HACR style circuit breakers. The Serial and Rating Plate provides the maximum overcurrent device permissible.

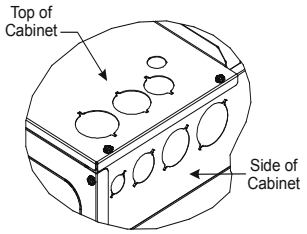
**NOTE:** Fuses or circuit breakers are to be sized larger than the equipment MCA but not to exceed the MOP.

**NOTE:** Some transformers are equipped with an overcurrent protection switch. If the unit experienced a surge, check that the switch on the transformer is closed.

### *12.4 Electrical Connections – Supply Voltage*

**IMPORTANT NOTE: USE COPPER CONDUCTORS ONLY.**

Knockouts are provided on the CMXV air handler top panel and sides of the cabinet to allow for the entry of the supply voltage conductors, as shown in Figure 17. Separate knock-outs must be used for two circuit Heat-kits. If the knockouts on the cabinet sides are used for electrical conduit, an adapter ring must be used in order to meet UL 60335-2-40 safety requirements. An NEC or CEC approved strain relief is to be used at this entry point. Some codes/municipalities require the supply wire to be enclosed in conduit. Consult your local codes.




**KNOCK-OUT FOR ELECTRICAL CONNECTIONS**
**Figure 17**

Primary power is supplied from the outdoor unit. Use 14AWG wire and route wires from the terminal block on the outdoor unit and connect to the terminal block of the indoor unit, as shown on section 12.6.

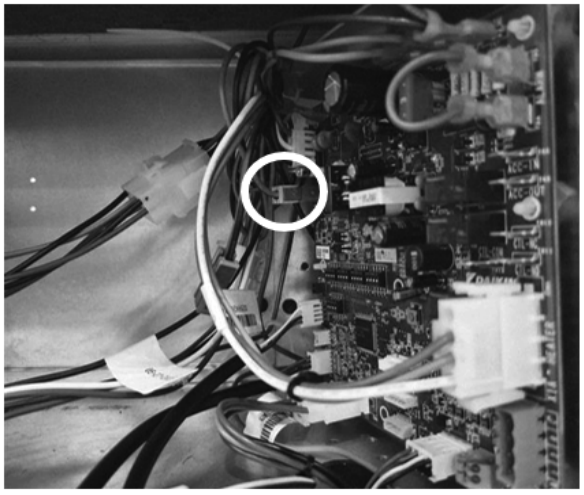
#### *12.4.1* **CMXV** *Air Handler Only (Non-Heat Kit Models)*

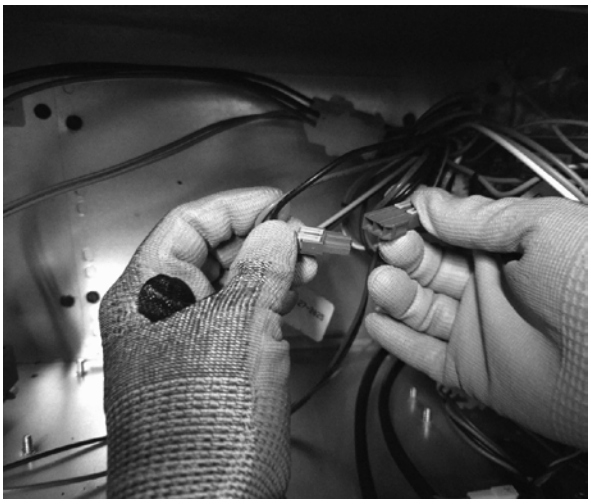
**IMPORTANT:** Installation of CMXV Air Handler must follow any local codes/regulations. For installations with two or more CMXV air handlers, where the power supply is connected to the stripped black and red wires contained in the CMXV air handler electrical compartment, a field supplied disconnect switch or breaker must be installed in the electrical circuit that will allow power to be shut-off for service or maintenance.

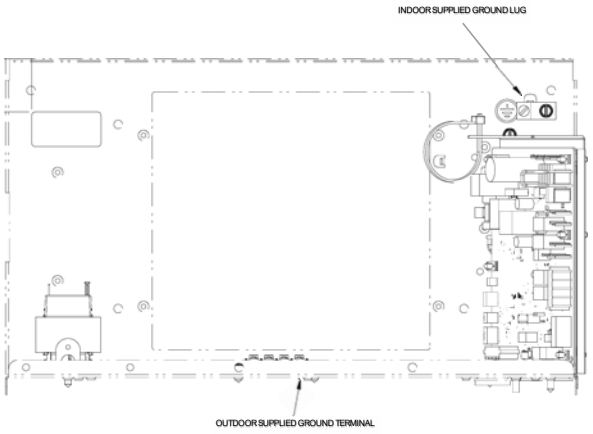
The selected terminal block on the Outdoor unit must be connected to the terminal block contained in the CMXV air handler electrical compartment. Attach the supply wires to the CMXV air handler conductors as shown in the unit wiring diagram using appropriately sized solderless connectors or other NEC or CEC approved means.

One CMXV* unit can be powered directly by the OD. If the installation requires multiple CMXV**AVJUA units to be connected to one OD then an alternative wiring method must be used. The following instructions must be followed for the alternative method:

1. Familiarize yourself with the CMXV air handler wire diagram.
2. Unplug the harness connector PL-5 from the X28A port on the PCB.
3. Connect PL-5 to PL-6. Refer to wiring diagram detail 1 and note 11 for further details.
4. The power supply connects to the stripped black and red wires contained in the CMXV air handler electrical compartment. Attach the supply wires to the air handler conductors as shown in the unit wiring diagram using appropriately sized solderless connectors or other NEC or CEC approved means.
5. A ground lug is also provided in the electrical compartment. The ground wire from the power supply must be connected to this ground lug.








**Schematic 1**

Heater kits can be installed on either connection method (OD unit only or OD unit only + additional power supply). Follow the instruction from section 12.4.2 or 12.4.3 depending on the heater kit being installed.

**⚠ CAUTION**

**FIRE HAZARD! To avoid the risk of property damage, personal injury or fire, use only copper conductors.**

**⚠ WARNING**

**HIGH VOLTAGE**
**Disconnect all power before servicing or installing this unit. Multiple power source may be present. Failure to do so may cause property damage, personal injury or death.**



**⚠ WARNING**

**High Voltage!**
**To avoid property damage, personal injury or death due to electrical shock, this unit MUST have an uninterrupted, unbroken electrical ground. The electrical ground circuit may consist of an appropriately sized electrical wire connecting the ground lug in the unit control box to the building electrical service panel.**
**Other methods of grounding are permitted if performed in accordance with the National Electric Code (NEC)/American National Standards Institute (ANSI)/National Fire Protection Association (NFPA) 70 and local/state codes. In Canada, electrical grounding is to be in accordance with the Canadian Electric Code (CSA) C22.1.**

### *12.4.2 CMXV Air Handler - Non-Circuit Breaker Heat Kits*

A terminal block is provided with the HKTS kit to attach the power supply and CMXV air handler connections. Follow the HKTS Installation Manual and wiring diagram for complete wiring details.

### *12.4.3 CMXV Air Handler With Circuit Breaker Heat Kit*

The CMXV air handler has a soft plastic cover on the upper access panel and can be removed to allow the heater kit circuit breaker to be installed. The circuit breakers have lugs for power supply connection. See the HKTS Installation Instructions for further details.

### *12.5 General Instructions*

- Make certain that all electric wiring work is carried out by qualified personnel according to the applicable legislation and this installation manual, using a separate dedicated circuit. Insufficient capacity of the power supply circuit or improper electrical construction may lead to electric shock or a fire.
- Make sure to install a ground fault circuit interrupter. Failure to do so may cause electric shock and a fire.
- Do not turn on the power supply (branch switch, branch overcurrent circuit breaker) until all the works are finished.
- Multiple number of indoor units are connected to one outdoor unit. Name each indoor unit as A-unit, B-unit ….. and the like. When these indoor units are wired to the outdoor unit, always wire the indoor unit to the terminal indicated with the same symbol on the terminal block. If the wiring and the piping are connected to the different indoor units and operated, it will result in malfunction.
- Make sure to ground the indoor unit. Grounding resistance should be according to applicable legislation.
- Do not connect the ground wiring to gas or water pipings, lightning conductor or telephone ground wiring.
- Ignition or explosion may occur if the gas leaks.
- Hard vinyl tubes are not effective grounds. (i.e drain pipes).
- For electric wiring work, refer to also the “WIRING DIAGRAM” attached to the blower access panel.
- Carry out wiring between the outdoor units, indoor units and the thermostat according to the wiring diagram.
- Carry out installation and wiring of the thermostat as per the thermostat installation manual.

**⚠ WARNING**

**Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire. Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire only connect OD power to the terminal block, or ID power to the heater kit harness provided with the unit, failure to do so may cause electric shock or fire.**

**⚠ CAUTION**

**When clamping wiring, use the included clamping material to prevent outside pressure being exerted on the wiring connections and clamp firmly. When installing the wiring, make sure the wiring is neat and does not cause the electrical wiring box cover to stick up, then close the cover firmly. Outside the unit, separate the low voltage wiring (remote controller wiring) and high voltage wiring (wiring between units, ground, and other power wiring) at least 2 in. so that they do not pass through the same place together. Proximity may cause electrical interference, malfunctions, and breakage.**

### *12.6 Wiring Example*

For the wiring of outdoor units, refer to the installation manual attached to the outdoor units.

**Confirm the system type.**

- Multi system: 2 through 6 (The number of connectable units will vary according to model) indoor units connect to 1 outdoor unit. The indoor unit is controlled by remote controller connected to each indoor unit.

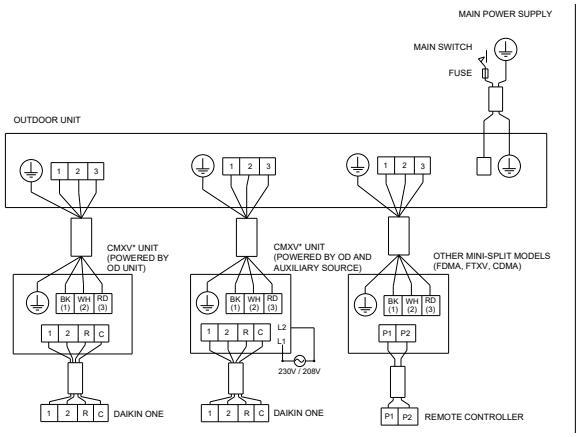



**Figure 18 - CMXV Wiring Example**

***NOTE:***

1. All transmission wiring except for the remote controller wires is polarized and must match the terminal symbol.
2. If a shielding wire is to be used, ensure the shielded portion is connected to the remote controller terminal block.
3. Refer to section 12.9 for thermostat wiring.

### *12.6.1 Specification for Field Wire*

| | Wire | Size | Length |
|---|---|---|---|
| Wiring between units | Recommend standard and shielded.<br><br>local code supersedes recommendation. | AWG 14 | Max 98ft (30m) |
| Thermostat wiring | Sheathed (4 wires) | AWG 18 - 16 | Max. 125ft (38m)* |
| Wiring to ground terminal | Recommended stranded and shielded.<br><br>Local code supersedes recommendation. | ----- | ----- |

**Table 9**

*this will be the total extended length in the system when doing group control.

### *12.6.2 Wiring Connection Method*

**CAUTION**

**Recommend stranded cable for interunit wiring. Local code always supersedes recommendation.**

- **For stranded wires, make sure to use the round crimp-style terminal for connection to the power supply terminal block. Place the round crimpstyle terminals on the wires up to the covered part and secure in place.**
- **If solid core wire must be used, be sure to curl the end of the lead. Improper work may cause heat and fire.**

**Tightening torque for the terminal blocks**

- Use the correct screwdriver for tightening the terminal screws. If the blade of screwdriver is too small, the head of the screw might be damaged, and the screw will not be properly tightened.
- If the terminal screws are tightened too hard, screws might be damaged.
- Ensure terminal block screws are tightened to between 0.92 - 1.0 lbf * ft (1.24 - 1.35 N * m)

### *12.7 Low Voltage Connections*

Use N.E.C Class 2 Wire. The 24V-control voltage connects the CMXV air handler to the room thermostat 24V only for Daikin *One* thermostat. Typical 18 AWG thermostat wire may be used to wire the system components. Ninety eight (98) feet is the maximum length of wire between indoor unit and outdoor unit, and one hundred twenty five (125) feet between indoor unit and thermostat. Low voltage wiring must be copper conductors. Low voltage wiring must be connected through the top of the cabinet or either side. See the “Daikin *One* Thermostat Wiring” section of this manual for typical low voltage wiring connections.

### *12.8 Leak Detection Output (Relay K6R)*

The control board [A2P] is equipped with three Refrigerant Leak Detection terminals, labeled TB11, TB12 and TB13 that are used for the control of optional kits (UV light, ventilator) when a refrigerant leak is detected, the error codes being A0-19, A0-17 or CH-11. Between TB12 and TB13 are normally closed, TB11 and TB13 are normally opened. When the A0-19, A0-17 or CH-11 error is issued, TB12-TB13 is open, and TB11-TB13 is closed. See the table 10 for the conditions of relay K6R when the error code is issued. This output can be used to turn off UV lights, or activate ventilation if an A0-19, A0-17, or CH-11 error code is issued. Once these error codes are cleared, these outputs will return to their normal state after 5 minutes.

See the Table 10 for the specification for relay K6R and Figure 19 for the wiring diagram and the terminal’s location.

| Items | When A0-19, A0-17 CH-11 not issued | When A0-19, A0-17 CH-11 issued | Maximum Load (Type / Voltage / Current) |
|---|---|---|---|
| TB12-TB13 (NC) | CLOSE | OPEN | PILOT/24 VAC/1.1 A |
| TB11-TB13 (NO) | OPEN | CLOSE | PILOT/24 VAC/1.1 A |

**Relay K6R when A0/A1/AF is issued**

**Table 10**

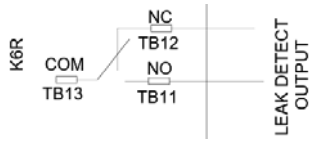



**Figure 19**

### *12.8.1 Refrigerant Leak Test*

Refrigerant Leak Test allows manual activation of Relay K6R to verify that the optional kits connected to the relay operate properly. When the relay is closed, and the UV light should turn off. Perform the test using one of the following procedures.

1. Via Dip Switches on Indoor Unit PCB
   Refer to the following table to configure the dip switch [DS5] to start the Refrigerant Leak Test. The test will automatically end after the time specified in the table has elapsed, regardless of the DIP switch setting. To restart the test, set both switches 3 and 4 to OFF, then reconfigure the switches as needed.

| DIPSW | Switches | | Refrigerant Leak Test |
|---|---|---|---|
| | 3 | 4 | |
| DS5 | OFF* | OFF* | OFF* |
| | OFF | ON | ON (60 mins) |
| | ON | OFF | ON (120 mins) |
| | ON | ON | ON (180 mins) |

2. Via Daikin *One* Thermostat
From the commissioning menu of Daikin *One* Thermostat, navigate to “3. Equipment”, then select “indoor unit”, and open “field setting”. Select “Field Setting 13” and refer to the table below to adjust the setting and initiate the Refrigerant Leak Test. The test will automatically end once the time specified in the table has elapsed.

| Field Setting Number | Selection | Refrigerant Leak Test |
|---|---|---|
| 13 | 0* | OFF* |
| | 1 | ON (60 mins) |
| | 2 | ON (120 mins) |
| | 3 | ON (180 mins) |

**CAUTION**

Do not change any other dip switches other than DS5-3 and DS5-4. Incorrect settings may cause any error. For default setting, see Figure 22a.

### *12.8.2 Refrigerant Leak Test through Indoor PCB*

The control board DIP Switch[DS5] can be used to perform refrigerant leak test. Select the DIP Switch settings in accordance with table 11. When the unit goes into Refrigerant Leak test as well as Remote Controller.

| DIPSW | Function Name | Setting Details | Switches | | | |
|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 |
| DSS | Leak Operation Test | Turn OFF | - | - | OFF | OFF |
| | | Turn ON | - | - | OFF | ON |

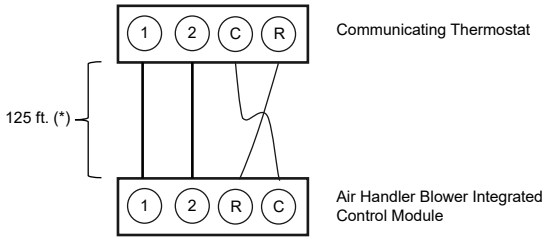
*Leak Operation Test Setting*
*Table 11*

### *12.9 Wiring for Daikin One Thermostat*

**NOTE:** Refer to section Electrical Connections for 208/230 volt line connections to the CMXV air handler.

**NOTE:** It is **STRONGLY** recommended that no more than two wires be connected in a single terminal. If two wires are used in a terminal, it is recommended the same type of wire be used (i.e. Both stranded or solid for secure connection). Failure to do so may result in intermittent operation.

Typical 18 AWG thermostat wire may be used to wire the system components. One hundred twenty five (125) feet between indoor unit and thermostat.




(*) Allowable Maximum Length

**SYSTEM WIRING**
**Figure 20**

**NOTE:** For a detailed procedure of thermostat commissioning process, please visit the Daikin *One+* website at http://www.daikinone.com.

## 13 ACHIEVING 1.4% AND 2.0% AIRFLOW LOW LEAKAGE RATE

Ensure all the gaskets remain intact on all surfaces as shipped with the unit. These surfaces are areas between the upper tie plate and coil access panel, blower access and coil access panels, and between the coil access and filter access panels. Ensure upon installation, that the plastic breaker cover is sitting flush on the blower access panel and all access panels are flush with each other and the cabinet. With these requirements satisfied, the unit achieves less than 1.4% airflow leakage @ 0.5 inch wc static pressure and less than 2% airflow leakage @1inch wc static pressure when tested in accordance with ASHRAE Standard 193.

**IMPORTANT**: After installing the heater kits, it is very important to seal the gap between the circuit breaker and the cover. Putty paste or gasket can be used to seal the gap so that air leakage can be minimized. Ensure both liquid and gas piping is sealed.

## 14 REFRIGERATION DETECTION SYSTEM (RDS)

Function: Refrigerant Detection System (RDS) is installed in this equipment to detect any R32 leakage in the coil and take action to mitigate any risk of ignition/ fire.

Operation: When there is a leak detected, the RDS shall send signals for the unit to perform these actions:

1. Turn on the blower to circulate air with Mitigation CFM
2. Switch off electric heater
3. Error code A0 issued
4. Fully open damper (*1)
5. Switch off UV light (*1)

Serial Plate Information: The installer must write the maximum possible refrigerant charge and the minimum room area on serial plate. Use table 12 to determine the maximum possible refrigerant charge and minimum room area based on the total system refrigerant charge. If the installation is not at sea level, consult section 14.1 to determine how to adjust the minimum air conditioned room area. Write the minimum air conditioned room area on the serial plate under the minimum room area field. Use a durable marking instrument to write the values on the serial plate.
The installers are responsible for verifying that actuation of mitigation procedures are operational with the minimum required airflow for mitigation.

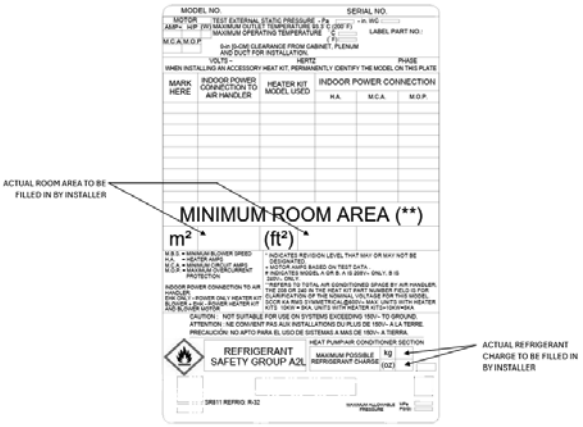



**Figure 21**

(*1) If UV lamp is installed in the field, be sure to use the “15.5 Leak detection output” function and construct the wiring so that they will activate as mentioned above when a leak is detected.

Servicing: Before servicing identify the Mode of operation of the system by reading the error listed on the thermostat. After identifying the mode of operation take recommended actions as specified in Table DIAGNOSTIC CODES.

Instruction to replace PCB: Take off the blower access panel, disconnect the PCB harness and A2L sensor wire connected to the PCB, detach the defective PCB from all of the plastic standoffs, install new PCB with new plastic standoff which is installed on metal bracket, re-connect the PCB harness and A2L sensor wire to the new PCB per wiring instruction as attached to the equipment, reassemble the blower access panel to the unit.

Instruction to replace A2L sensor: Take off the blower access panel and coil access panel, take off the drain port gasket on the drain pan in front of the sensor bracket, disconnect the A2L sensor wire from the PCB, take off sensor bracket assembly from the drain pan, remove plastic push pins and non-function A2L sensor off the sensor bracket, install new A2L sensor and plastic push pins to sensor bracket, re-install A2L sensor bracket assembly to the drain port correctly as shown in the figures 2, 3, 5 and 6. The “FRONT 0121A*****” print on sensor bracket should be facing away from the equipment, place gaskets back to the drain ports correctly. The “FRONT” print on the gaskets should be in the front facing away from the equipment, reassemble the blower access panel and coil access panel to the unit. Refrigerant sensors for refrigerant detection systems shall only be replaced with sensors specified by the appliance manufacture.

| | |
|---|---|
|  | service indicator; read technical manual |
|  | operator's manual; operating instructions |
|  | warning; low burning velocity material |
|  | UN GHS flame symbol |

**MARKING SYMBOL TABLE**

| Total System Refrigerant Charge (oz) | Maximum Possible Refrigerant Charge (oz) | Maximum Possible Refrigerant Charge (kg) | Minimum Air Conditioned Room Area (ft2) | Minimum Air Conditioned Room Area (m2) | Minimum Required Mitigation Airflow (CFM) | Minimum Required Mitigation Airflow (m3/hr) |
|---|---|---|---|---|---|---|
| 31~50 | 50 | 1.42 | 46 | 4.22 | 83 | 140 |
| 51~100 | 100 | 2.84 | 91 | 8.44 | 165 | 279 |
| 101~150 | 150 | 4.26 | 137 | 12.66 | 247 | 418 |
| 151~200 | 200 | 5.67 | 182 | 16.85 | 328 | 556 |
| 201~250 | 250 | 7.09 | 227 | 21.07 | 410 | 696 |
| 251~300 | 300 | 8.51 | 273 | 25.29 | 492 | 835 |
| 301~350 | 350 | 9.93 | 318 | 29.51 | 574 | 974 |
| 351~400 | 400 | 11.34 | 363 | 33.69 | 655 | 1112 |
| 401~450 | 450 | 12.76 | 409 | 37.91 | 737 | 1251 |
| 451~500 | 500 | 14.18 | 454 | 42.13 | 819 | 1391 |
| 501~550 | 550 | 15.60 | 499 | 46.35 | 901 | 1530 |
| 551~600 | 600 | 17.01 | 545 | 50.54 | 982 | 1668 |

**Table 12 - A2L Mitigation Table**

Mitigation CFM: When one of the error codes A0-17/A0-19/CH-11 that is related to refrigerant leak detection system is issued, the blower is activated with the mitigation CFM above the Qmin shown in Table 12 (around 300 CFM).

### *14.1 Altitude Adjustment Factor*

For altitudes other than at sea level, adjust the minimum room area specified on the Serial Plate by the corresponding altitude adjustment factor shown below. This table is provided as a reference. Adjusted room area (Amin adj) is the product of the minimum room area specified in the serial plate and the adjustment factor AF, as shown in below formula.

Amin adj = Amin (as per table 12) * AF

| Height in Meters | Height in Feet | Altitude Adjustment Factor (AF) |
|---|---|---|
| At sea level | At sea level | 1 |
| 1~200 | 1~660 | 1.02 |
| 200~400 | 660~1320 | 1.03 |
| 400~600 | 1320~1970 | 1.05 |
| 600~800 | 1970~2630 | 1.07 |
| 800~1000 | 2630~3290 | 1.09 |
| 1000~1200 | 3290~3940 | 1.11 |
| 1200~1400 | 3940~4600 | 1.13 |
| 1400~1600 | 4600~5250 | 1.15 |
| 1600~1800 | 5250~5910 | 1.17 |
| 1800~2000 | 5910~6570 | 1.19 |
| 2000~2200 | 6570~7220 | 1.21 |
| 2200~2400 | 7220~7880 | 1.24 |
| 2400~2600 | 7880~8540 | 1.26 |
| 2600~2800 | 8540~9190 | 1.29 |
| 2800~3000 | 9190~9850 | 1.31 |
| 3000~3200 | 9850~10500 | 1.34 |

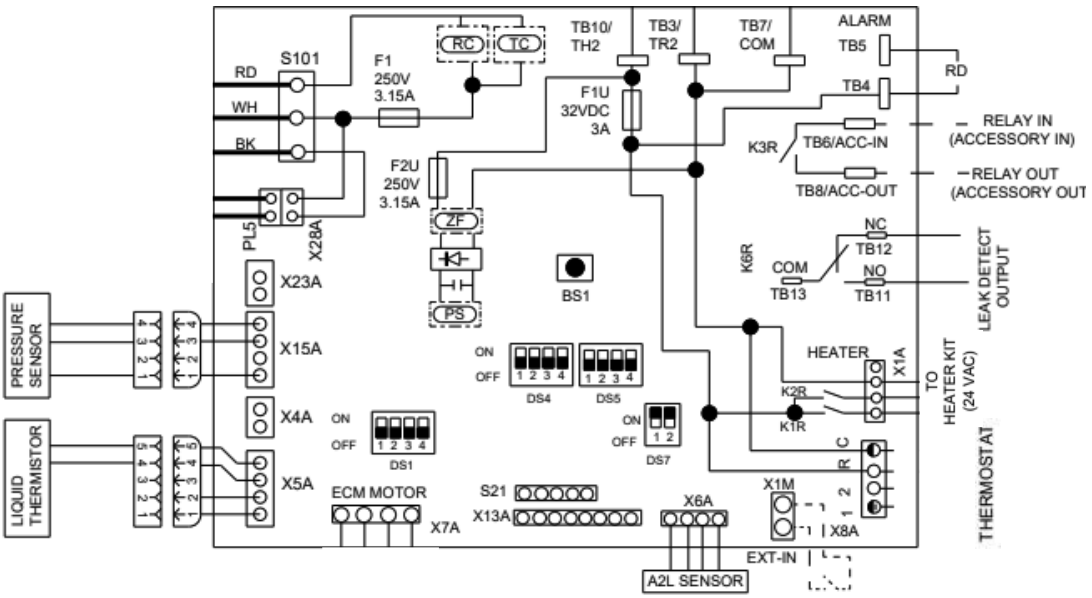
Table 13 - Altitude adjustment factor

**NOTE:** The altitude adjustment factor (AF) for any altitudes below sea level will be 1.00.

## 15 MISCELLANEOUS START-UP CHECKLIST

- Prior to start-up, ensure that all electrical wires are properly sized and all connections are properly tightened.
- All panels must be in place and secured. For Air Tight application, gasket must be positioned at prescribed locations to achieve 2% leakage. When reattaching tubing panel, ensure that the seal, both liquid and gas piping, is replaced by the insulation provided in the literature kit to maintain system performance and prevent condensation.
- Tubing must be leak free.
- Condensate line must be trapped and pitched to allow for drainage.
- Auxiliary drain is installed when necessary and pitched to allow for drainage.
- Low voltage wiring is properly connected.
- Unit is protected from vehicular or other physical damage.
- Return air is not obtained from, nor are there any return air duct joints that are unsealed in, areas where there may be objectionable odors, flammable vapors or products of combustion such as carbon monoxide (CO), which may cause serious personal injury or death.
- Ensure the Flare Nuts are torqued to specification.
- Ensure that Mitigation mode is operational before commissioning the unit.

**IMPORTANT NOTE:** If thumb screws are used to access the filter, ensure the washer installed on the screw behind the access panel remains in place after re-installation.




Indoor Unit Communicating Board (PCB)

Figure 22a

**NOTE:** A removable plug connector is provided with the control to make thermostat wire connections. This plug may be removed, wire connections made to the plug, and replaced. It is STRONGLY recommended that you do not connect multiple wires into a single terminal. Wire nuts are recommended to ensure one wire is used for each terminal. Failure to do so may result in intermittent operation.

### *15.1 Auxiliary Alarm Switch*

The control is equipped with two Auxiliary Alarm terminals, labeled TB4 and TB5 which are typically utilized in series with a condensate switch but could also be used with compatible $CO_2$ sensors or fire alarms.

The auxiliary alarm switch must be normally closed and open when the alarm occurs. For example, a normally closed condensate switch will open when the base pan's water level reaches a particular level. The control will respond by turning off the blower motor and outdoor unit and displaying the proper fault codes. If the switch is later detected closed for 30 seconds, normal operation resumes and the error message is removed. (The switch is closed as part of the default factory setting.) The error will be maintained in the equipment's fault history. See Figures 22a and 22b for the connection location.

**IMPORTANT NOTE:** If any refrigerant leak detection-related error codes (A0-17, A0-19, or CH-11) are detected simultaneously, the system will prioritize the actions associated with the leak detection error—specifically, turning on the fan and energizing Relay K6R. The field setting is available to prioritize the actions of auxiliary alarm. Refer to [16.3 Error Priority Setting] for details.

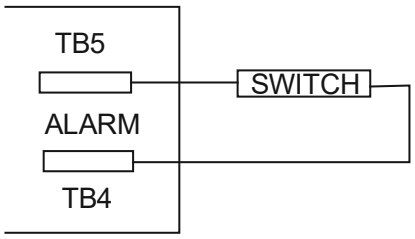



**Figure 22B**

### *15.2 Accessory Contacts (Humidifier Relay)*

A closed relay indicates continuity between the two terminals. The control does not provide power to these contacts.

Connect humidistat to the x1m connector on pcb so that the air handler receives the input from humidistat.

| | |
|---|---|
| Wire Specification | Sheathed Vinyl Cord or Cable (2 wires) |
| Gauge | AWG 18-16 |
| Length | Max. 328 ft |
| External Terminal | Contact that can ensure the minimum applicable load of 16V DC, 1mA. |

**Table 14**

The accessory relay terminals support four operational modes below for humidification. Refer to [17 field setting] in the thermostat to choose the setting for accessory contacts.

1: Heat on

The relay closes when both heating is on and air handler receives an input from x1m.

2: Independent

The relay closes when air handler receives an input from x1m.

3: Fan

The relay closes when the indoor unit's fan is operating.

4: None (factory setting)

The relay remains open; it never closes.

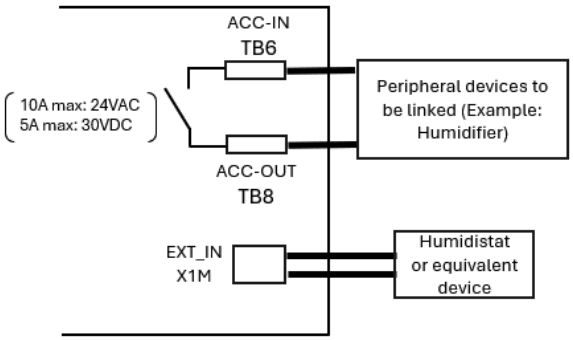



**Figure 23 - Accessory Contacts**

**NOTE:** The Accessory Relay is not forced to open when a refrigerant leak is detected or when a malfunction occurs in the A2L sensor (i.e., when error codes A0-17, A0-19 or CH-11 are issued). If it is necessary to enable the Accessory Relay to open while the above error codes are issued, the following wiring connection between the Accessory Relay and Leak Detection Output (relay K6R) can be implemented. The wire harness between ACC-OUT (TB8) and COM (TB12) must be prepared separately at the field.

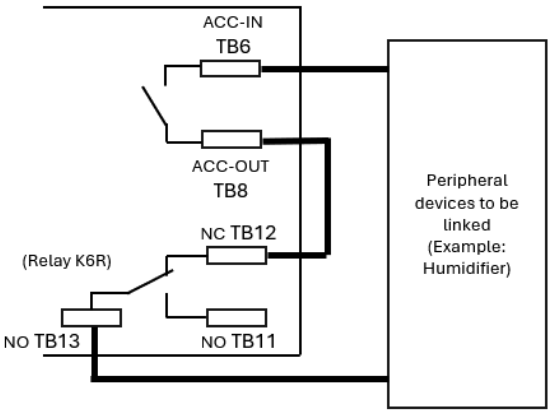



**Figure 24 - Accessory Contacts**

## 16 SETTING

After turning on the power supply, adjust the field settings according to the installation conditions. To access the field setting menu, from the commissioning menu of Daikin *One* Thermostat, navigate to “3. Equipment”, then select “indoor unit”, and open “field setting”.

- The settings marked with an asterisk (*) in the following tables are the factory default settings.
- Do not change any settings other than those listed in the table.

### *16.1 Heater Kit Selection*

Refer to the table below to set the Heater Kit Selection from the Daikin *One* Thermostat according to the capacity of the installed heater kit.

| Field Setting Number | Selection | Heater Kit Wattage (kW) | | |
|---|---|---|---|---|
| | | CMXV12 | CMXV18 | CMXV24 |
| 5 | 0* | NO HEATER* | | |
| | 1 | 3 | 3 | 5 |
| | 2 | 5 | 5 | 8 |
| | 3 | - | 8 | 10 |

Table 15

### *16.2 Accessory Contacts*

Refer to the table below to choose the accessory contacts setting from the Daikin *One* Thermostat. The details for each setting is described in [15.2 Accessory Contacts (Humidifier Relay)].

| Field Setting Number | Selection | Accessory Contacts Setting |
|---|---|---|
| 9 | 0 | Heat ON |
| | 1 | Independent |
| | 2 | Fan |
| | 3* | NONE* |

Table 16

### *16.3 Error Priority Setting*

This setting is used to stop the indoor unit’s fan operation when both a refrigerant leak is detected and a fire alarm (or similar devices) connected to auxiliary alarm terminals is triggered.

By default, leak detection errors (A0-17/A0-19/CH-11) take priority over the auxiliary alarm error (A0-01). When the fire alarm is connected to the auxiliary alarm terminals and both leak detection error and auxiliary alarm error occur simultaneously, the indoor unit’s fan continue operating to mitigate the refrigerant leak. This airflow could potentially spread the fire. If a fire alarm is installed and connected to the auxiliary alarm terminals, it is recommended to adjust the setting to prioritize the auxiliary alarm error over the leak detection error, to ensure that the indoor unit’s fan does not operate in the event of a fire.

| Field Setting Number | Selection | Error Priority Setting |
|---|---|---|
| 11 | 0* | Refrigerant Leak Detection Error Priority* |
| | 1 | Auxiliary Alarm Error Priority |

Table 17

## 17 TROUBLESHOOTING

### *17.1 Electrostatic Discharge (ESD) Precautions*

**NOTE:** Discharge body’s static electricity before touching unit. An electrostatic discharge can adversely affect electrical components.

Use the following precautions during CMXV air handler installation and servicing to protect the integrated control module from damage. By putting the CMXV air handler, the control, and the person at the same electrostatic potential, these steps will help avoid exposing the integrated control module to electrostatic discharge. This procedure is applicable to both installed and uninstalled (ungrounded) blowers.

1. Disconnect all power to the blower. Do not touch the integrated control module or any wire connected to the control prior to discharging your body’s electrostatic charge to ground.
2. Firmly touch a clean, unpainted, metal surface of the CMXV air handler blower near the control. Any tools held in a person’s hand during grounding will be discharged.
3. Service integrated control module or connecting wiring following the discharge process in step 2. Use caution not to recharge your body with static electricity; (i.e., do not move or shuffle your feet, do not touch ungrounded objects, etc.). If you come in contact with an ungrounded object, repeat step 2 before touching control or wires.
4. Discharge your body to ground before removing a new control from its container. Follow steps 1 through 3 if installing the control on a blower. Return any old or new controls to their containers before touching any ungrounded object.

### *17.2 Diagnostic Chart*

Refer to the Troubleshooting table at the end of this manual for assistance in determining the source of unit operational problems. The Daikin One Thermostat will provide any active fault codes.

## TROUBLESHOOTING

| Error Code | Description | Possible Causes | Corrective Actions |
|---|---|---|---|
| A0-17 | Refrigerant Leak Error (Confirmed) | · Refrigerant leak<br>· A2L sensor failure | · Ventilate the room before conducting any actions<br>· Check coil leakage<br>· Remove refrigerant from system and replace coil |
| CH-14 | A2L Sensor Communication Error | · A2L sensor is not connected<br>· Incorrect wiring of A2L sensor | · Check the connection of A2L sensor<br>· Replace A2L sensor |
| CH-11 | A2L Sensor Internal Error | · A2L sensor failure | · Replace A2L sensor<br>· Replace control board |
| A0-19 | Refrigerant Leak Error (Monitoring) | · Refrigerant leak<br>· A2L sensor failure | · If the leak has subsided, the error will disappear after 5 minutes<br>· Ventilate the room before conducting any actions<br>· Check coil leakage<br>· Remove refrigerant from system and replace coil |
| A0-01 | AUX Alarm Error | · High water level in the evaporation coil<br>· The connected alarm device is activated<br>· Auxiliary Alarm terminals (TB4, TB5) are open | · Check water level in drain pan<br>· Check alarm device<br>· Close Auxiliary terminals TB4 and TB5 if not used. After recovering the system, AUXILIARY CONTACTS OPEN will still be displayed on the thermostat for up to 45 seconds. It will be cleared automatically. |
| A1-00 | EEPROM Error | · No EEPROM in control board<br>· Incorrect EEPROM in control board | · Replace control board |
| AJ-00 | Capacity Setting Error | · No capacity setting in control board<br>· Invalid DIPSW settings for DS1 | · Check the DIPSW setting of DS1 |
| C1-07 | Blower Motor Communication Error | · Incorrect / loose wiring<br>· Power interruption (low voltage) | · Check wiring or tighten wiring connections if needed<br>· Verify the input voltage at the motor<br>· Replace circuit board or motor |
| C6-01 | Blower Motor ID and HP Mismatch Error | · Incorrect size motor<br>· Invalid shared data | · Correct motor installation<br>· Populate shared data set using memory card |
| A6-00 | Blower Motor Not Running | · Fan Motor Obstruction<br>· Power Interruption (low voltage)<br>· Incorrect / loose wiring | · Check for obstruction on the fan/motor<br>· Verify the input voltage at the motor<br>· Check wiring or tighten wiring connections if needed<br>· Replace circuit board or motor |

## TROUBLESHOOTING

| Error Code | Description | Possible Causes | Corrective Actions |
|---|---|---|---|
| U5-00 | Remote Controller Communication Error | · Incorrect wiring between ID unit and thermostat.<br>· Thermostat failure<br>· Power interruption (low voltage) | · Check for thermostat and indoor unit wiring<br>· Verify the input voltage at the ID unit and thermostat After restoring the system with power supply, TSTAT ID NO COM will continue to be displayed on the thermostat within 2 minutes. The error code will be cleared automatically.<br>· Replace control board or thermostat |
| UA-02 | IDU/ODU Connection Unsupported Error | · Incorrect combination of IDU and ODU | · Check the combination of IDU and ODU |
| UA-03 | Brand Mismatch Error | · The IDU and ODU brands don't match | · Check the combination of IDU and ODU |
| U4-00 | IDU/ODU Transmission Error | · Incorrect wiring between IDU and ODU | · Check wiring or tighten wiring connections if needed. |
| C4-02 | Liquid Thermistor Error (Short) | · Short circuit of the thermistor or pressure sensor<br>· Thermistor reading incorrect or values outside of normal range | · Check the connection to the thermistor (PCB and junction connector)<br>· Check the resistance value of the thermistor (refer service manual)<br>· Replace thermistor<br>· Replace the control board |
| C4-03 | Liquid Thermistor Error (Open) | · Open circuit of the thermistor or pressure sensor<br>· Thermistor reading incorrect or values outside of normal range | · Check the connection to the thermistor (PCB and junction connector)<br>· Check the resistance value of the thermistor (refer service manual)<br>· Replace thermistor<br>· Replace the control board |
| C5-02 | Coil Thermistor/Pressure Sensor Error (Short) | · Short circuit of the thermistor or pressure sensor<br>· Thermistor reading incorrect or values outside of normal range | · Check the connection to the thermistor (PCB and junction connector)<br>· Check the resistance value of the thermistor (refer service manual)<br>· Replace thermistor<br>· Replace the control board |
| C5-03 | Coil Thermistor/Pressure Sensor Error (Open) | · Open circuit of the thermistor or pressure sensor<br>· Thermistor reading incorrect or values outside of normal range | · Check the connection to the thermistor (PCB and junction connector)<br>· Check the resistance value of the thermistor (refer service manual)<br>· Replace thermistor<br>· Replace the control board |

## TROUBLESHOOTING

| Error Code | Description | Possible Causes | Corrective Actions |
|---|---|---|---|
| A6-21 | Inadequate Airflow | · Fan/motor obstruction or blocked filters<br>· Restrictive ductwork or ductwork undersized<br>· Wiring disconnected<br>· Wrong outdoor/indoor combination<br>· ID motor failure | · Check for obstruction on the fan/motor<br>· Check ductwork/filter for blockage, clean filters<br>· Remove obstruction. Verify all registers are fully open<br>· Check the connections and the rotation of the motor<br>· Verify the input voltage at the motor<br>· Verify ductwork is appropriately sized for system. Resize/replace ductwork if needed<br>· Replace motor |
| A6-20 | Fan Motor Status Error | · Fan/motor obstruction or blocked filters<br>· Power interruption (low voltage)<br>· Incorrect wiring<br>· Blockage in the airflow (ductwork) or ductwork undersized | · Check for obstruction on the fan/motor/ductwork, clean filters<br>· Verify the input voltage at the motor<br>· Check wiring<br>· Replace motor |
| E-8 | Input Overcurrent Protection | · Outdoor temperature is out of operation range<br>· Compressor failure., power module or outdoor unit PCB<br>· Short circuit in system<br>· Excessive ducting static<br>· Too many CMXV Air Handlers connected to outdoor power | · Check for obstructions to airflow to compressor at the outdoor unit, move unit in to the shade<br>· Replace failed parts<br>· Check for continuity and damage to the electronics due to a short circuit<br>· Check for obstruction on the fan/motor/ductwork, clean filters<br>· Follow instructions in section 12.4.1 and re-wire one of the CMXVs with indoor supplied power |

## DIAGNOSTIC CODES

| Error Code | Detail Code | Details |
|---|---|---|
| A0 | 17 | Refrigerant Leak Error (Confirmed) |
| CH | 14 | A2L Sensor Communication Error |
| CH | 11 | A2L Sensor Internal Error |
| A0 | 19 | Refrigerant Leak Error (Monitoring) |
| A0 | 1 | AUX Alarm Error |
| A1 | 0 | EEPROM Error |
| AJ | 0 | Capacity Setting Error |
| C1 | 7 | Blower Motor Communication Error |
| C6 | 1 | Blower Motor ID and HP Mismatch Error |
| A8 | 0 | Blower Motor Voltage Error |
| C6 | 2 | Incomplete Parameters Sent to Motor |
| A6 | 0 | Blower Motor Not Running |
| U5 | 0 | Remote Controller Communication Error |
| UA | 2 | IDU/ODU Connection Unsupported Error |
| UA | 3 | Brand Mismatch Error |
| U4 | 0 | IDU/ODU Transmission Error |
| C4 | 2 | Liquid Thermistor Error (Short) |
| C4 | 3 | Liquid Thermistor Error (Open) |
| C5 | 2 | Coil Thermistor/Pressure Sensor Error (Short) |
| C5 | 3 | Coil Thermistor/Pressure Sensor Error (Open) |
| A6 | 21 | Inadequate Airflow |
| A6 | 20 | Fan Motor Status Error |

## PCB LED STATE

| LED | Component Description | Approximate location | Color | State | | | Description |
|---|---|---|---|---|---|---|---|
| | | | | Blinking | Solid ON | OFF | |
| LED 1 | CPU MONITOR (HAP) | Near microcontroller, lower left quadrant of PCB. | Green | X | | | Only one blinking pattern available. This means the ID PCB is operating properly. |
| | | | | | | X | PCB is defective or not powered. |
| LED 2 | COMN STATUS (H2P) | Near microcontroller, lower left quadrant of PCB. | Red | | X | | Communication between the ID and OD units has not been established. |
| | | | | | | X | Communication has been established between the ID and OD units. |
| LED 3 | H3P | Near button, lower right quadrant of PCB. | Green | X | | | Communication has been established between the ID unit and Thermostat. |
| | | | | | | X | The thermostat is not connected or has failed to establish communication with the ID unit. |

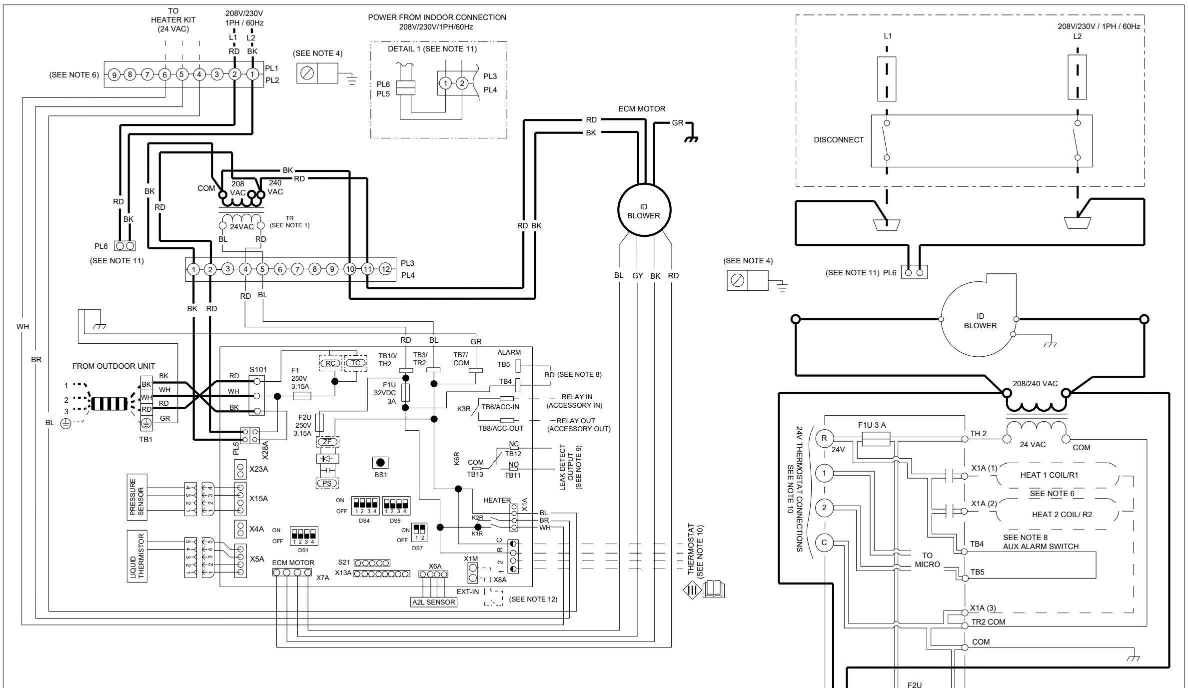
Each LED operates independently from each other.
When the PCB enters “Test Mode,” LED1 and LED2 will be OFF, and LED3 will switch ON.

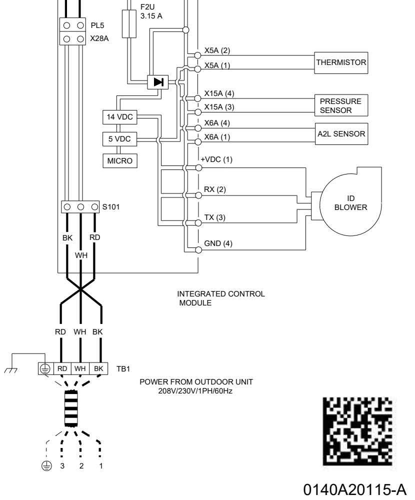
# WIRING DIAGRAM

**NOTE:** THESE INSTRUCTIONS ARE SPECIFICALLY FOR CMXV* MODELS. DO NOT ATTEMPT TO APPLY THESE DIAGRAMS FOR ANY OTHER MODELS.

**WARNING**

**HIGH VOLTAGE! DISCONNECT ALL POWER BEFORE SERVICING. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.**




**NOTES:**

1. FOR INSTALLATIONS USING 208V SUPPLY POWER, MOVE PRIMARY CONNECTIONS FROM THE 240V TAP TO THE 208V TAP.
2. MANUFACTURER'S SPECIFIED REPLACEMENT PARTS MUST BE USED WHEN SERVICING.
3. IF ANY OF THE ORIGINAL WIRES AS SUPPLIED WITH THIS UNIT MUST BE REPLACED, IT MUST BE REPLACED WITH WIRING MATERIAL HAVING A TEMPERATURE RATING OF AT LEAST 105°C. USE COPPER CONDUCTORS ONLY.
4. UNIT MUST BE PERMANENTLY GROUNDED AND CONFORM TO N.E.C AND LOCAL CODES.
5. RED STATUS LED PROVIDES NETWORK STATUS. GREEN RX LED INDICATES NETWORK TRAFFIC. USE LEARN BUTTON TO RESET NETWORK.
6. DISCARD FACTORY INSTALLED CONNECTOR PL1 AND REPLACE WITH THE HEATER KIT WIRING HARNESS CONNECTOR WHEN INSTALLING OPTIONAL ELECTRIC HEATER KIT.
7. THE POSITION OF SELECTOR SWITCHES (DS1 - DS7) INDICATE FACTORY SETTING.
8. REMOVE SHORT RED JUMPER WIRE AND PUT AUX ALARM SWITCH WHEN INSTALLING NORMALLY CLOSED DRY CONTACT SWITCH, CONDENSATE SWITCH, ETC
9. THIS OUTPUT (K6R RELAY) OPERATES WHEN A REFRIGERANT LEAK IS DETECTED. (DRY CONTACT) USE THIS CONTACT WHEN INTERLOCKING UV LIGHT, DAMPER, VENTILATION ETC.
10. USE N.E.C CLASS 2 WIRE.
11. WHEN OUTDOOR POWER IS INSUFFICIENT FOR THE OPERATING OF ALL INDOOR COMPONENTS, DISCONNECT PL5 FROM X28A AND CONNECT PL5 TO PL6. POWER MUST BE CONNECTED THROUGH PL1 LEAD WIRES OR THROUGH THE HEATER KIT WIRE HARNESS. SEE IO MANUAL FOR ADDITIONAL INFORMATION.
12. CONNECT TO HUMIDIFIER SIGNAL.

**COMPONENT LEGEND:**

- LOW VOLTAGE
- LOW VOLTAGE FIELD
- HIGH VOLTAGE
- HIGH VOLTAGE FIELD
- JUNCTION
- TERMINAL
- INTERNAL CONNECTIONS
- RESISTOR
- FUSE (F1U, F2U, F1)
- PLUG CONNECTION
- EQUIPMENT GROUND
- FIELD GROUND
- DIP SWITCH(OFF) ON OFF
- READ THE INSTRUCTIONS
- FIELD SPLICE
- CLASS III
- SLEEVE

**COMPONENT CODES:**

- PL1, PL2 — POWER/HEATER CONNECTOR
- PL3, PL4 — TRANSFORMER CONNECTOR
- PL5 — PCB POWER TO TRANSFORMER /BLOWER
- PL6 — INDOOR POWER (WHEN REQUIRED)
- DS1-DS7 — SELECTOR SWITCH
- TR — TRANSFORMER
- ID — INDOOR
- AUX — AUXILIARY
- COM — 24V COMMON
- BS1 — FAULT RECALL BUTTON
- TB1 — TERMINAL BLOCK

**COLOR CODES:**

- BL - BLUE
- RD - RED
- YL - YELLOW
- OR - ORANGE
- BK - BLACK
- GY - GREY
- BR - BROWN
- GR - GREEN
- PU - PURPLE
- WH - WHITE

0140A20115-A

Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

27

IOD-4065B

# CMXV AIR HANDLER

## CMXV AIR HANDLER HOMEOWNER'S ROUTINE MAINTENANCE RECOMMENDATIONS

*We strongly recommend a bi-annual maintenance checkup be performed before the heating and cooling seasons begin by a **qualified servicer**.*

### REPLACE OR CLEAN FILTER

**IMPORTANT NOTE:** Never operate unit without a filter installed as dust and lint will build up on internal parts resulting in loss of efficiency, equipment damage and possible fire.

An indoor air filter must be used with your comfort system. A properly maintained filter will keep the indoor coil of your comfort system clean. A dirty coil could cause poor operation and/or severe equipment damage.

Your air filter or filters could be located in your furnace, in a blower unit, or in "filter grilles" in your ceiling or walls. The installer of your air conditioner or heat pump can tell you where your filter(s) are, and how to clean or replace them.

Check your filter(s) at least once a month. When they are dirty, replace or clean as required. Disposable type filters should be replaced. Reusable type filters may be cleaned.

You may want to ask your dealer about high efficiency filters. High efficiency filters are available in both electronic and non-electronic types. These filters can do a better job of catching small airborne particles.

### MOTORS

Indoor and outdoor fan motors are permanently lubricated and do not require additional oiling.

**⚠ WARNING**

**HIGH VOLTAGE**
**DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.**



### ALUMINUM INDOOR COIL CLEANING (QUALIFIED SERVICER ONLY)

This unit is equipped with an aluminum tube evaporator coil. The safest way to clean the evaporator coil is to simply flush the coil with water. This cleaning practice remains as the recommended cleaning method for both copper tube and aluminum tube residential evaporator coils.

It has been determined that many coil cleaners and drain pan tablets contain corrosive chemicals that can be harmful to aluminum tube and fin evaporator coils. Even a one-time application of these corrosive chemicals can cause premature aluminum evaporator coil failure. Any cleaners that contain corrosive chemicals including, but not limited to, chlorine and hydroxides, should not be used.

An alternate cleaning method is to use one of the products listed in TP-109* to clean the coils. The cleaners listed are the only agents deemed safe and approved for use to clean round tube aluminum coils. TP-109 is also available on the web site in Partner Link > Service Toolkit.

**NOTE:** Ensure coils are rinsed well after use of any chemical cleaners.

### BEFORE YOU CALL YOUR SERVICER

**⚠ CAUTION**

**TO AVOID THE RISK OF EQUIPMENT DAMAGE OR FIRE, INSTALL THE SAME AMPERAGE BREAKER OR FUSE AS YOU ARE REPLACING. IF THE CIRCUIT BREAKER OR FUSE SHOULD OPEN AGAIN WITHIN THIRTY DAYS, CONTACT A QUALIFIED SERVICER TO CORRECT THE PROBLEM.**
**IF YOU REPEATEDLY RESET THE BREAKER OR REPLACE THE FUSE WITHOUT HAVING THE PROBLEM CORRECTED, YOU RUN THE RISK OF SEVERE EQUIPMENT DAMAGE.**

- Check the thermostat to confirm that it is properly set.
- Wait 15 minutes. Some devices in the outdoor unit or in programmable thermostats will prevent compressor operation for awhile, and then reset automatically. Also, some power companies will install devices which shut off air conditioners for several minutes on hot days. If you wait several minutes, the unit may begin operation on its own.
- Check the electrical panel for tripped circuit breakers or open fuses. Reset the circuit breakers or replace fuses as necessary.
- Check the disconnect switch near the indoor unit.
- Check for obstructions on the outdoor unit . Confirm that it has not been covered on the sides or the top. Remove any obstruction that can be safely removed. If the unit is covered with dirt or debris, call a qualified servicer to clean it.
- Check for blockage of the indoor air inlets and outlets. Confirm that they are open and have not been blocked by objects (rugs, curtains or furniture).
- Check the filter. If it is dirty, clean or replace it.

- Listen for any unusual noise(s), other than normal operating noise, that might be coming from the outdoor unit. If you hear unusual noise(s) coming from the unit, call a qualified servicer.

## UV COIL AND AIR PURIFIERS

Clean Comfort brand UV coil purifiers also can be purchased from distributor. Maximum UV lamp diameter to be used is 1.375” to reduce the possibility of air leak.

The power source must be installed external of the unit. Ensure that the wiring is routed though the access panel knockout with the grommet included. A magnetic door switch must be installed to avoid an accidental ultraviolet exposure during service. UV-C radiation hazard label must be placed on any door or access panel.

Refer to UV coil purifiers product specification and installation manual for additional details. see table 18 for model and kit assignment.

| UV-C PART NUMBERS | |
|---|---|
| **MODELS** | **LAMP** |
| UC18S15-24 | UCP-16013 |
| UC18S15-24B | UCP-16012 |

**Table 18**

UVc light conversion kit is required to install with the UVc light, for installation refer to the UVC drain pan kit installation manual IO -7023. see table 19 for model and kit assignment.

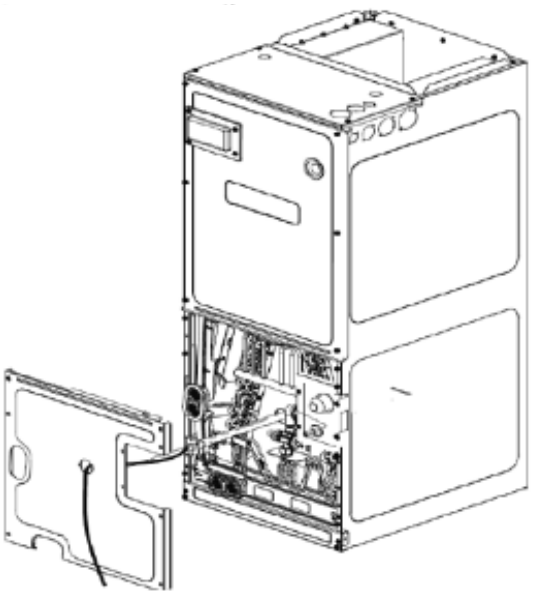


**Figure 25**

| KIT # | DRIAN PAN MAIN SEQ | DRIAN PAN SIDE SEQ | DRIAN PAN EXT SEQ | CONDENSATE COLLECTOR, FRONT | CONDENSATE COLLECTOR, BACK | CONDENSATE COLLECTOR, MIDDLE |
|---|---|---|---|---|---|---|
| **UVPK08** | **0010** | **0020** | **0050** | **0030** | **0040** | **NA** |

**Table 19**

## 1.6 FFA09/12/15/18AVJU9

# Contents

**Safety Considerations** ..... 1
**Before Installation** ..... 3
**Accessories** ..... 4
**Choosing an Installation Site** ..... 5
**Indoor Unit Installation** ..... 7
1. Relation of ceiling opening to unit and suspension bolt position ..... 7
2. Make the ceiling opening needed for installation where applicable (For existing ceilings) ..... 8
3. Installing the suspension bolts ..... 8
4. Installing the indoor unit ..... 8
5. Drain piping work ..... 9
6. Wiring ..... 12

**Refrigerant Piping Work** ..... 15
1. Flaring the pipe end ..... 15
2. Refrigerant piping ..... 15
**Installation of the Decoration Panel** ..... 16
**Field Settings** ..... 17
1. Setting air outlet direction ..... 17
2. Setting for options ..... 17
3. Setting air filter sign ..... 17
4. 2 remote controllers (controlling 1 indoor unit by 2 remote controllers) ..... 17
**Test Operation and Testing** ..... 18
1. Test operation and testing ..... 18
2. Test items ..... 20
3. How to diagnose for malfunction ..... 21
4. Pump down operation ..... 21

The pictures in this document are for illustrative purposes only.

# Safety Considerations

**Refer also to the General Safety Considerations in the separate booklet.**

| | |
|---|---|
|  | **Read the precautions in this manual carefully before operating the unit.** |
|   | **This appliance is filled with R32.** |

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.
Instruct the user on how to operate and maintain the unit.
Inform users that they should store this installation manual with the operation manual for future reference.
Always use a licensed installer or contractor to install this product.
Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion.
Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

⚠ **DANGER** ····· Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING** ····· Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** ····· Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ **NOTE** ····· Indicates situations that may result in equipment or property-damage accidents only.

**⚠ DANGER**

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death. Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injury or death by suffocation.
- All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal.

**⚠ WARNING**

- Only qualified personnel licensed or certified in their jurisdiction must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- Pipe-work including piping material, pipe routing, and installation shall include protection from physical damage in operation and service, and be in compliance with national and local codes and standards, such as ASHRAE 15, ASHRAE 15.2, IAPMO Uniform Mechanical Code, ICC International Mechanical Code, or CSA B52. All field joints shall be accessible for inspection prior to being covered or enclosed.

- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injury.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.
- The unit must have an uninterrupted, unbroken electrical ground to minimize the possibility of personal injury if an electrical fault should occur.
  The electrical ground circuit may consist of an appropriately sized electrical wire connecting the ground lug in the unit and control box wire to the building's electrical service panel.
  Other methods of grounding are permitted if performed in accordance with the "National Electrical Code" (NEC)/ "American National Standards Institute" (ANSI)/ "National Fire Protection Association" (NFPA) 70 and local/state codes.
  In CANADA, electrical grounding is to be in accordance with the Canadian Electrical Code CSA C22.1.
  Failure to observe this warning can result in electrical shock that can cause personal injury or death.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel licensed or certified in their jurisdiction according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the electrical wiring box cover can be securely fastened. Improper positioning of the electrical wiring box cover may result in electric shock, fire, or the terminals overheating.
- Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit terminal cover (panel). If the terminal cover/panel is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R32) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, which may result in equipment damage and even injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.
- Do not use means to accelerate the defrosting process (if possible) or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.
- Comply with national gas regulations.
- The indoor equipment and pipes shall be securely mounted and guarded such that accidental rupture of equipment cannot occur from such events as moving furniture or reconstruction activities.
- When mechanical connectors are reused indoors, sealing parts shall be renewed.
- When flared joints are reused indoors, the flared part shall be refabricated.

**⚠ CAUTION**

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- Wear adequate personal protective equipment (protective gloves, safety glasses,…) when installing, maintaining or servicing the system.
- The heat exchanger fins are sharp enough to cut. To avoid injury, wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to ensure proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R32 in the system must be kept clean, dry, and tight.
  (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.
  (b) Tight -- R32 does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R32 can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant piping* and follow the procedures.
- The indoor unit is for R32. See the catalog for outdoor models that can be connected. Normal operation is not possible when connected to non-compatible outdoor units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors.

# Safety Considerations

- Do not install the air conditioner or heat pump in the following locations:
  (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
  Plastic parts may deteriorate and fall off or result in water leakage.
  (b) Where corrosive gas, such as sulfurous acid gas, is produced.
  Corroding copper pipes or soldered parts may result in refrigerant leakage.
  (c) Near machinery emitting electromagnetic waves.
  Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
  (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled.
  Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.
- Servicing shall be performed only as recommended by the manufacturer and licensed or certified in their jurisdiction.

**⚠ NOTE**

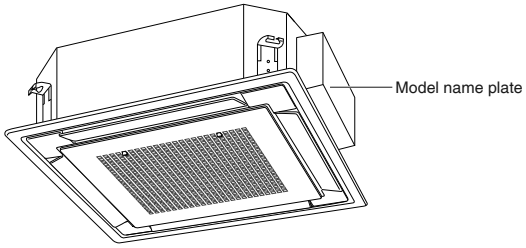
- The indoor unit should be positioned where the unit and interunit wires (outdoor to indoor) are at least 3.3ft (1m) away from any televisions or radios. (The unit may cause interference with the picture or sound.) Depending on the radio waves, a distance of 3.3ft (1m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Only use tools for R32, such as a gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R32, the refrigerant may deteriorate.
- As maximum allowable pressure is 604psi (4.17MPa), the wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.

FTN007(R32)-U

This is an appliance that is not accessible to the general public.

# Before Installation

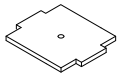
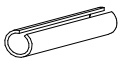
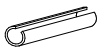
- Leave the unit inside its packaging until you reach the installation site. Where unpacking is unavoidable, use a sling of soft material or protective plates together with a rope when lifting, this to avoid damage or scratches to the unit.
  When unpacking the unit or when moving the unit after unpacking, be sure to lift the unit by holding on to the hanger bracket without exerting any pressure on other parts, especially on refrigerant piping, drain piping and other resin parts.
- Refer to the installation manual of the outdoor unit for items not described in this manual.
- Caution concerning refrigerant series R32:
  The connectable outdoor units must be designed exclusively for R32.
- Check the General Safety Considerations and enter the values in the blanks on the model name plate.




### Precautions

- Do not install or operate the unit in places mentioned below.
  - Places with mineral oil, or filled with oil vapor or spray like in kitchens. (Plastic parts may deteriorate.)
  - Where corrosive gas like sulphurous gas exists. (Copper tubing and brazed spots may corrode.)
  - Where volatile flammable gas like thinner or gasoline is used.
  - Where machines generating electromagnetic waves exist. (Control system may malfunction.)
  - Where the air contains high levels of salt such as near the ocean and where voltage fluctuates a lot (e.g. in factories). Also inside vehicles or vessels.
- When selecting the installation site, use the supplied (E) template for installation.
- Do not install accessories on the casing directly. Drilling holes in the casing may damage electrical wires and consequently cause fire.
- Take off static electricity from the body when carrying out wiring and the electrical wiring box cover is removed.
  The electric parts may be damaged.

# Accessories

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Ⓐ Drain hose  | 1 | Ⓑ Clamp metal  | 1 | Ⓒ Washer (for hanger bracket)  | 8 | Ⓓ Clamp  | 7 |
| Ⓔ Template (cut out from upper part of packing)  | 1 | Ⓕ Screws (M5) (for template)  | 4 | Ⓖ Fitting insulation (for gas pipe)  | 1 | Ⓗ Fitting insulation (for liquid pipe)  | 1 |
| Ⓙ Sealing pad (large)  | 1 | Ⓚ Sealing pad (medium A)  | 1 | Ⓛ Sealing pad (medium B)  | 1 | Ⓜ Sealing pad (small)  | 1 |
| Ⓝ Operation manual<br>Ⓟ Installation manual<br>Ⓠ Warranty<br>Ⓡ General Safety Considerations | 1 each | | | | | | |

### Optional Accessories

- The optional decoration panel and remote controller are required for this indoor unit.

Table 1

| Optional decoration panel |
|---|
| BYFQ60C3W2W (Color: White) |

Table 2

| Remote controller |
|---|
| BRC1NRV71 (Wired type) |

- If you wish to use a remote controller that is not listed in Table 2, select a suitable remote controller after consulting catalogs and technical materials.

# Choosing an Installation Site

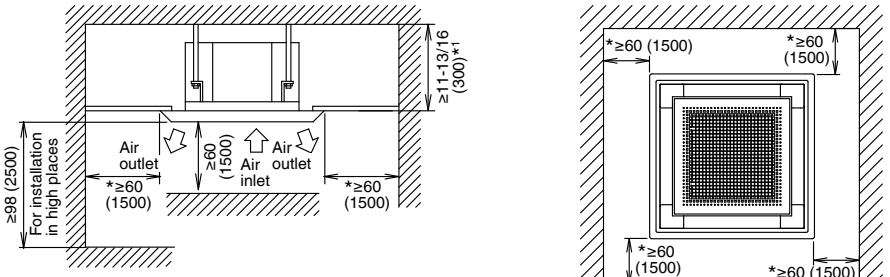
**R32 refrigerant is a mildly flammable refrigerant. Do not install indoor or outdoor units in areas where, in the event of a refrigerant leakage, refrigerant concentrations could exceed flammable concentrations.**
Hold the unit by the 4 hanger brackets when opening the box and moving it, and do not exert pressure on to any other part, piping (refrigerant, drain, etc.), or plastic parts.
If the temperature or humidity inside the ceiling might rise above 86°F (30°C) or RH 80%, respectively, add extra insulation to the unit.
Use polyethylene foam as insulation and make sure it is at least 3/8 inch (10mm) thick and fits inside the ceiling opening.

**Select the airflow directions best suited to the room and point of installation.**
**For air discharge in 3 directions, it is necessary to make field settings by means of the remote controller and to close the air outlet (s).**
**Refer to the installation manual of the blocking pad kit (sold separately) and to "Field Settings" on page 17.**

- Before choosing the installation site, obtain user approval.
  The indoor unit should be positioned in a place where:
  1) both the air inlet and air outlet are unobstructed,
  2) the unit is not exposed to direct sunlight,
  3) the unit is away from the source of heat or steam,
  4) there is no source of machine oil vapor (this may shorten the indoor unit service life),
  5) cool/warm air is circulated throughout the room,
  6) the unit is away from electronic ignition type fluorescent lamps (inverter or rapid start type) as they may affect the remote controller range,
  7) no laundry equipment is nearby,
  8) drainage can be performed without any problem,
  9) the weight of the indoor unit can be adequately supported,
  10) the wall and the ceiling's lower surface are not significantly tilted,
  11) room can be left for installation and service work,
  12) there is no risk of flammable gas leaking,
  13) the required length of indoor-outdoor piping would not exceed the specified maximum length (see the installation manual that came with the outdoor unit for details).

5

**Installation Space Requirements**




*1 These dimensions do not include the dimensions of any added extra insulation, so please secure additional space when adding extra insulation.

unit:inch (mm)

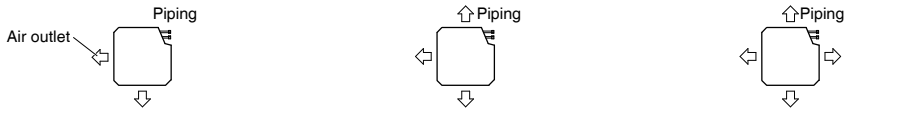
- Leave 8 inch (200mm) or more space where marked with the *, on sides where the air outlet is closed.

**<Failure example>**
If there is an obstacle in the airflow path or proper installation space is not provided, the indoor unit will cause air volume reduction and take in air blown out of the indoor unit, thus resulting in performance degradation or turning the thermostat OFF frequently.

## Airflow direction

- The air direction shown is an example.
- Select the appropriate number of directions according to the shape of the room and the location of the unit. (Field settings have to be made using the remote controller and the outlet vents have to be shut off if 2 or 3 directions are selected.
  See the blocking pad kit (sold separately) installation manual for details.)

**Airflow direction** (Example)




Air outlet in 2 directions | Air outlet in 3 directions | Air outlet in 4 directions

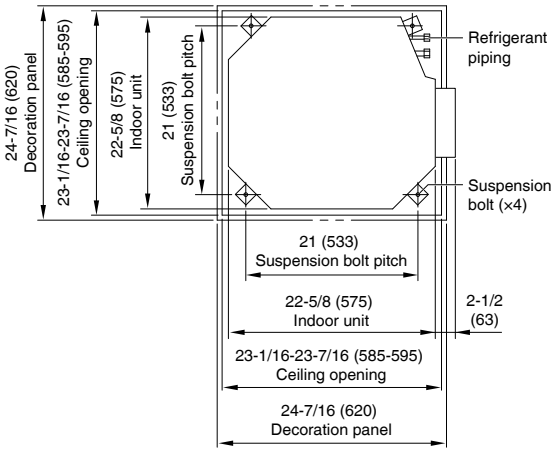
**Use suspension bolts for installation. Check whether the ceiling is strong enough to support the weight of the unit or not. If there is a risk, reinforce the ceiling before installing the unit.**

(Installation pitch is marked on the Ⓔ template. Refer to it to check for points requiring reinforcing.)

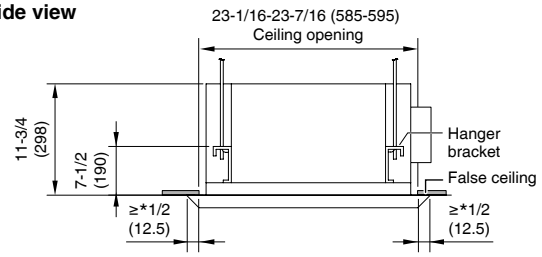
# Indoor Unit Installation

## 1. Relation of ceiling opening to unit and suspension bolt position

**Top view**



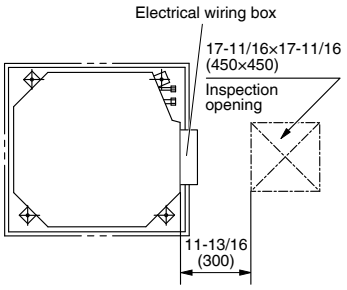

**Side view**




unit: inch (mm)

## NOTE

- * If the panel does not extend over the ceiling by this amount, supplement with extra ceiling material or restore the ceiling.
- Install the inspection opening on the electrical wiring box side where maintenance and inspection of the electrical wiring box and drain pump are easy.



## 2. Make the ceiling opening needed for installation where applicable (For existing ceilings)

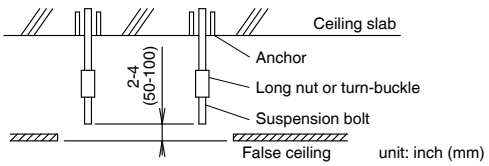
- Refer to the (E) template for ceiling opening dimensions.
- Create the ceiling opening required for installation. From the side of the opening to the casing outlet, implement the refrigerant and drain piping and wiring for remote controller and wiring between units. Refer to each **"5. Drain piping work"** or **"6. Wiring"** section.
- After making an opening in the ceiling, it may be necessary to reinforce ceiling beams to keep the ceiling level and to prevent it from vibrating. Consult the builder for details.

## 3. Installing the suspension bolts

(Use either a M8-M10 size bolt or the equivalent)
Use a hole-in anchor for existing ceilings, and a sunken insert, sunken anchor or other field supplied parts for new ceilings to reinforce the ceiling to bear the weight of the unit. Adjust clearance (2-4 inch (50-100mm)) from the ceiling before proceeding further.

- All the above parts are field supplied.

**Installation Example**




## 4. Installing the indoor unit

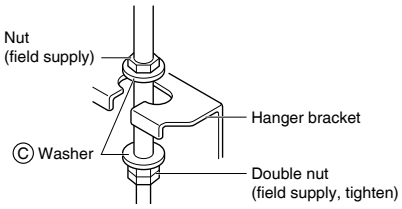
**When installing optional accessories (except for the decoration panel), read also the installation manual of the optional accessories. Depending on the field conditions, it may be easier to install optional accessories before the indoor unit is installed. However, for existing ceilings, always install fresh air intake kit before installing the unit.**
As for the parts to be used for installation work, be sure to use the provided accessories and specified parts designated by Daikin.

### For new ceilings

1) Install the indoor unit temporarily.

- Attach the hanger bracket to the suspension bolt. Be sure to fix it securely by using a nut and (C) washer from the upper and lower sides of the hanger bracket.

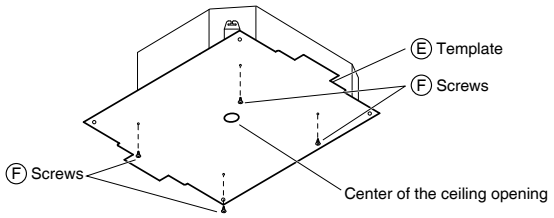
**Securing the hanger bracket**




2) Refer to the (E) template for ceiling opening dimension. Consult the builder or carpenter for details.

- The center of the ceiling opening is indicated on the (E) template. This indication also indicates the center of the unit.
- The (E) template can be rotated by 90° to be able to indicate the correct dimensions on all 4 sides.
- After cutting the template from the packaging, attach the (E) template to the unit with (F) screws (×4) as shown in figure.
- Ceiling height is shown on the side of the (E) template. Adjust the height of the unit according to this indication.

**Installation of template**




### Ceiling work

3) Adjust the unit to the right position for installation.
(Refer to **"1. Relation of ceiling opening to unit and suspension bolt position"**.)

# Indoor Unit Installation

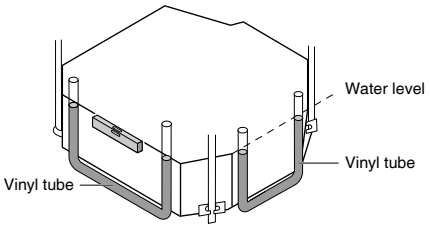
**⚠ CAUTION**

If the unit is tilted against condensate flow, the float switch may malfunction and cause water to drip.

4) Check the unit is horizontally level.
   - The indoor unit is equipped with a built-in drain pump and float switch. Verify that it is level by using a water level or a water-filled vinyl tube.

5) Remove the (E) template.

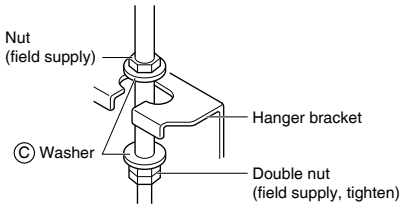
**Maintaining horizontality**




**For existing ceilings**

1) Install the indoor unit temporarily.
   - Attach the hanger bracket to the suspension bolt. Be sure to fix it securely by using a nut and (C) washer from the upper and lower sides of hanger bracket.

**Securing the hanger bracket**




2) Adjust the height and position of the unit.
   (Refer to **"1. Relation of ceiling opening to unit and suspension bolt position"**.)

3) Perform steps 4) in **For new ceilings** .

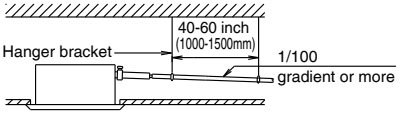
## 5. Drain piping work

**⚠ CAUTION**

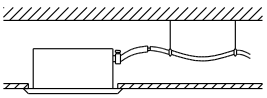
- Water pooling in the drainage piping can cause the drain to clog.
- **Do not connect the drain piping directly to sewage pipes that smell of ammonia. The ammonia in the sewage might enter the indoor unit through the drain pipes and corrode the heat exchanger.**
- **Keep in mind that the drain pipe becomes blocked if water collects on it.**

### 1. Install of drain piping

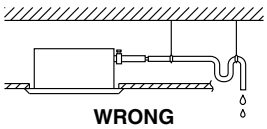
- Install the drain piping as shown in the figure and take measures against condensation. Improperly rigged piping could lead to leaks and eventually wet furniture and belongings.
- Keep piping as short as possible and slope it downwards at a gradient of at least 1/100 so that air may not remain trapped inside the pipe.
- Keep pipe size equal to or greater than that of the connecting pipe (vinyl pipe of nominal diameter 13/16 inch (20mm) and outer diameter 1 inch (26mm)).
- Push the supplied drain hose as far as possible over the drain socket.
- If the drain hose cannot be sufficiently set on a slope, refer to **"Precautions for drain raising piping"**.
- To keep the drain hose from sagging, space hanger bracket every 40-60 inch (1000-1500mm).




GOOD

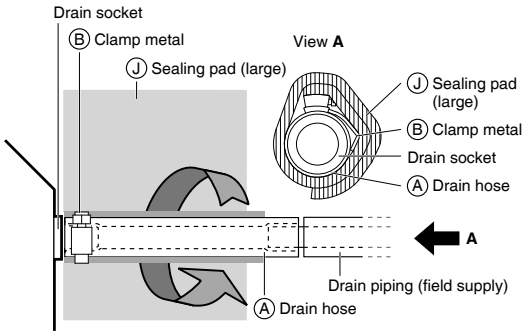


WRONG



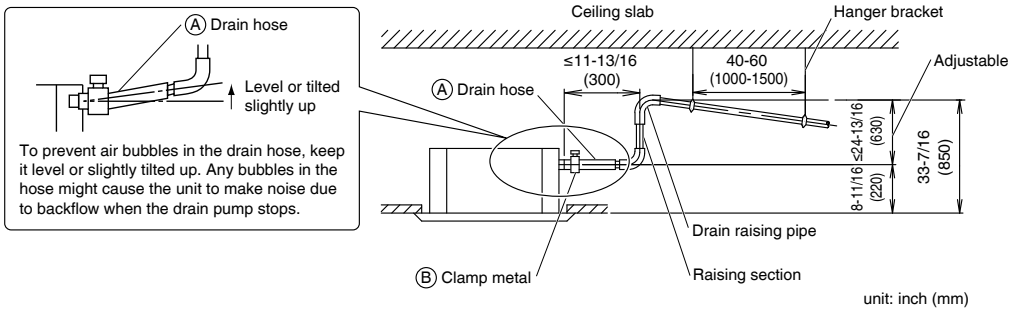
WRONG

- Tighten the (B) clamp metal as indicated in the illustration.
- After the testing of drain piping is finished, attach the drain (J) sealing pad (large) supplied with the unit over the uncovered part of the drain socket (= between drain hose and unit body).
- Wrap the supplied large sealing pad over the (B) clamp metal and (A) drain hose to insulate and fix it with clamps.
- Insulate the complete drain piping inside the building (field supply).
- If the drain hose cannot be sufficiently set on a slope, fit the hose with drain raising piping (field supply).

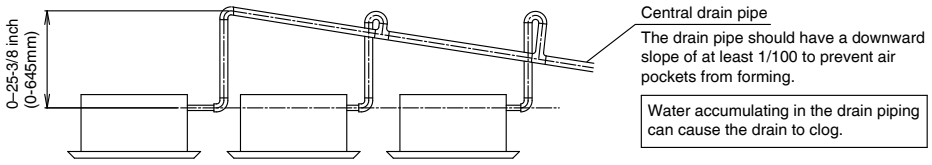



## Precautions for drain raising piping

- Install the drain raising pipes at a height of less than 24-13/16 inch (630mm)*.
  * If the downward slope cannot achieve a 1/100 gradient, install the drain raising pipes.
- Install the drain raising pipes at a right angle to the indoor unit and no more than 11-13/16 inch (300mm) from the unit.




- To ensure no excessive pressure is applied to the included (A) drain hose, do not bend or twist the hose when installing as it could cause leakage.
- If converging multiple drain pipes, install according to the procedure shown below.



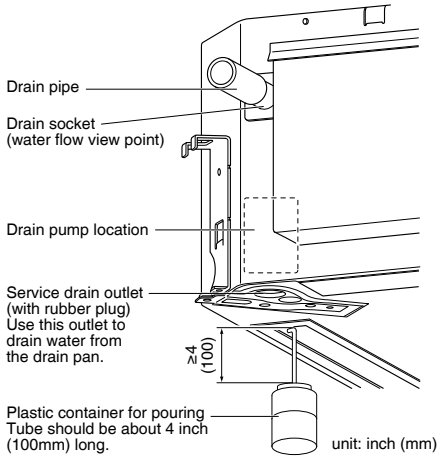

Select converging drain pipes with gauges is suitable for the operating capacity of the unit.

# Indoor Unit Installation

### 2. After piping work is finished, check if drainage flows smoothly

- Add approximately 1/4 gal of water slowly from the air outlet and check drainage flow.

**Method of adding water**




**When electric wiring work is finished**

- Check drainage flow during COOL operation, explained in **"Test operation and testing"** on page 18.

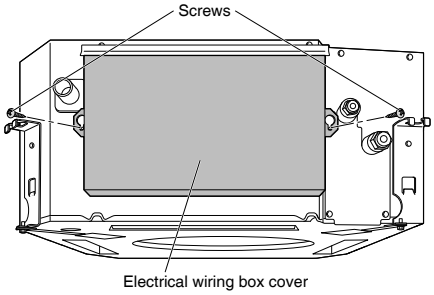
**When electric wiring work is not finished**

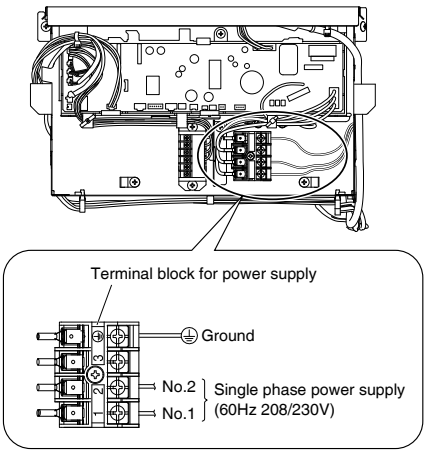
**⚠ CAUTION**

Electrical wiring work should be done by a certified electrician.

- If someone who does not have the proper qualifications performs the work, perform the following actions after the test operation is complete.

1) Remove the electrical wiring box cover (2 screws). Connect the single phase power supply (SINGLE PHASE 60 Hz 208/230V) to connections No.1 and No.2 on the terminal block for power supply.
   Do not connect to No.3 of the terminal block for power supply or the drain pump will not operate.
   When carrying out wiring work around the electrical wiring box, make sure none of the connectors come undone.
   Be sure to attach the electrical wiring box cover before turning on the power.
2) After confirming drainage, turn off the power supply and remove the power supply wiring.
3) Attach the electrical wiring box cover as before.



# 6. Wiring

**Refer also to the installation manual for the outdoor unit.**

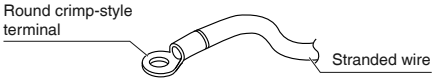
## ⚠ WARNING

- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.

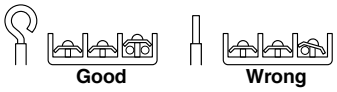
## ⚠ CAUTION

**Precautions to be taken for wiring**

- Recommend stranded cable for interunit wiring. Local code always supersedes recommendation.
- For stranded wires, make sure to use the round crimp-style terminal for connection to the power supply terminal block. Place the round crimp-style terminals on the wires up to the covered part and secure in place.




- If solid core wire must be used, be sure to curl the end of the lead. Improper work may cause heat and fire.




- When clamping wiring, use the included clamping material to prevent outside pressure being exerted on the wiring connections and clamp firmly. When doing the wiring, make sure the wiring is neat and does not cause the electrical wiring box cover to stick up, then close the cover firmly.
- Outside the unit, separate the low voltage wiring (remote controller wiring) and high voltage wiring (wiring between units, ground, and other power wiring) at least 2 in. so that they do not pass through the same place together. Proximity may cause electrical interference, malfunctions, and breakage.

### Tightening torque for the terminal blocks

- Use the correct screwdriver for tightening the terminal screws. If the blade of screwdriver is too small, the head of the screw might be damaged, and the screw will not be properly tightened.
- If the terminal screws are tightened too hard, screws might be damaged.
- Refer to the table below for the tightening torque of the terminal screws.

unit: lbf • ft (N • m)

| | Tightening torque |
|---|---|
| Terminal block for remote controller (6P) | 0.58 - 0.72 (0.79 - 0.98) |
| Terminal block for power supply (4P) | 0.87 - 1.06 (1.18 - 1.44) |

# Indoor Unit Installation

- For electric wiring work, refer also to **"Wiring diagram label"** attached to the electrical wiring box cover.
- For remote controller wiring details, refer to the installation manual attached to the remote controller.
- A circuit breaker capable of shutting down power supply to the entire system must be installed.
- **Specifications for field wire**

The remote controller wiring should be procured locally.

Table 3

| | Wire | Size | Length |
|---|---|---|---|
| Wiring between units | Recommend stranded and shielded.<br>Local code supersedes recommendation. | AWG 14 | – |
| Remote controller wiring | Sheathed (2 wire) | AWG 18 - 16 | Max. 1640ft (500m)* |
| Wiring to ground terminal | Recommend stranded and shielded.<br>Local code supersedes recommendation. | – | – |

* This will be the total extended length in the system when doing group control.

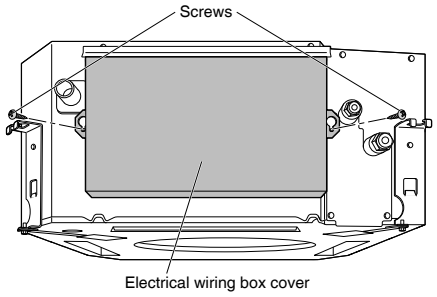
## ⚠ CAUTION

- Arrange the wires and fix a cover firmly so that the cover does not float during wiring work.
- Do not clamp remote controller wiring together with wiring between units. Doing so may cause malfunction.
- Remote controller wiring and wiring between units should be located at least 2 inch (50mm) from other electric wires. Not following this guideline may result in malfunction due to electrical noise.

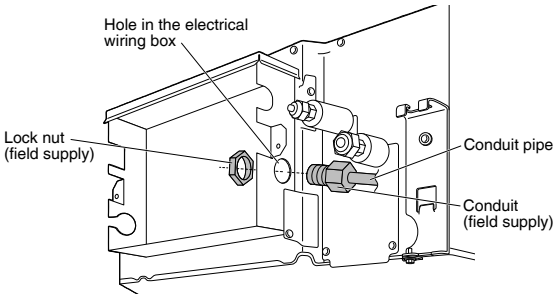
### Connection of wiring between units, ground wire and remote controller wiring

**Wiring between units and ground wire**

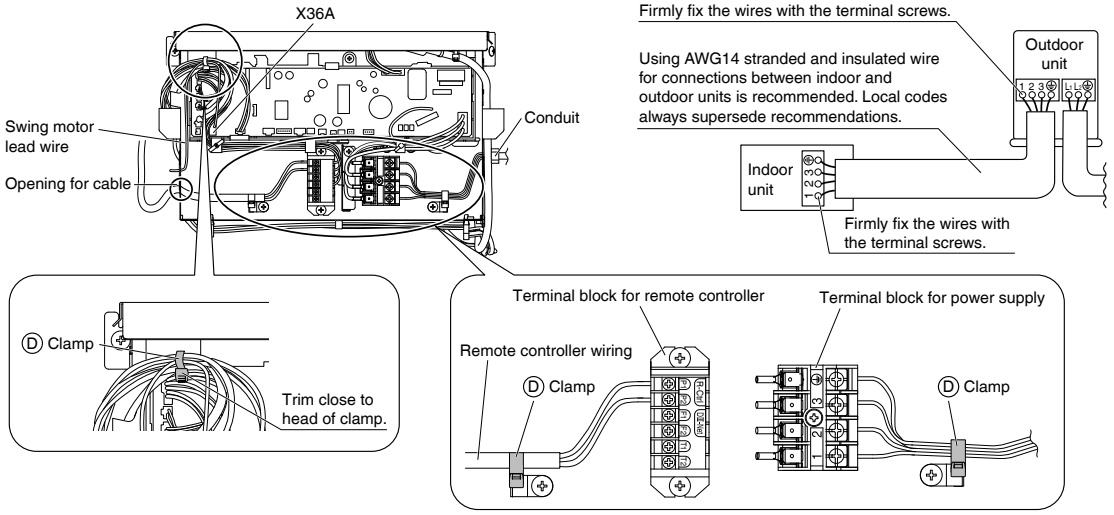
1) Remove the electrical wiring box cover (2 screws).




2) Insert the wires including the ground wire into the conduit, and secure the conduit to the hole in the electrical wiring box using a lock nut, as shown in the illustration.



3) Connect the ground wire to the corresponding terminals.
4) Match wire colors with terminal numbers on the terminal block for power supply of indoor and outdoor unit and firmly secure the wires in the corresponding terminals with screws.
5) In doing this, pull the wires inside through the hole and fix the wires securely with the included Ⓓ clamp.
6) Give enough slack to the wires between the Ⓓ clamp and terminal block for power supply.
7) Pull the wires inside through the hole and connect them to the terminal block for remote controller (P1, P2) (no polarity). Securely fix the remote controller wiring with the included Ⓓ clamp.
8) Give enough slack to the wires between the Ⓓ clamp and the terminal block for remote controller.
9) Securely connect the swing motor lead wire from the decoration panel to the connector (X36A) on the PCB inside the electrical wiring box of the indoor unit.
   The swing flap will not function without connection to the connector.
10) Fasten the swing motor lead wire to the other wires using the Ⓓ clamp. After fastening, trim away any excess strap from the Ⓓ clamp close to the head of the clamp.
11) Attach the electrical wiring box cover as before.
12) After all wiring connections are done, fill in any gaps in the casing wiring holes with putty or Ⓜ sealing pad (small) thus to prevent small animals or dirt from entering the unit from outside and causing short circuits in the electrical wiring box.



# Refrigerant Piping Work

**Refer also to the installation manual for the outdoor unit.**

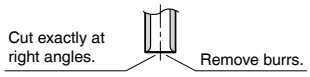
### ⚠ WARNING

- Do not apply mineral oil on flared part.
- Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with the unit.
- Never install a dryer to this R32 unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- Improper flaring may result in refrigerant gas leakage.

**Execute thermal insulation work completely on both sides of the gas and the liquid piping. Otherwise, a water leakage can result sometimes.**
Be sure to use insulation designed for use with HVAC systems.
**Also, in cases where the temperature and humidity of the refrigerant piping sections might exceed 86°F (30°C) or RH80%, reinforce the refrigerant insulation. (13/16 inch (20mm) or thicker) Condensation may form on the surface of the insulating material.**
**Before refrigerant piping work, check which type of refrigerant is used. Proper operation is not possible if the types of refrigerant are not the same.**

## 1. Flaring the pipe end

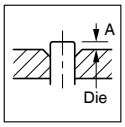
1) Cut the pipe end with a pipe cutter.
2) Remove burrs with the cut surface facing downward so that the filings do not enter the pipe.




3) Put the flare nut on the pipe.
4) Flare the pipe.
5) Check that the flaring has been done correctly.

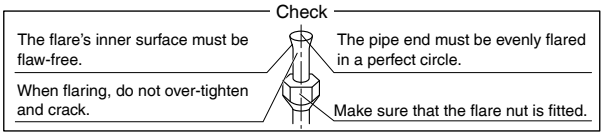
Flaring

Set exactly at the position shown below.




| | Flare tool for R410A or R32 | Conventional flare tool | |
|---|---|---|---|
| | Clutch-type | Clutch-type (Rigid-type) | Wing-nut type (Imperial-type) |
| A | 0-0.020 inch (0-0.5mm) | 0.039-0.059 inch (1.0-1.5mm) | 0.059-0.079 inch (1.5-2.0mm) |

Check

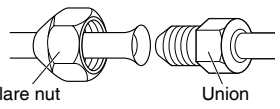



## 2. Refrigerant piping

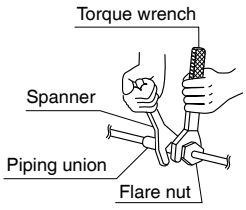
### ⚠ CAUTION

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.
- Excessive tightening of the flare nut can result in the flare nut cracking in the long term, leading to gas leakage.

- For refrigerant pipe connections, align the center of the flare and the union, tighten the flare nut 3 to 4 turns by hand, and then use a torque wrench and a spanner to firmly tighten to the specified torque.



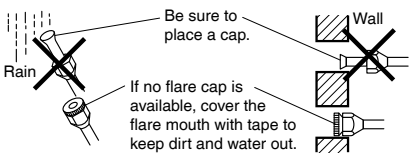

Do not apply refrigeration oil, gas leak prevention agent, etc., to the outer surface of the flare or threads (flare nut, union). (May result in cracking of the flare nut or damage to the threads)




| | Piping size | Flare nut tightening torque |
|---|---|---|
| Gas side | O.D. 3/8 inch (9.5mm) | 24-1/8–29-1/2lbf • ft (32.7-39.9N • m) |
| | O.D. 1/2 inch (12.7mm) | 36-1/2–44-1/2lbf • ft (49.5-60.3N • m) |
| Liquid side | O.D. 1/4 inch (6.4mm) | 10-1/2–12-3/4lbf • ft (14.2-17.2N • m) |

### Cautions on piping handling

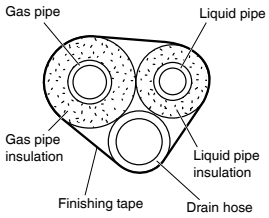
- Protect the open end of the pipe from dust and moisture.
- All pipe bends should be as gentle as possible. Use a pipe bender for bending.



### Selection of copper and heat insulation materials

When using commercial copper pipes and fittings, observe the following:

- Insulation material: Polyethylene foam
  Heat transfer rate: 0.041 to 0.052W/mK (0.024 to 0.030Btu/fth°F (0.035 to 0.045kcal/mh°C))
  Be sure to use insulation that is designed for use with HVAC Systems.
- ACR Copper pipe only.



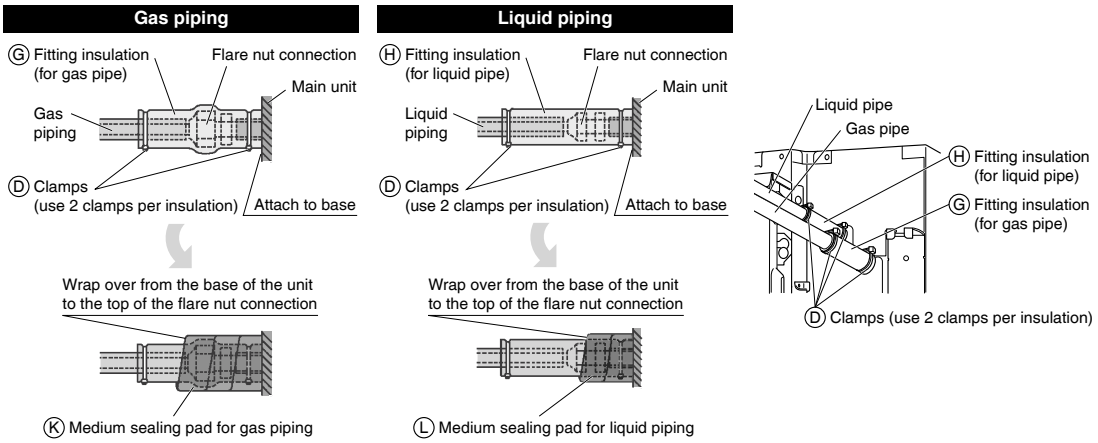

- Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below.

| | Piping size | Minimum bend radius | Piping thickness | Thermal insulation size | Thermal insulation thickness |
|---|---|---|---|---|---|
| Gas side | O.D. 3/8 inch (9.5mm) | 1-3/16 inch (30mm) or more | 0.031 inch (0.8mm) (C1220T-O) | I.D. 15/32-19/32 inch (12-15mm) | 13/32 inch (10mm) Min. |
| | O.D. 1/2 inch (12.7mm) | 1-9/16 inch (40mm) or more | | I.D. 9/16-5/8 inch (14-16mm) | |
| Liquid side | O.D. 1/4 inch (6.4mm) | 1-3/16 inch (30mm) or more | | I.D. 5/16-13/32 inch (8-10mm) | |

- Use separate thermal insulation pipes for gas and liquid refrigerant pipes.

- Make absolutely sure to execute thermal insulation works on the pipe-connecting section, after checking for gas leakage, by thoroughly studying the following figures and using the included thermal insulating materials Ⓖ fitting insulation and Ⓗ fitting insulation. Fasten both ends with the Ⓓ clamps.

**Piping insulation procedure**




**⚠CAUTION**

Be sure to insulate any field piping all the way to the piping connection inside the unit. Any exposed piping may cause condensation or burns if touched.

# Installation of the Decoration Panel

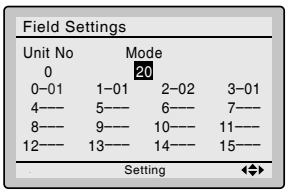
Read **"Test Operation and Testing"** before making a test operation without attaching the decoration panel.
Refer to the installation manual attached to the decoration panel.
After installing the decoration panel, ensure that there is no space between the unit body and decoration panel.

# Field Settings

**⚠ CAUTION**

When performing field setting or test operation without attaching the decoration panel, do not touch the drain pump. This may cause electric shock.

- **Make sure the electrical wiring box cover is closed on the indoor and outdoor units.**
- **Field settings must be made from the remote controller and in accordance with installation conditions.**
- Setting can be made by changing the "Mode No.", "FIRST CODE NO." and "SECOND CODE NO.".
- The "Field Settings" included with the remote control lists the order of the settings and method of operation.




## 1. Setting air outlet direction

- For changing air outlet direction (2 or 3 directions), refer to the installation manual attached to the blocking pad kit (sold separately) or the service manual.
  (SECOND CODE NO. is factory set to "01" for air outlet in 4 directions.)

## 2. Setting for options

- For settings for options, see the installation manual provided with the option.

## 3. Setting air filter sign

- Remote controllers are equipped with liquid crystal display air filter signs to display the time to clean air filters.
- Change the SECOND CODE NO. depending on the amount of dirt or dust in the room.

**AIR FILTER CLEANING TIME INDICATOR lamp display interval**

| Setting content | Contamination | Mode No. | FIRST CODE NO. | SECOND CODE NO. |
|---|---|---|---|---|
| Approx. 2500 hrs | Contamination-light | 10 (20) | 0 | 01 |
| Approx. 1250 hrs | Contamination-heavy | | | 02 |

**AIR FILTER CLEANING TIME INDICATOR lamp display**

| Setting content | Mode No. | FIRST CODE NO. | SECOND CODE NO. |
|---|---|---|---|
| Display ON | 10 (20) | 3 | 01 |
| Display OFF* | | | 02 |

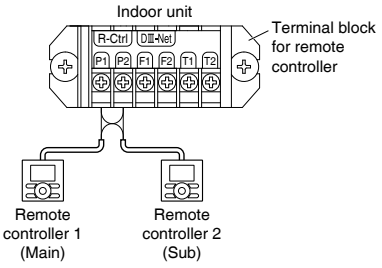
* Use "Display OFF" setting when cleaning indication is not necessary such as the case of periodical cleaning being carried out.

## 4. 2 remote controllers (controlling 1 indoor unit by 2 remote controllers)

- When using 2 remote controllers, one must be set to "MAIN" and the other to "SUB".

**Wiring Method**

1) Remove the electrical wiring box cover.
   (Refer to Wiring between units and ground wire in **"6. Wiring"** on page 13.)
2) Add remote controller 2 to the terminal block for remote controller (P1, P2) in the electrical wiring box. (There is no polarity.)
   (Refer to Table 3 in **"6. Wiring"** on page 13.)



# Test Operation and Testing

**⚠ CAUTION**

When performing field settings or test operation without attaching the decoration panel, do not touch the drain pump. This may cause electric shock.

- After finishing the construction of refrigerant piping, drain piping, and electric wiring, conduct test operation accordingly to protect the unit.

### Precautions

Refer to **"3. How to diagnose for malfunction"** if the unit does not operate properly.

## 1. Test operation and testing

- Test operation should be carried out in either COOL or HEAT operation.

**1-1. Measure the supply voltage and make sure that it is within the specified range.**

**1-2. In COOL operation, select the lowest programmable temperature; in HEAT operation, select the highest programmable temperature.**

**1-3. Carry out the test operation following the instructions in the operation manual to ensure that all functions and parts, such as the movement of the louvers, are working properly.**

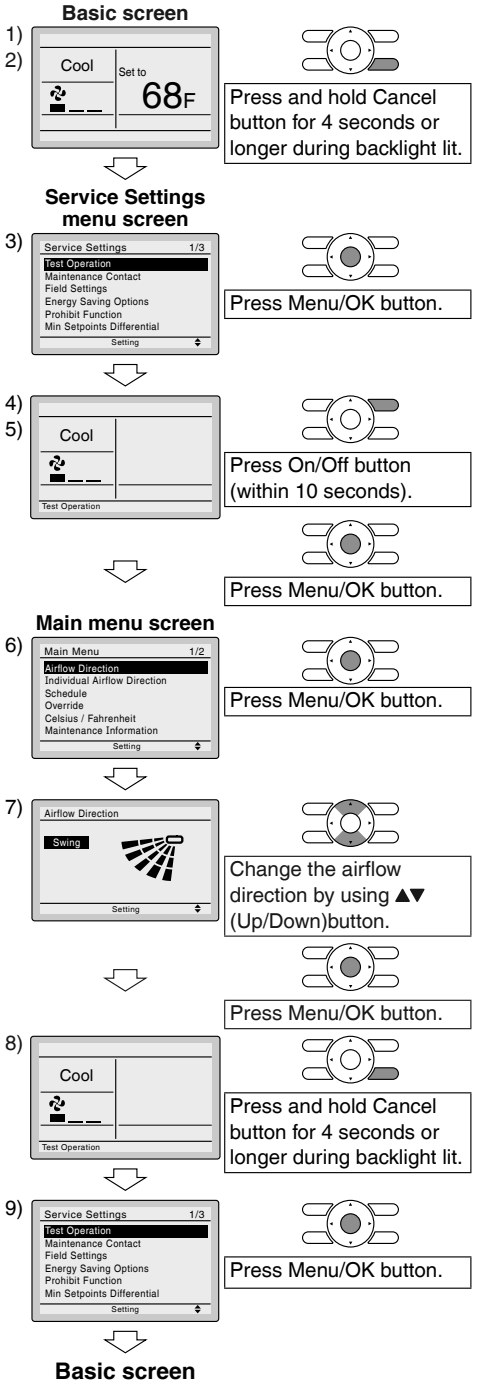
- To protect the air conditioner, restart operation is disabled for 3 minutes after the system has been turned off.

**1-4. After test operation is complete, set the temperature to a normal level (78°F to 82°F (26°C to 28°C) in COOL operation, 68°F to 75°F (20°C to 24°C) in HEAT operation).**

- When operating the air conditioner in COOL operation in winter, or HEAT operation in summer, set it to test operation mode using the procedure on page 19.

# Test Operation and Testing

1) Set to COOL or HEAT operation using the remote controller.
2) Press and hold Cancel button for 4 seconds or longer. Service settings menu is displayed.
3) Select Test Operation in the service settings menu, and press Menu/OK button. Basic screen returns and "Test Operation" is displayed at the bottom.
4) Press On/Off button within 10 seconds, and the test operation starts.
   Monitor the operation of the indoor unit for a minimum of 10 minutes. During test operation, the indoor unit will continue to cool/heat regardless of the temperature setpoint and room temperature.
   - In the case of above-mentioned procedures 3) and 4) in reverse order, test operation can start as well.
5) Press Menu/OK button in the basic screen. Main menu is displayed.
6) Select Airflow Direction in the main menu and check that airflow direction is actuated according to the setting. For operation of airflow direction setting, see the operation manual.
7) After the operation of airflow direction is confirmed, press Menu/OK button. Basic screen returns.
8) Press and hold Cancel button for 4 seconds or longer in the basic screen.
   Service settings menu is displayed.
9) Select Test Operation in the service settings menu, and press Menu/OK button. Basic screen returns and normal operation is conducted.
   - Test operation will stop automatically after 15-30 minutes. To stop the operation, press On/Off button.
10) If the decoration panel has not been installed, turn off the power after the test operation.



# 2. Test items

| Test items | Symptom | Check |
|---|---|---|
| Indoor and outdoor units are installed securely. | Fall, vibration, noise | |
| Is the outdoor unit fully installed? | No operation or burn damage | |
| No refrigerant gas leaks. | Incomplete cooling/heating function | |
| Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated. | Water leakage | |
| Draining line is properly installed. | Water leakage | |
| Does the power supply voltage correspond to that shown on the name plate? | No operation or burn damage | |
| Only specified wires are used for all wiring, and all wires are connected correctly. | No operation or burn damage | |
| System is properly grounded. | Electrical leakage | |
| Is wiring size according to specifications? | No operation or burn damage | |
| Is something blocking the air outlet or inlet of either the indoor or outdoor units? | Incomplete cooling/heating function | |
| Are refrigerant piping length and additional refrigerant charge noted down? | The refrigerant charge in the system is not clear | |
| Pipes and wires are connected to the corresponding connection ports / terminal blocks for the connected unit. | No cooling/heating | |
| Stop valves are opened. | Incomplete cooling/heating function | |
| Check that the connector of the lead wires of the decoration panel is connected securely. | Louvers do not move | |
| Indoor unit properly receives remote control commands. | No operation | |

### Items to be checked at time of delivery

Also review the **"Precautions"** on page 3

| Test items | Check |
|---|---|
| Are the electrical wiring box cover, air filter, suction grille attached? | |
| Did you explain about operations while showing the operation manual to your customer? | |
| Did you hand the operation manual over to your customer? | |

### Points for explanation about operations

The items with ⚠ WARNING and ⚠ CAUTION marks in the operation manual are the items pertaining to possibilities for bodily injury and material damage in addition to the general usage of the product. Accordingly, it is necessary that you make a full explanation about the described contents and also ask your customers to read the operation manual.

### Note to the installer

Be sure to instruct customers how to properly operate the unit (especially cleaning the filter, operating different functions, and adjusting the temperature) by having them carry out operations while looking at the manual.

# Test Operation and Testing

## 3. How to diagnose for malfunction

• If the air conditioner does not operate normally after installing the air conditioner, a malfunction shown in the table below may happen.

| Wired remote controller display | Description |
|---|---|
| No display | • Power outage, power voltage error or open-phase<br>• Incorrect wiring (between indoor and outdoor units)<br>• Indoor PCB assembly failure<br>• Remote controller wiring not connected<br>• Remote controller failure<br>• Open fuse or tripped circuit breaker (outdoor unit) |
| "Checking the connection. Please stand by." * | • Indoor PCB assembly failure<br>• Wrong wiring (between indoor and outdoor units) |

* "Checking the connection. Please stand by" will be displayed for up to 90 seconds following the application of power to the indoor unit. This is normal and does not indicate a malfunction.

■ Diagnose with the display on the liquid crystal display remote controller.

When the operation stops due to a malfunction, operation lamp blinks, and the malfunction code is indicated on the liquid crystal display. In such a case, diagnose the fault contents by referring to Error History in the service settings menu.
In the case of group control, the unit No. is displayed so that the indoor unit with the trouble can be identified.

## 4. Pump down operation

Be sure to pump down when relocating or disposing of the unit.
For instructions on how to pump down, refer to the service manual.

# 2. Outdoor Unit

## 2.1 2/3/4MXM, 2MXT, 2MXTH

# Contents

**Safety Considerations ..... 1**
**Accessories ..... 3**
**Precautions for Selecting a Location ..... 3**
**Precautions on Installation ..... 4**
**Outdoor Unit Installation Diagram ..... 4**
**Installation Space Requirements ..... 5**
**Selecting a Location for Installation of the Indoor Units ..... 6**
**Connections (connection port) ..... 6**
**How to Use Reducers ..... 7**
**Outdoor Unit Installation ..... 8**
1. Installing the outdoor unit ..... 8
2. Drain work ..... 8
3. Flaring the pipe end ..... 8
4. Refrigerant piping ..... 9
5. Pressure test and evacuating system ..... 10
6. Charging with refrigerant ..... 11
**Wiring ..... 12**
**Priority Room Setting ..... 15**
**Night Quiet Mode setting ..... 16**
**COOL/HEAT mode lock [X161A] ..... 16**
**When attaching the optional drain pan heater (excluding 2MXTH models) ..... 17**
**Pump Down Operation ..... 17**
**Trial Operation and Testing ..... 18**
1. Wiring error check ..... 18
2. Trial operation and testing ..... 19
3. Test items ..... 19

The pictures in this document are for illustrative purposes only.

# Safety Considerations

**Refer also to the General Safety Considerations in the separate booklet.**

| | |
|---|---|
|  | **Read the precautions in this manual carefully before operating the unit.** |
|   | **This appliance is filled with R32.** |

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.
Instruct the user on how to operate and maintain the unit.
Inform users that they should store this installation manual with the operation manual for future reference.
Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion.
Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

⚠ **DANGER** ····· Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING** ····· Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** ····· Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ **NOTE** ····· Indicates situations that may result in equipment or property damage accidents only.

### ⚠ DANGER

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death. Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injury or death by suffocation.
- All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal.

### ⚠ WARNING

- Only qualified personnel licensed or certified in their jurisdiction must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- Pipe-work including piping material, pipe routing, and installation shall include protection from physical damage in operation and service, and be in compliance with national and local codes and standards, such as ASHRAE 15, ASHRAE 15.2, IAPMO Uniform Mechanical Code, ICC International Mechanical Code, or CSA B52. All field joints shall be accessible for inspection prior to being covered or enclosed.
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.

- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injury.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel licensed or certified in their jurisdiction according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the service lid can be securely fastened. Improper positioning of the service lid may result in electric shock, fire, or the terminals overheating.
- Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit service lid. If the service lid is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R32) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, which may result in equipment damage and even injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.
- Do not use means to accelerate the defrosting process (if possible) or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.
- Comply with national gas regulations.
- The indoor equipment and pipes shall be securely mounted and guarded such that accidental rupture of equipment cannot occur from such events as moving furniture or reconstruction activities.

**⚠ CAUTION**

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- Wear adequate personal protective equipment (protective gloves, safety glasses,…) when installing, maintaining or servicing the system.
- The heat exchanger fins are sharp enough to cut. To avoid injury, wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to ensure proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R32 in the system must be kept clean, dry, and tight.
  (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.
  (b) Tight -- R32 does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R32 can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant Piping* and follow the procedures.
- The outdoor unit is for R32. See the catalog for indoor models that can be connected. Normal operation is not possible when connected to non-compatible indoor units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors.
- Do not install the air conditioner or heat pump in the following locations:
  (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
  Plastic parts may deteriorate and fall off or result in water leakage.
  (b) Where corrosive gas, such as sulfurous acid gas, is produced.
  Corroding copper pipes or soldered parts may result in refrigerant leakage.
  (c) Near machinery emitting electromagnetic waves.
  Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
  (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.
- Servicing shall be performed only as recommended by the manufacturer and licensed or certified in their jurisdiction.

**⚠ NOTE**

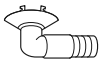
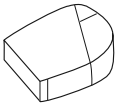
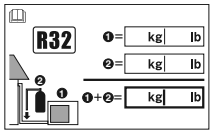
- The outdoor unit should be positioned where the unit and power supply wires (breaker panel to outdoor unit) are at least 10ft (3m) away from any televisions or radios. (The unit may cause interference with the picture or sound.) Depending on the radio waves, a distance of 10ft (3m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Only use tools for R32 or R410A, such as a gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R32, the refrigerant may deteriorate.
- As maximum allowable pressure is 604psi (4.17MPa), the wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.

RN007(R32)-U

2

3P740830-1D

# Accessories

| | | | |
|---|---|---|---|
| Ⓐ Installation manual | 1 | Ⓑ Drain socket  This is at the bottom of the packaging. | 1 |
| Ⓒ Drain cap (1)  | 6 | Ⓓ Drain cap (2)  | 3 |
| Ⓔ Reducer assy  | 1 | Ⓕ Warranty | 1 |
| Ⓖ Refrigerant charge label   Affix near the machine nameplate. | 1 | Ⓗ General Safety Considerations | 1 |

# Precautions for Selecting a Location

1) Choose a place solid enough to bear the weight and vibration of the unit, where the operating sound will not be amplified.
2) Choose a location where the air discharged from the unit or the operating sound will not cause a nuisance to the neighbors of the user.
3) Avoid locations, such as near bedrooms, where the operating sound may cause disturbance.
4) There must be sufficient space to carry the unit into and out of the site.
5) There must be sufficient space for air passage and no obstructions around the air inlet and the air outlet.
6) In coastal areas or other places with salty atmosphere or one containing sulfate gas, corrosion may shorten the life of the air conditioner.
7) Since water will flow from the drain of the outdoor unit, do not place anything under the unit which must be kept away from moisture.
8) A location where flammable gas does not leak. Position at least 6-5/8ft (2m) from propane gas cylinders.

**NOTE**
Cannot be installed suspended from a ceiling or stacked.

**⚠ CAUTION**

When operating the air conditioner in a low outdoor ambient temperature, be sure to follow the instructions described below.

- To prevent exposure to wind, install the outdoor unit with its suction side facing the wall.
- Never install the outdoor unit at a site where the suction side may be exposed directly to wind.
- To prevent exposure to wind, it is recommended to install a baffle plate on the air discharge side of the outdoor unit.
- In heavy snow areas, select an installation site where the snow will not affect the unit.
- If there is a likelihood of snow accumulating on the outdoor unit, attach a snow protection hood.
- In high humidity areas or heavy snow areas, it is recommended to attach a drain pan heater to prevent ice build-up from the bottom frame.

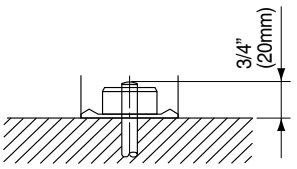
• Construct a large canopy.
• Construct a pedestal.



Install the unit high enough off the ground to prevent burying in snow.

# Precautions on Installation

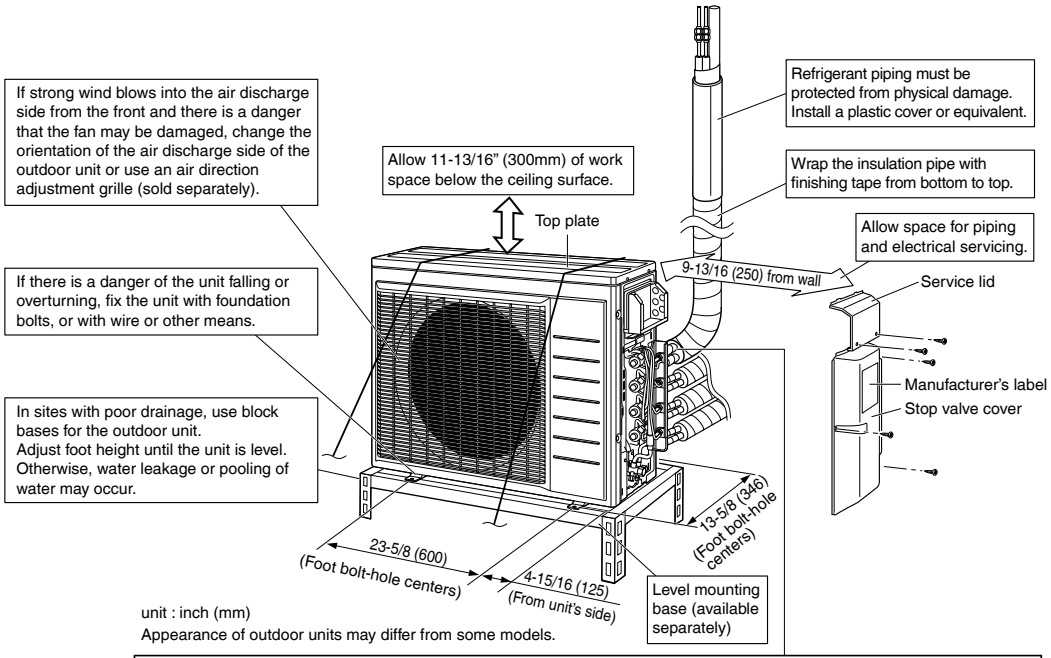
- Check the strength and level of the installation surface so that the unit does not cause any operating vibrations or noise after installation.
- Fix the unit in place securely using foundation bolts, as in the figure. (Prepare 4 sets of 5/16 inch (M8) or 3/8 inch (M10) foundation bolts, nuts and washers; all sold separately.)
- It is best to screw in the foundation bolts until their ends are 3/4 inch (20mm) from the foundation surface.




# Outdoor Unit Installation Diagram

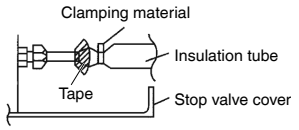
## ⚠ CAUTION

- Do not connect the embedded branch piping and the outdoor unit when only carrying out piping work without connecting the indoor unit in order to add another indoor unit later.
  Make sure no dirt or moisture gets into either side of the embedded branch piping.
  Refer to **"4. Refrigerant piping"** on page 9 for details.
- It is not possible to have only 1 indoor unit connected. **Be sure to connect at least 2 indoor units.**




unit : inch (mm)
Appearance of outdoor units may differ from some models.

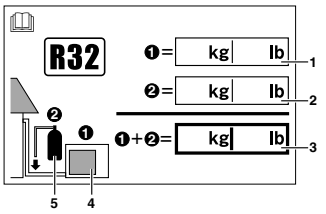
Also insulate the connection on the outdoor unit.




Use tape or insulating material on all connections to prevent air from getting in between the copper piping and the insulation tube.
Be sure to do this if the outdoor unit is installed at a higher elevation than any of the indoor units connected to it.

### Refrigerant charge label

Please fill in with indelible ink,
■① the factory refrigerant charge of the product,
■② the additional refrigerant amount charged in the field and
■① + ② the total refrigerant charge
on the refrigerant charge label supplied with the product.
Affix the refrigerant charge label near the manufacturer's label after filling it out.

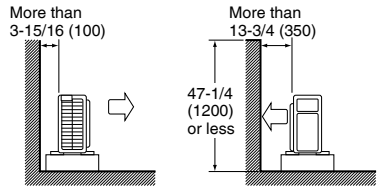



1 factory refrigerant charge of the product: see unit manufacturer's label
2 additional refrigerant amount charged in the field
3 total refrigerant charge
4 outdoor unit
5 refrigerant cylinder and manifold for charging

# Installation Space Requirements

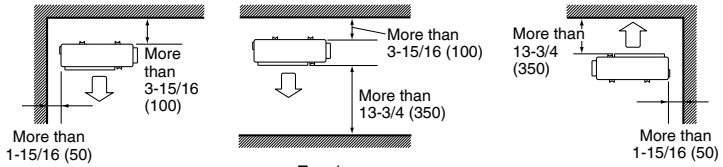
- Position the unit on a horizontal surface. Any tilt in the unit should be 3° or less to the horizontal.
- Where a wall or other obstacle is in the path of the outdoor unit's intake or exhaust airflow, follow the installation space requirements below.
- For any of the below installation patterns, the wall height on the outlet side should be 47-1/4 inch (1200mm) or less.
- Secure as much installation space around the unit as the location allows, as more space will result in more efficient operation.

## Wall facing one side



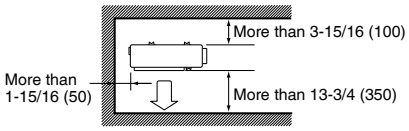

Side view

## Walls facing two sides




Top view

## Walls facing three sides




Top view

When installed as in the figure on the left, it is recommended to either change the orientation of the outdoor unit outlet side or use the air direction adjustment grille (sold separately).

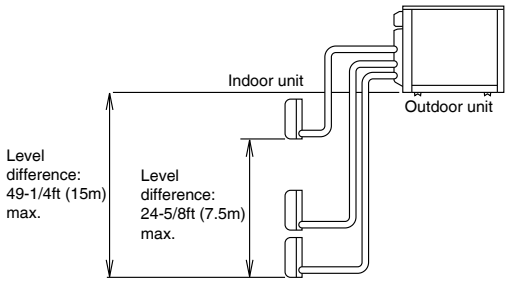
unit: inch (mm)

5

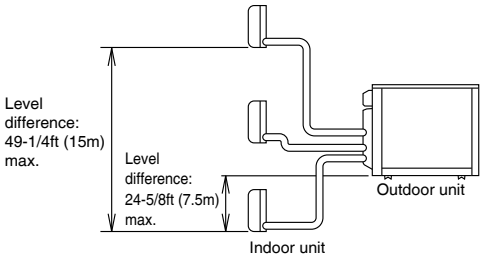
# Selecting a Location for Installation of the Indoor Units

- The maximum allowable length of refrigerant piping, and the maximum allowable height difference between the outdoor and indoor units, are listed below.
- Refrigerant piping must be kept to a minimum.
  The suggested shortest pipe length per room is 10ft (3m), in order to avoid noise from the outdoor unit and vibration.
  (Mechanical noise and vibration may occur depending on how the unit is installed and the environment in which it is used.)
- **The minimum required floor area of the room where the indoor unit is installed varies depending on the installation height and refrigerant amount. For details, refer to the General Safety Considerations supplied with the indoor unit.**

| Outdoor unit capacity class | 2MXM∗, 2MXT∗ | 3MXM∗, 4MXM∗ |
|---|---|---|
| Piping to each indoor unit | 82ft (25m) max. 10ft (3m) min. | |
| Total length of piping between all units | 164ft (50m) max. | 230ft (70m) max. |




If the outdoor unit is positioned higher than the indoor units.




If the outdoor unit is positioned lower than one or more indoor units.

# Connections (connection port)

Install the indoor unit according to the table below, which shows the relationship between the class of indoor unit and the corresponding port.
The total indoor unit class that can be connected to this unit:

2MXM∗, 2MXT∗ – Up to 24000 Btu/h
3MXM∗ – Up to 39000 Btu/h
4MXM∗ – Up to 48000 Btu/h

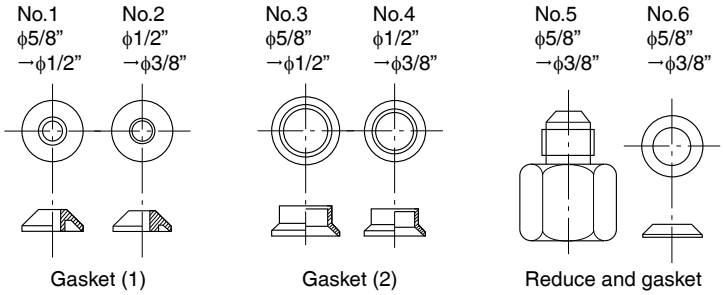
The line set piping size is determined by the size of the indoor unit fittings.
Reducers are used at the outdoor unit to accommodate the correct gas line pipe size.

| Port | 2MXM∗, 2MXT∗ | 3MXM∗ | 4MXM∗ |
|---|---|---|---|
| A | 07 , 09 , 12 | 07 , 09 , 12 | 07 , 09 , 12 |
| B | #(07), #(09), #(12), 15 | #(07), #(09), #(12), 15 , 18 | #(07), #(09), #(12), 15 , 18 |
| C | ——— | #(07), #(09), #(12), 15 , 18 | #(07), #(09), #(12), 15 , 18 |
| D | ——— | ——— | △(07), △(09), △(12), □(15), □(18), 24 |

(  ) : Use a reducer to connect pipes.
□ : Use No. 1 and 3 reducers.
# : Use No. 2 and 4 reducers.
△ : Use No. 5 and 6 reducers.

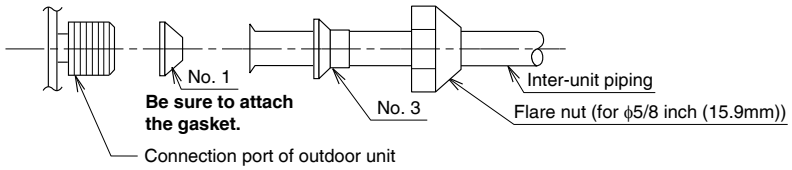
Refer to **"How to Use Reducers"** on page 7 for information on reducer numbers and their shapes.

# How to Use Reducers

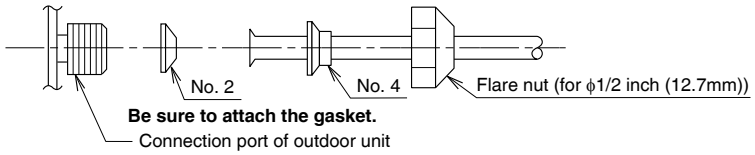



• Use the reducers supplied with the unit as described below.

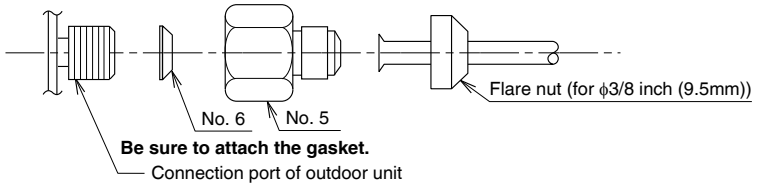
(1) Connecting a pipe of ϕ1/2 inch (12.7mm) to a gas pipe connection port for ϕ5/8 inch (15.9mm) :




(2) Connecting a pipe of ϕ3/8 inch (9.5mm) to a gas pipe connection port for ϕ1/2 inch (12.7mm) :




(3) Connecting a pipe of ϕ3/8 inch (9.5mm) to a gas pipe connection port for ϕ5/8 inch (15.9mm) :




- When using the reducer packing shown above, be careful not to overtighten the nut, or the smaller pipe may become damaged. (Apply about 2/3 to 3/3 the normal torque.)
- Apply a coat of refrigeration oil to the threaded connection port of the outdoor unit where the flare nut comes in.
- Use an appropriate wrench to avoid damaging the connection thread by overtightening the flare nut.

| Flare nut tightening torque | |
|---|---|
| ϕ3/8 inch (9.5mm) | 24-1/8 – 29-1/2lbf • ft (32.7-39.9N • m) |
| ϕ1/2 inch (12.7mm) | 36-1/2 – 44-1/2lbf • ft (49.5-60.3N • m) |
| ϕ5/8 inch (15.9mm) | 45-5/8 – 55-5/8lbf • ft (61.8-75.4N • m) |

7

# Outdoor Unit Installation

## 1. Installing the outdoor unit

1) When installing the outdoor unit, refer to **"Precautions for Selecting a Location"** on page 3 and the **"Outdoor Unit Installation Diagram"** on page 4.
2) If drain work is necessary, follow the procedures below.

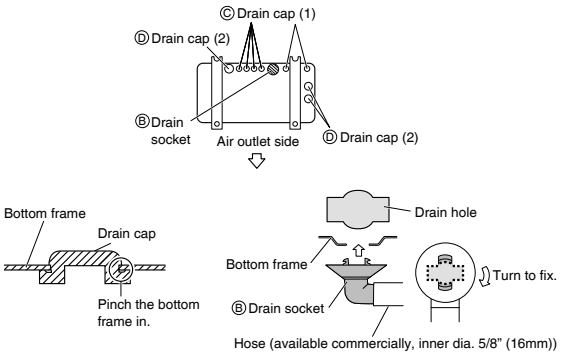
## 2. Drain work

**⚠CAUTION**

In cold areas, do not use a drain socket, drain caps (1, 2) and a drain hose with the outdoor unit. (Drain water may freeze, impairing heating performance.)

- If the drain port is covered by a mounting base or floor surface, place additional foot bases of at least 1-1/4 inch (30mm) in height under the outdoor unit's feet.

1) Attach Ⓒ drain cap (1) and Ⓓ drain cap (2).
2) Attach Ⓑ drain socket to the shape of drain hole and fix it by turning.
   - When attaching Ⓑ drain socket to the bottom frame, make sure to connect the drain hose to the drain socket first.




## 3. Flaring the pipe end

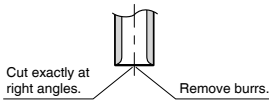
**⚠WARNING**

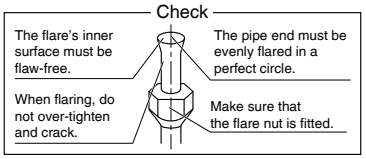
- Do not apply mineral oil to the flare.
- Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with this unit.
- Never install a dryer to this R32 unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- Improper flaring may result in refrigerant gas leakage.

**⚠CAUTION**

Do not reuse joints which have been used once already.

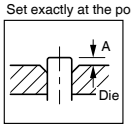
1) Cut the pipe end with a pipe cutter.
2) Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.
3) Put the flare nut on the pipe.
4) Flare the pipe.
5) Check that the flaring has been done correctly.




Flaring

Set exactly at the position shown below.




| | Flare tool for R32 or R410A | Conventional flare tool | |
|---|---|---|---|
| | Clutch-type | Clutch-type (Rigid-type) | Wing-nut type (Imperial-type) |
| A | 0-0.020 inch (0-0.5mm) | 0.039-0.059 inch (1.0-1.5mm) | 0.059-0.079 inch (1.5-2.0mm) |

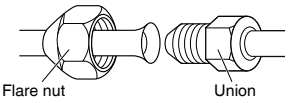
# Outdoor Unit Installation

## 4. Refrigerant piping

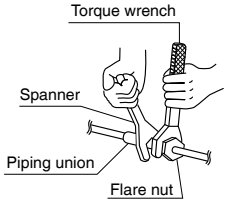
**⚠ CAUTION**

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.
- Excessive tightening of the flare nut can result in the flare nut cracking in the long term, leading to gas leakage.

- For refrigerant pipe connections, align the center of the flare and the union, tighten the flare nut 3 to 4 turns by hand, and then use a torque wrench and a spanner to firmly tighten to the specified torque.




Do not apply refrigeration oil, gas leak prevention agent, etc., to the outer surface of the flare or threads (flare nut, union). (May result in cracking of the flare nut or damage to the threads)




**Tightening torque**

Piping connection

| Flare nut | | | |
|---|---|---|---|
| Gas side | | | Liquid side |
| 3/8 inch (9.5mm) | 1/2 inch (12.7mm) | 5/8 inch (15.9mm) | 1/4 inch (6.4mm) |
| 24-1/8 – 29-1/2lbf • ft (32.7-39.9N • m) | 36-1/2 – 44-1/2lbf • ft (49.5-60.3N • m) | 45-5/8 – 55-5/8lbf • ft (61.8-75.4N • m) | 10-1/2 – 12-3/4lbf • ft (14.2-17.2N • m) |

Valve cap

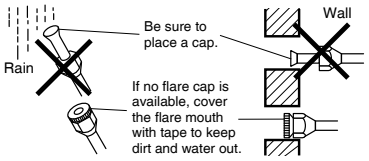
| Width across flats | |
|---|---|
| 3/4 inch (19mm) | 7/8 inch (22mm) |
| 12-5/8 – 15-3/8lbf • ft (17.0-20.9N • m) | 16 – 20-1/4lbf • ft (21.6-27.4N • m) |

Service port cap

| |
|---|
| 8 – 10-7/8lbf • ft (10.7-14.7N • m) |

**Cautions on pipe handling**

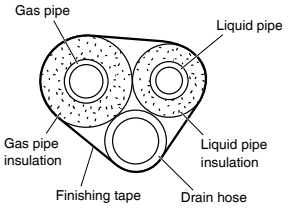
- Protect the open end of the pipe from dust and moisture.
- All pipe bends should be as gentle as possible. Use a pipe bender for bending.




**Selection of copper and heat insulation materials**

When using commercial copper pipes and fittings, observe the following:

- Insulation material: Polyethylene foam
  Heat transfer rate: 0.041 to 0.052W/mK (0.024 to 0.030Btu/fth°F)
  (0.035 to 0.045kcal/mh°C)
  Be sure to use insulation that is designed for use with HVAC Systems.
- ACR Copper only.
- Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below.




| | Piping size | Minimum bend radius | Piping thickness | Thermal insulation size | Thermal insulation thickness |
|---|---|---|---|---|---|
| Gas side | O.D. 3/8 inch (9.5mm) | 1-3/16 inch (30mm) or more | 0.031 inch (0.8mm) (C1220T-O) | I.D. 15/32-19/32 inch (12-15mm) | 13/32 inch (10mm) Min. |
| | O.D. 1/2 inch (12.7mm) | 1-9/16 inch (40mm) or more | | I.D. 9/16-5/8 inch (14-16mm) | |
| | O.D. 5/8 inch (15.9mm) | 1-15/16 inch (50mm) or more | 0.039 inch (1.0mm) (C1220T-O) | I.D. 5/8-13/16 inch (16-20mm) | |
| Liquid side | O.D. 1/4 inch (6.4mm) | 1-3/16 inch (30mm) or more | 0.031 inch (0.8mm) (C1220T-O) | I.D. 5/16-13/32 inch (8-10mm) | |

- Use separate thermal insulation pipes for gas and liquid refrigerant pipes.
- Using finishing tape, bundle and wrap the indoor unit piping and drain hose together so that the drain hose is below the other piping.

# 5. Pressure test and evacuating system

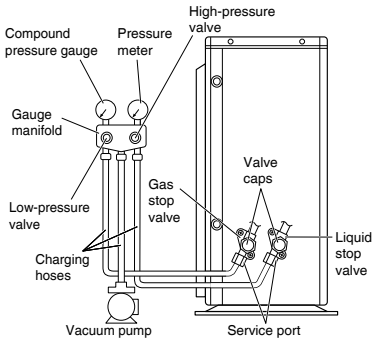
## ⚠WARNING

- Make sure that air or any matter other than refrigerant (R32) does not get into the refrigeration cycle.
- If refrigerant gas leaks should occur, ventilate the room as soon and as much as possible.
- R32, as well as other refrigerants, should always be recovered and never be released directly into the environment.
- **Use tools for R32 or R410A (such as the gauge manifold, charging hose, or vacuum pump adapter).**

## ⚠CAUTION

It is highly recommended that you do not open/close the stop valves when the outdoor temperature is below –5°F (–21°C) as this may result in refrigerant leakage.

- When piping work is complete, it is necessary to perform a pressure test and evacuate system with a vacuum pump.
- If using additional refrigerant, purge the air from the refrigerant pipes and indoor unit using a vacuum pump, then charge additional refrigerant.
- Use a hexagonal wrench (3/16 inch (4mm)) to operate the stop valve rod.
- All refrigerant pipe joints should be tightened with a torque wrench to the specified tightening torque.




1) Pressurize the liquid pipe and gas pipe from the service ports of each stop valve to 604psi (4.17MPa) (do not pressurize more than 604psi (4.17MPa)) for 1 hour minimum, 24 hours recommended. If there is a pressure drop, check for leaks, make repairs and perform the pressure test again.
2) Connect the gauge manifold's charging hoses to the service ports of each stop valve.
3) Fully open the low-pressure valve (Lo) and the high-pressure valve (Hi) on the gauge manifold.
4) Evacuate system using vacuum pump to below 500 microns for 1 hour minimum.
5) Close the low-pressure valve (Lo) and the high-pressure valve (Hi) on the gauge manifold and stop vacuum pump. (Maintain this condition for 4-5 minutes to make sure that the compound pressure gauge pointer does not swing back.)*1
6) Remove the valve caps from the liquid stop valve and gas stop valve.
7) To open the liquid stop valve, turn the rod of the valve 90° counter-clockwise using a hexagonal wrench. Close it after 5 seconds, and check for gas leakage. Using soapy water, check for gas leakage from the indoor unit's flare and outdoor unit's flare and valve rods. After the check is complete, wipe all soapy water off *2.
8) Disconnect the charging hoses from the service ports, then fully open the liquid and gas stop valves. (Do not attempt to turn the valve rods further than they can go.)
9) Tighten the valve caps and service port caps for the liquid and gas stop valves with a torque wrench to the specified torques. Refer to **"4. Refrigerant piping"** on page 9 for details.

*1 If the compound pressure gauge pointer swings back, the refrigerant may have water content or there may be a loose pipe joint. Check all pipe joints and retighten nuts as needed, then repeat steps 3) through 5).

*2 **Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used. Do not use substances containing chlorine and electronic leak detection for gas leak detection.**

# Outdoor Unit Installation

## 6. Charging with refrigerant

**⚠ CAUTION**

Even though the stop valve is fully closed, the refrigerant may slowly leak out; do not leave the flare nut removed for a long period of time.

- If the total length of piping for all rooms exceeds the table listed below, additionally charge with 0.22oz/ft (20g/m) of refrigerant (R32) for each additional piping length.
  Be sure to add the proper amount of additional refrigerant.
  Failure to do so may result in reduced performance.

| Outdoor unit capacity class | 2MXM∗, 2MXT∗ | 3MXM∗, 4MXM∗ |
|---|---|---|
| Total length of piping for all rooms | 98-3/8ft (30m) | 131-1/4ft (40m) |

# Wiring

## ⚠ WARNING

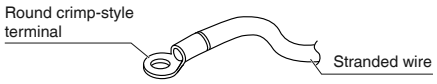
- **RISK OF ELECTRIC SHOCK CAUSE INJURY OR DEATH.**
  System contains oversize protective earthing (grounding) terminal which shall be properly connected.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death.
  Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Use an all-pole disconnection type circuit breaker with at least 1/8 inch (3mm) between the contact point gaps.
- When carrying out wiring, take care not to pull at the conduit.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.
- Do not turn on the circuit breaker until all work is completed.

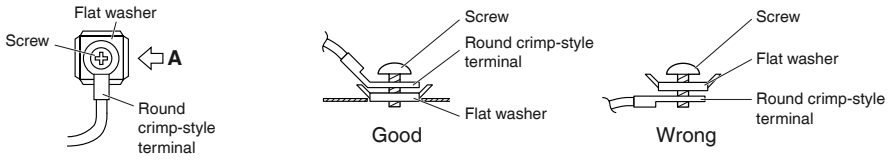
## ⚠ CAUTION

**Precautions to be taken for power supply wiring**

Recommend stranded cable for interunit wiring. Local code always supersedes recommendation.

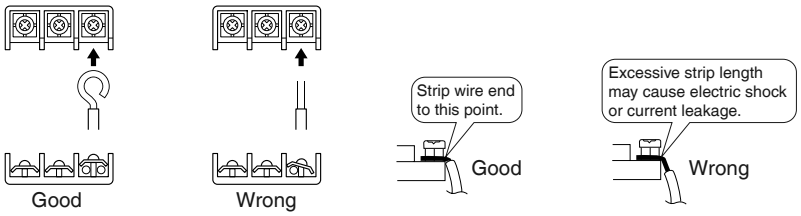
- For stranded wires, make sure to use the round crimp-style terminal for connection to the power supply terminal block. Place the round crimp-style terminals on the wires up to the covered part and secure in place.




Arrow view **A**

- If solid core wire must be used, be sure to curl the end of the lead. Improper work may cause heat and fire.




Stripping wire at terminal block

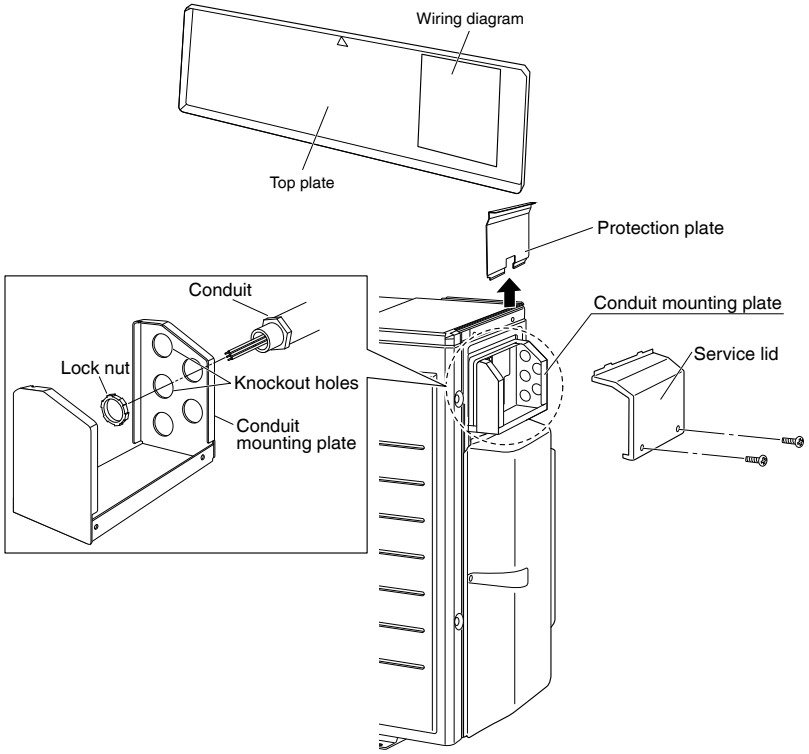
# Wiring

[Method of Mounting Conduit]

• When wiring, remove the top plate and look at the wiring diagram on the back of the top plate.

• When connecting indoor units for 3 rooms or more, open knockout holes without deforming the conduit mounting plate.

1) Dismount the service lid by removing the 2 screws.
2) Slide the protection plate up and remove it.
3) Pass wires through the conduit and secure them with a lock nut.

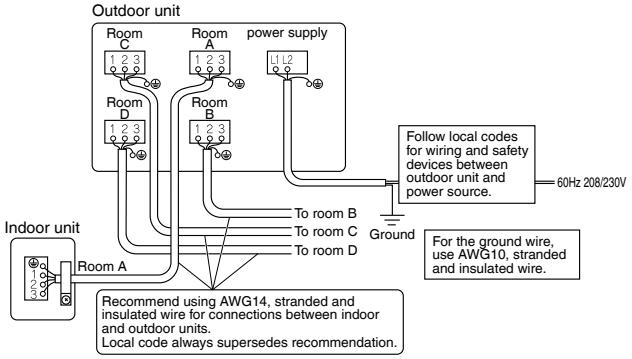



13

3P740830-1D

[Wiring procedure]

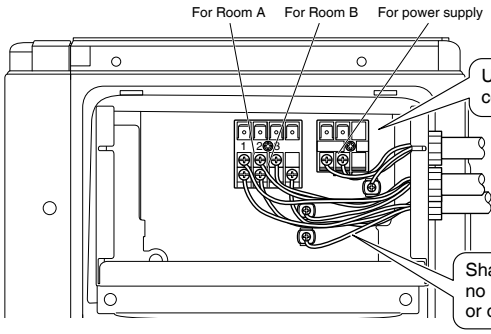
1) Strip the insulation from the wire (3/4inch (20mm)).
2) Connect the inter-unit wires between the indoor and outdoor units **so that the terminal numbers match.** Tighten the terminal screws securely. It is recommended that a slot-head screwdriver be used to tighten the screws.
3) **Be sure to match the symbols for wiring and piping.**
4) Pull the wire lightly to make sure that it does not disconnect.
5) Pass the wiring through the cutout on the bottom of the protection plate and attach the protection plate.
6) After completing the work, reattach the service lid to its original position.



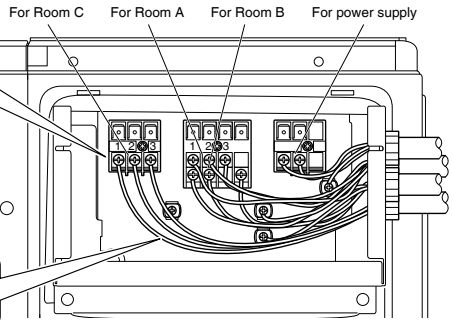

**Note**

Take care to ensure that all wiring between indoor unit and outdoor unit has a consistent connection. Any splices can cause communication errors.

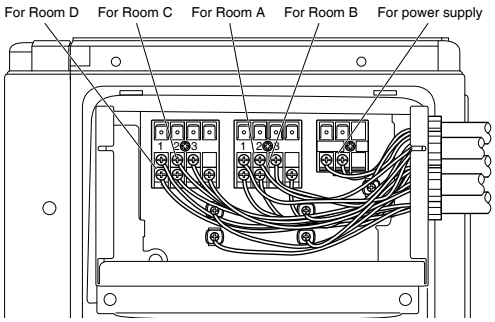
**• 2MXM, 2MXT models**




**• 3MXM models**




**• 4MXM models**




**Ground**

This air conditioner must be grounded. For grounding, follow all local, and state electrical codes.

# Priority Room Setting

- To use priority room setting, initial settings must be made when the unit is installed. Explain the priority room setting, as described below, to the user, and confirm whether or not the user wants to use priority room setting.
  Setting it in the guest and living rooms is convenient.

## About the priority room setting function

The indoor unit for which priority room setting is applied takes priority in the following cases.

### 1) Operation mode priority

The operation mode of the indoor unit which is set for priority room setting takes priority. If the set indoor unit is operating, all other indoor units do not operate and enter standby mode, according to the operation mode of the set indoor unit.

### 2) Priority during powerful operation

If the indoor unit which is set for priority room setting is operating at powerful, the capabilities of other indoor units will be somewhat reduced. Power supply gives priority to the indoor unit which is set for priority room setting.

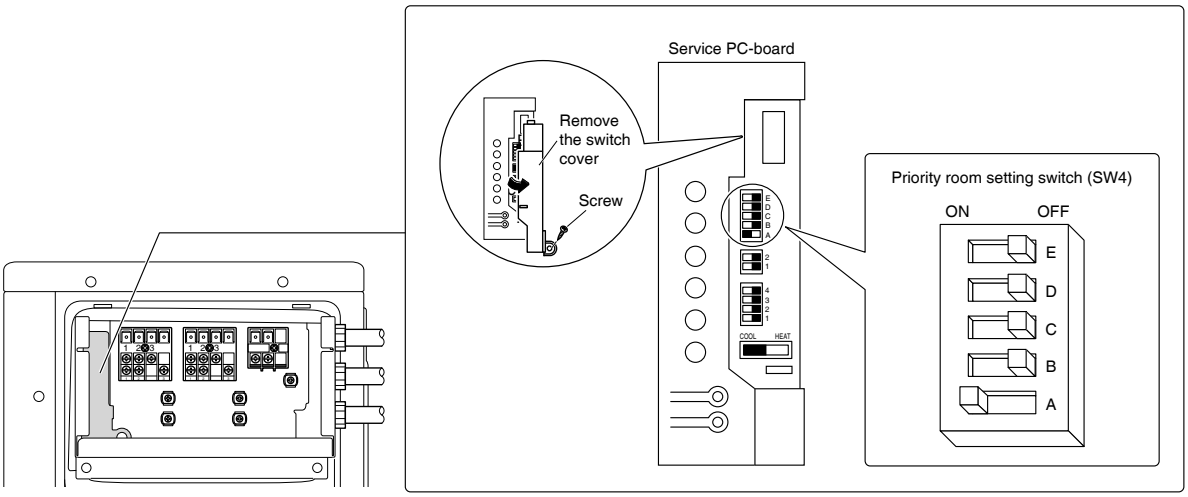
### 3) Quiet operation priority

Setting the indoor unit to quiet operation will make the outdoor unit run quietly.

## Setting procedure

Slide the priority room setting switch (SW4) to the on side for the switch that corresponds to the piping connected to the indoor unit to be set.
(In the figure below, it is room A.)
Once the settings are complete, switch the power on.

Be sure to set only one room




15

3P740830-1D

# Night Quiet Mode setting

- If night quiet mode is to be used, initial settings must be made when the unit is installed. Explain night quiet mode, as described below, to the user, and confirm whether or not the user wants to use night quiet mode.

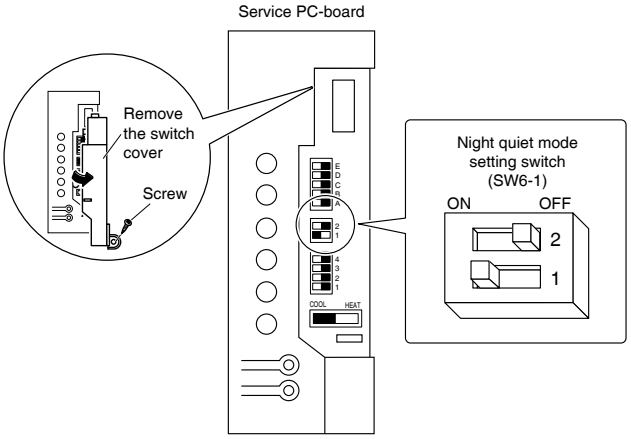
### About night quiet mode

The night quiet mode function reduces operating noise of the outdoor unit at nighttime. This function is useful if the user is worried about the effects of the operating noise on the neighbors.

However, cooling capacity will be reduced when operating in night quiet mode.

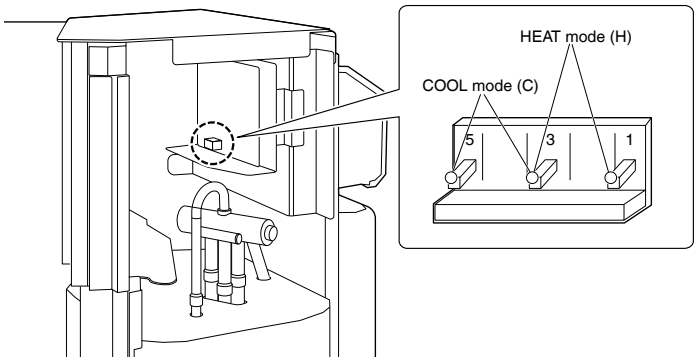
### Setting procedure

Turn the night quiet mode switch (SW6-1) to on.




# COOL/HEAT mode lock [X161A]

- Use the X161A connector to set the unit to only cool or heat.
  Setting to only heat (H) : short-circuit pins 1 and 3 of the connector [X161A]
  Setting to only cool (C) : short-circuit pins 3 and 5 of the connector [X161A]
  The following specifications apply to the connector housing and pins.
  JST products Housing: VHR-5N
  Pin: SVH-21T-P1.1
  Note that forced operation is also possible in COOL/HEAT mode.

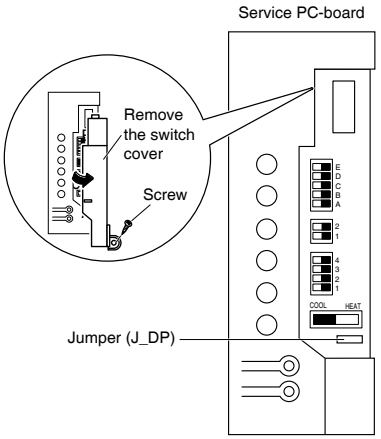


# When attaching the optional drain pan heater (excluding 2MXTH models)

**⚠ WARNING**

Do not remove the switch cover unless the power has been turned off. (Risk of electric shock)

1) Attach the drain pan heater in accordance with the installation manual included with the drain pan heater.
2) Using a tool such as nippers, cut the jumper (J_DP) on the service PC-board.



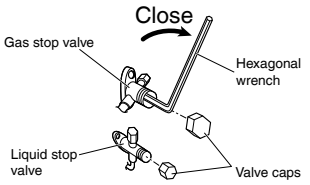

# Pump Down Operation

**⚠ WARNING**

Do not remove the switch cover unless the power has been turned off. (Risk of electric shock)

**In order to protect the environment, be sure to pump down when relocating or disposing of the unit.**

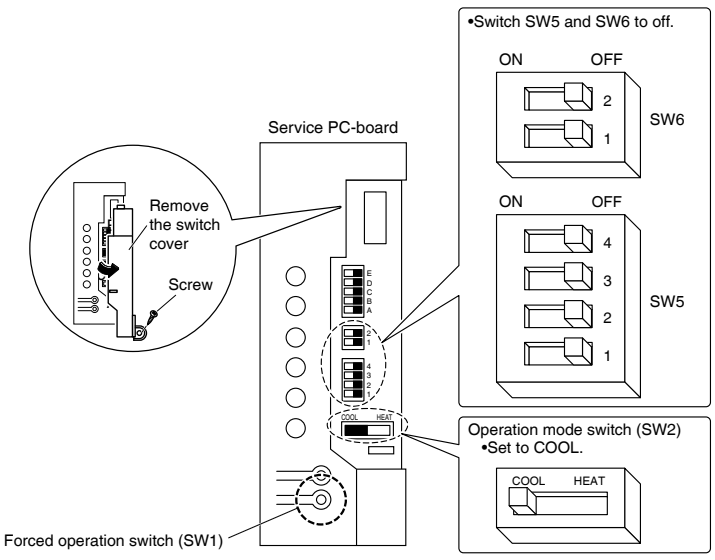
1) Remove the valve caps from liquid stop valve and gas stop valve.
2) Begin forced cooling operation.
3) After 3 to 5 minutes, close the liquid stop valve with a hexagonal wrench.
4) After 3 to 4 minutes, close the gas stop valve and stop forced cooling operation.
5) Attach the valve caps once procedures are complete.




### Forced cooling operation

• When using this outdoor unit, no need to operate the indoor unit.

1) Turn off the power.
2) Remove the service lid (2 screws).
3) Remove the service PC-board switch cover (1 screw).
4) Switch SW5 and SW6 to off.
5) Turn the operation mode switch (SW2) to COOL.
6) Screw the service PC-board switch cover back on (1 screw).
7) Turn on the power.
8) Push the forced operation switch (SW1) above the service PC-board cover. (The operation will start.)
   • Forced cooling operation will stop automatically after about 11 to 15 minutes. To stop the operation, push the forced operation switch (SW1).



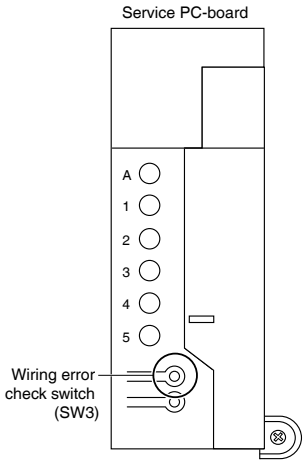
# Trial Operation and Testing

- Before starting the trial operation, measure the voltage at the primary side of the circuit breaker.
- Check that all liquid and gas stop valves are fully open.
- Check that piping and wiring all match. The wiring error check can be conveniently used for underground wiring and other wiring that cannot be directly checked. However, if the outside air temperature is 41°F (5°C) or less, the wiring error check function will not operate.
- When trial operation is conducted directly after the circuit breaker is turned on, in some cases such as the outdoor temperature is below 40°F (5°C) no air will be output for about 15 to 25 minutes in order to protect the air conditioner.

## 1. Wiring error check

This product is capable of automatic correction of wiring errors.

Press the wiring error check switch on the outdoor unit service PC-board. However, the wiring error check switch will not function for 3 minutes after the safety breaker is turned on. About 15-20 minutes after the switch is pressed, the errors in the connection wiring will be corrected.

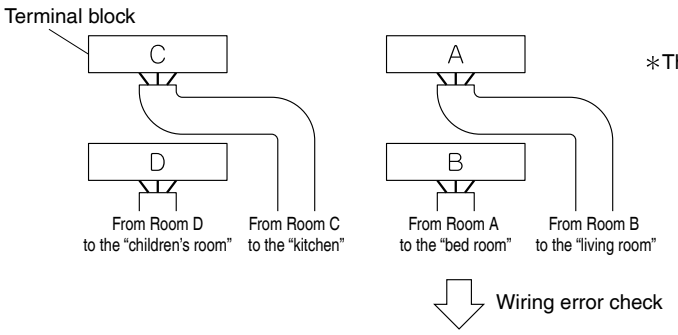



The service monitor LEDs indicate whether or not correction is possible, as shown in the table below. For details on how to read the LED display, refer to the collective indications label on the reverse side of the top plate or the service manual.

If self-correction is not possible, check the indoor unit wiring and piping in the usual manner.

| LED | 1 | 2 | 3 | 4 | 5 | Message |
|---|---|---|---|---|---|---|
| Status | All Flashing | | | | | Automatic correction impossible |
| | Flashing One after another | | | | | Automatic correction completed |
| | ☼ (One or more of LEDs 1 to 5 are ON) | | | | | Abnormal stop [Note. 3] |

**Wiring correct example**




∗The figure at left shows branch wiring.

Wiring error check

LED lighting sequence after a wiring correction.

Order of LED flashing: 2 → 1 → 3 → 4 [Note. 1]

**NOTE**

1) For two rooms, LED 3,4 and 5 are not displayed, and for three rooms, LED 4 and 5 is not displayed, and for four rooms, LED 5 is not displayed.
2) After wiring error check operation is completed, LED indication will continue until ordinary operation starts. This is normal.
3) Follow the product diagnosis procedures. (Details of product error diagnosis are listed on the reverse side of the top plate.)

# Trial Operation and Testing

## 2. Trial operation and testing

- During the trial operation, first check the operation of each unit individually. After this, check the simultaneous operation of all indoor units. Check both COOL and HEAT operations.

### 2-1. Measure the supply voltage and make sure that it is within the specified range.

### 2-2. In COOL operation, select the lowest programmable temperature; in HEAT operation, select the highest programmable temperature.

- When operating the air conditioner in COOL operation in winter, or HEAT operation in summer, activate trial operation mode by following the instructions in the installation manual for the indoor unit.

### 2-3. Carry out the trial operation following the instructions in the operation manual to ensure that all functions and parts, such as the movement of the flap, are working properly.

- To protect the air conditioner, restart operation is disabled for 3 minutes after the system has been turned off.
- When trial operation is conducted in HEAT operation directly after the circuit breaker is turned on, in some cases no air will be output for about 3 to 20 minutes in order to protect the air conditioner.
- During COOL operation, frost may form on the gas stop valve or other parts. This is normal.

### 2-4. After running the unit for about 20 minutes, measure the temperatures at the indoor unit inlet and outlet.

- If the measurements are above the values shown in the table below, then they are normal.

| | COOL operation | HEAT operation |
|---|---|---|
| Temperature difference between inlet and outlet | About 14°F (8°C) | About 36°F (20°C) |

(When running in one room)

### 2-5. After trial operation is complete, set the temperature to a normal level (78°F to 82°F (26°C to 28°C) in COOL operation, 68°F to 75°F (20°C to 24°C) in HEAT operation).

- The air conditioner draws a small amount of power in its standby mode. If the system is not to be used for some time after installation, shut off the circuit breaker to eliminate unnecessary power consumption.
- If the circuit breaker trips to shut off the power to the air conditioner, the system will restore the original operation mode when the circuit breaker is opened again.

## 3. Test items

| Test item | Symptom | Check |
|---|---|---|
| Indoor and outdoor units are installed securely. | Fall, vibration, noise | |
| No refrigerant gas leaks. | Incomplete cooling/heating function | |
| Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated. | Water leakage | |
| Draining line is properly installed. | Water leakage | |
| System is properly grounded. | Electrical leakage | |
| Only specified wires are used for all wiring, and all wires are connected correctly. | No operation or burn damage | |
| Indoor or outdoor unit's air inlet or air outlet are unobstructed. | Incomplete cooling/heating function | |
| Stop valves are opened. | Incomplete cooling/heating function | |
| Pipes and wires are connected to the corresponding terminal blocks/connection ports for the connected unit. | Incomplete cooling/heating function | |
| The priority room setting is set for only 1 room. | The priority room setting will not function. | |
| Indoor unit properly receives remote control commands. | No operation | |

## 2.2 5MXM, 3/4/5MXT, 3/4/5MXTH

# Contents

**Safety Considerations** ..... 1
**Accessories** ..... 4
**Precautions for Selecting a Location** ..... 4
**Precautions on Installation** ..... 5
**Outdoor Unit Installation Diagram** ..... 5
**Installation Space Requirements** ..... 6
**Selecting a Location for Installation of the Indoor Units** ..... 6
**Connections (connection port)** ..... 7
**How to Use Reducer assy** ..... 8
**Outdoor Unit Installation** ..... 9
1. Installing the outdoor unit ..... 9
2. Drain work ..... 9
3. Flaring the pipe end ..... 9
4. Refrigerant piping ..... 10
5. Pressure test and evacuating system ..... 11
6. Charging with refrigerant ..... 12
**Wiring** ..... 13
**Priority Room Setting** ..... 16
**Night Quiet Mode setting** ..... 17
**COOL/HEAT mode lock [S15]** ..... 17
**Pump Down Operation** ..... 18
**Trial Operation and Testing** ..... 19
1. Wiring error check ..... 19
2. Trial operation and testing ..... 20
3. Test items ..... 20

The pictures in this document are for illustrative purposes only.

# Safety Considerations

**Refer also to the General Safety Considerations in the separate booklet.**

| | |
|---|---|
|  | **Read the precautions in this manual carefully before operating the unit.** |
|   | **This appliance is filled with R32.** |

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.
Instruct the user on how to operate and maintain the unit.
Inform users that they should store this installation manual with the operation manual for future reference.
Always use a licensed installer or contractor to install this product.
Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion.
Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

⚠ **DANGER** ····· Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING** ····· Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** ····· Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ **NOTE** ····· Indicates situations that may result in equipment or property damage accidents only.

⚠ **DANGER**

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death.
  Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injury or death by suffocation.
- All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal.

### ⚠ WARNING

- During installation, attach the refrigerant piping securely before operating the compressor. If the refrigerant pipes are not attached and the stop valve is open when the compressor is operated, air will be sucked in, causing abnormal pressure in the refrigeration cycle, which may result in equipment damage and even injury.
- During pump down, stop the compressor before removing the refrigerant piping. If the compressor is still operating and the stop valve is open during pump down, air will be sucked in when the refrigerant piping is removed, causing abnormal pressure in the refrigeration cycle, which may result in equipment damage and even injury.
- Only qualified personnel licensed or certified in their jurisdiction must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- Pipe-work including piping material, pipe routing, and installation shall include protection from physical damage in operation and service, and be in compliance with national and local codes and standards, such as ASHRAE 15, ASHRAE 15.2, IAPMO Uniform Mechanical Code, ICC International Mechanical Code, or CSA B52. All field joints shall be accessible for inspection prior to being covered or enclosed.
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injury.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.
- The unit must have an uninterrupted, unbroken electrical ground to minimize the possibility of personal injury if an electrical fault should occur.
  The electrical ground circuit may consist of an appropriately sized electrical wire connecting the ground lug in the unit and control box wire to the building's electrical service panel.
  Other methods of grounding are permitted if performed in accordance with the "National Electrical Code" (NEC)/ "American National Standards Institute" (ANSI)/ "National Fire Protection Association" (NFPA) 70 and local/state codes.
  In CANADA, electrical grounding is to be in accordance with the Canadian Electrical Code CSA C22.1.
  Failure to observe this warning can result in electrical shock that can cause personal injury or death.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel licensed or certified in their jurisdiction according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the protection plates can be securely fastened. Improper positioning of the protection plates may result in electric shock, fire, or the terminals overheating.
- Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit outer plates. If the outer plates are not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R32) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, which may result in equipment damage and even injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.
- Do not use means to accelerate the defrosting process (if possible) or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.
- Comply with national gas regulations.
- The indoor equipment and pipes shall be securely mounted and guarded such that accidental rupture of equipment cannot occur from such events as moving furniture or reconstruction activities.

### ⚠ CAUTION

- While following the instructions in this installation manual, install drain piping to ensure proper drainage and insulate the piping to prevent condensation. Improper drain piping may result in indoor water leakage and property damage.
- The refrigerant circuit temperature will be high, therefore the inter-unit wires must be kept away from copper pipes that are not thermally insulated.
- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- Wear adequate personal protective equipment (protective gloves, safety glasses,…) when installing, maintaining or servicing the system.
- The heat exchanger fins are sharp enough to cut. To avoid injury, wear gloves or cover the fins while working around them.

# Safety Considerations

- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to ensure proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R32 in the system must be kept clean, dry, and tight.

  (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.

  (b) Tight -- R32 does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R32 can contribute to the greenhouse effect if it is released.
  Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant piping* and follow the procedures.
- The outdoor unit is for R32. See the catalog for indoor models that can be connected. Normal operation is not possible when connected to non-compatible indoor units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors.
- Do not install the air conditioner or heat pump in the following locations:

  (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
  Plastic parts may deteriorate and fall off or result in water leakage.

  (b) Where corrosive gas, such as sulfurous acid gas, is produced.
  Corroding copper pipes or soldered parts may result in refrigerant leakage.

  (c) Near machinery emitting electromagnetic waves.
  Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.

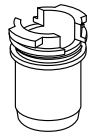
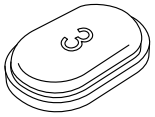
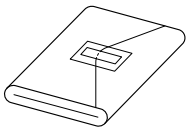
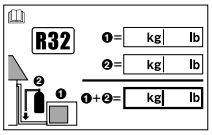
  (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.
- Servicing shall be performed only as recommended by the manufacturer and licensed or certified in their jurisdiction.

**⚠ NOTE**

- The outdoor unit should be positioned where the unit and power supply wires (breaker panel to outdoor unit) are at least 10ft (3m) away from any televisions or radios. (The unit may cause interference with the picture or sound.) Depending on the radio waves, a distance of 10ft (3m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Only use tools for R32 or R410A, such as a gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R32, the refrigerant may deteriorate.
- This air conditioner or heat pump is an appliance that should not be accessible to the general public.
- As maximum allowable pressure is 604psi (4.17MPa), the wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.

RN008(R32)-U

# Accessories

| | | | |
|---|---|---|---|
| Ⓐ Installation manual | 1 | Ⓑ Drain socket  | 1 |
| Ⓒ Drain socket cap  | 1 | Ⓓ Drain plug  | 9 |
| Ⓔ Reducer assy  Actual component included varies by model. | 1 | Ⓗ Refrigerant charge label  Affix near the manufacturer's label. | 1 |
| Ⓕ Warranty | 1 | | |
| Ⓖ General Safety Considerations | 1 | | |

# Precautions for Selecting a Location

1) Choose a place solid enough to bear the weight and vibration of the unit, where the operating sound will not be amplified.
2) Choose a location where the air discharged from the unit or the operating sound will not cause a nuisance to the neighbors of the user.
3) Avoid locations, such as near bedrooms, where the operating sound may cause disturbance.
4) There must be sufficient space to carry the unit into and out of the site.
5) There must be sufficient space for air passage and no obstructions around the air inlet and the air outlet.
6) In coastal areas or other places with a salty atmosphere or one containing sulfate gas, corrosion may shorten the life of the air conditioner.
7) Since water will flow from the drain of the outdoor unit, do not place anything under the unit which must be kept away from moisture.
8) A location where flammable gas does not leak. Position at least 6-5/8ft (2m) from propane gas cylinders.

**NOTE**
Cannot be installed suspended from a ceiling or stacked.

**⚠ CAUTION**

When operating the air conditioner in a low outdoor ambient temperature, be sure to follow the instructions described below.

- To prevent exposure to wind, install the outdoor unit with its suction side facing the wall.
- Never install the outdoor unit at a site where the suction side may be exposed directly to wind.
- To prevent exposure to wind, it is recommended to install a baffle plate on the air discharge side of the outdoor unit.
- In heavy snow areas, select an installation site where the snow will not affect the unit.
- If there is a likelihood of snow accumulating on the outdoor unit, attach a snow protection hood.
- In high humidity areas or heavy snow areas, it is recommended to attach a drain pan heater (sold separately) to prevent ice build-up from the bottom frame.

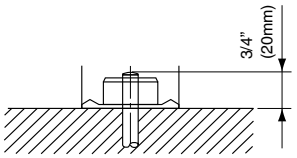
• Construct a large canopy.
• Construct a pedestal.



Install the unit high enough off the ground to prevent burying in snow.

# Precautions on Installation

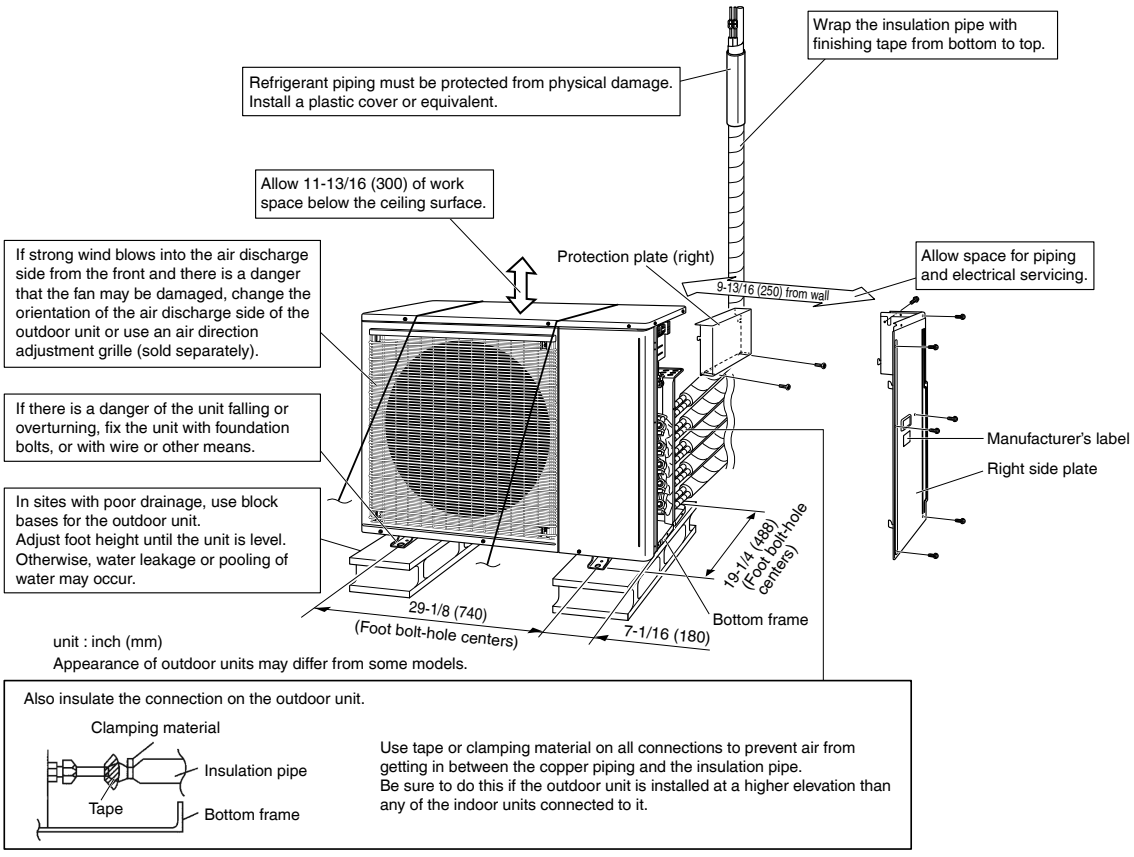
- Check the strength and level of the installation surface so that the unit does not cause any operating vibrations or noise after installation.
- Fix the unit in place securely using foundation bolts, as in the figure. (Prepare 4 sets of 1/2 inch (M12) foundation bolts, nuts and washers.)
- It is best to screw in the foundation bolts until their ends are 3/4 inch (20mm) from the foundation surface.




# Outdoor Unit Installation Diagram

**⚠ CAUTION**

- Do not connect the embedded branch piping and the outdoor unit when only carrying out piping work without connecting the indoor unit in order to add another indoor unit later.
  Make sure no dirt or moisture gets into either side of the embedded branch piping.
  Refer to **"4. Refrigerant piping"** on page 10 for details.
- It is not possible to have only 1 indoor unit connected. **Be sure to connect at least 2 indoor units.**

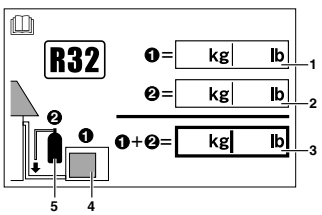






## Refrigerant charge label

Please fill in with indelible ink,
■❶ the factory refrigerant charge of the product,
■❷ the additional refrigerant amount charged in the field and
■❶ + ❷ the total refrigerant charge
on Ⓗ refrigerant charge label.
Affix Ⓗ refrigerant charge label near the manufacturer's label after filling it out.

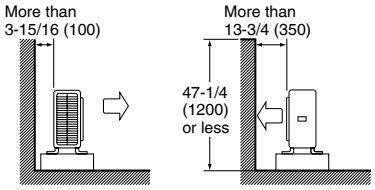



**1** factory refrigerant charge of the product: see unit manufacturer's label
**2** additional refrigerant amount charged in the field
**3** total refrigerant charge
**4** outdoor unit
**5** refrigerant cylinder and manifold for charging

# Installation Space Requirements

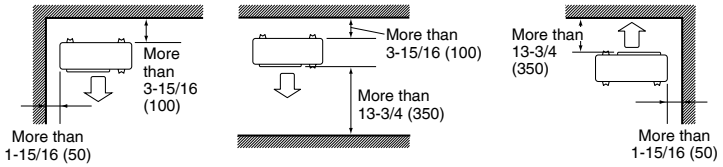
- Position the unit on a horizontal surface. Any tilt in the unit should be 3° or less to the horizontal.
- Where a wall or other obstacle is in the path of outdoor unit's intake or exhaust airflow, follow the installation space requirements below.
- For any of the below installation patterns, the wall height on the outlet side should be 47-1/4 inch (1200mm) or less.
- Secure as much installation space around the unit as the location allows, as more space will result in more efficient operation.

Wall facing one side



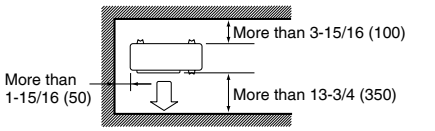

Side view

Walls facing two sides




Top view

Walls facing three sides



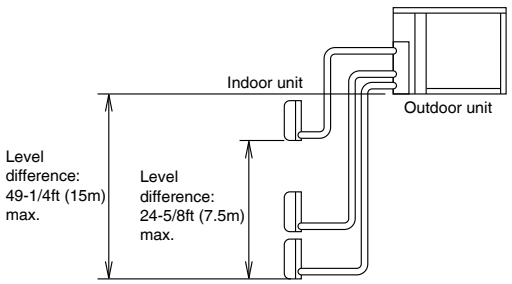

Top view unit: inch (mm)

When installed as in the figure on the left, it is recommended to either change the orientation of the outdoor unit outlet side or use the air direction adjustment grille (sold separately).

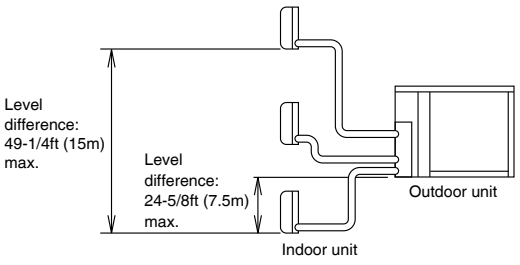
# Selecting a Location for Installation of the Indoor Units

- The maximum allowable length of refrigerant piping, and the maximum allowable height difference between the outdoor and indoor units, are listed below.
- Refrigerant piping must be kept to a minimum.
  The suggested shortest pipe length per room is 10ft (3m), in order to avoid noise from the outdoor unit and vibration. (Mechanical noise and vibration may occur depending on how the unit is installed and the environment in which it is used.)
- **The minimum required floor area of the room where the indoor unit is installed varies depending on the installation height and refrigerant amount. For details, refer to the General Safety Considerations supplied with the indoor unit.**

| Outdoor unit capacity class | 3MXT∗ | 4MXT∗ | 5MXT∗/5MXM∗ |
|---|---|---|---|
| Piping to each indoor unit | 82ft (25m) max. 10ft (3m) min. | 98ft (30m) max. 10ft (3m) min. | |
| Total length of piping between all units | 230ft (70m) max. | | 262ft (80m) max. |




If the outdoor unit is positioned higher than the indoor units.




If the outdoor unit is positioned lower than one or more indoor units.

# Connections (connection port)

Install the indoor unit according to the table below, which shows the relationship between the class of indoor unit and the corresponding port.
The total indoor unit class that can be connected to this unit:

3MXT∗ – Up to 39000 Btu/h
4MXT∗ – Up to 48000 Btu/h
5MXT∗ – Up to 54000 Btu/h
5MXM∗ – Up to 58000 Btu/h

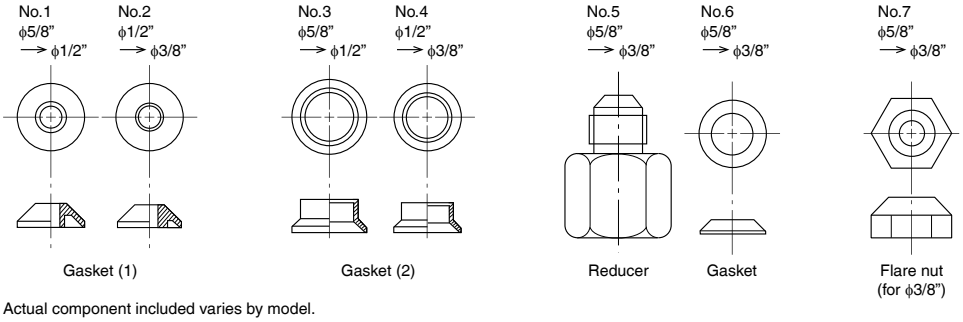
The line set piping size is determined by the size of the indoor unit fittings.
Ⓔ Reducer assy is used at the outdoor unit to accommodate the correct gas line pipe size.

| Port | 3MXT∗ | 4MXT∗ | 5MXT∗/5MXM∗ |
|---|---|---|---|
| A | 07 , 09 , 12 | 07 , 09 , 12 | 07 , 09 , 12 |
| B | #Ⓔ07, #Ⓔ09, #Ⓔ12, 15 , 18 | #Ⓔ07, #Ⓔ09, #Ⓔ12, 15 , 18 | #Ⓔ07, #Ⓔ09, #Ⓔ12, 15 , 18 |
| C | #Ⓔ07, #Ⓔ09, #Ⓔ12, 15 , 18 | #Ⓔ07, #Ⓔ09, #Ⓔ12, 15 , 18 | #Ⓔ07, #Ⓔ09, #Ⓔ12, 15 , 18 |
| D | ——— | △Ⓔ07, △Ⓔ09, △Ⓔ12, □Ⓔ15, □Ⓔ18, 24 | △Ⓔ07, △Ⓔ09, △Ⓔ12, □Ⓔ15, □Ⓔ18, 24 |
| E | ——— | ——— | △Ⓔ07, △Ⓔ09, △Ⓔ12, □Ⓔ15, □Ⓔ18, 24 |

Ⓔ : Use Ⓔ reducer assy to connect pipes.
□ : Use No. 1 and 3.
# : Use No. 2 and 4.
△ : Use No. 5, 6 and 7.

Refer to “**How to Use Reducer assy**” on page 8 for information on reducer numbers and their shapes.

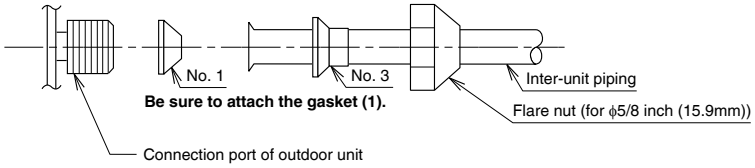
# How to Use Reducer assy



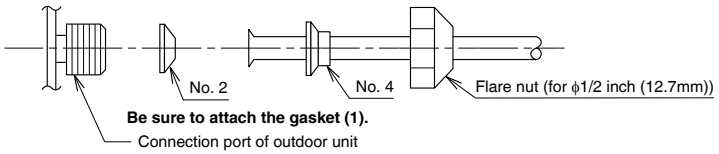

Actual component included varies by model.

• Use Ⓔ reducer assy as described below.

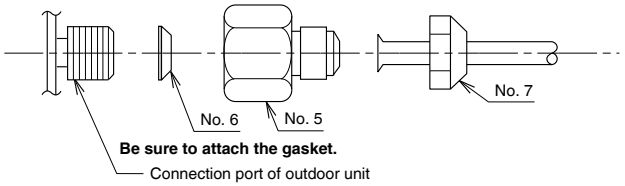
(1) Connecting a pipe of ϕ1/2 inch (12.7mm) to a gas pipe connection port for ϕ5/8 inch (15.9mm) :




(2) Connecting a pipe of ϕ3/8 inch (9.5mm) to a gas pipe connection port for ϕ1/2 inch (12.7mm) :




(3) Connecting a pipe of ϕ3/8 inch (9.5mm) to a gas pipe connection port for ϕ5/8 inch (15.9mm) :




- When using Ⓔ reducer assy shown above, be careful not to overtighten the nut, or the smaller pipe may become damaged. (Apply about 2/3 to 3/3 the normal torque.)
- Use an appropriate wrench to avoid damaging the connection thread by overtightening the flare nut.

| Piping size | Flare nut tightening torque |
|---|---|
| O.D. ϕ3/8 inch (9.5mm) | 24-1/8 – 29-3/8lbf • ft (32.7-39.9N • m) |
| O.D. ϕ1/2 inch (12.7mm) | 36-1/2 – 44-1/2lbf • ft (49.5-60.3N • m) |
| O.D. ϕ5/8 inch (15.9mm) | 45-5/8 – 55-5/8lbf • ft (61.8-75.4N • m) |

# Outdoor Unit Installation

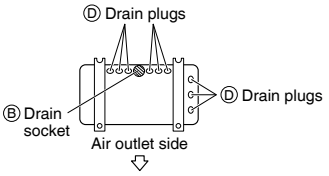
## 1. Installing the outdoor unit

- When installing the outdoor unit, refer to "**Precautions for Selecting a Location**" on page 4 and "**Outdoor Unit Installation Diagram**" on page 5.
- If drain work is necessary, follow the procedures below.

## 2. Drain work

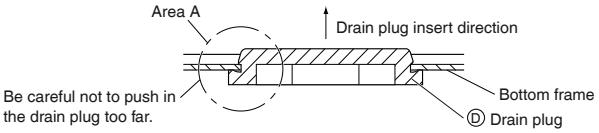
**⚠CAUTION**

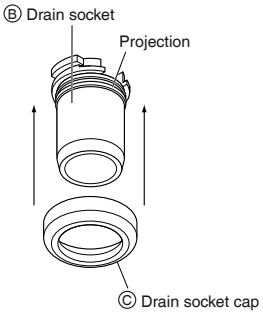
- In cold areas, do not use a drain socket, drain plugs, a drain socket cap and a drain hose with the outdoor unit. (Drain water may freeze, impairing heating performance.)




- If the drain port is covered by a mounting base or floor surface, place additional foot bases of at least 3-15/16 inch (100mm) in height under the outdoor unit's feet.

1) Insert the Ⓓ drain plug into the bottom frame until it is flush with the bottom frame around the entire circumference, as shown in area A.

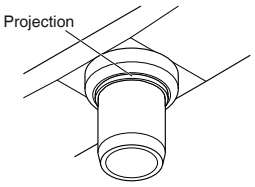



2) Insert Ⓒ drain socket cap onto Ⓑ drain socket beyond the projection around Ⓑ drain socket.
3) Insert Ⓑ drain socket into the matching drain hole.
After insertion, turn it about 40° clockwise.

**NOTE**
Check that Ⓒ drain socket cap is correctly engaged with the projection of Ⓑ drain socket. Otherwise, water leakage may result.

4) Connect the drain hose (field supplied; internal diameter of 1 inch (25mm)) to Ⓑ drain socket.
(Ensure there are no bends in the hose if it is too long or hangs down.)
5) Make sure the Ⓓ drain plugs and the Ⓑ drain socket of the outdoor unit are securely inserted and there is no leakage.




## 3. Flaring the pipe end

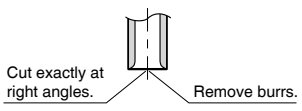
**⚠WARNING**

- Do not apply mineral oil to the flare.
- Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with the unit.
- Never install a dryer to this R32 unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- Improper flaring may result in refrigerant gas leakage.

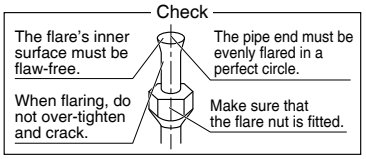
**⚠CAUTION**

Do not reuse joints which have been used once already.

1) Cut the pipe end with a pipe cutter.
2) Remove burrs with the cut surface facing downward so that the filings do not enter the pipe.
3) Put the flare nut on the pipe.
4) Flare the pipe.
5) Check that the flaring has been done correctly.

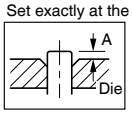



Check




Flaring

Set exactly at the position shown below.



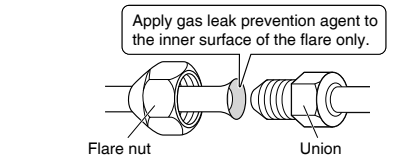

| | Flare tool for R32 or 410A | Conventional flare tool | |
|---|---|---|---|
| | Clutch-type | Clutch-type (Rigid-type) | Wing-nut type (Imperial-type) |
| A | 0-0.020 inch (0-0.5mm) | 0.039-0.059 inch (1.0-1.5mm) | 0.059-0.079 inch (1.5-2.0mm) |

# 4. Refrigerant piping

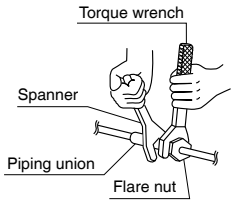
## ⚠CAUTION

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.
- Excessive tightening of the flare nut can result in the flare nut cracking in the long term, leading to gas leakage.

1) To prevent gas leakages, apply gas leak prevention agent to the inner surface of the flare only.
2) For refrigerant pipe connections, align the center of the flare and the union, tighten the flare nut 3 to 4 turns by hand, and then use a torque wrench and a spanner to firmly tighten to the specified torque.




Do not apply refrigeration oil, gas leak prevention agent, etc., to the outer surface of the flare or threads (flare nut, union). (May result in cracking of the flare nut or damage to the threads)




**Tightening torque**

Piping connection

| Flare nut | | | |
|---|---|---|---|
| Gas side | | | Liquid side |
| 3/8 inch (9.5mm) | 1/2 inch (12.7mm) | 5/8 inch (15.9mm) | 1/4 inch (6.4mm) |
| 24-1/8 – 29-3/8lbf • ft (32.7-39.9N • m) | 36-1/2 – 44-1/2lbf • ft (49.5-60.3N • m) | 45-5/8 – 55-5/8lbf • ft (61.8-75.4N • m) | 10-1/2 – 12-5/8lbf • ft (14.2-17.2N • m) |

Valve cap

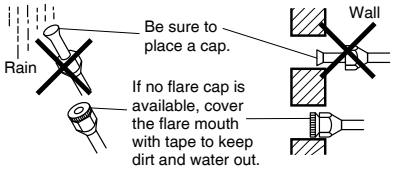
| Width across flats | |
|---|---|
| 3/4 inch (19mm) | 7/8 inch (22mm) |
| 12-5/8 – 15-3/8lbf • ft (17.1-20.9N • m) | 16-1/4 – 19-7/8lbf • ft (22.1-26.9N • m) |

Service port cap

| |
|---|
| 7-7/8 – 10-7/8lbf • ft (10.7-14.7N • m) |

**Cautions on pipe handling**

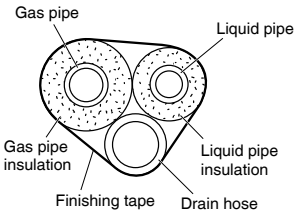
- Protect the open end of the pipe from dust and moisture.
- All pipe bends should be as gentle as possible. Use a pipe bender for bending.




**Selection of copper and heat insulation materials**

When using commercial copper pipes and fittings, observe the following:

- Insulation material: Polyethylene foam
  Heat transfer rate: 0.041 to 0.052W/mK (0.024 to 0.030Btu/fth°F)
  (0.035 to 0.045kcal/mh°C)
  Be sure to use insulation that is designed for use with HVAC Systems.
- ACR Copper only.
- Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below.




| | Piping size | Minimum bend radius | Piping thickness | Thermal insulation size | Thermal insulation thickness |
|---|---|---|---|---|---|
| Gas side | O.D. 3/8 inch (9.5mm) | 1-3/16 inch (30mm) or more | 0.031 inch (0.8mm) (C1220T-O) | I.D. 15/32-19/32 inch (12-15mm) | 13/32 inch (10mm) Min. |
| | O.D. 1/2 inch (12.7mm) | 1-9/16 inch (40mm) or more | | I.D. 9/16-5/8 inch (14-16mm) | |
| | O.D. 5/8 inch (15.9mm) | 1-15/16 inch (50mm) or more | 0.039 inch (1.0mm) (C1220T-O) | I.D. 5/8-13/16 inch (16-20mm) | |
| Liquid side | O.D. 1/4 inch (6.4mm) | 1-3/16 inch (30mm) or more | 0.031 inch (0.8mm) (C1220T-O) | I.D. 5/16-13/32 inch (8-10mm) | |

- Use separate thermal insulation pipes for gas and liquid refrigerant pipes.
- Using finishing tape, bundle and wrap the indoor unit piping and drain hose together so that the drain hose is below the other piping.

# Outdoor Unit Installation

## 5. Pressure test and evacuating system

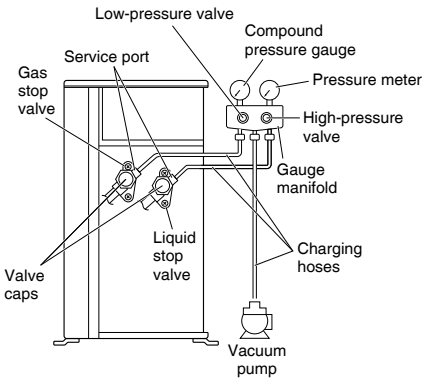
**⚠ WARNING**

- Make sure that air or any matter other than refrigerant (R32) does not get into the refrigeration cycle.
- If refrigerant gas leaks should occur, ventilate the room as soon and as much as possible.
- R32, as well as other refrigerants, should always be recovered and never be released directly into the environment.
- **Use tools for R32 or R410A (such as the gauge manifold, charging hose, or vacuum pump adapter).**

**⚠ CAUTION**

Do not open/close the stop valves when the outdoor temperature is –5°F (–21°C) or less, as this may result in refrigerant leakage.

- When piping work is complete, it is necessary to perform a pressure test and evacuate system with a vacuum pump.
- If using additional refrigerant, purge the air from the refrigerant pipes and indoor unit using a vacuum pump, then charge additional refrigerant.
- Use a hexagonal wrench (3/16 inch (4mm)) to operate the stop valve rods.
- All refrigerant pipe joints should be tightened with a torque wrench to the specified tightening torque.




1) Pressurize the liquid pipe and gas pipe from the service ports of each stop valve to 604psi (4.17MPa) (do not pressurize more than 604psi (4.17MPa)) for 1 hour minimum, 24 hours recommended. If there is a pressure drop, check for leaks, make repairs and perform the pressure test again.
2) Connect the gauge manifold's charging hoses to the service ports of each stop valve.
3) Fully open the low-pressure valve (Lo) and the high-pressure valve (Hi) on the gauge manifold.
4) Evacuate system using vacuum pump to below 500 microns for 1 hour minimum.
5) Close the low-pressure valve (Lo) and the high-pressure valve (Hi) on the gauge manifold and stop vacuum pump. (Maintain this condition for 4-5 minutes to make sure that the compound pressure gauge pointer does not swing back.)*1
6) Remove the valve caps from the liquid stop valve and gas stop valve.
7) To open the liquid stop valve, turn the rod of the valve 90° counter-clockwise using a hexagonal wrench. Close it after 5 seconds, and check for gas leakage. Using soapy water, check for gas leakage from the indoor unit's flare and outdoor unit's flare and valve rods. After the check is complete, wipe all soapy water off*2.
8) Disconnect the charging hoses from the service ports, then fully open the liquid and gas stop valves. (Do not attempt to turn the valve rods further than they can go.)
9) Tighten the valve caps and service port caps for the liquid and gas stop valves with a torque wrench to the specified torques. Refer to **"4. Refrigerant piping"** on page 10 for details.

*1 If the compound pressure gauge pointer swings back, the refrigerant pipes may contain water or there may be a loose pipe joint. Check all pipe joints and retighten nuts as needed, then repeat steps 3) through 5).

*2 **Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used. Do not use substances containing chlorine and electronic leak detection for gas leak detection.**

# 6. Charging with refrigerant

**⚠CAUTION**

Even though the stop valve is fully closed, the refrigerant may slowly leak out; do not leave the flare nut removed for a long period of time.

- If the total length of piping for all rooms exceeds the figure listed below, additionally charge with 0.22oz/ft (20g/m) of refrigerant (R32) for each additional piping length.
  Be sure to add the proper amount of additional refrigerant.
  Failure to do so may result in reduced performance.

| Outdoor unit capacity class | 3MXT∗, 4MXT∗, 5MXT∗, 5MXM∗ |
|---|---|
| Total length of piping for all rooms | 131-1/4ft (40m) |

# Wiring

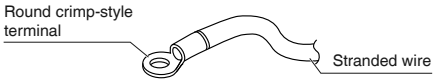
## ⚠ WARNING

- **RISK OF ELECTRIC SHOCK CAUSE INJURY OR DEATH.**
  System contains oversize protective earthing (grounding) terminal which shall be properly connected.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death.
  Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Use an all-pole disconnection type circuit breaker with at least 1/8 inch (3mm) between the contact point gaps.
- When carrying out wiring, take care not to pull at the conduit.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.
- Do not turn on the circuit breaker until all work is completed.

## ⚠ CAUTION

**Precautions to be taken for wiring**

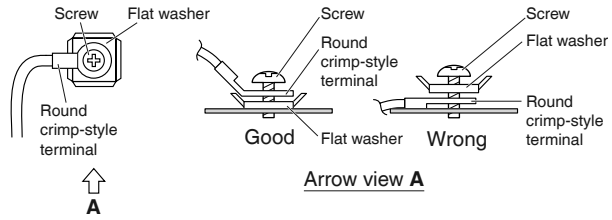
- Recommend stranded cable for interunit wiring. Local code always supersedes recommendation.
- For stranded wires, make sure to use the round crimp-style terminal.
  Place the round crimp-style terminals on the wires up to the covered part and secure in place.




**Ground terminal installation**

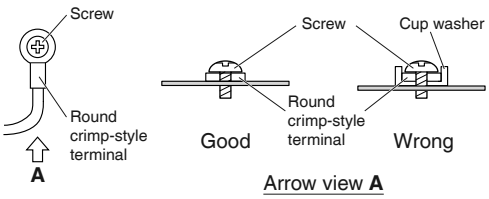
1) Use the following method when installing a round crimp-style terminal.

When connecting to ground for each room



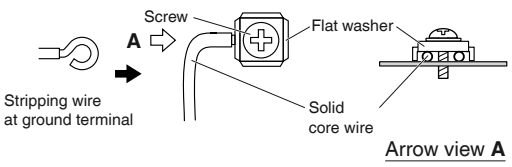

When connecting to ground for power supply

- Remove the cup washer.

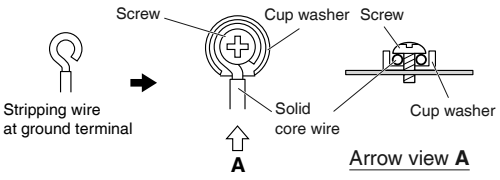



2) Use the following method when installing a solid core wire.
   Make sure to curl the end of the lead. Improper work may cause heat and fire.

When connecting to ground for each room

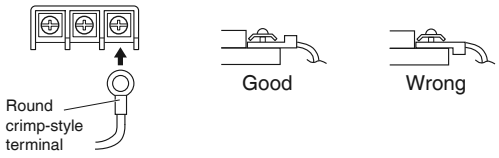



When connecting to ground for power supply

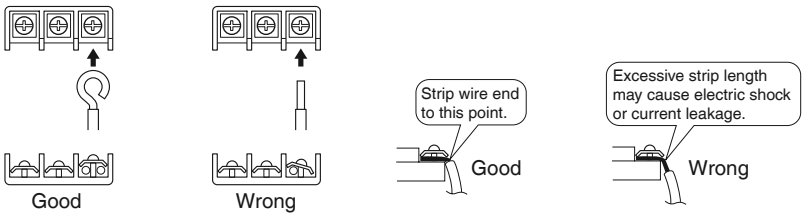


**Terminal block installation**

1) Use the following method when installing a round crimp-style terminal.




2) Use the following method when installing a solid core wire.
Make sure to curl the end of the lead. Improper work may cause heat and fire.




Stripping wire at terminal block

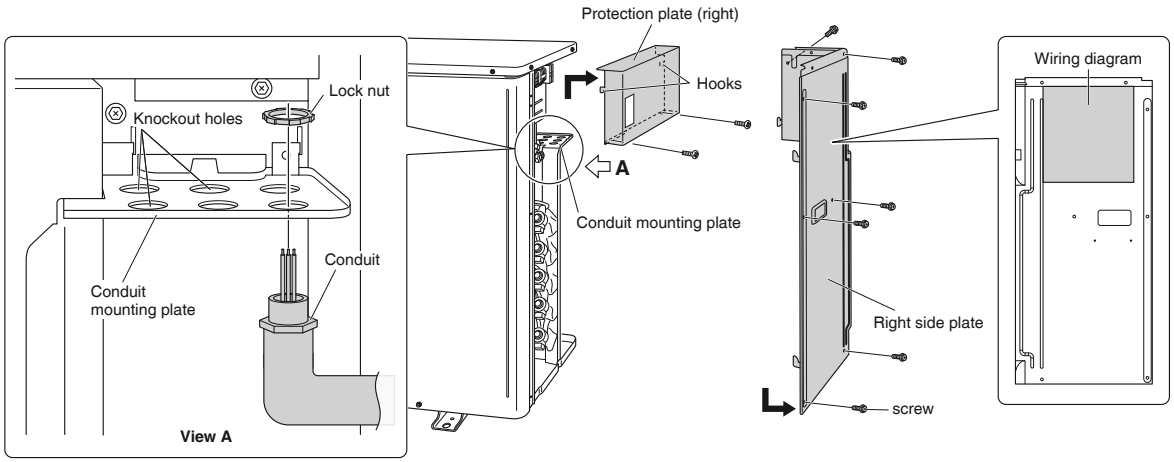
---

[Method of mounting conduit]

• When wiring, remove the right side plate and look at the wiring diagram on the back of the right side plate.

• When connecting indoor units for 3 rooms or more, open knockout holes without deforming the conduit mounting plate.

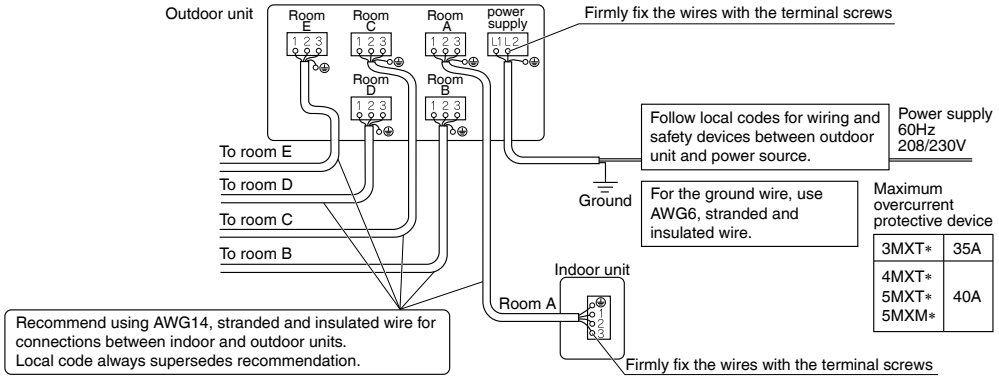
1) Remove the right side plate (7 screws).
2) Remove the protection plate (right) (2 screws).
3) Pass wires through the conduit and secure them with a lock nut.



# Wiring

[Wiring procedure]

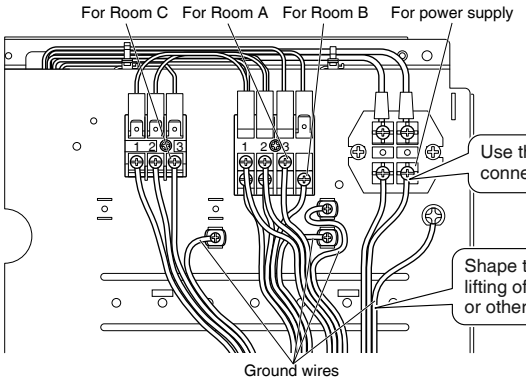
1) Strip the insulation from the wire (3/4 inch (20mm)).
2) Connect the inter-unit wires between the indoor and outdoor units **so that the terminal numbers match.** Tighten the terminal screws securely. It is recommended that a slot-head screwdriver be used to tighten the screws.
3) **Be sure to match the symbols for wiring and piping.**
4) Pull the wire lightly to make sure that it does not disconnect.
5) After completing the work, reattach the protection plate (right) and right side plate to their original positions.
   - Attach so that the protection plate (right) hooks (2 locations) are securely engaged.



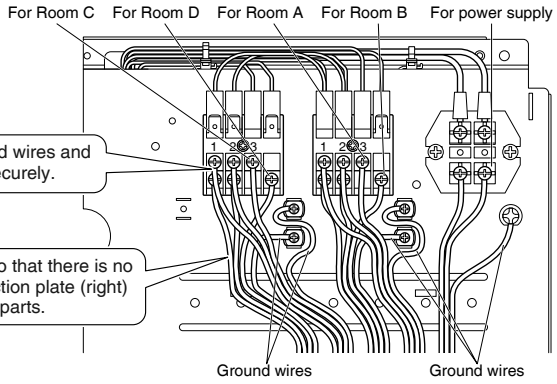

**Note**

Take care to ensure that all wiring between indoor unit and outdoor unit has a consistent connection.
Any splices can cause communication errors.

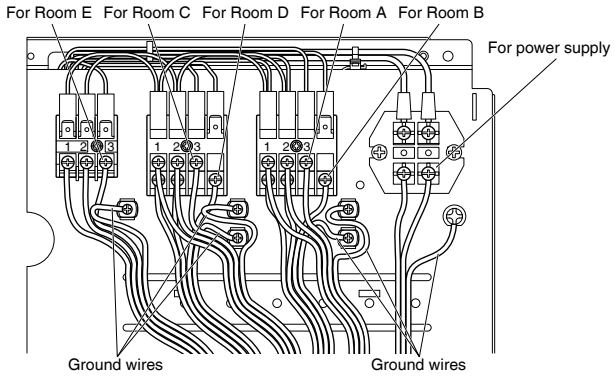
**• 3MXT, 3MXTH models**




**• 4MXT, 4MXTH models**




**• 5MXT, 5MXTH, 5MXM models**




**Ground**

This air conditioner must be grounded. For grounding, follow all local, and state electrical codes.

15

3P795496-1

# Priority Room Setting

- To use priority room setting, initial settings must be made when the unit is installed. Explain the priority room setting, as described below, to the user, and confirm whether or not the user wants to use priority room setting.
  Setting it in the guest and living rooms is convenient.

## About the priority room setting function

The indoor unit for which priority room setting is applied takes priority in the following cases.

### 1) Operation mode priority

Even if other indoor units are in operation, the operation mode of the indoor unit with priority room setting will be given precedence. In some cases, other indoor units may not operate but enter standby mode.

### 2) Priority during powerful operation

If the indoor unit which is set for priority room setting is operating at powerful, the capabilities of other indoor units will be somewhat reduced. Power supply gives priority to the indoor unit which is set for priority room setting.

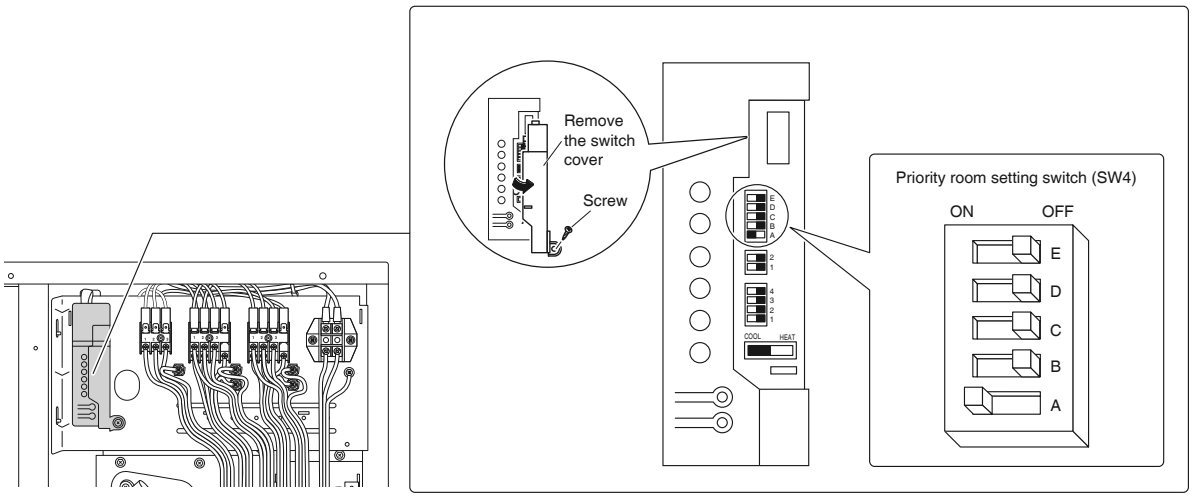
### 3) Quiet operation priority

Setting the indoor unit which is set for priority room setting to quiet operation will make the outdoor unit run quietly.

## Setting procedure

Slide the priority room setting switch (SW4) to the on side for the switch that corresponds to the piping connected to the indoor unit to be set.
(In the figure below, it is room A.)
Once the settings are complete, switch the power on.

**Be sure to set only one room**



# Night Quiet Mode setting

- If night quiet mode is to be used, initial settings must be made when the unit is installed. Explain night quiet mode, as described below, to the user, and confirm whether or not the user wants to use night quiet mode.

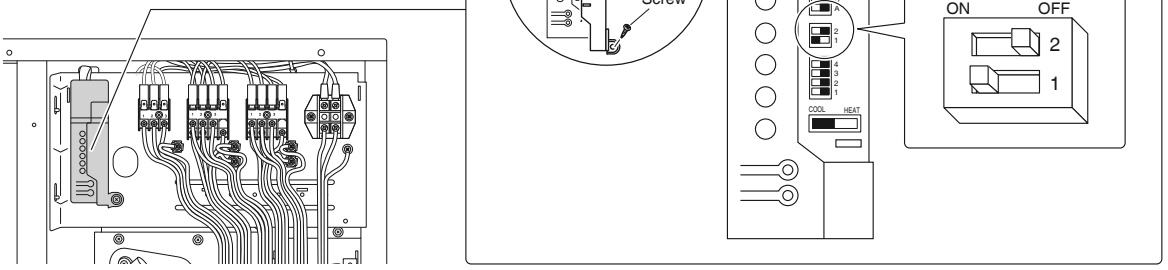
### About night quiet mode

The night quiet mode function reduces operating noise of the outdoor unit at nighttime. This function is useful if the user is worried about the effects of the operating noise on the neighbors.

However, cooling capacity will be reduced when operating in night quiet mode.

### Setting procedure

Turn the night quiet mode setting switch (SW6-1) to on.

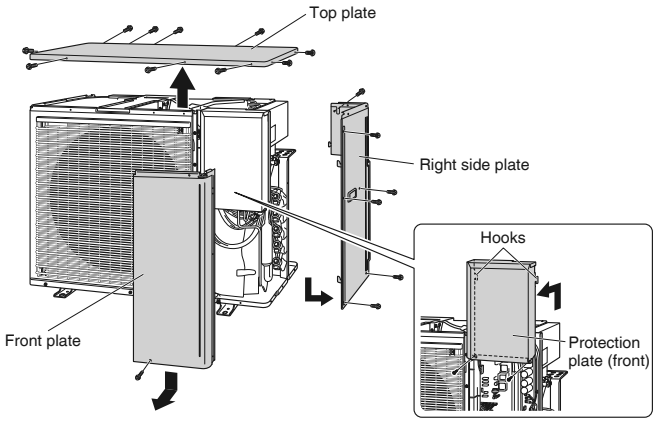


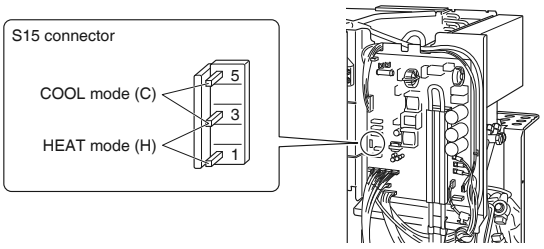

# COOL/HEAT mode lock [S15]

1) Remove the top plate (10 screws).
2) Remove the right side plate (6 screws).
3) Remove the front plate (1 screw).
   - The front plate is heavy, so take care.
4) Remove the protection plate (front) (2 screws).
5) Use the S15 connector to set the unit to only cool or heat.
   Setting to only heat (H) : short-circuit pins 1 and 3 of the connector [S15]
   Setting to only cool (C) : short-circuit pins 3 and 5 of the connector [S15]
   The following specifications apply to the connector housing and pins.

   JST products Housing: VHR-5N
   Pin: SVH-21T-P1.1

   Note that forced operation is also possible in COOL/HEAT mode.
6) Reattach the protection plate (front), front plate, right side plate and top plate to their original positions.
   - Attach so that the protection plate (front) hooks (2 locations) are securely engaged.



# Pump Down Operation

**⚠ WARNING**

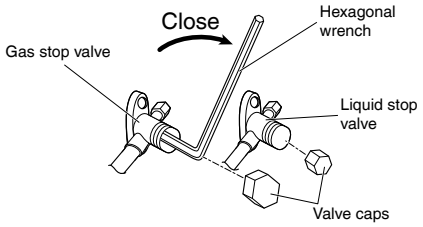
Do not remove the switch cover unless the power has been turned off. (Risk of electric shock)

**⚠ CAUTION**

Do not open/close the stop valves when the outdoor temperature is –5°F (–21°C) or less, as this may result in refrigerant leakage.

**In order to protect the environment, be sure to pump down when relocating or disposing of the unit.**

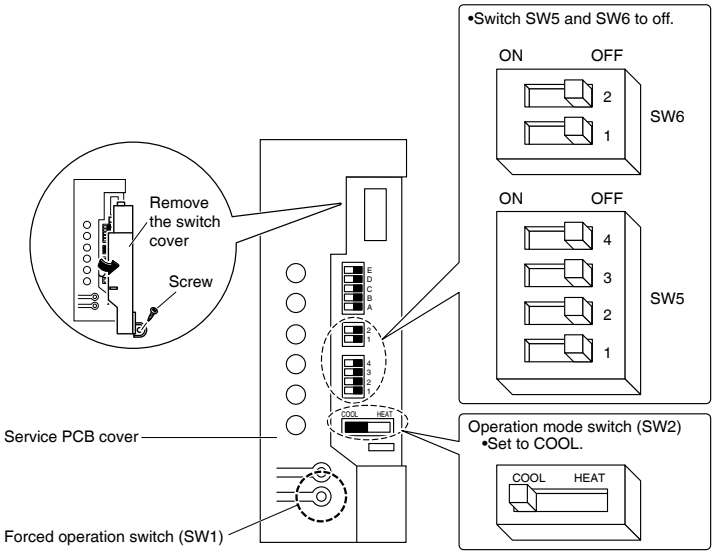
1) Remove the right side plate (7 screws).
2) Remove the valve caps from liquid stop valve and gas stop valve.
3) Begin forced cooling operation.
4) After 1 to 2 minutes, close the liquid stop valve with a hexagonal wrench.
5) After 3 to 4 minutes, close the gas stop valve and stop forced cooling operation.
6) Attach the valve caps once procedures are complete.
7) Attach the right side plate (7 screws).




### Forced cooling operation

- When using this outdoor unit, no need to operate the indoor unit.

1) Turn off the power.
2) Remove the protection plate (right) (2 screws).
3) Remove the switch cover (1 screw).
4) Switch SW5 and SW6 to off.
5) Turn the operation mode switch (SW2) to COOL.
6) Screw the switch cover back on (1 screw).
7) Attach the protection plate (right) (2 screws).
8) Turn on the power.
9) Push the forced operation switch (SW1) above the service PCB cover. (The operation will start.)
   - Forced cooling operation will stop automatically after about 8 minutes. To stop the operation, push the forced operation switch (SW1) again.



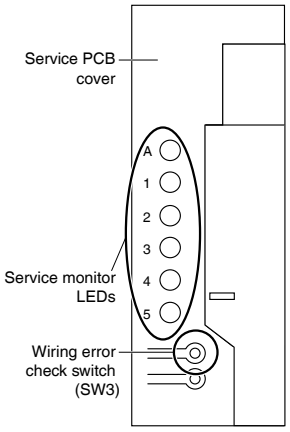
# Trial Operation and Testing

- Before starting the trial operation, measure the voltage at the primary side of the circuit breaker.
- Check that all liquid and gas stop valves are fully open.
- Check that piping and wiring all match. The wiring error check can be conveniently used for underground wiring and other wiring that cannot be directly checked. However, if the outside air temperature is 41°F (5°C) or less, the wiring error check function will not operate.
- When trial operation is conducted directly after the circuit breaker is turned on, in some cases no air will be output for about 15 minutes in order to protect the air conditioner.

## 1. Wiring error check

This product is capable of automatic correction of wiring errors.

Press the wiring error check switch (SW3) on the service PCB cover. However, the wiring error check switch (SW3) will not function for 3 minutes after the safety breaker is turned on. About 15-25 minutes after the switch is pressed, the errors in the connection wiring will be corrected.

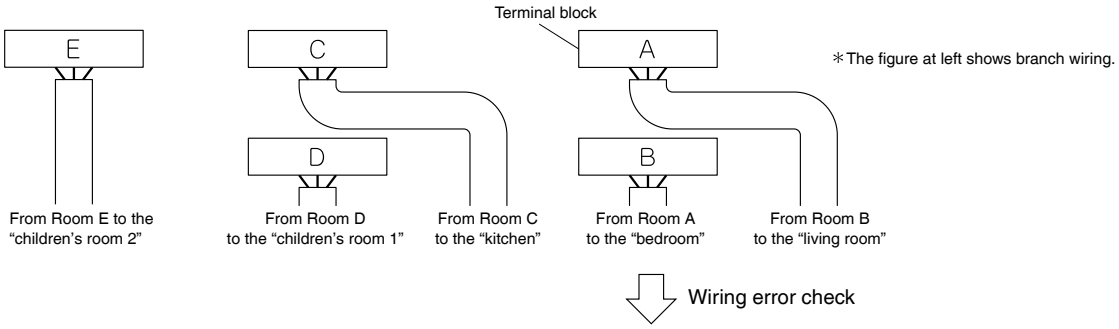



The service monitor LEDs indicate whether or not correction is possible, as shown in the table below. For details on how to read the LED display, refer to the wiring diagram on the back of the right side plate or the service manual.

If self-correction is not possible, check the indoor unit wiring and piping in the usual manner.

| LED | 1 | 2 | 3 | 4 | 5 | Message |
|---|---|---|---|---|---|---|
| Status | All Flashing | | | | | Automatic correction impossible |
| | Flashing One after another | | | | | Automatic correction completed |
| | ☼ (One or more of LEDs 1 to 5 are ON) | | | | | Abnormal stop [Note. 3] |

**Wiring error example**




*The figure at left shows branch wiring.

Wiring error check

LED lighting sequence after a wiring correction.

Order of LED flashing: 2 → 1 → 3 → 4 → 5 [Note. 1]

**NOTE**

1) For two rooms, LED 3, 4 and 5 are not displayed, and for three rooms, LED 4 and 5 is not displayed, and for four rooms, LED 5 is not displayed.
2) After wiring error check operation is completed, LED indication will continue until ordinary operation starts. This is normal.
3) Follow the product diagnosis procedures. (Details of product error diagnosis are listed on the reverse side of the right side plate.)

## 2. Trial operation and testing

- During the trial operation, first check the operation of each unit individually. After this, check the simultaneous operation of all indoor units. Check both COOL and HEAT operations.

### 2-1. Measure the supply voltage and make sure that it is within the specified range.

### 2-2. In COOL operation, select the lowest programmable temperature; in HEAT operation, select the highest programmable temperature.

- When operating the air conditioner in COOL operation in winter, or HEAT operation in summer, activate trial operation mode by following the instructions in the installation manual for the indoor unit.

### 2-3. Carry out the trial operation following the instructions in the operation manual to ensure that all functions and parts, such as the movement of the flap, are working properly.

- To protect the air conditioner, restart operation is disabled for 3 minutes after the system has been turned off.
- When trial operation is conducted in HEAT operation directly after the circuit breaker is turned on, in some cases no air will be output for about 3 to 20 minutes in order to protect the air conditioner.
- During COOL operation, frost may form on the gas stop valve or other parts. This is normal.

### 2-4. After running the unit for about 20 minutes, measure the temperatures at the indoor unit inlet and outlet.

- If the measurements are above the values shown in the table below, then they are normal.

| | COOL operation | HEAT operation |
|---|---|---|
| Temperature difference between inlet and outlet | About 14°F (8°C) | About 36°F (20°C) |

(When running in one room)

### 2-5. After trial operation is complete, set the temperature to a normal level (78°F to 82°F (26°C to 28°C) in COOL operation, 68°F to 75°F (20°C to 24°C) in HEAT operation).

- The air conditioner draws a small amount of power in its standby mode. If the system is not to be used for some time after installation, shut off the circuit breaker to eliminate unnecessary power consumption.
- If the circuit breaker trips to shut off the power to the air conditioner, the system will restore the original operation mode when the circuit breaker is opened again.

## 3. Test items

| Test item | Symptom | Check |
|---|---|---|
| Indoor and outdoor units are installed securely. | Fall, vibration, noise | |
| No refrigerant gas leaks. | Incomplete cooling/heating function | |
| Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated. | Water leakage | |
| Draining line is properly installed. | Water leakage | |
| System is properly grounded. | Electrical leakage | |
| Only specified wires are used for all wiring, and all wires are connected correctly. | No operation or burn damage | |
| Indoor or outdoor unit's air inlet or air outlet are unobstructed. | Incomplete cooling/heating function | |
| Stop valves are opened. | Incomplete cooling/heating function | |
| Pipes and wires are connected to the corresponding terminal blocks/connection ports for the connected unit. | Incomplete cooling/heating function | |
| The priority room setting is set for only 1 room. | The priority room setting will not function. | |
| Indoor unit properly receives remote control commands. | No operation | |

# Part 3 Operation Manual

1. Operation Manual List....246
2. Operation Manual....247
2.1 CTXV07, FTXV09/12....247
2.2 FTXV15/18/24....280
2.3 CDMA07, FDMA09/12/15/18/24....313
2.4 General Safety Considerations....323
2.5 FVXV09/12/15/18....331
2.6 CMXV12/18/24....381
2.7 FFA09/12/15/18....389

# 1. Operation Manual List

| Model | Operation Manual | Reference Page | Wireless R/C | Wired R/C and/or Thermostat |
|---|---|---|---|---|
| CTXV07AVJU9 | 3P741457-1K | 247 | ARC480A83 | (BRC073A6), (BRC944B2) (Option) |
| FTXV09AVJU9 | | | | |
| FTXV12AVJU9 | | | | |
| FTXV15AVJU9 | 3P741457-2K | 280 | | |
| FTXV18AVJU9 | | | | |
| FTXV24AVJU9 | | | | |
| CDMA07AVJU9 | 3P805333-1 | 313 | — | BRC1NRV71 |
| FDMA09AVJU9 | | | | |
| FDMA12AVJU9 | | | | |
| FDMA15AVJU9 | | | | |
| FDMA18AVJU9 | | | | |
| FDMA24AVJU9 | | | | |
| FVXV09AVJUW(T)9 | 3P813525-1 | 331 | ARC466A89 | BRC073A6 (option) |
| FVXV12AVJUW(T)9 | | | | |
| FVXV15AVJUW(T)9 | | | | |
| FVXV18AVJUW(T)9 | | | | |
| CMXV12AVJUA | IOD-4067 | 381 | — | Daikin One Thermostat |
| CMXV18AVJUA | | | | |
| CMXV24AVJUA | | | | |
| FFA09AVJU9 | 3P818811-1 | 389 | — | BRC1NRV71 |
| FFA12AVJU9 | | | | |
| FFA15AVJU9 | | | | |
| FFA18AVJU9 | | | | |

# 2. Operation Manual

## 2.1 CTXV07, FTXV09/12

**Read Before Operation**

# Safety Considerations

**Refer also to the General Safety Considerations in the separate booklet.**

| | |
|---|---|
|  | **Read the precautions in this manual carefully before operating the unit.** |
|   | **This appliance is filled with R32.** |

Read these **Safety Considerations for Operations** carefully before operating an air conditioner or heat pump.
Make sure that the unit operates properly during the startup operation. Instruct the user on how to operate and maintain the unit.
Inform users that they should store this operation manual with the installation manual for future reference.
Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

⚠ **DANGER** ····· Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING** ····· Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** ····· Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ **NOTE** ····· Indicates situations that may result in equipment or property-damage accidents only.

### ⚠ DANGER

- Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.
- Any abnormalities in the operation of the air conditioner or heat pump, such as smoke or fire, could result in severe injury or death. Turn off the power and contact your dealer immediately.
- Refrigerant gas may produce toxic gas if it comes into contact with fire, such as from a fan heater, stove, or cooking device. Exposure to this gas could cause severe injury or death.
- For refrigerant leakage, consult your dealer. Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- If equipment utilizing a burner is used in the same room as the air conditioner or heat pump, there is the danger of oxygen deficiency which could lead to an asphyxiation hazard resulting in serious injury or death. Be sure to ventilate the room sufficiently to avoid this hazard.
- Safely dispose of the packing materials. Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
- Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death by suffocation.

### ⚠ WARNING

- Contact your dealer for repair and maintenance. Improper repair and maintenance may result in water leakage, electric shock, and fire. Only use accessories made by Daikin that are specifically designed for use with the equipment and have them installed by a professional.
- Contact your dealer to move and reinstall the air conditioner or heat pump. Incomplete installation may result in water leakage, electric shock, and fire.
- Never let the indoor unit or the remote controller get wet. Water can cause an electric shock or a fire.
- Never use flammable spray such as hair spray, lacquer, or paint near the unit. Flammable spray may cause a fire.
- When a fuse blows out, never replace it with one of incorrect ampere ratings or different wires. Always replace any blown fuse with a fuse of the same specification.
- Never remove the fan guard of the unit. A fan rotating at high speed without the fan guard is very dangerous.
- Never inspect or service the unit by yourself. Contact a qualified service person to perform this work.
- Turn off all electrical power before doing any maintenance to avoid the risk of serious electric shock; never sprinkle or spill water or liquids on the unit.
- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not put a finger or other objects into the air inlet or air outlet. The fan is rotating at high speed and will cause injury.
- Check the unit foundation for damage on a continuous basis, especially if it has been in use for a long time. If left in a damaged condition the unit may fall and cause injury.
- Placing a flower vase or other containers with water or other liquids on the unit could cause a shock or fire if a spill occurs.
- Do not touch the air outlet or horizontal blades while the swing flap is in operation because fingers could get caught and injured.
- Never touch the internal parts of the controller. Do not remove the front panel because some parts inside are dangerous to touch. To check and adjust internal parts, contact your dealer.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.

### ⚠ CAUTION

- Do not use the air conditioner or heat pump for any other purposes other than comfort cooling or heating. Do not use the unit for cooling precision instruments, food, plants, animals or works of art.
- Do not place items under the indoor unit as they may be damaged by condensates that may form if the humidity is above 80% or if the drain outlet gets blocked.
- Before cleaning, stop the operation of the unit by turning the power off or by pulling the supply cord out from its receptacle. Otherwise, an electric shock and injury may result.
- Do not wash the air conditioner or heat pump with excessive water. An electric shock or fire may result.
- Avoid placing the controller in a spot which may be splashed with water. Water entering the controller may cause an electric shock or damage the internal electronic parts.
- Do not operate the air conditioner or heat pump when using a room-fumigation type of insecticide. Failure to observe this could cause the chemicals to be deposited in the unit and can endanger the health of those who are hypersensitive to chemicals.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- The appliance is not intended for use by young children or infirm persons without supervision.
- The remote controller should be kept away from children so they cannot play with it.
- Consult with the installation contractor for cleaning.
- Incorrect cleaning of the inside of the air conditioner or heat pump could make the plastics parts break and cause water leakage or electric shock.
- Do not touch the air inlet or aluminum fin of the air conditioner or heat pump as they can cut and cause injury.
- Do not place objects in direct proximity of the outdoor unit. Do not let leaves and other debris accumulate around the unit. Leaves are a hotbed for small animals which can enter the unit. Once inside the unit, animals can cause the unit to malfunction, and cause smoke or fire when they make contact with electrical parts.

### ⚠ NOTE

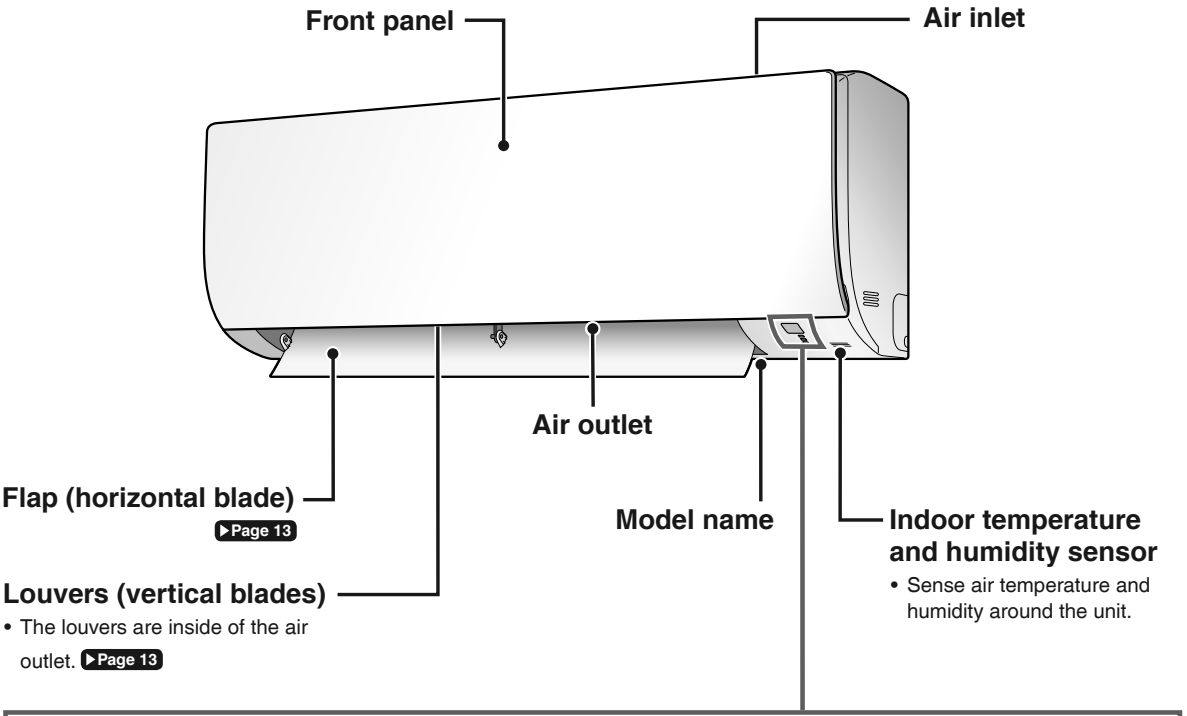
- Never press the button of the remote controller with a hard, pointed object. The remote controller may be damaged.
- Never pull or twist the electric wire of the remote controller. It may cause the unit to malfunction.
- Do not place appliances that produce open flames in places that are exposed to the airflow of the unit or under the indoor unit. It may cause incomplete combustion or deformation of the unit due to the heat.
- Do not expose the controller to direct sunlight. The LCD display can become discolored and may fail to display the data.
- Do not wipe the controller operation panel with benzene, thinner, chemical dust cloth, etc. The panel may get discolored or the coating can peel off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. Then wipe it with another dry cloth.
- Dismantling of the unit, disposal of the refrigerant, oil, and additional parts, should be done in accordance with the relevant local, state, and national regulations.
- Operate the air conditioner or heat pump in a sufficiently ventilated area and not surrounded by obstacles. Do not use the air conditioner or heat pump in the following places.
  a. Places with a mist of mineral oil, such as cutting oil.
  b. Locations such as coastal areas where there is a lot of salt in the air.
  c. Locations such as hot springs where there is a lot of sulfur in the air.
  d. Locations such as factories where the power voltage varies a lot.
  e. In cars, boats, and other vehicles.
  f. Locations such as kitchens where oil may splatter or where there is steam in the air.
  g. Locations where equipment produces electromagnetic waves.
  h. Places with an acid or alkaline mist.
  i. Places where fallen leaves can accumulate or where weeds can grow.
- Take snow protection measures. Contact your dealer for the details of snow protection measures, such as the use of a snow protection hood.
- Do not attempt to do electrical work or grounding work unless you are licensed to do so. Consult with your dealer for electrical work and grounding work.
- Pay attention to operating sound. Be sure to use the following places:
  a. Places that can sufficiently withstand the weight of the air conditioner or heat pump yet can suppress the operating sound and vibration.
  b. Places where warm air from the air outlet of the outdoor unit or the operating sound of the outdoor unit does not annoy neighbors.
- Make sure that there are no obstacles close to the outdoor unit. Obstacles close to the outdoor unit may drop the performance of the outdoor unit or increase the operating sound of the outdoor unit.
- Consult your dealer if the air conditioner or heat pump in operation generates unusual noise.
- Make sure that the drainpipe is installed properly to drain water. If no water is discharged from the drainpipe while the air conditioner or heat pump is in the cooling mode, the drainpipe may be clogged with dust or dirt and water leakage from the indoor unit may occur. Stop operating the air conditioner or heat pump and contact your dealer.
- Do not spray the air conditioner unit with any deodorizers, etc. It may cause the unit to malfunction.

FTP002(R32)-U

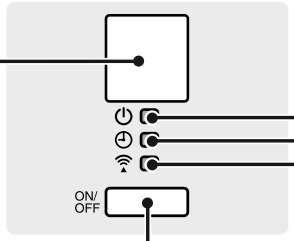
Read Before Operation

# Names of Parts

## Indoor Unit




### Display




**Signal receiver**

- Receives signals from the remote controller.
- When the unit receives a signal, you will hear a beep sound.

| Case | Sound type |
|---|---|
| Operation start | beep-beep |
| Setting changed | beep |
| Operation stop | long beep |

**OPERATION lamp (Green)**
Page 10

**TIMER lamp (Orange)**
Page 16, 17

**Wireless LAN connection adapter lamp (Orange)**
Page 8, 21, 22

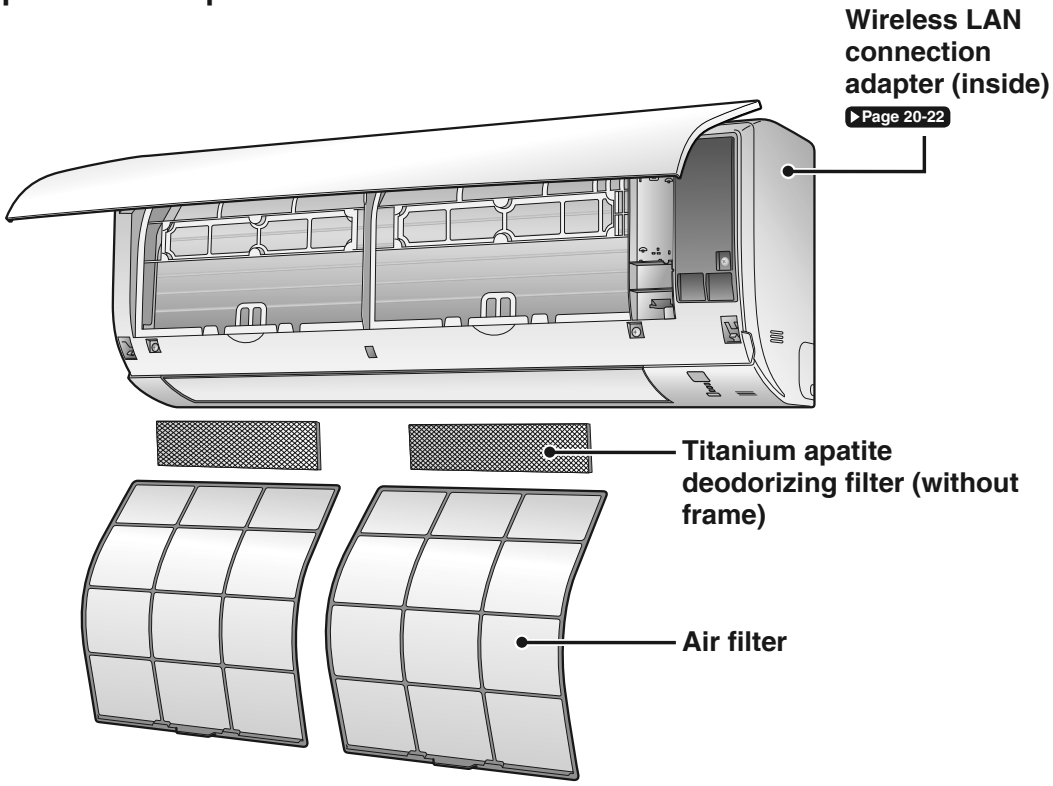
**Indoor unit ON/OFF switch**

- Press this switch once to start operation. Press once again to stop it.
- For the operation mode setting, refer to the following table.

| Mode | Temperature setting | Airflow rate |
|---|---|---|
| AUTO | 77°F (25°C) | AUTO |

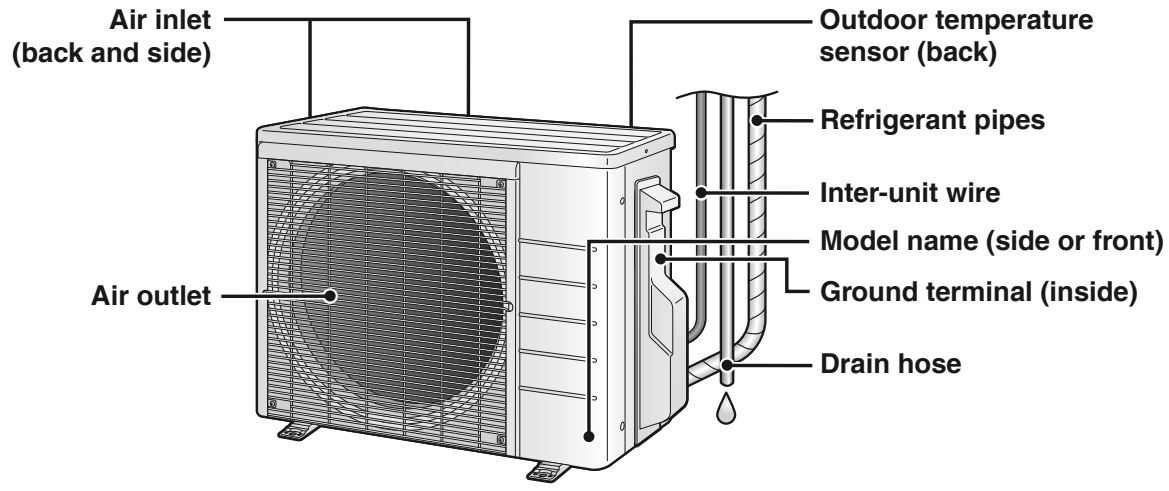
- This switch can be used when the remote controller is missing or out of batteries.

## ■ Open the front panel




## Outdoor Unit

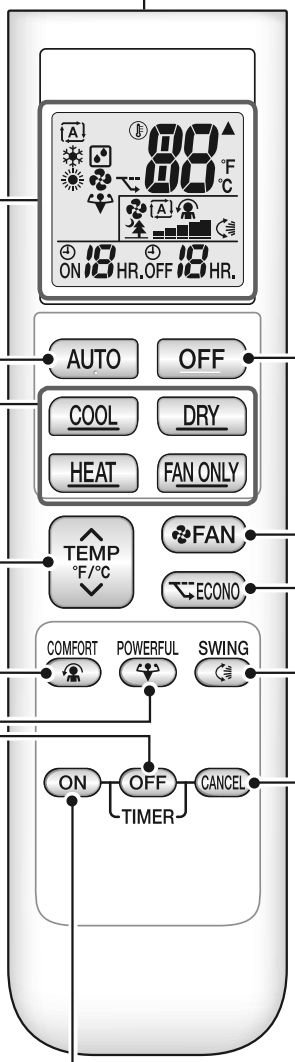
• The appearance of the outdoor unit may differ between different models.



Read Before Operation

# Names of Parts

## Remote Controller




### Display (LCD)
- Displays the current settings. (In this illustration, each section is shown with its displays on for the purpose of explanation.)

### AUTO button
- Automatically selects an appropriate operation mode (COOL or HEAT) based on the indoor temperature and starts the operation. ▶Page 10

### Direct operation buttons
- Starts the COOL, DRY, HEAT or FAN ONLY operation. ▶Page 10

### TEMPERATURE adjustment button
- Changes the temperature setting. ▶Page 11

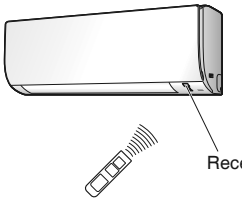
### COMFORT button
- COMFORT AIRFLOW operation. ▶Page 14

### POWERFUL button and Wireless LAN button
**POWERFUL button**
- POWERFUL operation. ▶Page 14

**Wireless LAN button (push 5 seconds)**
- Wireless LAN connection. ▶Page 21, 22

### OFF TIMER button (NIGHT SET mode) ▶Page 17

### ON TIMER button ▶Page 16

### Signal transmitter



- To use the remote controller, aim the transmitter at the indoor unit. If there is anything blocking the signals between the unit and the remote controller, such as a curtain, the unit may not operate.
- The maximum transmission distance is about 23ft (7m).

### OFF button
- Stops the operation. ▶Page 11

### FAN setting button
- Selects the airflow rate setting. ▶Page 12

### ECONO button
- ECONO operation. ▶Page 15

### SWING button
- Adjusts the airflow direction. ▶Page 13

### TIMER CANCEL button
- Cancels the timer setting. ▶Page 17

| Model | ARC480A83 |
|---|---|

## Wireless LAN connection adapter

The Wireless LAN connection adapter function requires the Daikin One Home for connecting to the air conditioner and controlling it via your smartphone or tablet over your network.

**Attention**

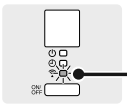
- **Wireless LAN sends and receives data using radio waves so there is a risk of transmitted data being subject to eavesdropping and illegal access. When using wireless LAN, manage the SSID/KEY of the wireless LAN connection adapter, the SSID/KEY of the wireless router, and the app login information so that they will not be known to others, and ensure that you have an adequate understanding of the risks involved.** ▶Page 6
  **In the case that the product is accessed and operated illegally, turn off the wireless LAN connection adapter function.** ▶Page 22
- **Do not use this product near a microwave oven. (This can affect wireless LAN communications.)**
- **This product cannot be directly connected to the communication line of a telecommunications carrier (internet service provider, etc.). When connecting to the internet, be sure to connect via a device such as a router.**
  When the wireless LAN connection adapter function is turned on, the right side of the air conditioner may become slightly warm, but this is not an abnormality.

## ⚠ WARNING

- While the Wireless LAN connection adapter operates, it may affect persons using cardiac pacemakers or defibrillators.
  This product may cause electromagnetic interference.
- While the Wireless LAN connection adapter operates, it may affect automatic doors or fire alarm equipment.
  This product may cause faulty behavior of the equipment.

## Configuration

- The user is responsible for providing the following items before using this product:
  - ■ Smartphone or tablet PC
  - ■ Internet line and communicating device (Modem/router or similar device)
  - ■ Wireless LAN access point
  - ■ Application name: [Daikin One Home] (free)
    For details on the installation method for the Daikin One Home, please see ▶Page 21.



Display

### Wireless LAN connection adapter lamp (Orange)

- The Wireless LAN connection adapter lamp lights when connecting to a router (Wireless LAN access point). Please see ▶Page 21.
- For Wireless LAN connection adapter operation, please see ▶Page 22.

## ⚠ WARNING

**When operating an air conditioner from outside the home, it is not possible to check the air conditioner or the surroundings of the air conditioner, or the state of the people in the room. Therefore, make sure to adequately check for safety before use.**
**In some cases, there is a risk of death, severe injury, or property damage.**

■ **Check the following in advance (while at home)**

- Timer settings or reservations that other users may have made. (There is a risk of causing harm to the health of people, animals, or plants in the home if operation starts and stops unexpectedly)
- There are no signs of abnormality in the air conditioning. Harm will not be caused to people or to the room if there is a change in airflow. (For example, that there are no objects nearby that might blow over) (There is a risk of objects falling due to airflow and causing fire, bodily injury, or staining of household items)

■ **Check the following before/while operating a unit from outside the home**

- If you know that there is someone at home, inform the person when turning the air conditioner on or off from outside the home. (If someone at home is standing on something such as a stool, the air conditioner turning on or off unexpectedly could surprise them and cause them to fall or topple over. Additionally, a sudden change in the indoor/outdoor temperature could harm the health of people at home)
  · The air conditioner can be turned off and temperature adjustment can be made using a remote controller in the home.
  · Do not use the function if the only people at home are persons who are unable to make adjustments to temperature or other settings themselves, such as young children, disabled persons, or elderly persons.
- Regularly check the settings and operating status of the air conditioner. (Sudden changes in indoor/outdoor temperature pose a health hazard. There is a risk of harm to animals and plants)
  If an error occurs during operation, immediately turn off the air conditioner and contact your dealer.
  Double check the display to confirm that the power is off.

Read Before Operation

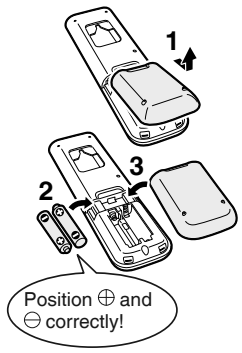
# Preparation Before Operation

## ⚠ CAUTION

**Incorrect handling of batteries can result in injury from battery leakage, rupturing or heating, or lead to equipment failure.**

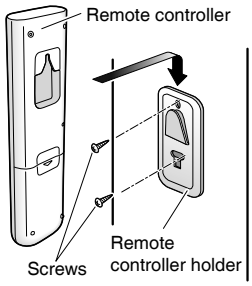
**Please observe the following precautions and use safely.**

- If the alkaline solution from the batteries should get in the eyes, do not rub the eyes. Instead, immediately flush the eyes with tap water and seek the attention of a medical professional.
- Keep batteries out of reach of children. In the event that batteries are swallowed, seek the immediate attention of a medical professional.
- Do not expose batteries to heat or fire. Do not disassemble or modify batteries. The insulation or gas release vent inside the battery may be damaged, resulting in battery leakage, rupturing, or heating.
- Do not damage or peel off labels on the batteries.



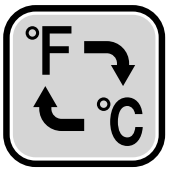

### To insert the batteries

1. Remove the back cover by sliding and then slightly lifting it.
2. Insert 2 dry batteries AAA.LR03 (alkaline).
3. Replace the back cover.




### To attach the remote controller holder to a wall

1. Choose a place where the signals reach the unit.
2. Attach the holder to a wall, a pillar, or similar location with the screws supplied with the holder.
3. Hang the remote controller on the remote controller holder.




### Fahrenheit/Celsius display switch

**Press TEMP °F/°C and ON (TIMER button) simultaneously for about 5 seconds.**

- The temperature will be displayed in Celsius when it is presently displayed in Fahrenheit, and vice versa.
- The switch operation is only possible when the temperature is being displayed.
- A reception sound will go off for the transmission of set temperature to the indoor unit at the time of setting the Fahrenheit/Celsius display change function.

### Turn on the circuit breaker

- After the power is turned on, the flap of the indoor unit opens and closes once to set the reference position.

## NOTE

**Notes on batteries**

- To avoid possible injury or damage from battery leakage or rupturing, remove the batteries when not using the product for long periods of time.
- The standard replacement time is about 1 year. Both batteries should be replaced at the same time. Be sure to replace them with new dry batteries AAA.LR03 (alkaline).
- If the remote controller display begins to fade and signal reception begins to decline, replace the batteries with new batteries. Owing to usage conditions, battery consumption may be accelerated.
- The batteries supplied with the remote controller are for initial operation. The batteries may run out in less than 1 year.

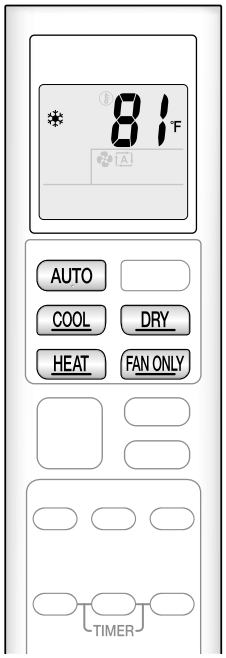
**Notes on remote controller**

- Do not drop the remote controller. Do not get it wet.
- If dirt becomes an issue, wipe with a soft dry cloth.

**Fahrenheit/Celsius display change function of remote controller**

- The set temperature may increase when the display is changed to Celsius from Fahrenheit, because a fraction of 0.5°C is rounded up.
- Example: A set temperature of 65°F (equivalent to 18.5°C) will be converted into 19°C.
  When the display is changed to Fahrenheit again, the set temperature will be converted into 66°F (equivalent to 19°C) instead of the original set temperature (65°F) but a set temperature of 66°F (equivalent to 19°C) will be converted into 19°C with no temperature change.

# MODE AUTO · COOL · DRY · HEAT · FAN ONLY Operation




The air conditioner operates with the operation mode of your choice.

## To start operation

### AUTO operation



• To automatically select an appropriate temperature and operation mode.

**Press** AUTO .

### COOL operation



• To lower the temperature.

**Press** COOL .

### DRY operation



• To lower the humidity.

**Press** DRY .

### HEAT operation



• To raise the temperature.

**Press** HEAT .

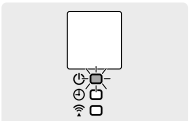
### FAN ONLY operation



• To circulate air in the room.

**Press** FAN ONLY .

• The OPERATION lamp lights green.



Display

## NOTE

**Notes on AUTO operation**

• In AUTO operation, the system selects an appropriate operation mode (COOL or HEAT) based on the indoor temperature and starts the operation.

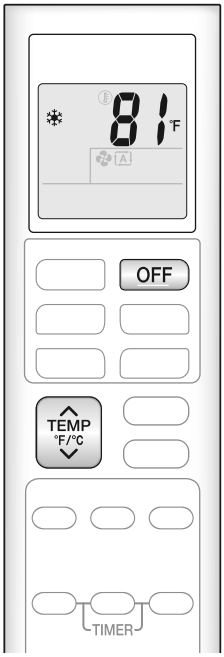
• The system automatically reselects setting at a regular interval to bring the indoor temperature to the user-setting level.

**Note on DRY operation**

• Eliminates humidity while maintaining the indoor temperature as much as possible. It automatically controls temperature and airflow rate, so manual adjustment of these functions is unavailable.

Basic Operation

# MODE AUTO · COOL · DRY · HEAT · FAN ONLY Operation




## To stop operation

**Press** OFF .

- The OPERATION lamp goes off.

## To change the temperature setting

**Press** TEMP °F/°C .

- Press ∧ to raise the temperature and press ∨ to lower the temperature.

| COOL operation | HEAT operation | AUTO operation | DRY or FAN ONLY operation |
|---|---|---|---|
| 64-90°F (18-32°C) | 50-86°F (10-30°C) | 64-86°F (18-30°C) | The temperature setting cannot be changed. |

## Tips for saving energy



**Keeping the temperature setting at a moderate level helps save energy.**

- Recommended temperature setting
  - For cooling: 78-82°F (26-28°C)
  - For heating: 68-75°F (20-24°C)

**Cover windows with a blind or a curtain.**

- Blocking sunlight and air from outdoors increases the cooling (heating) effect.

**Keep the air filters clean.**

- Clogged air filters cause inefficient operation and waste energy. Clean them once in about every 2 weeks. ▶Page 26

**If you are not going to use the air conditioner for a long period, for example in spring or autumn, turn off the circuit breaker.**

- The air conditioner always consumes a small amount of electricity even while it is not operating.

# Adjusting the Airflow Rate




You can adjust the airflow rate to increase your comfort.

## To adjust the airflow rate setting

### Press FAN .

- Each pressing of FAN changes the airflow rate setting in sequence.




- When the airflow is set to " ", quiet operation starts and noise from the indoor unit will become quieter. However, it may become difficult to cool (or warm) the room.
- In the quiet operation mode, the airflow rate is set to a weak level.

| AUTO, COOL, HEAT and FAN ONLY operation | DRY operation |
|---|---|
| | The airflow rate setting cannot be changed. (only AUTO) AUTO |

## NOTE

**Note on airflow rate setting**

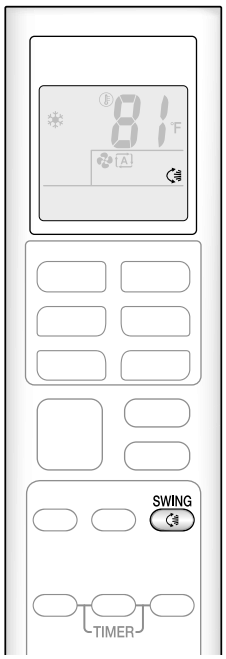
- At smaller airflow rates, the cooling (heating) effect is also smaller.

**Note on AUTO airflow rate**

- When using AUTO airflow rate, the airflow rate is adjusted according to conditions in the room.

Basic Operation

# Adjusting the Airflow Direction




You can adjust the airflow direction to increase your comfort.

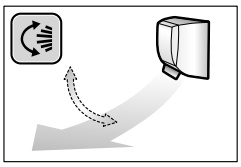
## ⚠ CAUTION

- Always use a remote controller to adjust the angles of the flap. Moving the flap forcibly by hand may cause a malfunction.
- Be careful when adjusting the louvers. Inside the air outlet, a fan is rotating at a high speed.

## To start auto swing

### Up and down airflow direction

**Press SWING .**



- "" is displayed on the LCD.
- The flap (horizontal blade) will begin to swing.

## To set the flap at the desired position

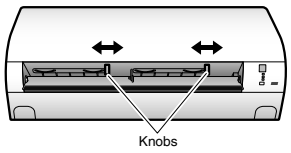
- This function is effective while the flap is in auto swing mode.

**Press SWING when the flap reaches the desired position.**

- "" disappears from the LCD.

## To adjust the louvers at desired position

**Hold the knobs and move the louvers (vertical blades).**

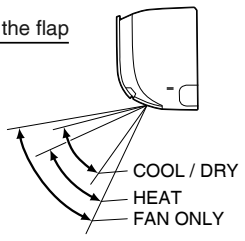



## NOTE

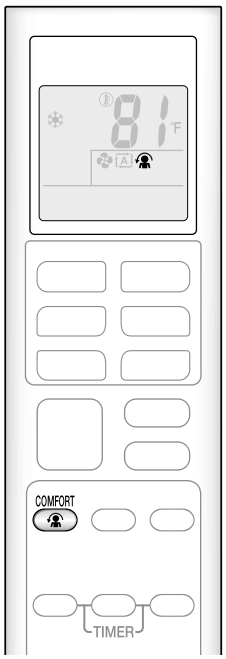
**Notes on airflow direction setting**

- The movable range of the flap varies according to the operation mode.
- If the airflow rate becomes weak during operation, the flap will stop.
  When up and down airflow direction is set, the flap will stop in an upward position.

Movable range of the flap



# COMFORT AIRFLOW Operation




The flow of air will be in the upward direction while in COOL and DRY operation and in the downward direction while in HEAT operation, which will provide a comfortable airflow that will not come in direct contact with people.

## To start COMFORT AIRFLOW operation

**Press** COMFORT **.**

- " " is displayed on the LCD.

| | COOL and DRY operation | HEAT operation | FAN operation |
|---|---|---|---|
| **Flap direction** | Goes up | Goes down | Not available |
| **Airflow rate** | AUTO | | |

- When in AUTO operation, the flap direction differs based on the operation mode (COOL or HEAT) as shown in the table above.

## To cancel COMFORT AIRFLOW operation

**Press** COMFORT **again.**

- " " disappears from the LCD.
- The flap will return to the memory position from before COMFORT AIRFLOW operation.

# POWERFUL Operation




POWERFUL operation quickly maximizes the cooling (heating) effect in any operation mode. In this mode, the air conditioner operates at maximum capacity.

## To start POWERFUL operation

**Press** POWERFUL **.**

- " " is displayed on the LCD.
- POWERFUL operation ends in 20 minutes. Then the system automatically operates again with the previous settings which were used before POWERFUL operation.

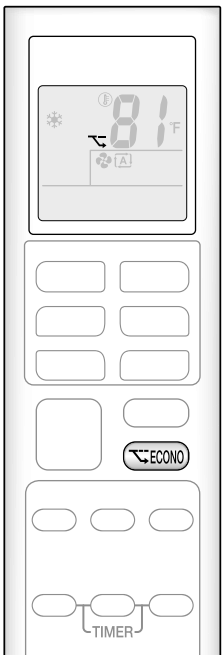
## To cancel POWERFUL operation

**Press** POWERFUL **again.**

- " " disappears from the LCD.

Useful Functions

# ECONO Operation




ECONO operation enables efficient operation by limiting the maximum power consumption.
This function is useful to prevent the circuit breaker from tripping when the unit operates alongside other appliances on the same circuit.

## To start ECONO operation

### Press ECONO .

- " " is displayed on the LCD.
- Not available in FAN ONLY mode.

## To cancel ECONO operation

### Press ECONO again.

- " " disappears from the LCD.

## NOTE

**Notes on COMFORT AIRFLOW operation**
- The airflow rate will be set to AUTO.
- If the up and down airflow direction is selected, the COMFORT AIRFLOW operation will be canceled.

**Notes on POWERFUL operation**
- Pressing OFF causes the settings to be canceled, and " " disappears from the LCD.
- POWERFUL operation will not increase the capacity of the air conditioner if the air conditioner is already in operation with its maximum capacity demonstrated.

**– In COOL, HEAT and AUTO operation**
To maximize the cooling (heating) effect, the capacity of outdoor unit increases and the airflow rate becomes fixed at the maximum setting.
The temperature and airflow settings cannot be changed in COOL and HEAT operation.
Airflow settings cannot be changed in AUTO operation.

**– In DRY operation**
The temperature setting is lowered by 1.8°F (1.0°C) and the airflow rate is slightly increased.

**– In FAN ONLY operation**
The airflow rate is fixed at the maximum setting.

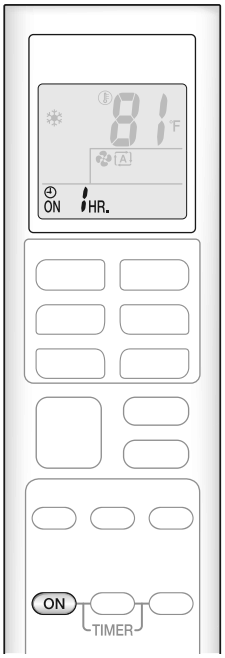
**Notes on ECONO operation**
- This operation is performed with lower power and therefore may not provide a sufficient cooling (heating) effect.
- Pressing OFF causes the settings to be canceled, and " " disappears from the LCD.
- If the power consumption level is already low, switching to ECONO operation will not reduce the power consumption.

**Some useful functions can be used together.**

| | |
|---|---|
| **COMFORT AIRFLOW + ECONO** | Available |
| **POWERFUL + COMFORT AIRFLOW** | Not available* |
| **POWERFUL + ECONO** | Not available* |

*Priority is given to the function of whichever button is pressed last.

# ON/OFF TIMER Operation

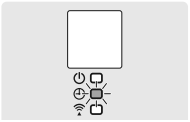



Timer functions are useful for automatically switching the air conditioner on or off in the morning or at night. You can also use the ON TIMER and OFF TIMER together.

## To use ON TIMER operation

### Press ON .

- Each pressing of ON changes the time setting by 1 hour. The time can be set between 1 and 12 hours.
- The TIMER lamp lights orange.



Display

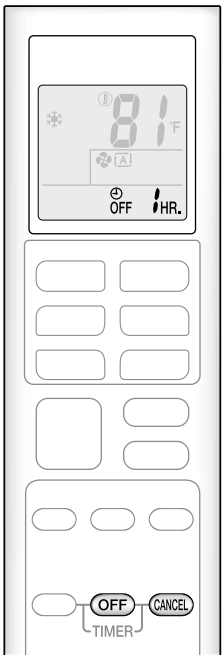
## NOTE

**In the following cases, set the timer again.**

- After the circuit breaker has turned off.
- After a power failure.
- After replacing the batteries in the remote controller.

TIMER Operation

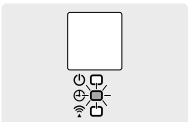
# ON/OFF TIMER Operation




## To use OFF TIMER operation

**Press OFF .**

- Each pressing of OFF changes the time setting by 1 hour. The time can be set between 1 and 12 hours.
- The TIMER lamp lights orange.



Display

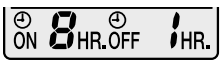
## To cancel ON/OFF TIMER operation

**Press CANCEL .**

## To combine ON TIMER and OFF TIMER operation

- A sample setting for combining the 2 timers is shown below.
- " ON " and " OFF " are displayed on the LCD.

**[Example]**




**When setting while the unit is operating**
- Stops the unit 1 hour later and starts it 7 hours after that.



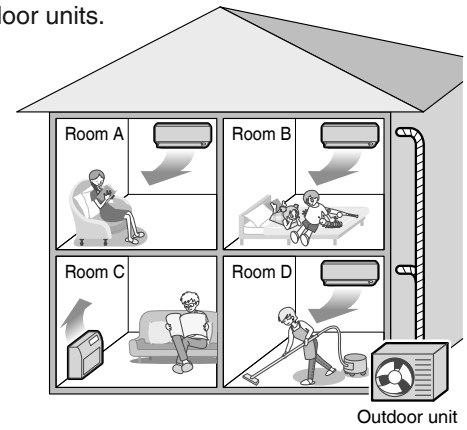

**When setting while the unit is stopped**
- Starts the unit 2 hours later and stops it 3 hours after that.

## NOTE

**NIGHT SET mode**
- When the OFF TIMER is set, the air conditioner automatically adjusts the temperature setting (0.9°F (0.5°C) up in COOL, 3.6°F (2.0°C) down in HEAT) to prevent excessive cooling (heating) during sleeping hours.

# Note for Multi System

A multi system has one outdoor unit connected to multiple indoor units.




## Selecting the operation mode

### When the priority room setting is active but the set unit is not operating or when the priority room setting is inactive

When more than one indoor unit is operating, priority is given to the first unit that was turned on.
In this case, set the units that are turned on later to the same operation mode as the first unit.
Otherwise, they will enter the standby state, and the OPERATION lamp will blink; this does not indicate malfunction.

## NOTE

**Notes on operation mode for a multi system**

- COOL, DRY and FAN operation may be used at the same time.
- AUTO operation automatically selects COOL operation or HEAT operation based on the indoor temperature.
  Therefore, AUTO operation is available when selecting the same operation mode as that of the room with the first unit to be turned on.

## ⚠ CAUTION

- Normally, the operation mode in the room where the unit is first started is given priority, but the following situations are exceptions to this rule.
  If the operation mode of the first room is FAN operation, then using HEAT operation in any room after this will give priority to HEAT operation.
  In this situation, the indoor unit operating in FAN mode will switch to standby, and the OPERATION lamp will blink.

### With the priority room setting active

Refer to “**Priority room setting**” on the next page.

Multi Connection

# Note for Multi System

## COOL/HEAT mode lock

The COOL/HEAT mode lock requires initial programming during installation. Please consult your authorized dealer for assistance. The COOL/HEAT mode lock sets the unit forcibly to either COOL or HEAT operation. This function is convenient when you wish to set all indoor units connected to the multi system to the same operation mode.

### NOTE

- The COOL/HEAT mode lock cannot be activated together with the priority room setting.

## Priority room setting (Not available on some models)

The priority room setting requires initial programming during installation. Please consult your authorized dealer for assistance. The room designated as the priority room takes priority in the following situations.

### Operation mode priority

- As the operation mode of the priority room takes precedence, you can select a different operation mode from other rooms.

**[Example]**

- Room A is the priority room in this example.
  When COOL operation is selected in room A while operating the following modes in room B, C and D:

| Operation mode in room B, C and D | Status of room B, C and D when the unit in room A is in COOL operation |
|---|---|
| COOL or DRY or FAN | The current operation mode is maintained. |
| HEAT | The unit enters the standby mode. Operation resumes when the room A unit stops operating. |
| AUTO | If the unit is set to COOL operation, it continues. If the unit is set to HEAT operation, it enters the standby mode. Operation resumes when the room A unit stops operating. |

### Priority when POWERFUL operation is used

**[Example]**

- Room A is the priority room in this example.
  The indoor units in rooms A, B, C and D are all operating. If the unit in room A enters POWERFUL operation, operation capacity will be concentrated in room A. In such a case, the cooling (heating) efficiency of the units in room B, C and D may be slightly reduced.

Mobile Controller

# Wireless LAN connection

## Wireless LAN connection

Web site: **https://daikinone.com/ductless**

For instructions on how to connect your unit to wireless LAN and to your Daikin One Home application, please see the website above.

Contains FCC ID: VPYLB1YA
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.
FCC CAUTION
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.
Contains IC: 772C-LB1YA
This device complies with Industry Canada's applicable licence-exempt RSSs.
Operation is subject to the following two conditions:
(1) This device may not cause interference; and
(2) This device must accept any interference, including interference that may cause undesired operation of the device.
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 7-7/8 inches (20cm) or more away from person's body.
The FCC responsible party is Daikin Comfort Technologies Manufacturing, L.P., and may be contacted by calling (713)-861-2500, or at 19001 Kermier Rd., Waller, TX 77484.
(https://www.northamerica-daikin.com)
This device, which was assembled by Daikin Comfort Technologies Manufacturing, L.P., contains a component that is classified as an intentional radiator.
This intentional radiator has been certified by the FCC: FCC ID VPYLB1YA.
And this intentional radiator has an industry Canada ID: IC 772C-LB1YA.
The manufacturer of the intentional radiator (model no. Type1YA) is Murata Manufacturing co., Ltd (www.murata.com).
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 7-7/8 inches (20cm) or more away from person's body.
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Mobile Controller

# Wireless LAN connection

## Application software installation

**For Android Phones**

1) Open [Google Play].
2) Search using the application name: [Daikin One Home].
3) Follow the directions on the screen to install.

**For iOS Phones**

1) Open the [App Store].
2) Search using the application name: [Daikin One Home].
3) Follow the directions on the screen to install.

**Attention**

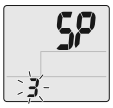
- The actual application screen layout and content may differ from what is shown. The layout and content of the application screen is subject to change without notice.

Connect the air conditioner to your home network.

**1. While operation is stopped, press POWERFUL and hold the button for 5 seconds.**

**2. Press TEMP or TEMP and select menu number 3.**

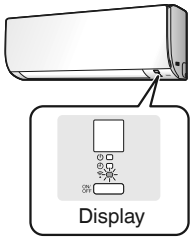
- "SP" appears on the LCD.
- "3" blinks.







**3. Press POWERFUL to connect to the access point.**




The wireless LAN connection adapter lamp blinks quickly.

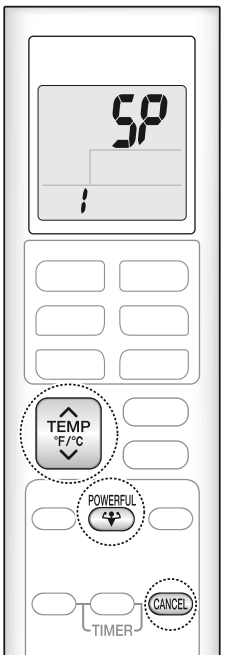
**4. Press CANCEL to return to the default screen.**
**No more settings need to be carried out from the remote controller.**

**5. Open Daikin One Home App and follow the instructions to set up the wireless LAN.**

**6. When the wireless LAN connection adapter lamp switches from blinking to lit, the connection is complete.**

## NOTE

- While "SP" is displayed, the options that can be selected using TEMP and TEMP are 1, 3, A, and OFF.
- Perform wireless LAN connection one indoor unit at a time.
- If you are unable to establish a network connection, refer the troubleshooting provided by the Daikin One Home App.
- When the lamp blinks slowly, the connection is not ready. Perform the connection procedure while it blinks quickly.




## To confirm the wireless LAN connection adapter connection

### ■ To confirm

**1.** **While operation is stopped, press POWERFUL and hold the button for 5 seconds.**

**2.** **Press POWERFUL to confirm the selected setting.**




- "SP" appears on the LCD.
- "1" blinks.

**Check the indoor unit LED.**

| Wireless LAN connection adapter lamp | Status |
|---|---|
| Blinking for 1 second | Connection is not ready |
| Blinking for 3 seconds | Please initialize the wireless LAN connection adapter |
| Does not blink or light | Communication is abnormal<br>There is a possibility of equipment failure<br>Please request repair |

## To turn off the wireless connection

### ■ To use the remote controller

**1.** **While operation is stopped, press POWERFUL and hold the button for 5 seconds.**

**2.** **Press TEMP or TEMP and select menu OFF.**




- "SP" appears on the LCD.
- "OFF" blinks, and communication is OFF.

**3.** **Press POWERFUL and hold the button for 2 seconds to confirm selected setting.**

- The wireless LAN connection adapter lamp turn off.

**4.** **Press CANCEL to return to the default screen.**

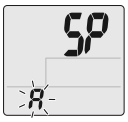
## To reset the connection setting to the factory default

- If you want to reset the connection settings, it is possible to initialize the wireless LAN connection adapter to its factory default state. If initialized, data including the network settings and power consumption history will be erased.
- When discarding or transferring to another user, initialize the connection adapter to erase the internal data.

### ■ To reset

**1.** **While operation is stopped, press POWERFUL and hold the button for 5 seconds.**

**2.** **Press TEMP or TEMP and select menu A.**




- "SP" appears on the LCD.
- "A" blinks.

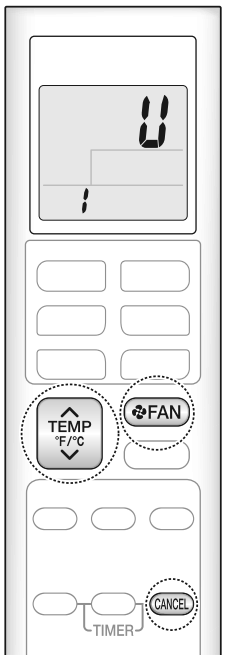
**3.** **Press POWERFUL and hold the button for 2 seconds to confirm selected setting.**

- The wireless LAN connection adapter lamp blinks for 1 second.

**4.** **Press CANCEL to return to the default screen.**

Making Changes to Default Settings

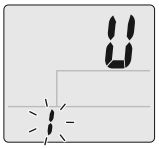
# Brightness of Indoor Unit LED Lamps




Changes can be made to the setting for the brightness of the LED lamps, to suit your preferences.

**1. While operation is stopped, press FAN and hold the button for 5 seconds.**

**2. Press TEMP °F/°C and select menu number 1.**

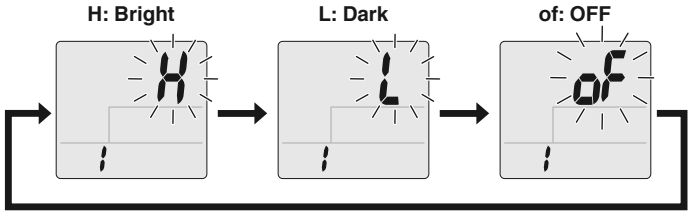


- "U" appears on the LCD.
- "1" blinks.

**3. Press FAN.**

**4. Press TEMP °F/°C or TEMP °F/°C and select setting option.**

- The setting option will blink.



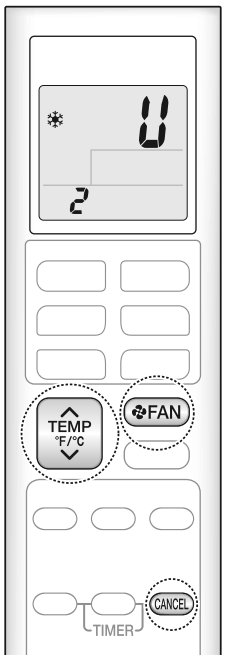

**5. Press FAN.**

**6. Press FAN and hold the button for 5 seconds to return to the default screen.**

## NOTE

- Press CANCEL to return to the previous screen.
- If no operations are performed for approximately 1 minute, the display will return to the default screen.
- Indoor unit default setting: H (Bright)

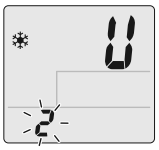
# Airflow Setting When Indoor Unit Reaches Setpoint




Changes can be made to the setting for airflow rate when unit reaches desired temperature (setpoint), to suit your preferences.
This function is effective when COOL operation is selected.

**1. While operation is stopped, press FAN and hold the button for 5 seconds.**

**2. Press TEMP or TEMP and select menu number 2.**

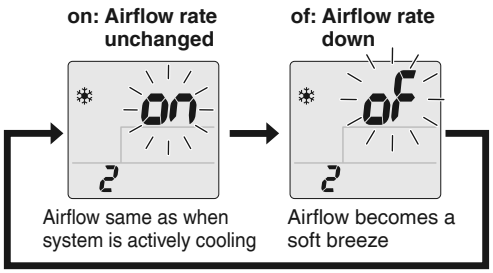


- "U" appears on the LCD.
- "2" blinks.

**3. Press FAN.**

**4. Press TEMP or TEMP and select setting option.**

- The setting option will blink.




**5. Press FAN.**

**6. Press FAN and hold the button for 5 seconds to return to the default screen.**

## NOTE

- Press CANCEL to return to the previous screen.
- If no operations are performed for approximately 1 minute, the display will return to the default screen.
- Indoor unit default setting: of (Airflow rate down)

Care

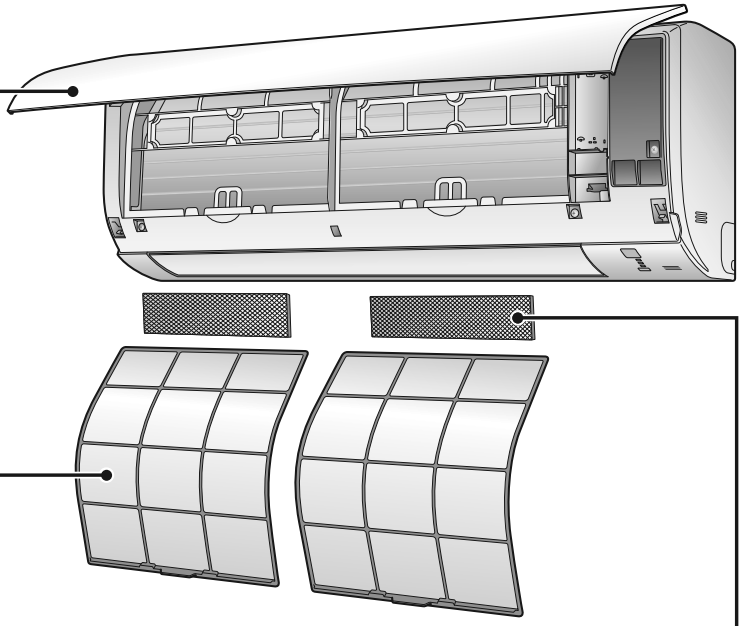
# Care and Cleaning

## ⚠ CAUTION

- Before cleaning, be sure to stop the operation and turn off the circuit breaker.
- Do not touch the aluminum fins of the indoor unit. If you touch those parts, this may cause an injury.

## ■ Quick reference

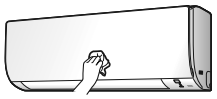
**Cleaning parts**



### Front panel

- Wipe with a soft cloth which has been moistened with water or neutral detergent.
- Only neutral detergent may be used.

**If dirty**



### Air filter

- Vacuum dust or wash the filter.

**Once every 2 weeks**

▶Page 26

### Indoor unit, outdoor unit and remote controller

- Wipe them with a soft cloth.

**If dirty**

### Titanium apatite deodorizing filter (without frame)

- Vacuum dust or replace the filter.

[Cleaning] **Once every 6 months**

▶Page 27

[Replacement] **Once every 3 years**

▶Page 27

## NOTE

**For cleaning, do not use any of the following:**

- Water hotter than 104°F (40°C)
- Volatile liquid such as benzine, gasoline and thinner
- Polishing compounds
- Rough materials such as a scrubbing brush
- Sprays such as deodorizers



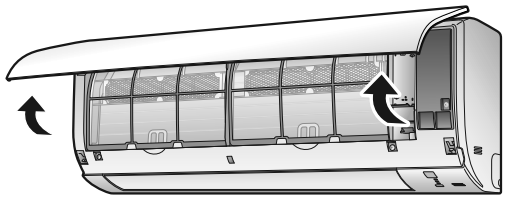


3P741457-1K

## ■ Air filter

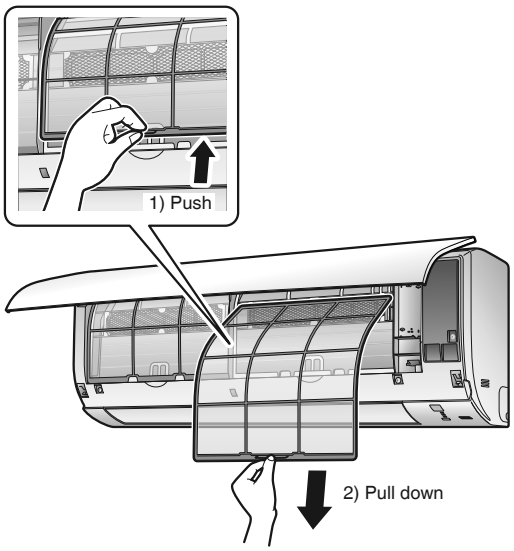
### 1. Open the front panel.

• Hold the front panel by the sides and open it.



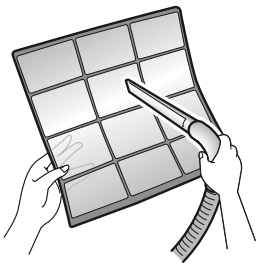
### 2. Pull out the air filters.

• Push the filter tab at the center of each air filter a little upwards, then pull it down.



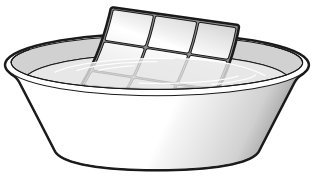

### 3. Wash the air filters with water or clean them with vacuum cleaner.

• It is recommended to clean the air filters every 2 weeks.



**If the dust does not come off easily**

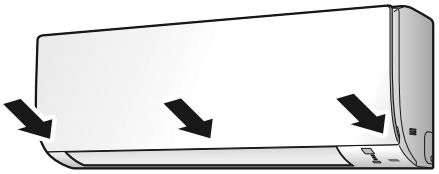
• Wash the air filters with neutral detergent thinned with lukewarm water, then dry them up in the shade.



### 4. Reattach the filters.

### 5. Close the front panel slowly.

• Press the panel at both sides and the center.



• Make sure that the front panel is securely fixed.

Care

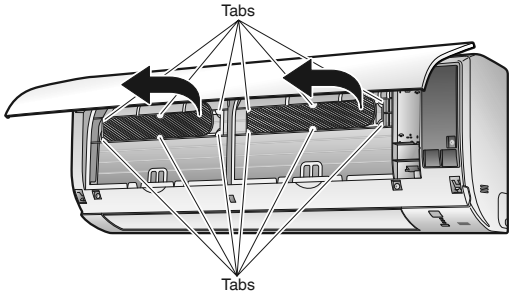
# Care and Cleaning

## ■ Titanium apatite deodorizing filter

### 1. Open the front panel and pull out the air filters. Page 26

### 2. Take off the titanium apatite deodorizing filters.

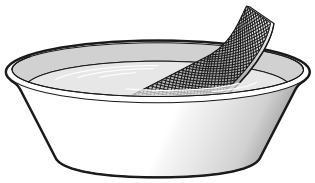
• Remove the filters from the tabs.




### 3. Clean or replace the titanium apatite deodorizing filters.

**[Cleaning]**

**3-1 Vacuum dust, and soak in lukewarm water or water for about 10 to 15 minutes if very dirty.**

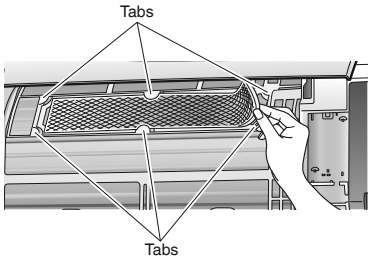


**3-2 After washing, shake off remaining water and let them dry in the shade.**

• Do not wring out the filter to remove water from it.

**[Replacement]**

**Remove the filter from the tabs and prepare a new one.**




• Dispose of the old filter as non-flammable waste.

### 4. Insert the titanium apatite deodorizing filters as they were.

• When attaching the filter, check that the filter is properly set in the tabs.
• The titanium apatite deodorizing filter can be attached in any orientation.

### 5. Reattach the filters. Page 26

### 6. Close the front panel slowly.

Page 26

## NOTE

• Operation with dirty filters:
  – cannot deodorize the air,
  – cannot clean the air,
  – results in poor heating or cooling,
  – may cause odor.
• Dispose of old filters as non-flammable waste.
• To order a titanium apatite deodorizing filter, contact the dealer where you bought the air conditioner.

| Item | Titanium apatite deodorizing filter 1 set (2 pieces) |
|---|---|
| Part No. | KAF970A46 (without frame) |

## ■ Prior to a long period of non-use

### 1. Operate the FAN ONLY mode for several hours on a mild day to dry out the inside.

• Press FAN ONLY .

### 2. After operation stops, turn off the circuit breaker for the room air conditioner.

### 3. Clean the air filters and reattach them. ▶Page 26

### 4. To prevent battery leakage, take out the batteries from the remote controller.

• When starting to use the air conditioner again, make sure that the drain hose outlet is not blocked, then turn on the circuit breaker.
An operational check of each component will be carried out automatically. (Also, put the batteries into the remote controller.)

## ■ We recommend periodical maintenance

• In certain operating conditions, the inside of the air conditioner may get foul after several seasons of use, resulting in poor performance. It is recommended to have periodical maintenance by a qualified contractor in addition to regular cleaning by the user.
• For qualified contractor maintenance, please contact the dealer where you bought the air conditioner.

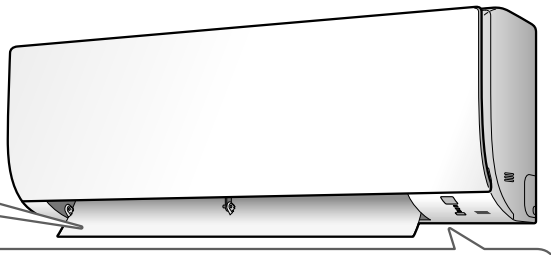


3P741457-1K

When the Need Arises

# FAQ

## Indoor unit



### The flap does not start swinging immediately.

- The air conditioner is adjusting the position of the flap. The flap will start moving soon.

### The air conditioner stops generating airflow during HEAT operation.

- Once the set temperature is reached, the airflow rate is reduced and operation stopped in order to avoid generating a cool airflow. Operation will resume automatically when the indoor temperature falls.

### HEAT operation stops suddenly and a flowing sound is heard.

- The outdoor unit is defrosting. HEAT operation starts after the frost on the outdoor unit has been removed. This can take about 4 to 12 minutes.

### Operation does not start soon.

■ **When the unit is turned on again soon after being turned off.**

■ **When the mode was reselected.**

- This is to protect the air conditioner. You should wait for about 3 minutes.

### Different sounds are heard.

■ **A sound like flowing water**

- This sound is generated because the refrigerant in the air conditioner is flowing.
- This is a pumping sound of the water in the air conditioner and can be heard when the water is pumped out from the air conditioner during COOL or DRY operation.
- The refrigerant flows in the air conditioner even if the air conditioner is not working when the indoor units in other rooms are in operation.

■ **Blowing sound**

- This sound is generated when the flow of the refrigerant in the air conditioner is switched over.
- If the outdoor temperature is low, this sound is generated when the direction of the flow of the refrigerant in the piping changes at the start of defrost operation, after HEAT operation is stopped and the room temperature is stabilized.

■ **Ticking sound**

- This sound is generated when the cabinet and frame of the air conditioner slightly expand or shrink as a result of temperature changes.

■ **Whistling sound**

- This sound is generated when refrigerant flows during defrosting operation.

■ **Clicking sound during operation or idle time**

- This sound is generated when the refrigerant control valves or the electrical parts operate.

■ **Clopping sound**

- This sound is heard from the inside of the air conditioner when the exhaust fan is activated while the room doors are closed. Open the window or turn off the exhaust fan.

## Outdoor unit

### Operating sound is loud.

- When frost forms on the heat exchanger of the outdoor unit, the operating sound level increases slightly.

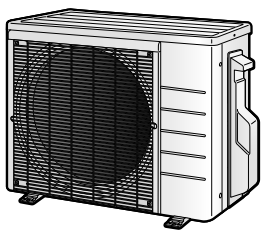
### The outdoor unit emits water or steam.

■ **In HEAT operation**

- The frost on the outdoor unit melts into water or steam when the air conditioner is in defrosting operation.

■ **In COOL or DRY operation**

- Moisture in the air condenses into water on the cool surface of the outdoor unit piping and drips.



### Blowing sound

- If the outdoor temperature is low, this sound is generated when the direction of the flow of the refrigerant in the piping changes at the start of defrost operation, after HEAT operation is stopped and the room temperature is stabilized.

# Troubleshooting

Before making an inquiry or a request for repair, please check the following.
If the problem persists, consult your dealer.

**Not a problem**
This case is not a problem.

**Check**
Please check again before requesting repairs.

## The air conditioner does not operate

| Case | Description / what to check |
|---|---|
| **OPERATION lamp is off.** | • Has the circuit breaker been tripped or the fuse blown?<br>• Is there a power failure?<br>• Are batteries set in the remote controller? |
| **OPERATION lamp is blinking.** | • Turn off the power with the circuit breaker and restart operation with the remote controller. If the OPERATION lamp is still blinking, check the error code and consult your dealer. ▶Page 33, 34 |

## The air conditioner suddenly stops operating

| Case | Description / what to check |
|---|---|
| **OPERATION lamp is on.** | • To protect the system, the air conditioner may stop operating after sudden large voltage fluctuations. It automatically resumes operation in about 3 minutes. |
| **OPERATION lamp is blinking.** | • Are the air filters dirty?<br>Clean the air filters.<br>• Is there anything blocking the air inlet or air outlet of the indoor unit or outdoor unit?<br>Stop operation and after turning off the circuit breaker, remove the obstruction. Then restart operation with the remote controller. If the OPERATION lamp is still blinking, check the error code and consult your dealer. ▶Page 33, 34<br>• Are operation modes all the same for indoor units connected to outdoor units in the multi system?<br>If not, set all indoor units to the same operation mode and confirm that the lamps. Moreover, when the operation mode is in AUTO, set all indoor unit operation modes to COOL or HEAT for a moment and check again that the lamps are normal. If the lamps stop blinking after the above steps, there is no malfunction. ▶Page 18, 19 |

## The air conditioner does not stop operating

| Case | Description / what to check |
|---|---|
| **The air conditioner continues operating even after operation is stopped.** | ■ **Immediately after the air conditioner is stopped**<br>• The outdoor unit fan continues rotating for about another 1 minute to protect the system.<br>■ **While the air conditioner is not in operation**<br>• When the outdoor temperature is high, the outdoor unit fan may start rotating to protect the system. |

## Wireless LAN connection

| When this happens | Explanation and where to check |
|---|---|
| **The device (air conditioner) cannot be found on the device list screen.** | • Carry out connection setting again while the lamp blinks quickly.<br>• Move the router (wireless LAN access point) close to the indoor unit. ▶Page 20-22<br>• There is a possibility that you are using an unsupported smart phone or router (wireless LAN access point). For details, refer to the web site. ▶Page 20-22 |
| **Even if the wireless LAN connection adapter lamp is lit, operation from outside the home is not possible.** | • Communication between the router and the internet connection may not be working. Please confirm. |

When the Need Arises

# Troubleshooting

## The room does not cool down / warm up

| Case | Description / what to check |
|---|---|
| **Air does not come out.** | ☑ ■ **In HEAT operation**<br>• The air conditioner is warming up. Wait for about 1 to 4 minutes.<br>• During defrosting operation, hot air does not flow out of the indoor unit.<br>■ **When the air conditioner operates immediately after the circuit breaker is turned on**<br>• The air conditioner is preparing to operate. Wait for about 3 to 10 minutes.<br>• When the outdoor temperature is below 40°F (5°C) and heating operation is started, the air conditioner is warming up. Wait for about 10 to 25 minutes. |
| **Air does not come out / Air comes out.** | ? ■ **Is the airflow rate setting appropriate?**<br>• Is the airflow rate setting low, such as “Indoor unit quiet” or “Airflow rate 1”? Increase the airflow rate setting.<br>■ **Is the set temperature appropriate?**<br>■ **Is the adjustment of the airflow direction appropriate?** |
| **Air comes out.** | ?<br>• Is there any furniture directly under or beside the indoor unit?<br>• Is the air conditioner in ECONO operation? ▶Page 15<br>• Are the air filters dirty?<br>• Is there anything blocking the air inlet or air outlet of the indoor unit or outdoor unit?<br>• Is a window or door open?<br>• Is an exhaust fan turning?<br>• Depending on the room conditions, number of occupants, or outdoor temperature and humidity, the set temperature may not be reached.<br>A temperature regulation function which factors in living space conditions is available. For further details, please contact your dealer. |

## Water or mist comes out

| Case | Description / what to check |
|---|---|
| **Mist comes out of the indoor unit.** | ☑ • This happens when the air in the room is cooled into mist by the cold airflow during COOL or other operation. |
| **Water is leaking from the indoor unit.** | ? • If the drain hose is crushed or clogged, water from the indoor unit may be unable to drain and start leaking. Stop operation of the unit immediately and contact your dealer. |

## Remote controller

| Case | Description / what to check |
|---|---|
| **The unit does not receive signals from the remote controller or has a limited operating range.** | ☑<br>• The batteries may be exhausted.<br>Replace both batteries with new dry batteries AAA.LR03 (alkaline).<br>For details, refer to **“Preparation Before Operation”**. ▶Page 9<br>• Signal communication may be disabled if an electronic-starter-type fluorescent lamp (such as inverter-type lamps) is in the room. Consult your dealer if that is the case.<br>• The remote controller may not function correctly if the transmitter is exposed to direct sunlight.<br>• Is there a device in the room that redirects remote controller signals?<br>Some appliances such as TV speakers are equipped with these devices.<br>If there is such a device in the room, the signals it emits may interfere with signals from the remote controller, preventing reception.<br>• Infrared rays from smartphones and game consoles may interfere with signals from the remote controller, preventing reception. |
| **LCD is faint, is not working, or the display is erratic.** | ☑<br>• The batteries may be exhausted.<br>Replace both batteries with new dry batteries AAA.LR03 (alkaline).<br>For details, refer to **“Preparation Before Operation”**. ▶Page 9 |
| **The LCD is blinking and the remote controller cannot be operated.** | ☑<br>• Battery power has run out.<br>Replace both batteries at the same time with new size AAA.LR03 (alkaline) batteries.<br>Leaving exhausted batteries in the remote controller can result in injury due to battery leakage, rupturing or heating, or lead to equipment failure.<br>(Even when the LCD is blinking, the OFF button remains functional.) |
| **Other electric devices start operating.** | ☑ • If the remote controller activates other electric devices, move them away or consult your dealer. |

## Air has an odor

| Case | Description / what to check |
|---|---|
| **The air conditioner gives off an odor.** | ☑ • The room odor absorbed in the unit is discharged with the airflow. We recommend you to have the indoor unit cleaned. Please consult your dealer. |
| | ☑ • The indoor unit is blowing out room odor it has absorbed (the smell of walls or carpeting, furniture, clothes, and so on). If the air conditioner has been used for a long time, there is a chance that a dirty heat exchanger or fan are emitting an odor. We recommend you to have the indoor unit cleaned. Please consult your dealer. Do not spray the air conditioner unit with any deodorizers. |

## Display lamp

| Case | Description / what to check |
|---|---|
| **The unit operates even though the OPERATION lamp is off.** | ? • Is lamp brightness set to "oF"? ▶Page 23 |
| **The LED lamps on the unit are dim.** | ? • Is lamp brightness set to "L"? ▶Page 23 |

## Others

| Case | Description / what to check |
|---|---|
| **The air conditioner suddenly starts behaving strangely during operation.** | ? • The air conditioner may malfunction due to lightning or radio. If the air conditioner malfunctions, turn off the power with the circuit breaker and restart the operation with the remote controller. |
| **The ceiling and walls around the indoor unit are black and dirty.** | ☑ • Due to the circulation pattern of the air and static electricity, the air conditioner is causing airborne dirt and dust to stick to walls and other surfaces. Depending on the wallpaper type, dirt may adhere more easily. A thorough cleaning of the area around the air conditioner is recommended. |

**Notes on the operating conditions**

- If operation continues under any conditions other than those listed in the table,
  - – A safety device may activate to stop the operation.
  - – Dew may form on the indoor unit and drip from it when COOL or DRY operation is selected.

*1 Cutting the jumper on the outdoor unit PCB will extend the cooling operation range to 14°F (–10°C). Installing an air direction adjustment grille (sold separately) will further extend the operation range to –4°F (–20°C). Please consult your dealer.

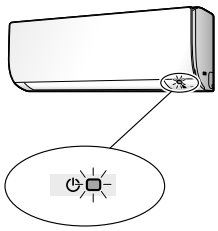
*2 Installing a drain pan heater (sold separately) will further extend the heating operation range to –13°F (–25°C). Please consult your dealer.

| Mode | Operating conditions |
|---|---|
| **COOL / DRY** | Outdoor temperature<br>[RXT models] : 50*1 - 115°F (10*1 - 46°C)<br>[MXM, MXT, MXTH models] : 14 - 115°F (–10 - 46°C)<br>*1 –4°F (–20°C) if an air direction adjustment grille (sold separately) is installed.<br>Indoor temperature : 64 - 90°F (18 - 32°C)<br>Indoor humidity : 80% max. |
| **HEAT** | Outdoor temperature<br>[MXM models] : 5 - 75°F (–15 - 24°C)<br>[RXT, MXT models] : 5*2 - 75°F (–15*2 - 24°C)<br>[MXTH models] : –13 - 75°F (–25 - 24°C)<br>*2 –13°F (–25°C) if a drain pan heater (sold separately) is installed.<br>Indoor temperature : 50 - 86°F (10 - 30°C) |

When the Need Arises

# Troubleshooting

## The OPERATION lamp blinks



### ■ Check the interval time between blinks of the OPERATION lamp.

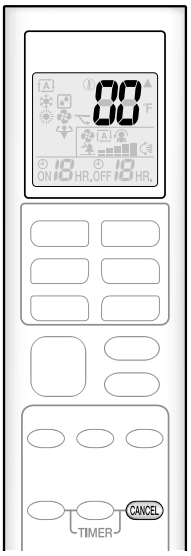
**If connecting to multiple indoor units**

**[Blink interval of about 2 to 3 seconds]**

Check the operation mode of any indoor units connected in other rooms.
Because this is a multi system air conditioner, it has one outdoor unit connected to multiple indoor units in different rooms.
If the operation mode is different from the operation mode of the indoor unit in another room, the OPERATION lamp may blink and operation may not be performed, or operation may stop while in progress.
COOL, DRY and HEAT operation may not be used at the same time.

**[Blink interval of about 0.5 seconds]**

This is a notification of an abnormality.
Check the error code following the procedure below, and respond according to the instructions in the table.




### ■ Fault diagnosis by remote controller

**1.** **When (CANCEL) is held down for about 5 seconds, "00" blinks in the temperature display section.**

**2.** **While pointing the remote controller at the indoor unit, press (CANCEL) repeatedly.**

A beep indicates a non-corresponding error code.
A long beep indicates a corresponding error code.

**3.** **When a long beep is produced, check the error code and respond according to the instructions in the table.**

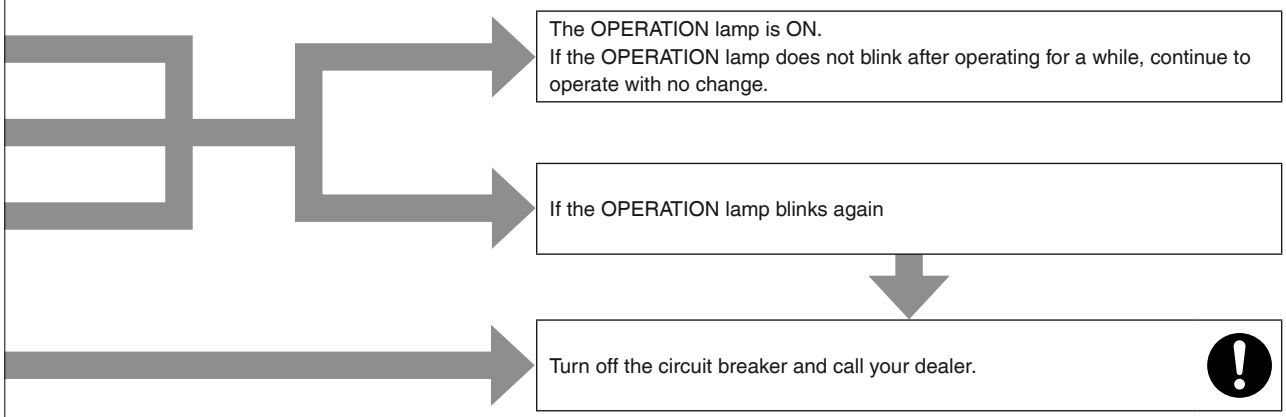
- To cancel the code display, hold down (CANCEL) for about 5 seconds (the code display also clears if no button is pressed for a while).

| CODE | Cause | Description / what to check |
|---|---|---|
| **E7** | The fan of the outdoor unit is stopped.<br>• Is there any foreign matter inside the outdoor unit? | After turning off the circuit breaker, remove the foreign matter, then turn the power on again and operate. |
| **L3, L4, L5** | The temperature inside the outdoor unit has become too high, so operation has stopped.<br>• Is there anything blocking the air outlet of the outdoor unit? | After turning off the circuit breaker, remove the obstruction, then turn the power on again and operate. |
| Other error codes, or if the error code cannot be checked | | An abnormality has occurred. |

In the case of error code **U0** or **F3**

| | CODE | MEANING |
|---|---|---|
| SYSTEM | 00 | NORMAL |
| | UA | INDOOR-OUTDOOR UNIT COMBINATION FAULT |
| | U0 | REFRIGERANT SHORTAGE |
| | U2 | DROP VOLTAGE OR MAIN CIRCUIT OVERVOLTAGE |
| | U4 | FAILURE OF TRANSMISSION (BETWEEN INDOOR UNIT AND OUTDOOR UNIT) |
| INDOOR UNIT | A1 | INDOOR PCB DEFECTIVENESS |
| | A5 | HIGH PRESSURE CONTROL OR FREEZE-UP PROTECTOR |
| | A6 | FAN MOTOR FAULT |
| | C4 | FAULTY HEAT EXCHANGER TEMPERATURE SENSOR |
| | C9 | FAULTY SUCTION AIR TEMPERATURE SENSOR |
| | CC | FAULTY HUMIDITY SENSOR |
| OUTDOOR UNIT | EA | COOLING-HEATING SWITCHING ERROR |
| | E1 | CIRCUIT BOARD FAULT, ELECTRONIC EXPANSION VALVE COIL DRIVER FAULT |
| | E3* | HIGH PRESSURE SWITCH (HPS) ACTIVATED |
| | E5 | OL (COMPRESSOR OVERLOAD) STARTED, HIGH PRESSURE SWITCH (HPS) ACTIVATED* |
| | E6 | FAULTY COMPRESSOR START UP |
| | E7 | DC FAN MOTOR FAULT |
| | E8 | OVERCURRENT INPUT |
| | E9 | ELECTRONIC EXPANSION VALVE COIL FAULT |
| | F3 | HIGH TEMPERATURE DISCHARGE PIPE CONTROL |
| | F6 | HIGH PRESSURE CONTROL (IN COOLING) |
| | F8 | OPERATION HALT DUE TO COMPRESSOR INTERNAL TEMPERATURE ABNORMALITY |
| | H0 | SENSOR FAULT |
| | H3 | HIGH PRESSURE SENSOR ABNORMALITY |
| | H6 | OPERATION HALT DUE TO FAULTY POSITION DETECTION SENSOR |
| | H7 | FAN IPM TEMPERATURE ERROR |
| | H8 | DC CURRENT SENSOR FAULT |
| | H9 | FAULTY SUCTION AIR TEMPERATURE SENSOR |
| | J3 | FAULTY DISCHARGE PIPE TEMPERATURE SENSOR |
| | J6 | FAULTY HEAT EXCHANGER TEMPERATURE SENSOR |
| | J8* | FAULTY LIQUID PIPE TEMPERATURE SENSOR |
| | J9* | FAULTY GAS PIPE TEMPERATURE SENSOR |
| | L3 | ELECTRICAL PARTS HEAT FAULT |
| | L4 | HIGH TEMPERATURE AT INVERTER CIRCUIT HEATSINK |
| | L5 | OUTPUT OVERCURRENT |
| | P4 | FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR |

*The contents of the error differ depending on the connected outdoor unit.



When the Need Arises

# Troubleshooting

## ■ Call your dealer immediately

### ⚠ WARNING

**When an abnormality (such as a burning smell) occurs, stop operation and turn off the circuit breaker.**
- Continued operation in an abnormal condition may result in problems, electric shock or fire.
- Consult the dealer where you bought the air conditioner.

**Do not attempt to repair or modify the air conditioner by yourself.**
- Incorrect work may result in electric shock or fire.
- Consult the dealer where you bought the air conditioner.

### If one of the following symptoms takes place, call your dealer immediately.

- **The power cord is abnormally hot or damaged.**
- **An abnormal sound is heard during operation.**
- **The circuit breaker cuts off the operation frequently.**
- **A switch or a button often fails to work properly.**
- **There is a burning smell.**
- **Water leaks from the indoor unit.**

Turn off the circuit breaker and call your dealer.

**■ After a power failure**
- The air conditioner automatically resumes operation in about 3 minutes. Please wait for a while.

**■ Lightning**
- If there is a risk lightning could strike in the neighborhood, stop operation and turn off the circuit breaker to protect the system.

## ■ Disposal requirements

- Dismantling of the unit, handling of the refrigerant, oil and other parts, should be done in accordance with the relevant local and national regulations.

## 2.2 FTXV15/18/24

**Read Before Operation**

# Safety Considerations

**Refer also to the General Safety Considerations in the separate booklet.**

| | |
|---|---|
|  | **Read the precautions in this manual carefully before operating the unit.** |
|   | **This appliance is filled with R32.** |

Read these **Safety Considerations for Operations** carefully before operating an air conditioner or heat pump.
Make sure that the unit operates properly during the startup operation. Instruct the user on how to operate and maintain the unit.
Inform users that they should store this operation manual with the installation manual for future reference.
Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

⚠ **DANGER** ····· Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING** ····· Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** ····· Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ **NOTE** ····· Indicates situations that may result in equipment or property-damage accidents only.

### ⚠ DANGER

- Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.
- Any abnormalities in the operation of the air conditioner or heat pump, such as smoke or fire, could result in severe injury or death. Turn off the power and contact your dealer immediately.
- Refrigerant gas may produce toxic gas if it comes into contact with fire, such as from a fan heater, stove, or cooking device. Exposure to this gas could cause severe injury or death.
- For refrigerant leakage, consult your dealer. Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- If equipment utilizing a burner is used in the same room as the air conditioner or heat pump, there is the danger of oxygen deficiency which could lead to an asphyxiation hazard resulting in serious injury or death. Be sure to ventilate the room sufficiently to avoid this hazard.
- Safely dispose of the packing materials. Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
- Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death by suffocation.

### ⚠ WARNING

- Contact your dealer for repair and maintenance. Improper repair and maintenance may result in water leakage, electric shock, and fire. Only use accessories made by Daikin that are specifically designed for use with the equipment and have them installed by a professional.
- Contact your dealer to move and reinstall the air conditioner or heat pump. Incomplete installation may result in water leakage, electric shock, and fire.
- Never let the indoor unit or the remote controller get wet. Water can cause an electric shock or a fire.
- Never use flammable spray such as hair spray, lacquer, or paint near the unit. Flammable spray may cause a fire.
- When a fuse blows out, never replace it with one of incorrect ampere ratings or different wires. Always replace any blown fuse with a fuse of the same specification.
- Never remove the fan guard of the unit. A fan rotating at high speed without the fan guard is very dangerous.
- Never inspect or service the unit by yourself. Contact a qualified service person to perform this work.
- Turn off all electrical power before doing any maintenance to avoid the risk of serious electric shock; never sprinkle or spill water or liquids on the unit.
- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not put a finger or other objects into the air inlet or air outlet. The fan is rotating at high speed and will cause injury.
- Check the unit foundation for damage on a continuous basis, especially if it has been in use for a long time. If left in a damaged condition the unit may fall and cause injury.
- Placing a flower vase or other containers with water or other liquids on the unit could cause a shock or fire if a spill occurs.
- Do not touch the air outlet or horizontal blades while the swing flap is in operation because fingers could get caught and injured.
- Never touch the internal parts of the controller. Do not remove the front panel because some parts inside are dangerous to touch. To check and adjust internal parts, contact your dealer.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.

### ⚠ CAUTION

- Do not use the air conditioner or heat pump for any other purposes other than comfort cooling or heating. Do not use the unit for cooling precision instruments, food, plants, animals or works of art.
- Do not place items under the indoor unit as they may be damaged by condensates that may form if the humidity is above 80% or if the drain outlet gets blocked.
- Before cleaning, stop the operation of the unit by turning the power off or by pulling the supply cord out from its receptacle. Otherwise, an electric shock and injury may result.
- Do not wash the air conditioner or heat pump with excessive water. An electric shock or fire may result.
- Avoid placing the controller in a spot which may be splashed with water. Water entering the controller may cause an electric shock or damage the internal electronic parts.
- Do not operate the air conditioner or heat pump when using a room-fumigation type of insecticide. Failure to observe this could cause the chemicals to be deposited in the unit and can endanger the health of those who are hypersensitive to chemicals.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- The appliance is not intended for use by young children or infirm persons without supervision.
- The remote controller should be kept away from children so they cannot play with it.
- Consult with the installation contractor for cleaning.
- Incorrect cleaning of the inside of the air conditioner or heat pump could make the plastics parts break and cause water leakage or electric shock.
- Do not touch the air inlet or aluminum fin of the air conditioner or heat pump as they can cut and cause injury.
- Do not place objects in direct proximity of the outdoor unit. Do not let leaves and other debris accumulate around the unit. Leaves are a hotbed for small animals which can enter the unit. Once inside the unit, animals can cause the unit to malfunction, and cause smoke or fire when they make contact with electrical parts.

### ⚠ NOTE

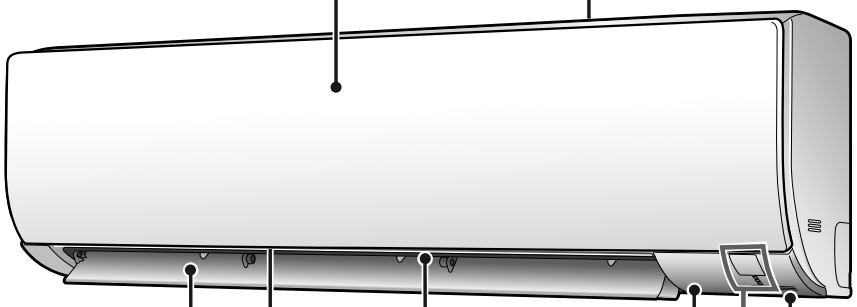
- Never press the button of the remote controller with a hard, pointed object. The remote controller may be damaged.
- Never pull or twist the electric wire of the remote controller. It may cause the unit to malfunction.
- Do not place appliances that produce open flames in places that are exposed to the airflow of the unit or under the indoor unit. It may cause incomplete combustion or deformation of the unit due to the heat.
- Do not expose the controller to direct sunlight. The LCD display can become discolored and may fail to display the data.
- Do not wipe the controller operation panel with benzene, thinner, chemical dust cloth, etc. The panel may get discolored or the coating can peel off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. Then wipe it with another dry cloth.
- Dismantling of the unit, disposal of the refrigerant, oil, and additional parts, should be done in accordance with the relevant local, state, and national regulations.
- Operate the air conditioner or heat pump in a sufficiently ventilated area and not surrounded by obstacles. Do not use the air conditioner or heat pump in the following places.
  a. Places with a mist of mineral oil, such as cutting oil.
  b. Locations such as coastal areas where there is a lot of salt in the air.
  c. Locations such as hot springs where there is a lot of sulfur in the air.
  d. Locations such as factories where the power voltage varies a lot.
  e. In cars, boats, and other vehicles.
  f. Locations such as kitchens where oil may splatter or where there is steam in the air.
  g. Locations where equipment produces electromagnetic waves.
  h. Places with an acid or alkaline mist.
  i. Places where fallen leaves can accumulate or where weeds can grow.
- Take snow protection measures. Contact your dealer for the details of snow protection measures, such as the use of a snow protection hood.
- Do not attempt to do electrical work or grounding work unless you are licensed to do so. Consult with your dealer for electrical work and grounding work.
- Pay attention to operating sound. Be sure to use the following places:
  a. Places that can sufficiently withstand the weight of the air conditioner or heat pump yet can suppress the operating sound and vibration.
  b. Places where warm air from the air outlet of the outdoor unit or the operating sound of the outdoor unit does not annoy neighbors.
- Make sure that there are no obstacles close to the outdoor unit. Obstacles close to the outdoor unit may drop the performance of the outdoor unit or increase the operating sound of the outdoor unit.
- Consult your dealer if the air conditioner or heat pump in operation generates unusual noise.
- Make sure that the drainpipe is installed properly to drain water. If no water is discharged from the drainpipe while the air conditioner or heat pump is in the cooling mode, the drainpipe may be clogged with dust or dirt and water leakage from the indoor unit may occur. Stop operating the air conditioner or heat pump and contact your dealer.
- Do not spray the air conditioner unit with any deodorizers, etc. It may cause the unit to malfunction.

FTP002(R32)-U

Read Before Operation

# Names of Parts

## Indoor Unit




**Flaps (horizontal blades)**
▶Page 13

**Air outlet**

**Model name**

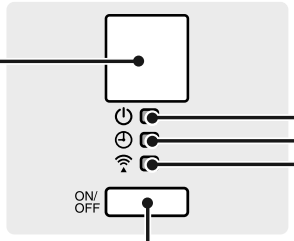
**Indoor temperature and humidity sensor**
- Sense air temperature and humidity around the unit.

**Louvers (vertical blades)**
- The louvers are inside of the air outlet. ▶Page 13

### Display

**Signal receiver**
- Receives signals from the remote controller.
- When the unit receives a signal, you will hear a beep sound.

| Case | Sound type |
|---|---|
| Operation start | beep-beep |
| Setting changed | beep |
| Operation stop | long beep |




**OPERATION lamp (Green)**
▶Page 10

**TIMER lamp (Orange)**
▶Page 16, 17

**Wireless LAN connection adapter lamp (Orange)**
▶Page 8, 21, 22

**Indoor unit ON/OFF switch**
- Press this switch once to start operation. Press once again to stop it.
- For the operation mode setting, refer to the following table.

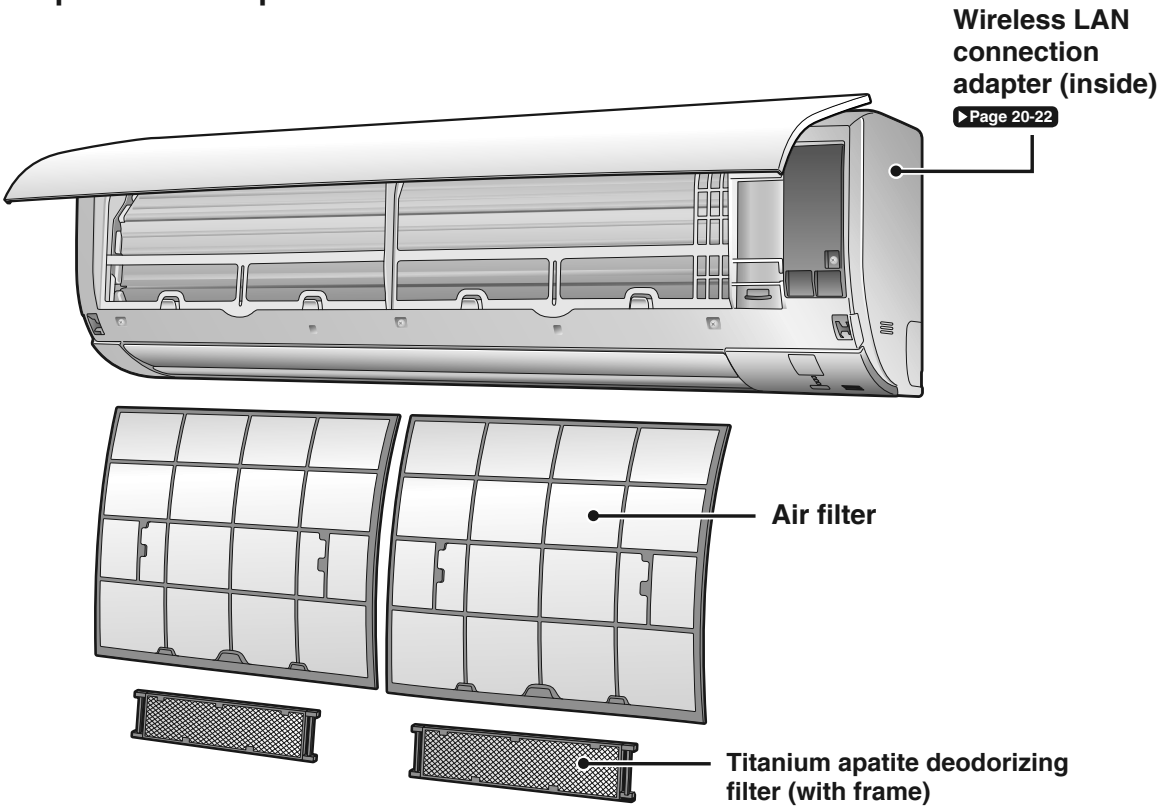
| Mode | Temperature setting | Airflow rate |
|---|---|---|
| AUTO | 77°F (25°C) | AUTO |

- This switch can be used when the remote controller is missing or out of batteries.



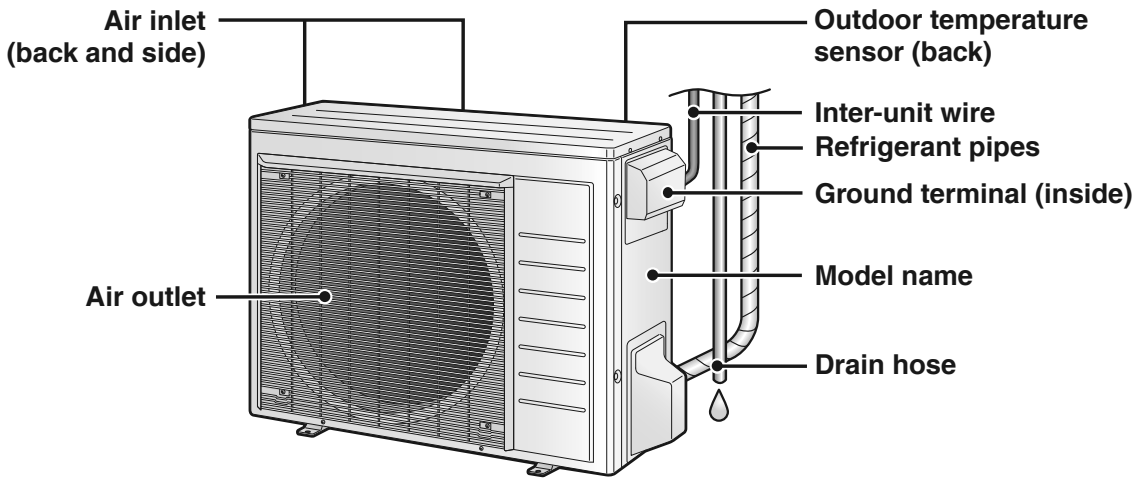
3P741457-2K

## ■ Open the front panel




## Outdoor Unit

• The appearance of the outdoor unit may differ between different models.



Read Before Operation

# Names of Parts

## Remote Controller

### Display (LCD)
- Displays the current settings. (In this illustration, each section is shown with its displays on for the purpose of explanation.)

### AUTO button
- Automatically selects an appropriate operation mode (COOL or HEAT) based on the indoor temperature and starts the operation. Page 10

### Direct operation buttons
- Starts the COOL, DRY, HEAT or FAN ONLY operation. Page 10

### TEMPERATURE adjustment button
- Changes the temperature setting. Page 11

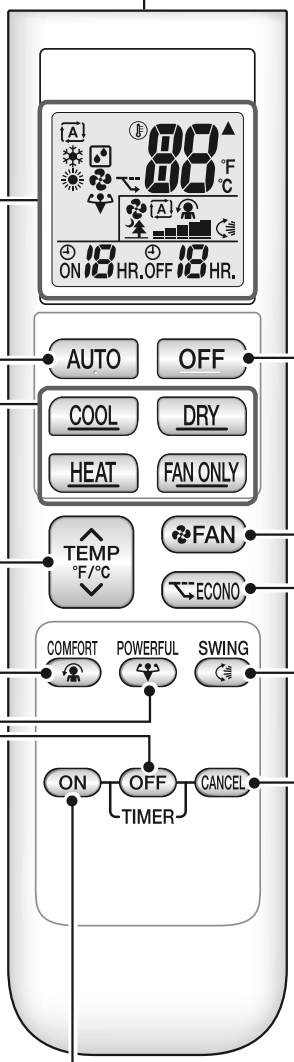
### COMFORT button
- COMFORT AIRFLOW operation. Page 14

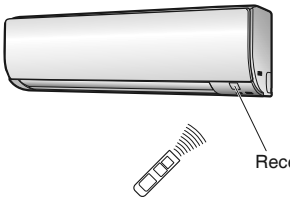
### POWERFUL button and Wireless LAN button
**POWERFUL button**
- POWERFUL operation. Page 14

**Wireless LAN button (push 5 seconds)**
- Wireless LAN connection. Page 21, 22

### OFF TIMER button (NIGHT SET mode) Page 17

### ON TIMER button Page 16




### Signal transmitter



- To use the remote controller, aim the transmitter at the indoor unit. If there is anything blocking the signals between the unit and the remote controller, such as a curtain, the unit may not operate.
- The maximum transmission distance is about 23ft (7m).

### OFF button
- Stops the operation. Page 11

### FAN setting button
- Selects the airflow rate setting. Page 12

### ECONO button
- ECONO operation. Page 15

### SWING button
- Adjusts the airflow direction. Page 13

### TIMER CANCEL button
- Cancels the timer setting. Page 17

| Model | ARC480A83 |
|---|---|

## Wireless LAN connection adapter

The Wireless LAN connection adapter function requires the Daikin One Home for connecting to the air conditioner and controlling it via your smartphone or tablet over your network.

**Attention**

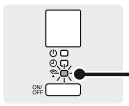
- **Wireless LAN sends and receives data using radio waves so there is a risk of transmitted data being subject to eavesdropping and illegal access. When using wireless LAN, manage the SSID/KEY of the wireless LAN connection adapter, the SSID/KEY of the wireless router, and the app login information so that they will not be known to others, and ensure that you have an adequate understanding of the risks involved.** ▶Page 6
  **In the case that the product is accessed and operated illegally, turn off the wireless LAN connection adapter function.** ▶Page 22
- **Do not use this product near a microwave oven. (This can affect wireless LAN communications.)**
- **This product cannot be directly connected to the communication line of a telecommunications carrier (internet service provider, etc.). When connecting to the internet, be sure to connect via a device such as a router.**
  When the wireless LAN connection adapter function is turned on, the right side of the air conditioner may become slightly warm, but this is not an abnormality.

## ⚠ WARNING

- While the Wireless LAN connection adapter operates, it may affect persons using cardiac pacemakers or defibrillators.
  This product may cause electromagnetic interference.
- While the Wireless LAN connection adapter operates, it may affect automatic doors or fire alarm equipment.
  This product may cause faulty behavior of the equipment.

## Configuration

- The user is responsible for providing the following items before using this product:
  - ■ Smartphone or tablet PC
  - ■ Internet line and communicating device (Modem/router or similar device)
  - ■ Wireless LAN access point
  - ■ Application name: [Daikin One Home] (free)
    For details on the installation method for the Daikin One Home, please see ▶Page 21.



Display

### Wireless LAN connection adapter lamp (Orange)

- The Wireless LAN connection adapter lamp lights when connecting to a router (Wireless LAN access point). Please see ▶Page 21.
- For Wireless LAN connection adapter operation, please see ▶Page 22.

## ⚠ WARNING

**When operating an air conditioner from outside the home, it is not possible to check the air conditioner or the surroundings of the air conditioner, or the state of the people in the room. Therefore, make sure to adequately check for safety before use.**
**In some cases, there is a risk of death, severe injury, or property damage.**

■ **Check the following in advance (while at home)**

- Timer settings or reservations that other users may have made. (There is a risk of causing harm to the health of people, animals, or plants in the home if operation starts and stops unexpectedly)
- There are no signs of abnormality in the air conditioning. Harm will not be caused to people or to the room if there is a change in airflow. (For example, that there are no objects nearby that might blow over) (There is a risk of objects falling due to airflow and causing fire, bodily injury, or staining of household items)

■ **Check the following before/while operating a unit from outside the home**

- If you know that there is someone at home, inform the person when turning the air conditioner on or off from outside the home. (If someone at home is standing on something such as a stool, the air conditioner turning on or off unexpectedly could surprise them and cause them to fall or topple over. Additionally, a sudden change in the indoor/outdoor temperature could harm the health of people at home)
  · The air conditioner can be turned off and temperature adjustment can be made using a remote controller in the home.
  · Do not use the function if the only people at home are persons who are unable to make adjustments to temperature or other settings themselves, such as young children, disabled persons, or elderly persons.
- Regularly check the settings and operating status of the air conditioner. (Sudden changes in indoor/outdoor temperature pose a health hazard. There is a risk of harm to animals and plants)
  If an error occurs during operation, immediately turn off the air conditioner and contact your dealer.
  Double check the display to confirm that the power is off.

Read Before Operation

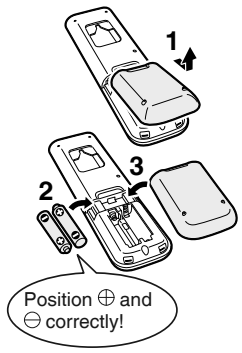
# Preparation Before Operation

## ⚠ CAUTION

**Incorrect handling of batteries can result in injury from battery leakage, rupturing or heating, or lead to equipment failure.**

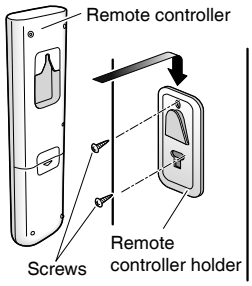
**Please observe the following precautions and use safely.**

- If the alkaline solution from the batteries should get in the eyes, do not rub the eyes. Instead, immediately flush the eyes with tap water and seek the attention of a medical professional.
- Keep batteries out of reach of children. In the event that batteries are swallowed, seek the immediate attention of a medical professional.
- Do not expose batteries to heat or fire. Do not disassemble or modify batteries. The insulation or gas release vent inside the battery may be damaged, resulting in battery leakage, rupturing, or heating.
- Do not damage or peel off labels on the batteries.



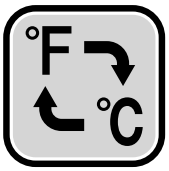

### To insert the batteries

1. Remove the back cover by sliding and then slightly lifting it.
2. Insert 2 dry batteries AAA.LR03 (alkaline).
3. Replace the back cover.




### To attach the remote controller holder to a wall

1. Choose a place where the signals reach the unit.
2. Attach the holder to a wall, a pillar, or similar location with the screws supplied with the holder.
3. Hang the remote controller on the remote controller holder.




### Fahrenheit/Celsius display switch

**Press TEMP °F/°C and ON (TIMER button) simultaneously for about 5 seconds.**

- The temperature will be displayed in Celsius when it is presently displayed in Fahrenheit, and vice versa.
- The switch operation is only possible when the temperature is being displayed.
- A reception sound will go off for the transmission of set temperature to the indoor unit at the time of setting the Fahrenheit/Celsius display change function.

### Turn on the circuit breaker

- After the power is turned on, the flap of the indoor unit opens and closes once to set the reference position.

## NOTE

**Notes on batteries**

- To avoid possible injury or damage from battery leakage or rupturing, remove the batteries when not using the product for long periods of time.
- The standard replacement time is about 1 year. Both batteries should be replaced at the same time. Be sure to replace them with new dry batteries AAA.LR03 (alkaline).
- If the remote controller display begins to fade and signal reception begins to decline, replace the batteries with new batteries. Owing to usage conditions, battery consumption may be accelerated.
- The batteries supplied with the remote controller are for initial operation. The batteries may run out in less than 1 year.

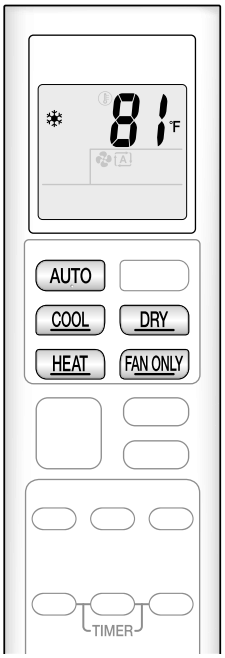
**Notes on remote controller**

- Do not drop the remote controller. Do not get it wet.
- If dirt becomes an issue, wipe with a soft dry cloth.

**Fahrenheit/Celsius display change function of remote controller**

- The set temperature may increase when the display is changed to Celsius from Fahrenheit, because a fraction of 0.5°C is rounded up.
- Example: A set temperature of 65°F (equivalent to 18.5°C) will be converted into 19°C.
  When the display is changed to Fahrenheit again, the set temperature will be converted into 66°F (equivalent to 19°C) instead of the original set temperature (65°F) but a set temperature of 66°F (equivalent to 19°C) will be converted into 19°C with no temperature change.

# AUTO · COOL · DRY · HEAT · FAN ONLY Operation




The air conditioner operates with the operation mode of your choice.

## To start operation

### AUTO operation



• To automatically select an appropriate temperature and operation mode.

**Press** AUTO .

### COOL operation



• To lower the temperature.

**Press** COOL .

### DRY operation



• To lower the humidity.

**Press** DRY .

### HEAT operation



• To raise the temperature.

**Press** HEAT .

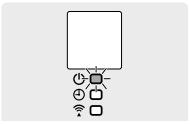
### FAN ONLY operation



• To circulate air in the room.

**Press** FAN ONLY .

• The OPERATION lamp lights green.



Display

## NOTE

**Notes on AUTO operation**

• In AUTO operation, the system selects an appropriate operation mode (COOL or HEAT) based on the indoor temperature and starts the operation.

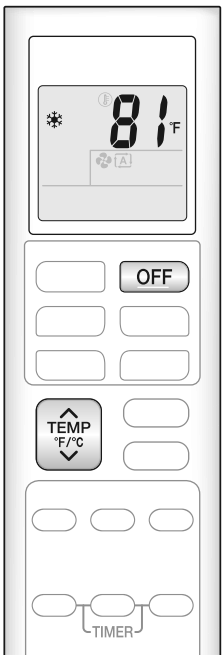
• The system automatically reselects setting at a regular interval to bring the indoor temperature to the user-setting level.

**Note on DRY operation**

• Eliminates humidity while maintaining the indoor temperature as much as possible. It automatically controls temperature and airflow rate, so manual adjustment of these functions is unavailable.

Basic Operation

# MODE AUTO · COOL · DRY · HEAT · FAN ONLY Operation




## To stop operation

**Press** OFF .

- The OPERATION lamp goes off.

## To change the temperature setting

**Press** TEMP °F/°C .

- Press ∧ to raise the temperature and press ∨ to lower the temperature.

| COOL operation | HEAT operation | AUTO operation | DRY or FAN ONLY operation |
|---|---|---|---|
| 64-90°F (18-32°C) | 50-86°F (10-30°C) | 64-86°F (18-30°C) | The temperature setting cannot be changed. |

## Tips for saving energy



**Keeping the temperature setting at a moderate level helps save energy.**

- Recommended temperature setting
  - For cooling: 78-82°F (26-28°C)
  - For heating: 68-75°F (20-24°C)

**Cover windows with a blind or a curtain.**

- Blocking sunlight and air from outdoors increases the cooling (heating) effect.

**Keep the air filters clean.**

- Clogged air filters cause inefficient operation and waste energy. Clean them once in about every 2 weeks. ▶Page 26

**If you are not going to use the air conditioner for a long period, for example in spring or autumn, turn off the circuit breaker.**

- The air conditioner always consumes a small amount of electricity even while it is not operating.

# Adjusting the Airflow Rate




You can adjust the airflow rate to increase your comfort.

## To adjust the airflow rate setting

### Press FAN .

- Each pressing of FAN changes the airflow rate setting in sequence.




- When the airflow is set to " ", quiet operation starts and noise from the indoor unit will become quieter. However, it may become difficult to cool (or warm) the room.
- In the quiet operation mode, the airflow rate is set to a weak level.

| AUTO, COOL, HEAT and FAN ONLY operation | DRY operation |
|---|---|
| | The airflow rate setting cannot be changed. (only AUTO) AUTO |

## NOTE

**Note on airflow rate setting**

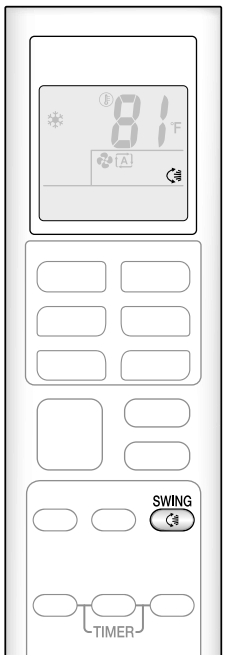
- At smaller airflow rates, the cooling (heating) effect is also smaller.

**Note on AUTO airflow rate**

- When using AUTO airflow rate, the airflow rate is adjusted according to conditions in the room.

Basic Operation

# Adjusting the Airflow Direction




You can adjust the airflow direction to increase your comfort.

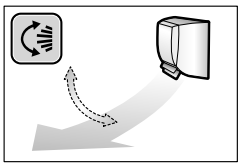
## ⚠ CAUTION

- Always use a remote controller to adjust the angles of the flap. Moving the flap forcibly by hand may cause a malfunction.
- Be careful when adjusting the louvers. Inside the air outlet, a fan is rotating at a high speed.

## To start auto swing

### Up and down airflow direction

**Press SWING .**



- "  " is displayed on the LCD.
- The flap (horizontal blade) will begin to swing.

## To set the flap at the desired position

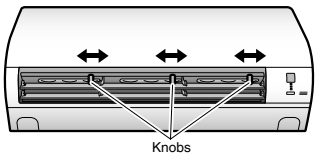
- This function is effective while the flap is in auto swing mode.

**Press SWING when the flap reaches the desired position.**

- "  " disappears from the LCD.

## To adjust the louvers at desired position

**Hold the knobs and move the louvers (vertical blades).**

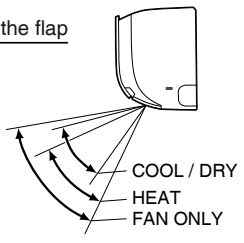



## NOTE

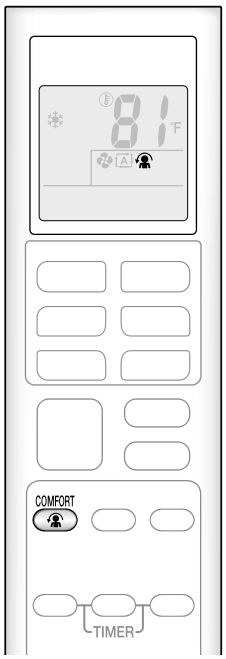
**Notes on airflow direction setting**

- The movable range of the flap varies according to the operation mode.
- If the airflow rate becomes weak during operation, the flap will stop.
  When up and down airflow direction is set, the flap will stop in an upward position.

Movable range of the flap



# COMFORT AIRFLOW Operation




The flow of air will be in the upward direction while in COOL and DRY operation and in the downward direction while in HEAT operation, which will provide a comfortable airflow that will not come in direct contact with people.

## To start COMFORT AIRFLOW operation

**Press COMFORT .**

- " " is displayed on the LCD.

| | COOL and DRY operation | HEAT operation | FAN operation |
|---|---|---|---|
| Flap direction | Goes up | Goes down | Not available |
| Airflow rate | AUTO | | |

- When in AUTO operation, the flap direction differs based on the operation mode (COOL or HEAT) as shown in the table above.

## To cancel COMFORT AIRFLOW operation

**Press COMFORT again.**

- " " disappears from the LCD.
- The flap will return to the memory position from before COMFORT AIRFLOW operation.

# POWERFUL Operation




POWERFUL operation quickly maximizes the cooling (heating) effect in any operation mode. In this mode, the air conditioner operates at maximum capacity.

## To start POWERFUL operation

**Press POWERFUL .**

- " " is displayed on the LCD.
- POWERFUL operation ends in 20 minutes. Then the system automatically operates again with the previous settings which were used before POWERFUL operation.

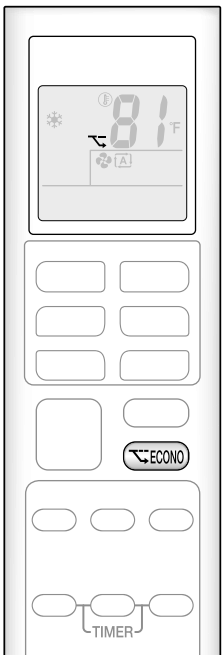
## To cancel POWERFUL operation

**Press POWERFUL again.**

- " " disappears from the LCD.

Useful Functions

# ECONO Operation




ECONO operation enables efficient operation by limiting the maximum power consumption.
This function is useful to prevent the circuit breaker from tripping when the unit operates alongside other appliances on the same circuit.

## To start ECONO operation

### Press (ECONO) .

- " " is displayed on the LCD.
- Not available in FAN ONLY mode.

## To cancel ECONO operation

### Press (ECONO) again.

- " " disappears from the LCD.

## NOTE

**Notes on COMFORT AIRFLOW operation**
- The airflow rate will be set to AUTO.
- If the up and down airflow direction is selected, the COMFORT AIRFLOW operation will be canceled.

**Notes on POWERFUL operation**
- Pressing OFF causes the settings to be canceled, and " " disappears from the LCD.
- POWERFUL operation will not increase the capacity of the air conditioner if the air conditioner is already in operation with its maximum capacity demonstrated.

**– In COOL, HEAT and AUTO operation**
To maximize the cooling (heating) effect, the capacity of outdoor unit increases and the airflow rate becomes fixed at the maximum setting.
The temperature and airflow settings cannot be changed in COOL and HEAT operation.
Airflow settings cannot be changed in AUTO operation.

**– In DRY operation**
The temperature setting is lowered by 1.8°F (1.0°C) and the airflow rate is slightly increased.

**– In FAN ONLY operation**
The airflow rate is fixed at the maximum setting.

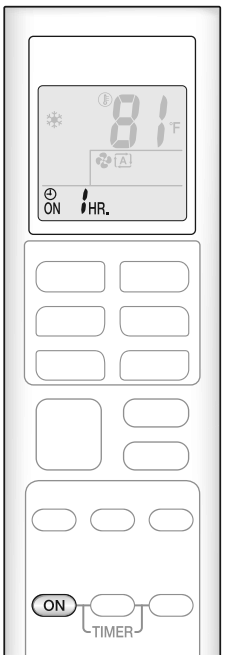
**Notes on ECONO operation**
- This operation is performed with lower power and therefore may not provide a sufficient cooling (heating) effect.
- Pressing OFF causes the settings to be canceled, and " " disappears from the LCD.
- If the power consumption level is already low, switching to ECONO operation will not reduce the power consumption.

**Some useful functions can be used together.**

| | |
|---|---|
| **COMFORT AIRFLOW + ECONO** | Available |
| **POWERFUL + COMFORT AIRFLOW** | Not available* |
| **POWERFUL + ECONO** | Not available* |

*Priority is given to the function of whichever button is pressed last.

# ON/OFF TIMER Operation

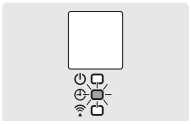



Timer functions are useful for automatically switching the air conditioner on or off in the morning or at night. You can also use the ON TIMER and OFF TIMER together.

## To use ON TIMER operation

### Press ON .

- Each pressing of ON changes the time setting by 1 hour. The time can be set between 1 and 12 hours.
- The TIMER lamp lights orange.



Display

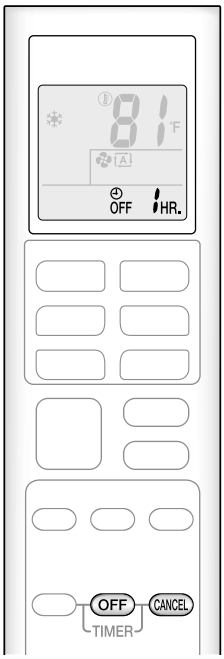
## NOTE

**In the following cases, set the timer again.**

- After the circuit breaker has turned off.
- After a power failure.
- After replacing the batteries in the remote controller.

TIMER Operation

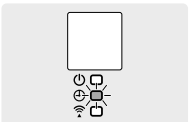
# ON/OFF TIMER Operation




## To use OFF TIMER operation

**Press OFF .**

- Each pressing of OFF changes the time setting by 1 hour. The time can be set between 1 and 12 hours.
- The TIMER lamp lights orange.



Display

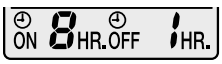
## To cancel ON/OFF TIMER operation

**Press CANCEL .**

## To combine ON TIMER and OFF TIMER operation

- A sample setting for combining the 2 timers is shown below.
- " ON " and " OFF " are displayed on the LCD.

**[Example]**




**When setting while the unit is operating**
- Stops the unit 1 hour later and starts it 7 hours after that.



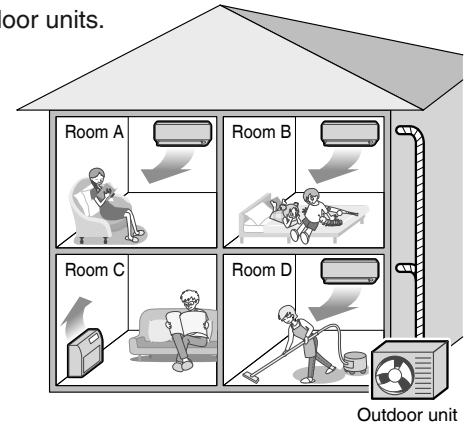

**When setting while the unit is stopped**
- Starts the unit 2 hours later and stops it 3 hours after that.

## NOTE

**NIGHT SET mode**
- When the OFF TIMER is set, the air conditioner automatically adjusts the temperature setting (0.9°F (0.5°C) up in COOL, 3.6°F (2.0°C) down in HEAT) to prevent excessive cooling (heating) during sleeping hours.

# Note for Multi System

A multi system has one outdoor unit connected to multiple indoor units.




## Selecting the operation mode

### When the priority room setting is active but the set unit is not operating or when the priority room setting is inactive

When more than one indoor unit is operating, priority is given to the first unit that was turned on.
In this case, set the units that are turned on later to the same operation mode as the first unit.
Otherwise, they will enter the standby state, and the OPERATION lamp will blink; this does not indicate malfunction.

## NOTE

**Notes on operation mode for a multi system**

- COOL, DRY and FAN operation may be used at the same time.
- AUTO operation automatically selects COOL operation or HEAT operation based on the indoor temperature.
  Therefore, AUTO operation is available when selecting the same operation mode as that of the room with the first unit to be turned on.

## ⚠ CAUTION

- Normally, the operation mode in the room where the unit is first started is given priority, but the following situations are exceptions to this rule.
  If the operation mode of the first room is FAN operation, then using HEAT operation in any room after this will give priority to HEAT operation.
  In this situation, the indoor unit operating in FAN mode will switch to standby, and the OPERATION lamp will blink.

### With the priority room setting active

Refer to “**Priority room setting**” on the next page.

Multi Connection

# Note for Multi System

## COOL/HEAT mode lock

The COOL/HEAT mode lock requires initial programming during installation. Please consult your authorized dealer for assistance. The COOL/HEAT mode lock sets the unit forcibly to either COOL or HEAT operation. This function is convenient when you wish to set all indoor units connected to the multi system to the same operation mode.

### NOTE

- The COOL/HEAT mode lock cannot be activated together with the priority room setting.

## Priority room setting (Not available on some models)

The priority room setting requires initial programming during installation. Please consult your authorized dealer for assistance. The room designated as the priority room takes priority in the following situations.

### Operation mode priority

- As the operation mode of the priority room takes precedence, you can select a different operation mode from other rooms.

**[Example]**

- Room A is the priority room in this example.
  When COOL operation is selected in room A while operating the following modes in room B, C and D:

| Operation mode in room B, C and D | Status of room B, C and D when the unit in room A is in COOL operation |
|---|---|
| COOL or DRY or FAN | The current operation mode is maintained. |
| HEAT | The unit enters the standby mode. Operation resumes when the room A unit stops operating. |
| AUTO | If the unit is set to COOL operation, it continues. If the unit is set to HEAT operation, it enters the standby mode. Operation resumes when the room A unit stops operating. |

### Priority when POWERFUL operation is used

**[Example]**

- Room A is the priority room in this example.
  The indoor units in rooms A, B, C and D are all operating. If the unit in room A enters POWERFUL operation, operation capacity will be concentrated in room A. In such a case, the cooling (heating) efficiency of the units in room B, C and D may be slightly reduced.

Mobile Controller

# Wireless LAN connection

## Wireless LAN connection

Web site: **https://daikinone.com/ductless**

For instructions on how to connect your unit to wireless LAN and to your Daikin One Home application, please see the website above.

Contains FCC ID: VPYLB1YA
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.
FCC CAUTION
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.
Contains IC: 772C-LB1YA
This device complies with Industry Canada's applicable licence-exempt RSSs.
Operation is subject to the following two conditions:
(1) This device may not cause interference; and
(2) This device must accept any interference, including interference that may cause undesired operation of the device.
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 7-7/8 inches (20cm) or more away from person's body.
The FCC responsible party is Daikin Comfort Technologies Manufacturing, L.P., and may be contacted by calling (713)-861-2500, or at 19001 Kermier Rd., Waller, TX 77484.
(https://www.northamerica-daikin.com)
This device, which was assembled by Daikin Comfort Technologies Manufacturing, L.P., contains a component that is classified as an intentional radiator.
This intentional radiator has been certified by the FCC: FCC ID VPYLB1YA.
And this intentional radiator has an industry Canada ID: IC 772C-LB1YA.
The manufacturer of the intentional radiator (model no. Type1YA) is Murata Manufacturing co., Ltd (www.murata.com).
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 7-7/8 inches (20cm) or more away from person's body.
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Mobile Controller

# Wireless LAN connection

## Application software installation

**For Android Phones**

1) Open [Google Play].
2) Search using the application name: [Daikin One Home].
3) Follow the directions on the screen to install.

**For iOS Phones**

1) Open the [App Store].
2) Search using the application name: [Daikin One Home].
3) Follow the directions on the screen to install.

**Attention**

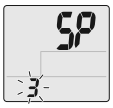
- The actual application screen layout and content may differ from what is shown. The layout and content of the application screen is subject to change without notice.

Connect the air conditioner to your home network.

**1. While operation is stopped, press POWERFUL and hold the button for 5 seconds.**

**2. Press TEMP or TEMP and select menu number 3.**

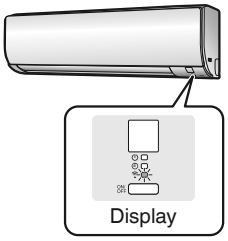
- "SP" appears on the LCD.
- "3" blinks.







**3. Press POWERFUL to connect to the access point.**




The wireless LAN connection adapter lamp blinks quickly.

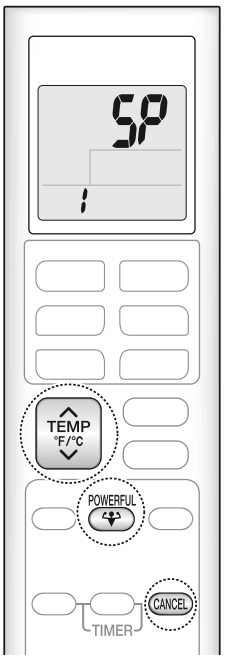
**4. Press CANCEL to return to the default screen.**
**No more settings need to be carried out from the remote controller.**

**5. Open Daikin One Home App and follow the instructions to set up the wireless LAN.**

**6. When the wireless LAN connection adapter lamp switches from blinking to lit, the connection is complete.**

## NOTE

- While "SP" is displayed, the options that can be selected using TEMP and TEMP are 1, 3, A, and OFF.
- Perform wireless LAN connection one indoor unit at a time.
- If you are unable to establish a network connection, refer the troubleshooting provided by the Daikin One Home App.
- When the lamp blinks slowly, the connection is not ready. Perform the connection procedure while it blinks quickly.




## To confirm the wireless LAN connection adapter connection

### ■ To confirm

**1.** **While operation is stopped, press POWERFUL and hold the button for 5 seconds.**

**2.** **Press POWERFUL to confirm the selected setting.**




- "SP" appears on the LCD.
- "1" blinks.

**Check the indoor unit LED.**

| Wireless LAN connection adapter lamp | Status |
|---|---|
| Blinking for 1 second | Connection is not ready |
| Blinking for 3 seconds | Please initialize the wireless LAN connection adapter |
| Does not blink or light | Communication is abnormal<br>There is a possibility of equipment failure<br>Please request repair |

## To turn off the wireless connection

### ■ To use the remote controller

**1.** **While operation is stopped, press POWERFUL and hold the button for 5 seconds.**

**2.** **Press TEMP or TEMP and select menu OFF.**




- "SP" appears on the LCD.
- "OFF" blinks, and communication is OFF.

**3.** **Press POWERFUL and hold the button for 2 seconds to confirm selected setting.**

- The wireless LAN connection adapter lamp turn off.

**4.** **Press CANCEL to return to the default screen.**

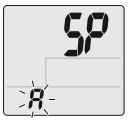
## To reset the connection setting to the factory default

- If you want to reset the connection settings, it is possible to initialize the wireless LAN connection adapter to its factory default state. If initialized, data including the network settings and power consumption history will be erased.
- When discarding or transferring to another user, initialize the connection adapter to erase the internal data.

### ■ To reset

**1.** **While operation is stopped, press POWERFUL and hold the button for 5 seconds.**

**2.** **Press TEMP or TEMP and select menu A.**




- "SP" appears on the LCD.
- "A" blinks.

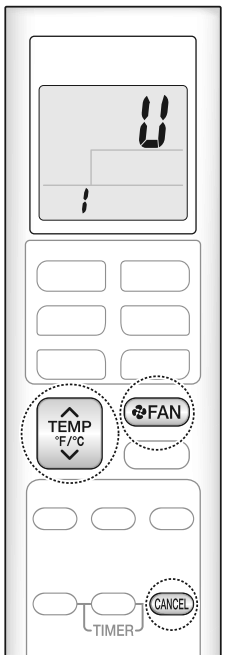
**3.** **Press POWERFUL and hold the button for 2 seconds to confirm selected setting.**

- The wireless LAN connection adapter lamp blinks for 1 second.

**4.** **Press CANCEL to return to the default screen.**

Making Changes to Default Settings

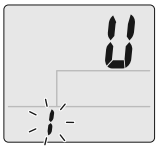
# Brightness of Indoor Unit LED Lamps




Changes can be made to the setting for the brightness of the LED lamps, to suit your preferences.

**1. While operation is stopped, press FAN and hold the button for 5 seconds.**

**2. Press TEMP °F/°C and select menu number 1.**

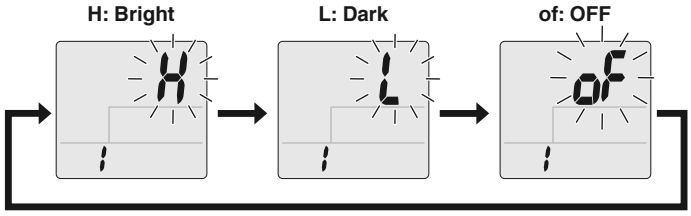


- "U" appears on the LCD.
- "1" blinks.

**3. Press FAN.**

**4. Press TEMP °F/°C or TEMP °F/°C and select setting option.**

- The setting option will blink.



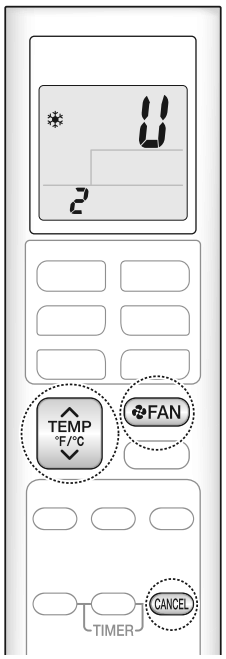

**5. Press FAN.**

**6. Press FAN and hold the button for 5 seconds to return to the default screen.**

## NOTE

- Press CANCEL to return to the previous screen.
- If no operations are performed for approximately 1 minute, the display will return to the default screen.
- Indoor unit default setting: H (Bright)

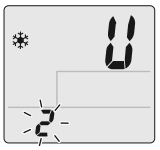
# Airflow Setting When Indoor Unit Reaches Setpoint




Changes can be made to the setting for airflow rate when unit reaches desired temperature (setpoint), to suit your preferences.
This function is effective when COOL operation is selected.

**1. While operation is stopped, press FAN and hold the button for 5 seconds.**

**2. Press TEMP or TEMP and select menu number 2.**

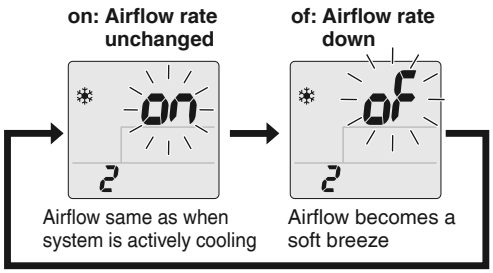


- "U" appears on the LCD.
- "2" blinks.

**3. Press FAN.**

**4. Press TEMP or TEMP and select setting option.**

- The setting option will blink.




**5. Press FAN.**

**6. Press FAN and hold the button for 5 seconds to return to the default screen.**

## NOTE

- Press CANCEL to return to the previous screen.
- If no operations are performed for approximately 1 minute, the display will return to the default screen.
- Indoor unit default setting: of (Airflow rate down)

Care

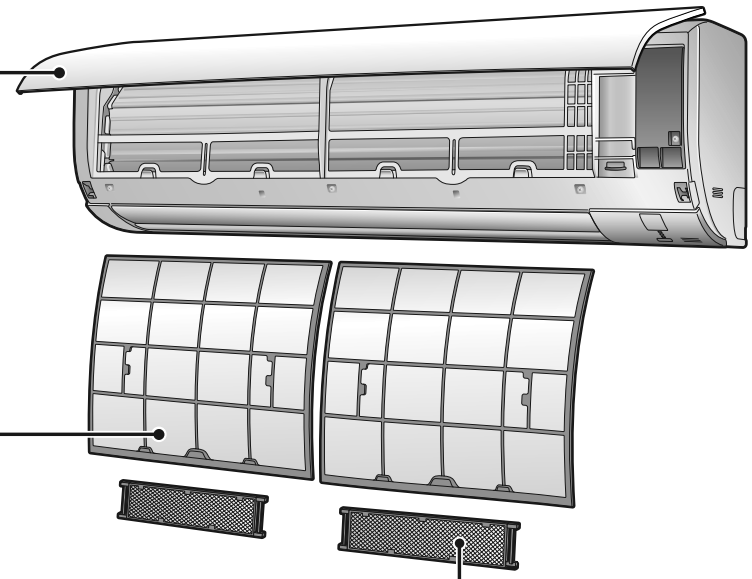
# Care and Cleaning

## ⚠ CAUTION

- Before cleaning, be sure to stop the operation and turn off the circuit breaker.
- Do not touch the aluminum fins of the indoor unit. If you touch those parts, this may cause an injury.

## ■ Quick reference

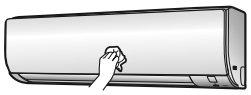
**Cleaning parts**



### Front panel

- Wipe with a soft cloth which has been moistened with water or neutral detergent.
- Only neutral detergent may be used.

**If dirty**



### Air filter

- Vacuum dust or wash the filter.

**Once every 2 weeks**

▶Page 26

### Indoor unit, outdoor unit and remote controller

- Wipe them with a soft cloth.

**If dirty**

### Titanium apatite deodorizing filter (with frame)

- Vacuum dust or replace the filter.

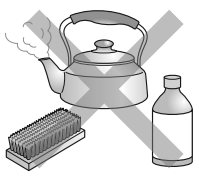
[Cleaning] **Once every 6 months** ▶Page 27

[Replacement] **Once every 3 years** ▶Page 27

## NOTE

**For cleaning, do not use any of the following:**

- Water hotter than 104°F (40°C)
- Volatile liquid such as benzine, gasoline and thinner
- Polishing compounds
- Rough materials such as a scrubbing brush
- Sprays such as deodorizers



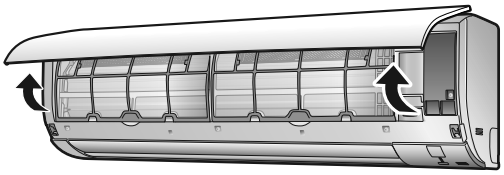


3P741457-2K

## ■ Air filter

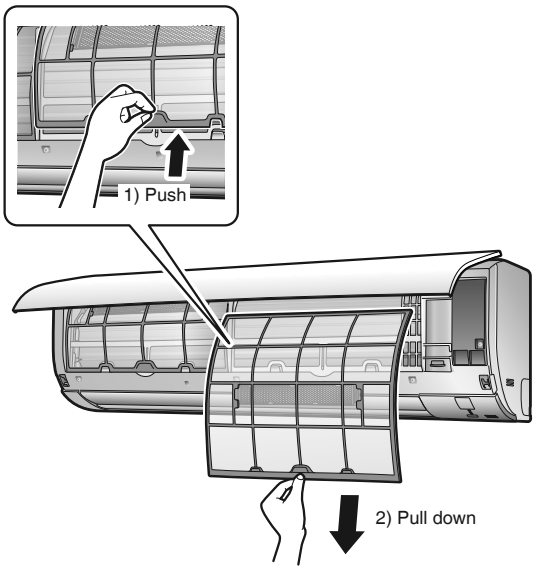
### 1. Open the front panel.

• Hold the front panel by the sides and open it.



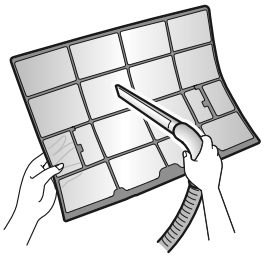
### 2. Pull out the air filters.

• Push the filter tab at the center of each air filter a little upwards, then pull it down.



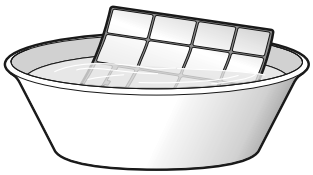

### 3. Wash the air filters with water or clean them with vacuum cleaner.

• It is recommended to clean the air filters every 2 weeks.



**If the dust does not come off easily**

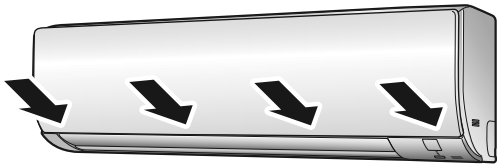
• Wash the air filters with neutral detergent thinned with lukewarm water, then dry them up in the shade.
• Be sure to remove the titanium apatite deodorizing filter. Refer to **"Titanium apatite deodorizing filter"**. ▶Page 27



### 4. Reattach the filters.

### 5. Close the front panel slowly.

• Press the front panel at both sides and in the central area.



• Make sure that the front panel is securely fixed.

Care

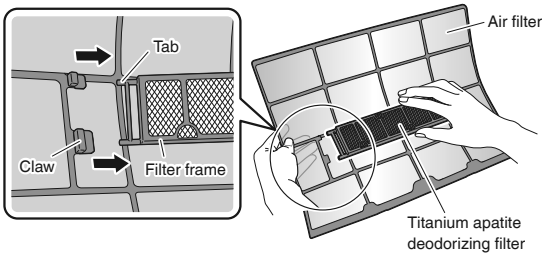
# Care and Cleaning

## ■ Titanium apatite deodorizing filter

### 1. Open the front panel and pull out the air filters. ▶Page 26

### 2. Take off the titanium apatite deodorizing filters.

- Hold the recessed parts of the frame and unhook the 4 claws.
- Remove the filters from the tab.

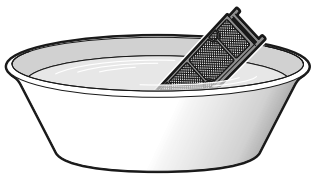



### 3. Clean or replace the titanium apatite deodorizing filters.

**[Cleaning]**

**3-1 Vacuum dust, and soak in lukewarm water or water for about 10 to 15 minutes if very dirty.**

- Do not remove the filter from the frame when washing with water.



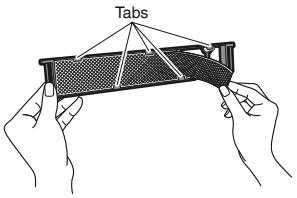
**3-2 After washing, shake off remaining water and let them dry in the shade.**

- Do not wring out the filter to remove water from it.

**[Replacement]**

**Remove the filter from the filter frame and prepare a new one.**

- Do not throw away the filter frame. Reuse the filter frame when replacing the titanium apatite deodorizing filter.




- Dispose of the old filter as non-flammable waste.

### 4. Set the titanium apatite deodorizing filters as they were.

- When attaching the filter, check that the filter is properly set in the tabs.
- The titanium apatite deodorizing filter can be attached in any orientation.

### 5. Reattach the filters. ▶Page 26

### 6. Close the front panel slowly.

▶Page 26

## NOTE

- Operation with dirty filters:
  – cannot deodorize the air,
  – cannot clean the air,
  – results in poor heating or cooling,
  – may cause odor.
- Dispose of old filters as non-flammable waste.
- To order a titanium apatite deodorizing filter, contact the dealer where you bought the air conditioner.

| Item | Titanium apatite deodorizing filter 1 set (2 pieces) |
|---|---|
| Part No. | KAF970A46 (without frame) |
| | KAF970A45 (with frame) |

## ■ Prior to a long period of non-use

### 1. Operate the FAN ONLY mode for several hours on a mild day to dry out the inside.

• Press FAN ONLY.

### 2. After operation stops, turn off the circuit breaker for the room air conditioner.

### 3. Clean the air filters and reattach them. ▶Page 26

### 4. To prevent battery leakage, take out the batteries from the remote controller.

• When starting to use the air conditioner again, make sure that the drain hose outlet is not blocked, then turn on the circuit breaker.
An operational check of each component will be carried out automatically. (Also, put the batteries into the remote controller.)

## ■ We recommend periodical maintenance

• In certain operating conditions, the inside of the air conditioner may get foul after several seasons of use, resulting in poor performance. It is recommended to have periodical maintenance by a qualified contractor in addition to regular cleaning by the user.
• For qualified contractor maintenance, please contact the dealer where you bought the air conditioner.

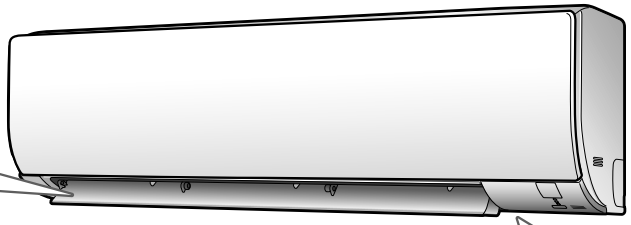


3P741457-2K

When the Need Arises

# FAQ

## Indoor unit



### The flaps do not start swinging immediately.

- The air conditioner is adjusting the position of the flaps. The flaps will start moving soon.

### The air conditioner stops generating airflow during HEAT operation.

- Once the set temperature is reached, the airflow rate is reduced and operation stopped in order to avoid generating a cool airflow. Operation will resume automatically when the indoor temperature falls.

### HEAT operation stops suddenly and a flowing sound is heard.

- The outdoor unit is defrosting. HEAT operation starts after the frost on the outdoor unit has been removed. This can take about 4 to 12 minutes.

### Operation does not start soon.

■ **When the unit is turned on again soon after being turned off.**

■ **When the mode was reselected.**

- This is to protect the air conditioner. You should wait for about 3 minutes.

### Different sounds are heard.

■ **A sound like flowing water**

- This sound is generated because the refrigerant in the air conditioner is flowing.
- This is a pumping sound of the water in the air conditioner and can be heard when the water is pumped out from the air conditioner during COOL or DRY operation.
- The refrigerant flows in the air conditioner even if the air conditioner is not working when the indoor units in other rooms are in operation.

■ **Blowing sound**

- This sound is generated when the flow of the refrigerant in the air conditioner is switched over.
- If the outdoor temperature is low, this sound is generated when the direction of the flow of the refrigerant in the piping changes at the start of defrost operation, after HEAT operation is stopped and the room temperature is stabilized.

■ **Ticking sound**

- This sound is generated when the cabinet and frame of the air conditioner slightly expand or shrink as a result of temperature changes.

■ **Whistling sound**

- This sound is generated when refrigerant flows during defrosting operation.

■ **Clicking sound during operation or idle time**

- This sound is generated when the refrigerant control valves or the electrical parts operate.

■ **Clopping sound**

- This sound is heard from the inside of the air conditioner when the exhaust fan is activated while the room doors are closed. Open the window or turn off the exhaust fan.

## Outdoor unit

### Operating sound is loud.

- When frost forms on the heat exchanger of the outdoor unit, the operating sound level increases slightly.

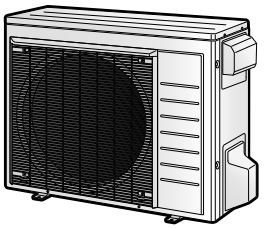
### The outdoor unit emits water or steam.

■ **In HEAT operation**

- The frost on the outdoor unit melts into water or steam when the air conditioner is in defrosting operation.

■ **In COOL or DRY operation**

- Moisture in the air condenses into water on the cool surface of the outdoor unit piping and drips.



### Blowing sound

- If the outdoor temperature is low, this sound is generated when the direction of the flow of the refrigerant in the piping changes at the start of defrost operation, after HEAT operation is stopped and the room temperature is stabilized.

# Troubleshooting

Before making an inquiry or a request for repair, please check the following.
If the problem persists, consult your dealer.

**Not a problem**
This case is not a problem.

**Check**
Please check again before requesting repairs.

## The air conditioner does not operate

| Case | Description / what to check |
|---|---|
| **OPERATION lamp is off.** | • Has the circuit breaker been tripped or the fuse blown?<br>• Is there a power failure?<br>• Are batteries set in the remote controller? |
| **OPERATION lamp is blinking.** | • Turn off the power with the circuit breaker and restart operation with the remote controller. If the OPERATION lamp is still blinking, check the error code and consult your dealer. ▶Page 33, 34 |

## The air conditioner suddenly stops operating

| Case | Description / what to check |
|---|---|
| **OPERATION lamp is on.** | • To protect the system, the air conditioner may stop operating after sudden large voltage fluctuations. It automatically resumes operation in about 3 minutes. |
| **OPERATION lamp is blinking.** | • Are the air filters dirty?<br>Clean the air filters.<br>• Is there anything blocking the air inlet or air outlet of the indoor unit or outdoor unit?<br>Stop operation and after turning off the circuit breaker, remove the obstruction. Then restart operation with the remote controller. If the OPERATION lamp is still blinking, check the error code and consult your dealer. ▶Page 33, 34<br>• Are operation modes all the same for indoor units connected to outdoor units in the multi system?<br>If not, set all indoor units to the same operation mode and confirm that the lamps. Moreover, when the operation mode is in AUTO, set all indoor unit operation modes to COOL or HEAT for a moment and check again that the lamps are normal. If the lamps stop blinking after the above steps, there is no malfunction. ▶Page 18, 19 |

## The air conditioner does not stop operating

| Case | Description / what to check |
|---|---|
| **The air conditioner continues operating even after operation is stopped.** | ■ **Immediately after the air conditioner is stopped**<br>• The outdoor unit fan continues rotating for about another 1 minute to protect the system.<br>■ **While the air conditioner is not in operation**<br>• When the outdoor temperature is high, the outdoor unit fan may start rotating to protect the system. |

## Wireless LAN connection

| When this happens | Explanation and where to check |
|---|---|
| **The device (air conditioner) cannot be found on the device list screen.** | • Carry out connection setting again while the lamp blinks quickly.<br>• Move the router (wireless LAN access point) close to the indoor unit. ▶Page 20-22<br>• There is a possibility that you are using an unsupported smart phone or router (wireless LAN access point). For details, refer to the web site. ▶Page 20-22 |
| **Even if the wireless LAN connection adapter lamp is lit, operation from outside the home is not possible.** | • Communication between the router and the internet connection may not be working. Please confirm. |

When the Need Arises

# Troubleshooting

## The room does not cool down / warm up

| Case | Description / what to check |
|---|---|
| **Air does not come out.** | ☑ ■ **In HEAT operation**<br>• The air conditioner is warming up. Wait for about 1 to 4 minutes.<br>• During defrosting operation, hot air does not flow out of the indoor unit.<br>■ **When the air conditioner operates immediately after the circuit breaker is turned on**<br>• The air conditioner is preparing to operate. Wait for about 3 to 10 minutes.<br>• When the outdoor temperature is below 40°F (5°C) and heating operation is started, the air conditioner is warming up. Wait for about 10 to 25 minutes. |
| **Air does not come out / Air comes out.** | ? ■ **Is the airflow rate setting appropriate?**<br>• Is the airflow rate setting low, such as “Indoor unit quiet” or “Airflow rate 1”? Increase the airflow rate setting.<br>■ **Is the set temperature appropriate?**<br>■ **Is the adjustment of the airflow direction appropriate?** |
| **Air comes out.** | ? • Is there any furniture directly under or beside the indoor unit?<br>• Is the air conditioner in ECONO operation? ▶Page 15<br>• Are the air filters dirty?<br>• Is there anything blocking the air inlet or air outlet of the indoor unit or outdoor unit?<br>• Is a window or door open?<br>• Is an exhaust fan turning?<br>• Depending on the room conditions, number of occupants, or outdoor temperature and humidity, the set temperature may not be reached.<br>A temperature regulation function which factors in living space conditions is available. For further details, please contact your dealer. |

## Water or mist comes out

| Case | Description / what to check |
|---|---|
| **Mist comes out of the indoor unit.** | ☑ • This happens when the air in the room is cooled into mist by the cold airflow during COOL or other operation. |
| **Water is leaking from the indoor unit.** | ? • If the drain hose is crushed or clogged, water from the indoor unit may be unable to drain and start leaking. Stop operation of the unit immediately and contact your dealer. |

## Remote controller

| Case | Description / what to check |
|---|---|
| **The unit does not receive signals from the remote controller or has a limited operating range.** | ☑ • The batteries may be exhausted.<br>Replace both batteries with new dry batteries AAA.LR03 (alkaline).<br>For details, refer to **“Preparation Before Operation”**. ▶Page 9<br>• Signal communication may be disabled if an electronic-starter-type fluorescent lamp (such as inverter-type lamps) is in the room. Consult your dealer if that is the case.<br>• The remote controller may not function correctly if the transmitter is exposed to direct sunlight.<br>• Is there a device in the room that redirects remote controller signals?<br>Some appliances such as TV speakers are equipped with these devices.<br>If there is such a device in the room, the signals it emits may interfere with signals from the remote controller, preventing reception.<br>• Infrared rays from smartphones and game consoles may interfere with signals from the remote controller, preventing reception. |
| **LCD is faint, is not working, or the display is erratic.** | ☑ • The batteries may be exhausted.<br>Replace both batteries with new dry batteries AAA.LR03 (alkaline).<br>For details, refer to **“Preparation Before Operation”**. ▶Page 9 |
| **The LCD is blinking and the remote controller cannot be operated.** | ☑ • Battery power has run out.<br>Replace both batteries at the same time with new size AAA.LR03 (alkaline) batteries.<br>Leaving exhausted batteries in the remote controller can result in injury due to battery leakage, rupturing or heating, or lead to equipment failure.<br>(Even when the LCD is blinking, the OFF button remains functional.) |
| **Other electric devices start operating.** | ☑ • If the remote controller activates other electric devices, move them away or consult your dealer. |



3P741457-2K

## Air has an odor

| Case | Description / what to check |
|---|---|
| **The air conditioner gives off an odor.** | ☑ • The room odor absorbed in the unit is discharged with the airflow. We recommend you to have the indoor unit cleaned. Please consult your dealer. |
| | ☑ • The indoor unit is blowing out room odor it has absorbed (the smell of walls or carpeting, furniture, clothes, and so on). If the air conditioner has been used for a long time, there is a chance that a dirty heat exchanger or fan are emitting an odor. We recommend you to have the indoor unit cleaned. Please consult your dealer. Do not spray the air conditioner unit with any deodorizers. |

## Display lamp

| Case | Description / what to check |
|---|---|
| **The unit operates even though the OPERATION lamp is off.** | ? • Is lamp brightness set to "oF"? ▶Page 23 |
| **The LED lamps on the unit are dim.** | ? • Is lamp brightness set to "L"? ▶Page 23 |

## Others

| Case | Description / what to check |
|---|---|
| **The air conditioner suddenly starts behaving strangely during operation.** | ? • The air conditioner may malfunction due to lightning or radio. If the air conditioner malfunctions, turn off the power with the circuit breaker and restart the operation with the remote controller. |
| **The ceiling and walls around the indoor unit are black and dirty.** | ☑ • Due to the circulation pattern of the air and static electricity, the air conditioner is causing airborne dirt and dust to stick to walls and other surfaces. Depending on the wallpaper type, dirt may adhere more easily. A thorough cleaning of the area around the air conditioner is recommended. |

**Notes on the operating conditions**

- If operation continues under any conditions other than those listed in the table,
  - – A safety device may activate to stop the operation.
  - – Dew may form on the indoor unit and drip from it when COOL or DRY operation is selected.

*1 Cutting the jumper on the outdoor unit PCB will extend the cooling operation range to 14°F (–10°C). Installing an air direction adjustment grille (sold separately) will further extend the operation range to –4°F (–20°C). Please consult your dealer.

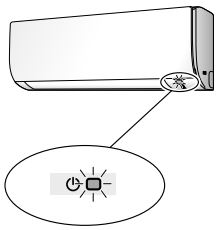
*2 Installing a drain pan heater (sold separately) will further extend the heating operation range to –13°F (–25°C). Please consult your dealer.

| Mode | Operating conditions |
|---|---|
| **COOL / DRY** | Outdoor temperature<br>[RXT models] : 50*1 - 115°F (10*1 - 46°C)<br>[MXM, MXT, MXTH models] : 14 - 115°F (–10 - 46°C)<br>*1 –4°F (–20°C) if an air direction adjustment grille (sold separately) is installed.<br>Indoor temperature : 64 - 90°F (18 - 32°C)<br>Indoor humidity : 80% max. |
| **HEAT** | Outdoor temperature<br>[MXM models] : 5 - 75°F (–15 - 24°C)<br>[RXT, MXT models] : 5*2 - 75°F (–15*2 - 24°C)<br>[MXTH models] : –13 - 75°F (–25 - 24°C)<br>*2 –13°F (–25°C) if a drain pan heater (sold separately) is installed.<br>Indoor temperature : 50 - 86°F (10 - 30°C) |

When the Need Arises

# Troubleshooting

## The OPERATION lamp blinks



### ■ Check the interval time between blinks of the OPERATION lamp.

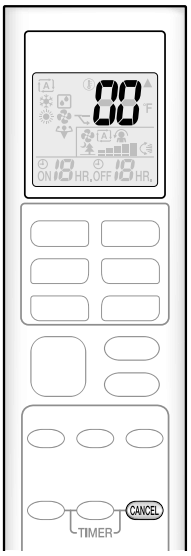
**If connecting to multiple indoor units**

**[Blink interval of about 2 to 3 seconds]**

Check the operation mode of any indoor units connected in other rooms.
Because this is a multi system air conditioner, it has one outdoor unit connected to multiple indoor units in different rooms.
If the operation mode is different from the operation mode of the indoor unit in another room, the OPERATION lamp may blink and operation may not be performed, or operation may stop while in progress.
COOL, DRY and HEAT operation may not be used at the same time.

**[Blink interval of about 0.5 seconds]**

This is a notification of an abnormality.
Check the error code following the procedure below, and respond according to the instructions in the table.




### ■ Fault diagnosis by remote controller

**1.** **When (CANCEL) is held down for about 5 seconds, "00" blinks in the temperature display section.**

**2.** **While pointing the remote controller at the indoor unit, press (CANCEL) repeatedly.**

A beep indicates a non-corresponding error code.
A long beep indicates a corresponding error code.

**3.** **When a long beep is produced, check the error code and respond according to the instructions in the table.**

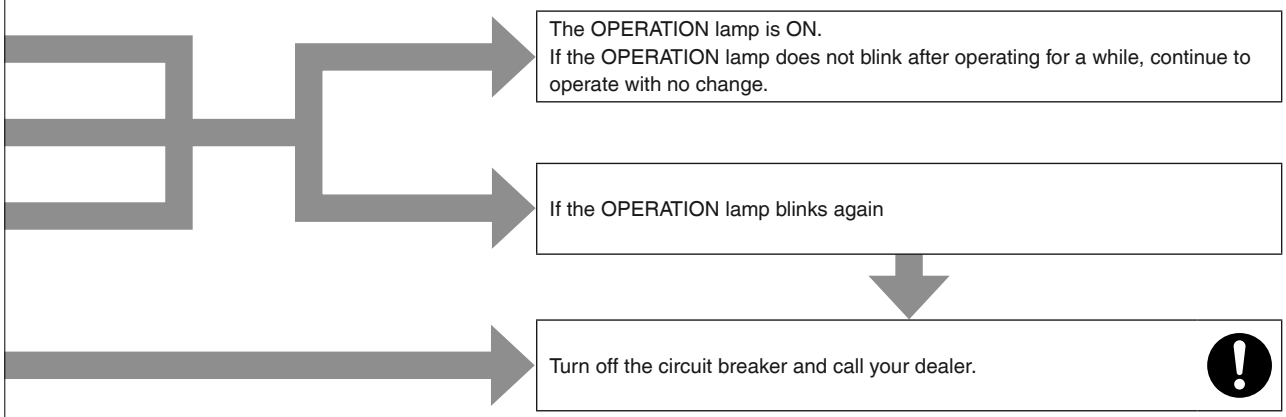
- To cancel the code display, hold down (CANCEL) for about 5 seconds (the code display also clears if no button is pressed for a while).

| CODE | Cause | Description / what to check |
|---|---|---|
| **E7** | The fan of the outdoor unit is stopped.<br>• Is there any foreign matter inside the outdoor unit? | After turning off the circuit breaker, remove the foreign matter, then turn the power on again and operate. |
| **L3, L4, L5** | The temperature inside the outdoor unit has become too high, so operation has stopped.<br>• Is there anything blocking the air outlet of the outdoor unit? | After turning off the circuit breaker, remove the obstruction, then turn the power on again and operate. |
| Other error codes, or if the error code cannot be checked | | An abnormality has occurred. |

In the case of error code **U0** or **F3**

| | CODE | MEANING |
|---|---|---|
| SYSTEM | 00 | NORMAL |
| | UA | INDOOR-OUTDOOR UNIT COMBINATION FAULT |
| | U0 | REFRIGERANT SHORTAGE |
| | U2 | DROP VOLTAGE OR MAIN CIRCUIT OVERVOLTAGE |
| | U4 | FAILURE OF TRANSMISSION (BETWEEN INDOOR UNIT AND OUTDOOR UNIT) |
| INDOOR UNIT | A1 | INDOOR PCB DEFECTIVENESS |
| | A5 | HIGH PRESSURE CONTROL OR FREEZE-UP PROTECTOR |
| | A6 | FAN MOTOR FAULT |
| | C4 | FAULTY HEAT EXCHANGER TEMPERATURE SENSOR |
| | C9 | FAULTY SUCTION AIR TEMPERATURE SENSOR |
| | CC | FAULTY HUMIDITY SENSOR |
| OUTDOOR UNIT | EA | COOLING-HEATING SWITCHING ERROR |
| | E1 | CIRCUIT BOARD FAULT, ELECTRONIC EXPANSION VALVE COIL DRIVER FAULT |
| | E3* | HIGH PRESSURE SWITCH (HPS) ACTIVATED |
| | E5 | OL (COMPRESSOR OVERLOAD) STARTED, HIGH PRESSURE SWITCH (HPS) ACTIVATED* |
| | E6 | FAULTY COMPRESSOR START UP |
| | E7 | DC FAN MOTOR FAULT |
| | E8 | OVERCURRENT INPUT |
| | E9 | ELECTRONIC EXPANSION VALVE COIL FAULT |
| | F3 | HIGH TEMPERATURE DISCHARGE PIPE CONTROL |
| | F6 | HIGH PRESSURE CONTROL (IN COOLING) |
| | F8 | OPERATION HALT DUE TO COMPRESSOR INTERNAL TEMPERATURE ABNORMALITY |
| | H0 | SENSOR FAULT |
| | H3 | HIGH PRESSURE SENSOR ABNORMALITY |
| | H6 | OPERATION HALT DUE TO FAULTY POSITION DETECTION SENSOR |
| | H7 | FAN IPM TEMPERATURE ERROR |
| | H8 | DC CURRENT SENSOR FAULT |
| | H9 | FAULTY SUCTION AIR TEMPERATURE SENSOR |
| | J3 | FAULTY DISCHARGE PIPE TEMPERATURE SENSOR |
| | J6 | FAULTY HEAT EXCHANGER TEMPERATURE SENSOR |
| | J8* | FAULTY LIQUID PIPE TEMPERATURE SENSOR |
| | J9* | FAULTY GAS PIPE TEMPERATURE SENSOR |
| | L3 | ELECTRICAL PARTS HEAT FAULT |
| | L4 | HIGH TEMPERATURE AT INVERTER CIRCUIT HEATSINK |
| | L5 | OUTPUT OVERCURRENT |
| | P4 | FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR |

*The contents of the error differ depending on the connected outdoor unit.



When the Need Arises

# Troubleshooting

## ■ Call your dealer immediately

### ⚠ WARNING

**When an abnormality (such as a burning smell) occurs, stop operation and turn off the circuit breaker.**
- Continued operation in an abnormal condition may result in problems, electric shock or fire.
- Consult the dealer where you bought the air conditioner.

**Do not attempt to repair or modify the air conditioner by yourself.**
- Incorrect work may result in electric shock or fire.
- Consult the dealer where you bought the air conditioner.

### If one of the following symptoms takes place, call your dealer immediately.

- **The power cord is abnormally hot or damaged.**
- **An abnormal sound is heard during operation.**
- **The circuit breaker cuts off the operation frequently.**
- **A switch or a button often fails to work properly.**
- **There is a burning smell.**
- **Water leaks from the indoor unit.**

Turn off the circuit breaker and call your dealer.

**■ After a power failure**
- The air conditioner automatically resumes operation in about 3 minutes. Please wait for a while.

**■ Lightning**
- If there is a risk lightning could strike in the neighborhood, stop operation and turn off the circuit breaker to protect the system.

## ■ Disposal requirements

- Dismantling of the unit, handling of the refrigerant, oil and other parts, should be done in accordance with the relevant local and national regulations.

## 2.3 CDMA07, FDMA09/12/15/18/24

**Read Before Operation**

# Contents


### ■ Read Before Operation

Safety Considerations ..... 1
Names of Parts ..... 4

### ■ Multi Connection

Note for Multi System ..... 5

### ■ Care

Care and Cleaning ..... 7

### ■ When the Need Arises

Troubleshooting ..... 9


The pictures in this document are for illustrative purposes only.

# Safety Considerations

**Refer also to the General Safety Considerations in the separate booklet.**

| | |
|---|---|
|  | **Read the precautions in this manual carefully before operating the unit.** |
|   | **This appliance is filled with R32.** |

Read these **Safety Considerations for Operations** carefully before operating an air conditioner or heat pump.
Make sure that the unit operates properly during the startup operation. Instruct the user on how to operate and maintain the unit.
Inform users that they should store this operation manual with the installation manual for future reference.
Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

⚠ **DANGER** ····· Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING** ····· Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** ····· Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ **NOTE** ····· Indicates situations that may result in equipment or property-damage accidents only.

**⚠ DANGER**

- Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.
- Any abnormalities in the operation of the air conditioner or heat pump, such as smoke or fire, could result in severe injury or death. Turn off the power and contact your dealer immediately.
- Refrigerant gas may produce toxic gas if it comes into contact with fire, such as from a fan heater, stove, or cooking device. Exposure to this gas could cause severe injury or death.
- For refrigerant leakage, consult your dealer.
  Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- If equipment utilizing a burner is used in the same room as the air conditioner or heat pump, there is the danger of oxygen deficiency which could lead to an asphyxiation hazard resulting in serious injury or death. Be sure to ventilate the room sufficiently to avoid this hazard.



3P805333-1

- Safely dispose of the packing materials. Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
- Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death by suffocation.

### ⚠ WARNING

- Contact your dealer for repair and maintenance. Improper repair and maintenance may result in water leakage, electric shock, and fire. Only use accessories made by Daikin that are specifically designed for use with the equipment and have them installed by a professional.
- Contact your dealer to move and reinstall the air conditioner or heat pump. Incomplete installation may result in water leakage, electric shock, and fire.
- Never let the indoor unit or the remote controller get wet. Water can cause an electric shock or a fire.
- Never use flammable spray such as hair spray, lacquer, or paint near the unit. Flammable spray may cause a fire.
- When a fuse blows out, never replace it with one of incorrect ampere ratings or different wires. Always replace any blown fuse with a fuse of the same specification.
- Never inspect or service the unit by yourself. Contact a qualified service person to perform this work.
- Turn off all electrical power before doing any maintenance to avoid the risk of serious electric shock; never sprinkle or spill water or liquids on the unit.
- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not put a finger or other objects into the air inlet or air outlet. The fan is rotating at high speed and will cause injury.
- Check the unit foundation for damage on a continuous basis, especially if it has been in use for a long time. If left in a damaged condition the unit may fall and cause injury.
- Never touch the internal parts of the controller. To check and adjust internal parts, contact your dealer.
- Be sure to establish a ground. Do not ground the unit to a utility pipe, arrester, or telephone ground. Incomplete grounding may cause electrical shock, or fire. A high surge current from lightning or other sources may cause damage to the air conditioner.
- Be sure to install a ground fault circuit interrupter. Failure to install a ground fault circuit interrupter may result in electric shock or fire.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.
- Do not turn off the power to air conditioners or connected devices (detectors and alarms, mechanical ventilators, safety shut-off valves, etc.) except when replacing parts or conducting inspections.
  Failure to detect a refrigerant leakage may result in a fire.
- Consult your dealer when making changes to the room layout or partitions.
  It will be necessary to re-examine safety measures required in managing refrigerant leakages.
  Failure to implement the necessary safety measures may lead to flammable concentrations.

### ⚠ CAUTION

- Do not use the air conditioner or heat pump for any other purposes other than comfort cooling or heating.
  Do not use the unit for cooling precision instruments, food, plants, animals or works of art.
- Do not place items under the indoor unit as they may be damaged by condensates that may form if the humidity is above 80% or if the drain outlet gets blocked.
- For care and cleaning, call service person.
- Before cleaning, stop the operation of the unit by turning the power off or by pulling the supply cord out from its receptacle. Otherwise, an electric shock and injury may result.
- Do not wash the air conditioner or heat pump with excessive water. An electric shock or fire may result.
- Avoid placing the controller in a spot which may be splashed with water. Water entering the controller may cause an electric shock or damage the internal electronic parts.
- Do not operate the air conditioner or heat pump when using a room-fumigation type of insecticide.
  Failure to observe this could cause the chemicals to be deposited in the unit and can endanger the health of those who are hypersensitive to chemicals.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- The appliance is not intended for use by young children or infirm persons without supervision.
- The remote controller should be kept away from children so they cannot play with it.
- Consult with the installation contractor for cleaning.
- Incorrect cleaning of the inside of the air conditioner or heat pump could make the plastics parts break and cause water leakage or electric shock.

Read Before Operation

# Safety Considerations

- Do not touch the air inlet or aluminum fin of the air conditioner or heat pump as they can cut and cause injury.
- Do not place objects in direct proximity of the outdoor unit. Do not let leaves and other debris accumulate around the unit. Leaves are a hotbed for small animals which can enter the unit. Once inside the unit, animals can cause the unit to malfunction, and cause smoke or fire when they make contact with electrical parts.

**⚠ NOTE**

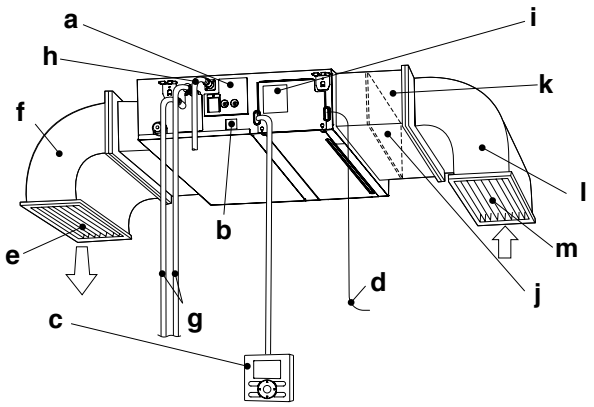
- Never press the button of the remote controller with a hard, pointed object. The remote controller may be damaged.
- Never pull or twist the electric wire of the remote controller. It may cause the unit to malfunction.
- Do not place appliances that produce open flames in places that are exposed to the airflow of the unit or under the indoor unit. It may cause incomplete combustion or deformation of the unit due to the heat.
- Do not expose the controller to direct sunlight. The LCD display can become discolored and may fail to display the data.
- Do not wipe the controller operation panel with benzine, thinner, chemical dust cloth, etc. The panel may get discolored or the coating can peel off. If it is heavily dirty, soak a cloth in a water-diluted neutral detergent, squeeze it well and wipe the panel clean. Then wipe it with another dry cloth.
- Dismantling of the unit, disposal of the refrigerant, oil, and additional parts, should be done in accordance with the relevant local, state, and national regulations.
- Operate the air conditioner or heat pump in a sufficiently ventilated area and not surrounded by obstacles. Do not use the air conditioner or heat pump in the following places.
  a. Places with a mist of mineral oil, such as cutting oil.
  b. Locations such as coastal areas where there is a lot of salt in the air.
  c. Locations such as hot springs where there is a lot of sulfur in the air.
  d. Locations such as factories where the power voltage varies a lot.
  e. In cars, boats, and other vehicles.
  f. Locations such as kitchens where oil may splatter or where there is steam in the air.
  g. Locations where equipment produces electromagnetic waves.
  h. Places with an acid or alkaline mist.
  i. Places where fallen leaves can accumulate or where weeds can grow.
- Take snow protection measures. Contact your dealer for the details of snow protection measures, such as the use of a snow protection hood.
- Do not attempt to do electrical work or grounding work unless you are licensed to do so. Consult with your dealer for electrical work and grounding work.
- Pay attention to operating sound. Be sure to use the following places:
  a. Places that can sufficiently withstand the weight of the air conditioner or heat pump yet can suppress the operating sound and vibration.
  b. Places where warm air from the air outlet of the outdoor unit or the operating sound of the outdoor unit does not annoy neighbors.
- Make sure that there are no obstacles close to the outdoor unit. Obstacles close to the outdoor unit may drop the performance of the outdoor unit or increase the operating sound of the outdoor unit.
- Consult your dealer if the air conditioner or heat pump in operation generates unusual noise.
- Make sure that the drainpipe is installed properly to drain water. If no water is discharged from the drainpipe while the air conditioner or heat pump is in the cooling mode, the drainpipe may be clogged with dust or dirt and water leakage from the indoor unit may occur. Stop operating the air conditioner or heat pump and contact your dealer.
- Do not spray the air conditioner unit with any deodorizers, etc. It may cause the unit to malfunction.
- A refrigerant sensor is mounted in the indoor units. Do not use gas appliances using flammable gas (propane, butane, methane, etc.), sprays using flammable gas (LPG, etc.) such as insecticide or hair spray, smoke, medical agent and paint in the vicinity.
- Once the refrigerant sensor reacts, it needs to be replaced with a new one.

FFP003M(R32)-U

This is an appliance that is not accessible to the general public.

# Names of Parts

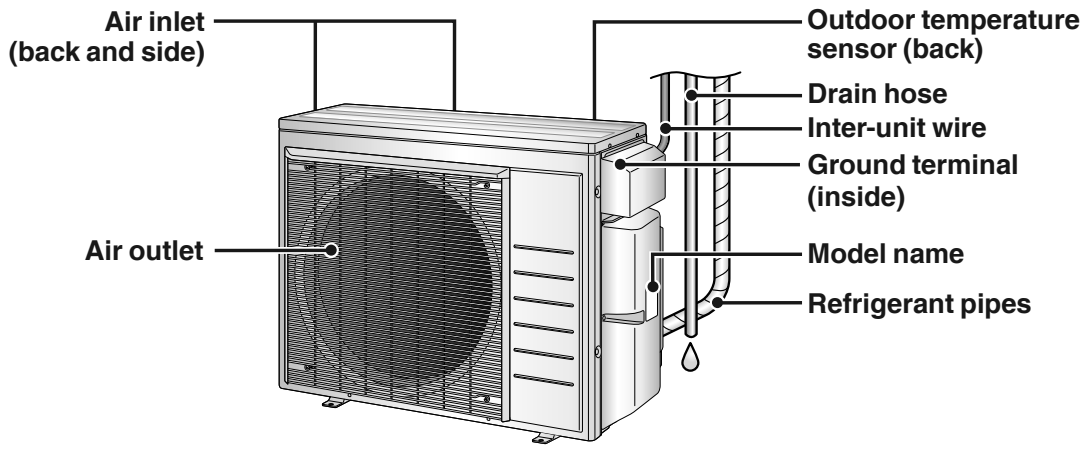
## Indoor Unit




| | | | |
|---|---|---|---|
| **a** | Drain discharge device (built-in) | **g** | Refrigerant piping |
| **b** | Drain pan inspection window | **h** | Drain piping |
| **c** | Remote controller<br>• The appearance of the remote controller may differ between different models.<br>• For details on remote controller operation, refer to the operation manual included with the remote controller. | **i** | Model name (Model name plate) |
| | | **j** | Air filter (Sold separately) |
| | | **k** | Suction filter chamber (Sold separately) |
| **d** | Wiring between the indoor and outdoor units | **l** | Suction duct (Field supply) |
| **e** | Air outlet grille (Field supply) | **m** | Suction grille (Field supply) |
| **f** | Exhaust duct (Field supply) | | |

## Outdoor Unit

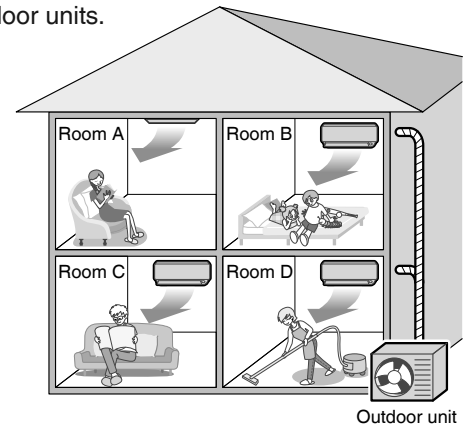
• The appearance of the outdoor unit may differ between different models.



Multi Connection

# Note for Multi System

A multi system has one outdoor unit connected to multiple indoor units.




## Selecting the operation mode

### When the priority room setting is active but the set unit is not operating or when the priority room setting is inactive

When more than one indoor unit is operating, priority is given to the first unit that was turned on.
In this case, set the units that are turned on later to the same operation mode as the first unit.
Otherwise, they will enter the standby state, and when using the wired remote controller the centralized control icon “CENTRAL CONTROL” will light up; this does not indicate malfunction.

## NOTE

**Notes on operation mode for a multi system**

- COOL, DRY and FAN operation may be used at the same time.
- AUTO operation automatically selects COOL operation or HEAT operation based on the indoor temperature. Therefore, AUTO operation is available when selecting the same operation mode as that of the first unit to be turned on.

## ⚠ CAUTION

- Normally, the operation mode of the first unit that was turned on is given priority, but the following situations are exceptions to this rule. If the operation mode of the first room is FAN operation, using HEAT operation in any room after this will give priority to HEAT operation. In this situation, the indoor unit operating in FAN mode will switch to standby, and when using the wired remote controller the centralized control icon “CENTRAL CONTROL” will light up.

### When the priority room setting is active

Refer to “**Priority room setting**” on the next page.

## COOL/HEAT mode lock

The COOL/HEAT mode lock requires initial programing during installation. Please consult your authorized dealer for assistance. The COOL/HEAT mode lock sets the unit forcibly to either COOL or HEAT operation. This function is convenient when you wish to set all indoor units connected to the multi system to the same operation mode.

### NOTE

- The COOL/HEAT mode lock cannot be activated together with the priority room setting.

## Priority room setting

The priority room setting requires initial programing during installation. Please consult your authorized dealer for assistance. The room designated as the priority room takes priority in the following situations.

### Operation mode priority

- As the operation mode of the priority room takes precedence, you can select a different operation mode from other rooms.

**[Example]**

- Room A is the priority room in this example.
  When COOL operation is selected in room A while operating the following modes in room B, C and D:

| Operation mode in room B, C and D | Status of room B, C and D when the unit in room A is in COOL operation |
|---|---|
| COOL or DRY or FAN | The current operation mode is maintained. |
| HEAT | The unit enters the standby mode. Operation resumes when the room A unit stops operating. |
| AUTO | If the unit is set to COOL operation, it continues. If the unit is set to HEAT operation, it enters the standby mode. Operation resumes when the room A unit stops operating. |

Care

# Care and Cleaning

## ⚠ WARNING

- **Only a qualified service person is allowed to perform maintenance.**
- **Before cleaning, be sure to stop unit operation and turn off the circuit breaker.**
  Otherwise, an electric shock and injury may result.
  If the refrigerant sensor detects a refrigerant leakage, the fan may suddenly start rotating even though operation is stopped.
- **Contact a qualified person regarding the attachment of accessories and be sure to use only accessories specified by the manufacturer.**
  If an accessory is attached incorrectly, water leakage, an electric shock, or fire may result.

## ⚠ CAUTION

- **When cleaning, use a sturdy and stable stand and watch your step.**
- **Do not touch the aluminium fins of the indoor unit. If you touch those parts, this may cause an injury.**

## ■ How to clean the air filter

When the remote controller indicates “Time to clean filter”, clean the air filter.
- It indicates after running for a certain time.

### Notes on cleaning

**For cleaning, do not use any of the following:**
- Water hotter than 104°F (40°C)
- Volatile liquid such as benzine, gasoline and thinner
- Polishing compounds or liquid insecticide
- Rough materials such as a scrubbing brush
- Sprays such as deodorizers



- You may change the time of indication “Time to clean filter”.
  **If the indoor unit is used in a space where the air is too contaminated, ask your local dealer for solution.**

| Contamination | Time until indication is displayed |
|---|---|
| Normal | 2500 hours (equivalent to one year) |
| More contaminated | 1250 hours (equivalent to a half year) |

- If it becomes difficult to remove contamination from the air filter, replace the air filter.
  (Air filter for replacement is a separately sold accessory.)
- Do not remove the air filter except when cleaning. Unnecessary handling may damage the filter.
  (This product is not provided with an air filter as a standard accessory.)
- Do not attach objects other than the genuine air filter (e.g., kitchen paper) to the air inlet.
  Otherwise, the performance of the air conditioner will be degraded, and icing or water leakage may result.
- This product is a ceiling mounted duct type air conditioner.
  **Installing under roof**
  If the air filter (sold separately) is used, request a special contractor for the cleaning of the air filter.
  **Not installing under roof**
  Always use the long-life filter chamber (sold separately). Be sure to request your dealer for the installation of the long-life chamber. For the methods of mounting, dismounting, and cleaning the air filter, refer to the manual provided with the air filter.
- **Be sure to use the separately sold filter chamber.**
  Request your dealer for the installation of the filter chamber.
- Be sure to clean the air filter at the beginning of the cooling or heating season.
  (A decrease in the airflow volume of the air conditioner will result and the performance of the air conditioner will be degraded if the air filter is clogged with dust or dirt.)

Increase the frequency of cleaning if the unit is installed in a room where the air is extremely contaminated.

**After completing cleaning and installing an air filter, turn off the indication of “Time to clean filter” on the remote controller.**
- For details, refer to the operation manual attached to the remote controller.
- The indication can be turned off while the unit is either operating or stopped.

## ■ How to clean air outlet, outside panels and remote controller

### 1. Clean with soft cloth.

### 2. When it is difficult to remove stains, use water or neutral detergent.

**NOTE**

- **Do not wash the suction grille with water of 122°F (50°C) or higher. It may cause discoloration and deformation.**
- **When drying the suction grille, do not heat it with fire. It may cause burning.**
- **Do not use substances such as gasoline, benzine, thinner, polishing powder and liquid insecticide sold in the market. It may cause discoloration and deformation.**

## ■ Prior to a long period of non-use

### 1. Operate the FAN mode for several hours on a fine day to dry out the inside.

1) Press the “MODE” selector button and select “FAN” operation.
   - When a multi outdoor unit is connected, make sure the HEAT operation is not being used in other rooms before you use the FAN operation. ▶Page 5

2) Press the “ON/OFF” button and start operation.

### 2. Clean the air filters and reattach them. ▶Page 7

## ■ We recommend periodical maintenance

- In certain operating conditions, the inside of the air conditioner may get foul after several seasons of use, resulting in poor performance. It is recommended to have periodical maintenance by a specialist.
- For specialist maintenance, please contact the dealer where you bought the air conditioner.
- The maintenance cost must be borne by the user.

When the Need Arises

# Troubleshooting

Before making an inquiry or a request for repair, please check the following. If the problem persists, consult your dealer.

**Not a problem**
This case is not a problem.

**Check**
Please check again before requesting repairs.

| Case | Description / what to check |
|---|---|
| **Operation does not start soon.**<br>• When ON/OFF button was pressed soon after operation was stopped.<br>• When the mode was reselected. | ☑ • This is to protect the air conditioner. You should wait for about 3 minutes. |
| **Air does not come out.** | ☑ ■ **In HEAT operation**<br>• The air conditioner is warming up. Wait for about 1 to 4 minutes.<br>• During defrosting operation, hot air does not flow out of the indoor unit.<br>■ **When the air conditioner operates immediately after the circuit breaker is turned on**<br>• The air conditioner is preparing to operate. Wait for about 3 to 20 minutes. |
| **The HEAT operation stops suddenly and a flowing sound is heard.** | ☑ • The system is taking away the frost on the outdoor unit. You should wait for about 4 to 12 minutes. |
| **The outdoor unit emits water or steam.** | ☑ ■ In HEAT mode<br>• The frost on the outdoor unit melts into water or steam when the air conditioner is in defrost operation.<br>■ In COOL or DRY mode<br>• Moisture in the air condenses into water on the cool surface of outdoor unit piping and drips. |
| **Mist comes out of the indoor unit.** | ☑ • This happens when the air in the room is cooled into mist by the cold airflow during cooling operation. |
| **The indoor unit gives out odor.** | ☑ • This happens when smells of the room, furniture, or cigarettes are absorbed into the unit and discharged with the airflow. (If this happens, we recommend you to have the indoor unit washed by a technician. Consult your dealer where you bought the air conditioner.) |
| **Air is emitted from the air outlet grille even when the air conditioner is not in operation.** | ☑ ■ This occurs when the refrigerant sensor has been triggered causing the fan in the indoor unit to rotate. The sensor is in the process of detecting a refrigerant leakage. If it is determined that there is no refrigerant leakage, the fan of the indoor unit will automatically stop after a few minutes. If air continues to flow out from the air outlet grille for more than 10 minutes, there may be a refrigerant leakage. Please consult your dealer. In addition to refrigerant, the refrigerant sensor may also be triggered by hairspray, insecticide, etc., resulting in a false positive. |
| **The outdoor fan rotates while the air conditioner is not in operation.** | ☑ ■ After operation is stopped:<br>• The outdoor fan continues rotating for another 1 minute for system protection.<br>■ While the air conditioner is not in operation:<br>• When the outdoor temperature is very high, the outdoor fan starts rotating for system protection. |
| **The operation stopped suddenly. (OPERATION lamp* is on.)** | ☑ • For system protection, the air conditioner may stop operating on a sudden large voltage fluctuation. It automatically resumes operation in about 3 minutes.<br>• Are operation modes all the same for indoor units connected to outdoor units in the **multi system?** If not, set all indoor units to the same operation mode. |
| **The air conditioner does not operate. (OPERATION lamp* is off.)** | ? • Hasn't the circuit breaker turned OFF or a fuse blown?<br>• Isn't it a power failure?<br>• Is the timer setting correct? |
| **Cooling (Heating) effect is poor.** | ? • Are the air filters clean?<br>• Is there anything blocking the air inlet or the outlet of the indoor and the outdoor units?<br>• Is the temperature setting appropriate?<br>• Are the windows and doors closed?<br>• Are the airflow rate set appropriately? |
| **Operation stops suddenly. (OPERATION lamp* is blinking.)** | ? • Are the air filters clean?<br>• Is there anything blocking the air inlet or the outlet of the indoor and the outdoor units? Clean the air filters or take all obstacles away and turn the circuit breaker OFF. Then turn it ON again and try operating the air conditioner with the remote controller. If the lamp still blinks, call your dealer where you bought the air conditioner. |

* The OPERATION lamp is on the receiver of the separately sold wired remote controller.

| Case | Description / what to check |
|---|---|
| **An abnormal functioning happens during operation.** | • The air conditioner may malfunction with lightning or radio waves. Turn the breaker OFF, turn it ON again and try operating the air conditioner with the remote controller. |

**Notes on the operating conditions**

- If operation continues under any conditions other than those listed in the table,
  - A safety device may activate to stop the operation. (With a multi connection in COOL operation, the safety device may work to stop the operation of the outdoor unit only.)
  - Dew may form on the indoor unit and drip from it when COOL or DRY operation is selected.

*1 Cutting the jumper on the outdoor unit PCB will extend the cooling operation range to 14°F (–10.0°C). Installing an air direction adjustment grille (sold separately) will further extend the operation range to –4°F (–20.0°C). Please consult your dealer.

*2 Installing a drain pan heater (sold separately) will further extend the heating operation range to –13°F (–25.0°C). Please consult your dealer.

| Mode | Operating conditions |
|---|---|
| **COOL / DRY** | Outdoor temperature<br>[RXP models] : 50*1 - 115°F (10*1 - 46°C)<br>[MXM, MXT, MXTH models] : 14 - 115°F (–10 - 46°C)<br>*1 –4°F (–20°C) if an air direction adjustment grille (sold separately) is installed.<br>Indoor temperature : 63 - 90°F (17 - 32°C)<br>Indoor humidity : 80% max. |
| **HEAT** | Outdoor temperature<br>[MXM models] : 5 - 75°F (–15 - 24°C)<br>[RXP, MXT models] : 5*2 - 75°F (–15*2 - 24°C)<br>[MXTH models] : –13 - 75°F (–25 - 24°C)<br>*2 –13°F (–25°C) if a drain pan heater (sold separately) is installed.<br>Indoor temperature : 50 - 88°F (10 - 31°C) |

## ■ Call your dealer immediately

### ⚠ WARNING

**When an abnormality (such as a burning smell) occurs, stop operation and turn off the circuit breaker.**

- Continued operation in an abnormal condition may result in problems, electric shock or fire.
- Consult the dealer where you bought the air conditioner.

**Do not attempt to repair or modify the air conditioner by yourself.**

- Incorrect work may result in electric shock or fire.
- Consult the dealer where you bought the air conditioner.

### If one of the following symptoms takes place, call your dealer immediately.

- **The power cord is abnormally hot or damaged.**
- **An abnormal sound is heard during operation.**
- **The circuit breaker cuts off the operation frequently.**
- **A switch or a button often fails to work properly.**
- **There is a burning smell.**
- **Water leaks from the indoor unit.**

Turn off the circuit breaker and call your dealer.

**■ After a power failure**

- The air conditioner automatically resumes operation in about 3 minutes. You should just wait for a while.

**■ Lightning**

- If there is a risk lightning could strike in the neighborhood, stop operation and turn off the circuit breaker to protect the system.

## ■ Disposal requirements

- Dismantling of the unit, handling of the refrigerant, oil and other parts, should be done in accordance with the relevant local and national regulations.

# 2.4 General Safety Considerations

## For ducted systems
## Ducted types

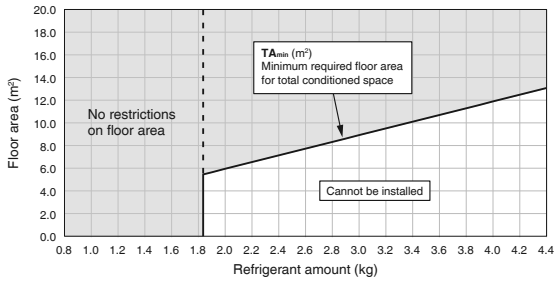
**Minimum required floor area for total conditioned space ($TA_{min}$)**
**The minimum required floor area of the air duct system varies depending on refrigerant amount. For details on determining refrigerant amount (m), refer to page 6.**

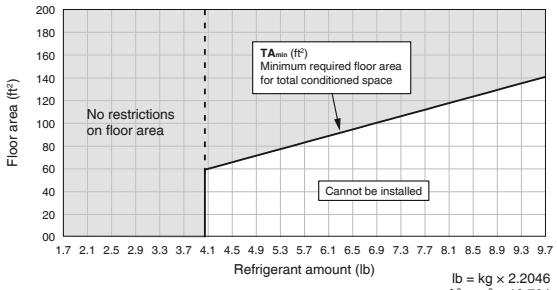
| m Refrigerant amount (kg) | Minimum required floor area for total conditioned space $TA_{min}$ ($m^2$) |
|---|---|
| < 1.84 | No restriction |
| 1.9 | 5.6 |
| 2.0 | 5.9 |
| 2.1 | 6.2 |
| 2.2 | 6.5 |
| 2.3 | 6.8 |
| 2.4 | 7.1 |
| 2.5 | 7.4 |
| 2.6 | 7.7 |
| 2.7 | 8.0 |
| 2.8 | 8.3 |
| 2.9 | 8.6 |
| 3.0 | 8.9 |
| 3.1 | 9.2 |
| 3.2 | 9.5 |
| 3.3 | 9.8 |
| 3.4 | 10.1 |
| 3.5 | 10.4 |
| 3.6 | 10.7 |
| 3.7 | 11.0 |
| 3.8 | 11.3 |
| 3.9 | 11.6 |
| 4.0 | 11.9 |
| 4.1 | 12.2 |
| 4.2 | 12.5 |
| 4.3 | 12.8 |
| 4.4 | 13.1 |

$m^2$

| m Refrigerant amount (lb) | Minimum required floor area for total conditioned space $TA_{min}$ ($ft^2$) |
|---|---|
| < 4.05 | No restriction |
| 4.2 | 61 |
| 4.4 | 64 |
| 4.6 | 67 |
| 4.9 | 70 |
| 5.1 | 74 |
| 5.3 | 77 |
| 5.5 | 80 |
| 5.7 | 83 |
| 6.0 | 86 |
| 6.2 | 90 |
| 6.4 | 93 |
| 6.6 | 96 |
| 6.8 | 99 |
| 7.1 | 102 |
| 7.3 | 106 |
| 7.5 | 109 |
| 7.7 | 112 |
| 7.9 | 115 |
| 8.2 | 118 |
| 8.4 | 122 |
| 8.6 | 125 |
| 8.8 | 128 |
| 9.0 | 131 |
| 9.3 | 134 |
| 9.5 | 138 |
| 9.7 | 141 |

$ft^2$




lb = kg × 2.2046
$ft^2 = m^2 \times 10.764$

# 1. General Safety Considerations

## 1-1 About the documentation

- The original documentation is written in English. All other languages are translations.
- The precautions described in this document cover very important topics, follow them carefully.
- The installation of the system, and all activities described in the installation manual and in the installer reference guide MUST be performed by an authorized installer.

### 1-1-1 Meaning of warnings and symbols

**DANGER**
Indicates a situation that results in death or serious injury.

**DANGER: RISK OF ELECTROCUTION**
Indicates a situation that could result in electrocution.

**DANGER: RISK OF BURNING**
Indicates a situation that could result in burning because of extreme hot or cold temperatures.

**DANGER: RISK OF EXPLOSION**
Indicates a situation that could result in explosion.

**WARNING**
Indicates a situation that could result in death or serious injury.

**WARNING: FLAMMABLE MATERIAL**

**CAUTION**
Indicates a situation that could result in minor or moderate injury.

**NOTICE**
Indicates a situation that could result in equipment or property damage.

**INFORMATION**
Indicates useful tips or additional information.

Symbols used on the unit:

| Symbol | Explanation |
|---|---|
|  | Before installation, read the installation and operation manual, and the wiring instruction sheet. |
|  | Before performing maintenance and service tasks, read the service manual. |
|  | For more information, see the installer and user reference guide. |
|  | The unit contains rotating parts. Be careful when servicing or inspecting the unit. |

Symbols used in the documentation:

| Symbol | Explanation |
|---|---|
|  | Indicates a figure title or a reference to it.<br>**Example:** "1–3 Figure title" means "Figure 3 in chapter 1". |
|  | Indicates a table title or a reference to it.<br>**Example:** "  1–3 Table title" means "Table 3 in chapter 1". |

## 1-2 For the user

**WARNING**
If you are NOT sure how to operate the unit, contact your installer.

**WARNING**
This appliance is not intended for use by persons, including children, with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

Cleaning and user maintenance must not be carried out by children without supervision.

**WARNING**
To prevent electrical shocks or fire:
- Do NOT rinse the unit.
- Do NOT operate the unit with wet hands.
- Do NOT place any objects containing water on the unit.

**CAUTION**
- Do NOT place any objects or equipment on top of the unit.
- Do NOT sit, climb or stand on the unit.

## 1-3 For the installer

### 1-3-1 General

If you are NOT sure how to install or operate the unit, contact your dealer.

The manual contains specific information about the required qualification of the working personnel for maintenance, service and repair operations.

Every working procedure that affects safety should only be carried out by competent persons.

Examples for such working procedures are:
- Breaking into the refrigerating circuit
- Opening of sealed components
- Opening of ventilated enclosures

**DANGER: RISK OF BURNING**
- Do NOT touch the refrigerant piping, water piping or internal parts during and immediately after operation. It could be too hot or too cold. Give it time to return to normal temperature. If you must touch it, wear protective gloves.
- Do NOT touch any accidental leaking refrigerant.

**WARNING**
Improper installation or attachment of equipment or accessories could result in electrical shock, short-circuit, leaks, fire or other damage to the equipment. Only use accessories, optional equipment and spare parts made or approved by Daikin.

**WARNING**
Make sure installation, testing and applied materials comply with applicable legislation (on top of the instructions described in the Daikin documentation).

**CAUTION**
Wear adequate personal protective equipment (protective gloves, safety glasses,…) when installing, maintaining or servicing the system.

**WARNING**
Tear apart and throw away plastic packaging bags so that nobody, especially children, can play with them. Possible risk: suffocation.

**WARNING**
Provide adequate measures to prevent that the unit can be used as a shelter by small animals. Small animals that make contact with electrical parts can cause malfunctions, smoke or fire.

**CAUTION**
Do NOT touch the air inlet or aluminum fins of the unit.

**CAUTION**
- Do NOT place any objects or equipment on top of the unit.
- Do NOT sit, climb or stand on the unit.

**NOTICE**
Works executed on the outdoor unit are best done under dry weather conditions to avoid water ingress.

In accordance with the applicable legislation, it might be necessary to provide a logbook with the product containing at least: information on maintenance, repair work, results of tests, stand-by periods,…

Also, at least, following information MUST be provided at an accessible place at the product:

- Instructions for shutting down the system in case of an emergency
- Name and address of fire department, police and hospital
- Name, address and day and night telephone numbers for obtaining service
- UL60335-2-40 provides the necessary guidance for this logbook.

That after completion of field piping for split systems, the field pipework should be pressure tested with an inert gas and then vacuum tested prior to refrigerant charging, according to the following requirements:

- The minimum test pressure for the low side of the system should be the low side maximum allowable pressure and the minimum test pressure for the high side of the system should be the high side maximum allowable pressure, unless the high side of the system cannot be isolated from the low side of the system, in which case the entire system should be pressure tested to the low side maximum allowable pressure.
- The test pressure after removal of the pressure source should be maintained for at least 1 hour with no decrease of pressure indicated by the test gauge, with test gauge resolution not exceeding 5% of the test pressure.
- During the evacuation test, after achieving a vacuum level equal to or less than the vacuum level specified in the manual, the refrigeration system should be isolated from the vacuum pump and the pressure should not rise above 1500 microns within 10 minutes. The vacuum pressure level is specified in the manual, and should be less than 500 microns, or the value required for compliance with national and local codes and standards, which may vary between residential, commercial, and industrial buildings.

### 1-3-2 Installation site

- Provide sufficient space around the unit for servicing and air circulation as outlined in the unit installation manual.
- Make sure the installation site can withstand the weight and vibrations of the unit.
- Make sure the area is well-ventilated. Do NOT block any ventilation openings.
- Make sure the unit is level.

Do NOT install the unit in the following places:

- Potentially explosive atmospheres.
- Places where there is machinery that emits electromagnetic waves. Electromagnetic waves may disturb the control system, and cause malfunction of the equipment.
- Places where there is a risk of fire due to the leakage of flammable gases (example: thinner or gasoline), carbon fiber, or ignitable dust.
- Places where corrosive gas (example: sulfurous acid gas) is produced. Corrosion of copper pipes or soldered parts may cause the refrigerant to leak.

**Instructions for equipment using R32 refrigerant**

**WARNING: FLAMMABLE MATERIAL**
The refrigerant inside this unit is mildly flammable.

**WARNING**
- Do NOT pierce or burn.
- Do NOT use means to accelerate the defrosting process or to clean the equipment, other than those recommended by the manufacturer.
- Be aware that R32 refrigerant does NOT contain an odor.

**WARNING**
The appliance should be stored so as to prevent mechanical damage and in a well-ventilated room without continuously operating ignition sources (example: open flames, an operating gas appliance or an operating electric heater), and the room size should be as specified.
(Refer to **"Minimum required floor area ($A_{min}$)"** (Ductless systems) on page 1 and **"Minimum required floor area for total conditioned space ($TA_{min}$)"** (Ducted systems) on page 2.)

**WARNING**
Ventilated area

Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation should continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

**WARNING**
Make sure installation, servicing, maintenance and repair comply with instructions from Daikin and with applicable legislation (for example national gas regulations) and are executed only by authorized persons.

**WARNING**
If one or more rooms are connected to the unit using a duct system, make sure:
- There are no operating ignition sources (example: open flames, an operating gas appliance or an operating electric heater) if the floor area is less than $TA_{min}$ ($m^2$, $ft^2$) defined in the table.
(Refer to **"Minimum required floor area for total conditioned space ($TA_{min}$)"** (Ducted systems) on page 2.)
- No auxiliary devices, which may be potential ignition sources, are installed in the duct work (example: hot surfaces with a temperature exceeding 158°F and electric switching devices).
- Only auxiliary devices approved by the manufacturer are used in the duct work.
- An air inlet or outlet is connected directly with a room by ducting. Do NOT use spaces such as a false ceiling as a duct for the air inlet or outlet.

**CAUTION**
Do NOT use potential sources of ignition in searching for or detection of refrigerant leaks.

**NOTICE**
- Do NOT re-use joints which have been used already.
- Joints made during installation between parts of the refrigerant system should be accessible for maintenance purposes.

**NOTICE**
- Precautions should be taken to avoid excessive vibration or pulsation of refrigeration piping.
- Protection devices, piping and fittings should be protected as much as possible against adverse environmental effects.
- Provisions should be made for expansion and contraction of long sections of piping.
- Piping in refrigerating systems should be designed and installed so that the likelihood of hydraulic shock damaging the system is minimized.
- The indoor equipment and pipes should be securely mounted and guarded so that accidental rupture of equipment or pipes cannot occur from events such as moving furniture or reconstruction activities.

**Installation space requirements**

**WARNING**

If appliances contain R32 refrigerant, the floor area of the room in which the appliances are installed, operated and stored MUST be larger than the minimum floor area defined in the table. (Refer to **"Minimum required floor area ($A_{min}$)"** (Ductless systems) on page 1 and **"Minimum required floor area for total conditioned space ($TA_{min}$)"** (Ductless systems) on page 2.) This applies to:

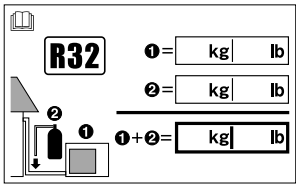
- Indoor units
- Outdoor units installed or stored indoors (e.g. yard, garage, machinery room)
- Pipework in unventilated spaces

**NOTICE**

- Pipework should be protected from physical damage.
- Installation of pipework should be kept to a minimum.

**To determine the minimum floor area**

1. Determine the total refrigerant charge in the system.
   **m** (Refrigerant amount)
   = ❶ factory refrigerant charge
   + ❷ additional refrigerant amount charged




2. Use the table and graph on pages 1 and 2 to determine the minimum required floor area.
   **m:** Refrigerant amount
   **$A_{min}$:** Minimum required floor area (Ductless systems)
   **$TA_{min}$:** Minimum required floor area for total conditioned space (Ducted systems)
   **h:** Indoor unit installation height

**1-3-3 Refrigerant**

If applicable, see the installation manual or installer reference guide of your application for more information.

**NOTICE**

Make sure refrigerant piping installation complies with applicable legislation. UL60335-2-40 is the applicable standard.

**NOTICE**

Make sure the field piping and connections are NOT subjected to stress.

**WARNING**

During tests, NEVER pressurize the product with a pressure higher than the maximum allowable pressure (as indicated on the nameplate of the unit).

**WARNING**

Take sufficient precautions in case of refrigerant leakage. If refrigerant gas leaks, ventilate the area immediately.

Possible risks:

- Excessive refrigerant concentrations in a closed room can lead to oxygen deficiency.
- In case of R410A or R32 refrigerant: Toxic gas might be produced if refrigerant gas comes into contact with fire.
- In case of $CO_2$ refrigerant: Refrigerant gas is toxic in high concentrations.

**DANGER: RISK OF EXPLOSION**

**Pump down – Refrigerant leakage.** If you want to pump down the system, and there is a leak in the refrigerant circuit:

- Do NOT use the unit's automatic pump down function, with which you can collect all refrigerant from the system into the outdoor unit. **Possible consequence:** Self-combustion and explosion of the compressor because of air going into the operating compressor.
- Use a separate recovery system so that the unit's compressor does NOT have to operate.

**WARNING**

ALWAYS recover the refrigerant. Do NOT release them directly into the environment. Use a vacuum pump to evacuate the installation.

Ensure that the outlet for the vacuum pump is not close to any potential ignition sources and that ventilation is available.

**WARNING: RISK OF FIRE.**

- Flammable refrigerant used. To be repaired only by trained service personnel. Do NOT puncture refrigerant tubing.
- Dispose of properly in accordance with federal or local regulations. Flammable refrigerant used.
- Flammable refrigerant used. Consult repair manual/ owner's guide before attempting to service this product. All safety precautions must be followed.
- Risk of fire due to flammable refrigerant used. Follow handling instructions carefully in compliance with national regulations.

**NOTICE**

- After all the piping has been connected, make sure there are no gas leaks. Use nitrogen to perform gas leak detection.
- Under no circumstances should potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) should not be used.
- If a leak is suspected, all naked flames should be removed/extinguished.
- The field-made refrigerant joints indoors should be tightness tested according to the following requirements: The test method should have a sensitivity of 5 grams per year of refrigerant or better under a pressure of at least 0.25 times the maximum allowable pressure. No leak should be detected.

**NOTICE**

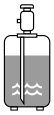
- To avoid compressor breakdown, do NOT charge more than the specified amount of refrigerant.
- Extreme care should be taken not to overfill the REFRIGERATING SYSTEM.
- Prior to recharging the system, it should be pressure-tested with the appropriate purging gas.
- The system should be leak-tested on completion of charging but prior to commissioning.
- A follow-up leak test should be carried out prior to leaving the site.
- When the refrigerant system is to be opened, refrigerant MUST be treated according to the applicable legislation.

**WARNING**

Make sure there is no oxygen in the system. Refrigerant may only be charged after performing a leak test and vacuum drying.

**Possible consequence:** Self-combustion and explosion of the compressor because of oxygen going into the operating compressor.

- In case recharge is required, see the nameplate of the unit. It states the type of refrigerant and necessary amount.
- The unit is factory charged with refrigerant, but depending on pipe sizes and pipe lengths some systems require additional charging of refrigerant.
- Only use tools exclusively for the refrigerant type used in the system. This to ensure pressure resistance and prevent foreign materials from entering into the system.
  Ensure that contamination of different refrigerants does not occur when using charging equipment.
  Hoses or lines shall be as short as possible to minimize the amount of refrigerant contained in them.
- Charge the liquid refrigerant as follows:

| If | Then |
|---|---|
| A siphon tube is present<br>(i.e., the cylinder is marked with “Liquid filling siphon attached”) | Charge with the cylinder upright.<br>  |
| A siphon tube is NOT present | Charge with the cylinder upside down.<br>  |

- Open refrigerant cylinders slowly.
- Charge the refrigerant in liquid form. Adding it in gas form may prevent normal operation.

**CAUTION**

When the refrigerant charging procedure is done or when pausing, close the valve of the refrigerant tank immediately. If the valve is NOT closed immediately, remaining pressure might charge additional refrigerant.
**Possible consequence:** Incorrect refrigerant amount.

### 1-3-4 Electrical

**DANGER: RISK OF ELECTROCUTION**

- Turn OFF all power supplies before removing the switch box cover, connecting electrical wiring, or touching electrical parts.
- Disconnect the power supply for more than 1 minute, and measure the voltage at the terminals of main circuit capacitors or electrical components before servicing. The voltage MUST be less than 50V DC before you can touch electrical components. For the location of the terminals, see the wiring diagram.
- Do NOT touch electrical components with wet hands.
- Do NOT leave the unit unattended when the service cover is removed.

**WARNING**

If NOT factory installed, a main switch or other means for disconnection, having a contact separation in all poles providing full disconnection under overvoltage category III conditions, MUST be installed in the fixed wiring.

**WARNING**

- ONLY use copper wires.
- Make sure the field wiring complies with the applicable legislation.
- All field wiring MUST be performed in accordance with the wiring diagram supplied with the product.
- NEVER squeeze bundled cables and make sure they do NOT come in contact with the piping and sharp edges. Make sure no external pressure is applied to the terminal connections.
- Make sure to check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check take into account the effects of aging or continual vibration from sources such as compressors or fans.
- Make sure to install ground wiring. Do NOT ground the unit to a utility pipe, surge absorber, or telephone ground. Incomplete grounding may cause electrical shock.
- Ensure that the REFRIGERATING SYSTEM is grounded prior to charging the system with refrigerant.
- Make sure to use a dedicated power circuit. NEVER use a power supply shared by another appliance.
- Make sure to install the required fuses or circuit breakers.
- Make sure to install a ground leakage protector where required by local codes. Failure to do so may cause electrical shock or fire.
- When installing the ground leakage protector, make sure it is compatible with the inverter (resistant to high frequency electric noise) to avoid unnecessary opening of the ground leakage protector.

**CAUTION**

- When connecting the power supply: connect the ground cable first, before making the current-carrying connections.
- When disconnecting the power supply: disconnect the current-carrying cables first, before separating the ground connection.
- The length of the conductors between the power supply stress relief and the terminal block itself must be such that, in case the power supply is pulled loose from the stress relief, the current-carrying wires become taut before the ground wire becomes taut.

**NOTICE**

Precautions when laying power wiring:



- Do NOT connect wiring of different thicknesses to the power terminal block (slack in the power wiring may cause abnormal heat).
- When connecting wiring which is the same thickness, do as shown in the figure above.
- For wiring, use the designated power wire and connect firmly, then secure to prevent outside pressure being exerted on the terminal board.
- Use an appropriate screwdriver for tightening the terminal screws. A screwdriver with a small head will damage the screw heads and make proper tightening impossible.
- Over-tightening the terminal screws may break them.
- This appliance incorporates an earth connection for functional purposes only.

Install power cables at least 3.3ft (1m) away from televisions or radios to prevent interference. Depending on the radio waves, a distance of 3.3ft (1m) may not be sufficient.

**WARNING**

- After finishing the electrical work, confirm that each electrical component and terminal inside the electrical components box is connected securely.
- Make sure all covers are closed before starting up the unit.

### 1-3-5 Disposal

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerant is removed safely.

- When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed.
- Ensure that the correct number of cylinders for holding the total system charge is available.
- Ensure that all cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i. e. special cylinders for the recovery of refrigerant).
- Cylinders should be complete with pressure-relief valve and associated shut-off valves in good working order.
- Empty recovery cylinders should be evacuated and, if possible, cooled before recovery occurs.
- The recovery equipment should be in good working order with a set of instructions concerning the equipment that is at hand and should be suitable for the recovery of all appropriate refrigerants including, when applicable, FLAMMABLE REFRIGERANT.
- In addition, a set of calibrated weighing scales should be available and in good working order.
- Hoses should be complete with leak-free disconnect couplings and in good condition.
- Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release.
- Consult the manufacturer if in doubt.
- The recovered refrigerant should be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant waste transfer note should be arranged.
- Do not mix refrigerants in recovery units and especially not in cylinders.
- If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. The compressor body shall not be heated by an open flame or other ignition sources to accelerate this process. When oil is drained from a system, it shall be carried out safely.
- The evacuation process should be carried out prior to returning the compressor to the suppliers.
- Only electric heating of the compressor body should be employed to accelerate this process.
- When oil is drained from a system, oil drainage should be carried out safely.

## 1-4 Glossary

**Your dealer**
Sales distributor for the product.

**Authorized installer**
Technically skilled person who is qualified to install the product.

**User**
Person who is owner of the product and/or operates the product.

**Applicable legislation**
All international, national and local directives, laws, regulations and/or codes that are relevant and applicable for a certain product or domain.

**Service company**
Qualified company which can perform or coordinate the required service on the product.

**Installation manual**
Instruction manual specified for a certain product or application, explaining how to install, configure and maintain it.

**Operation manual**
Instruction manual specified for a certain product or application, explaining how to operate it.

**Maintenance instructions**
Instruction manual specified for a certain product or application, which explains (if relevant) how to install, configure, operate and/or maintain the product or application.

**Accessories**
Labels, manuals, information sheets and pieces of equipment that are delivered with the product and that need to be installed according to the instructions in the accompanying documentation.

**Equipment sold separately**
Equipment made or approved by Daikin that can be combined with the product according to the instructions in the accompanying documentation.

**Field supply**
Equipment NOT made by Daikin that can be combined with the product according to the instructions in the accompanying documentation.

## 2.5 FVXV09/12/15/18

**Read Before Operation**

# Safety Considerations

**Refer also to the General Safety Considerations in the separate booklet.**

| | |
|---|---|
|  | **Read the precautions in this manual carefully before operating the unit.** |
|   | **This appliance is filled with R32.** |

Read these **Safety Considerations for Operations** carefully before operating an air conditioner or heat pump.
Make sure that the unit operates properly during the startup operation.
Instruct the user on how to operate and maintain the unit.
Inform users that they should store this operation manual with the installation manual for future reference.
Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

⚠ **DANGER** ····· Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING** ····· Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** ····· Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ **NOTE** ····· Indicates situations that may result in equipment or property damage accidents only.

### ⚠ DANGER

- Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.
- Any abnormalities in the operation of the air conditioner or heat pump, such as smoke or fire, could result in severe injury or death. Turn off the power and contact your dealer immediately.
- Refrigerant gas may produce toxic gas if it comes into contact with fire, such as from a fan heater, stove, or cooking device. Exposure to this gas could cause severe injury or death.
- For refrigerant leakage, consult your dealer.
  Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- If equipment utilizing a burner is used in the same room as the air conditioner or heat pump, there is the danger of oxygen deficiency which could lead to an asphyxiation hazard resulting in serious injury or death. Be sure to ventilate the room sufficiently to avoid this hazard.
- Safely dispose of the packing materials. Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
- Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death by suffocation.

### ⚠ WARNING

- Contact your dealer for repair and maintenance.
  Improper repair and maintenance may result in water leakage, electric shock, and fire. Only use accessories made by Daikin that are specifically designed for use with the equipment and have them installed by a professional.
- Contact your dealer to move and reinstall the air conditioner or heat pump. Incomplete installation may result in water leakage, electric shock, and fire.
- Never let the indoor unit or the remote controller get wet. Water can cause an electric shock or a fire.
- Never use flammable spray such as hair spray, lacquer, or paint near the unit. Flammable spray may cause a fire.
- When a fuse blows out, never replace it with one of incorrect ampere ratings or different wires. Always replace any blown fuse with a fuse of the same specification.
- Never remove the fan guard of the unit. A fan rotating at high speed without the fan guard is very dangerous.
- Never inspect or service the unit by yourself. Contact a qualified service person to perform this work.
- Turn off all electrical power before doing any maintenance to avoid the risk of serious electric shock; never sprinkle or spill water or liquids on the unit.
- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not put a finger or other objects into the air inlet or air outlet. The fan is rotating at high speed and will cause injury.
- Check the unit foundation for damage on a continuous basis, especially if it has been in use for a long time. If left in a damaged condition the unit may fall and cause injury.
- Placing a flower vase or other containers with water or other liquids on the unit could cause a shock or fire if a spill occurs.
- Do not touch the air outlet or horizontal blades while the swing flap is in operation because fingers could get caught and injured.
- Never touch the internal parts of the controller. Do not remove the front panel because some parts inside are dangerous to touch. To check and adjust internal parts, contact your dealer.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.
- Do not turn off the power to air conditioners or connected devices (detectors and alarms, mechanical ventilators, safety shut-off valves, etc.) except when replacing parts or conducting inspections.
  Failure to detect a refrigerant leakage may result in a fire.
- Consult your dealer when making changes to the room layout or partitions.
  It will be necessary to re-examine safety measures required in managing refrigerant leakages.
  Failure to implement the necessary safety measures may lead to flammable concentrations.

## ⚠ CAUTION

- Do not use the air conditioner or heat pump for any other purposes other than comfort cooling or heating.
  Do not use the unit for cooling precision instruments, food, plants, animals or works of art.
- Do not place items under the indoor unit as they may be damaged by condensates that may form if the humidity is above 80% or if the drain outlet gets blocked.
- Before cleaning, stop the operation of the unit by turning the power off or by pulling the supply cord out from its receptacle. Otherwise, an electric shock and injury may result.
- After cleaning, be sure to turn on the circuit breaker so that the refrigerant sensor can start operating.
- Do not wash the air conditioner or heat pump with excessive water. An electric shock or fire may result.
- Avoid placing the controller in a spot which may be splashed with water. Water entering the controller may cause an electric shock or damage the internal electronic parts.
- Do not operate the air conditioner or heat pump when using a room-fumigation type of insecticide.
  Failure to observe this could cause the chemicals to be deposited in the unit and can endanger the health of those who are hypersensitive to chemicals.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- The appliance is not intended for use by young children or infirm persons without supervision.
- The remote controller should be kept away from children so they cannot play with it.
- Consult with the installation contractor for cleaning.
- Incorrect cleaning of the inside of the air conditioner or heat pump could make the plastics parts break and cause water leakage or electric shock.
- Do not touch the air inlet or aluminum fin of the air conditioner or heat pump as they can cut and cause injury.
- Do not place objects in direct proximity of the outdoor unit. Do not let leaves and other debris accumulate around the unit. Leaves are a hotbed for small animals which can enter the unit. Once inside the unit, animals can cause the unit to malfunction, and cause smoke or fire when they make contact with electrical parts.

## ⚠ NOTE

- Never press the button of the remote controller with a hard, pointed object. The remote controller may be damaged.
- Never pull or twist the electric wire of the remote controller. It may cause the unit to malfunction.
- Do not place appliances that produce open flames in places that are exposed to the airflow of the unit or under the indoor unit. It may cause incomplete combustion or deformation of the unit due to the heat.
- Do not expose the controller to direct sunlight. The LCD display can become discolored and may fail to display the data.
- Do not wipe the controller operation panel with benzine, thinner, chemical dust cloth, etc. The panel may get discolored or the coating can peel off. If it is heavily dirty, soak a cloth in a water-diluted neutral detergent, squeeze it well and wipe the panel clean. Then wipe it with another dry cloth.
- Dismantling of the unit, disposal of the refrigerant, oil, and additional parts, should be done in accordance with the relevant local, state, and national regulations.
- Operate the air conditioner or heat pump in a sufficiently ventilated area and not surrounded by obstacles. Do not use the air conditioner or heat pump in the following places.
  a. Places with a mist of mineral oil, such as cutting oil.
  b. Locations such as coastal areas where there is a lot of salt in the air.
  c. Locations such as hot springs where there is a lot of sulfur in the air.
  d. Locations such as factories where the power voltage varies a lot.
  e. In cars, boats, and other vehicles.
  f. Locations such as kitchens where oil may splatter or where there is steam in the air.
  g. Locations where equipment produces electromagnetic waves.
  h. Places with an acid or alkaline mist.
  i. Places where fallen leaves can accumulate or where weeds can grow.
- Take snow protection measures. Contact your dealer for the details of snow protection measures, such as the use of a snow protection hood.
- Do not attempt to do electrical work or grounding work unless you are licensed to do so. Consult with your dealer for electrical work and grounding work.
- Pay attention to operating sound. Be sure to use the following places:
  a. Places that can sufficiently withstand the weight of the air conditioner or heat pump yet can suppress the operating sound and vibration.
  b. Places where warm air from the air outlet of the outdoor unit or the operating sound of the outdoor unit does not annoy neighbors.
- Make sure that there are no obstacles close to the outdoor unit. Obstacles close to the outdoor unit may drop the performance of the outdoor unit or increase the operating sound of the outdoor unit.
- Consult your dealer if the air conditioner or heat pump in operation generates unusual noise.
- Make sure that the drainpipe is installed properly to drain water. If no water is discharged from the drainpipe while the air conditioner or heat pump is in the cooling mode, the drainpipe may be clogged with dust or dirt and water leakage from the indoor unit may occur. Stop operating the air conditioner or heat pump and contact your dealer.
- Do not spray the air conditioner unit with any deodorizers, etc. It may cause the unit to malfunction.
- A refrigerant sensor is mounted in the indoor units. Do not use gas appliances using flammable gas (propane, butane, methane, etc.), sprays using flammable gas (LPG, etc.) such as insecticide or hair spray, smoke, medical agent and paint in the vicinity.
- Once the refrigerant sensor reacts, it needs to be replaced with a new one.

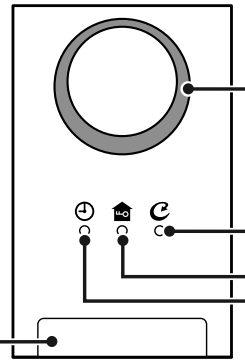
FVP003(R32)-U

Read Before Operation

# Names of Parts

## Indoor Unit

### Display



**Signal receiver**
- It receives signals from the remote controller.
- When the unit receives a signal, you will hear a beep sound.

| Case | Sound type |
|---|---|
| Operation start | beep-beep |
| Setting change | beep |
| Operation stop | long beep |

**Operation lamp (Multi-color)**
- The lamp color changes according to the operation. See **"List of lamps"**.

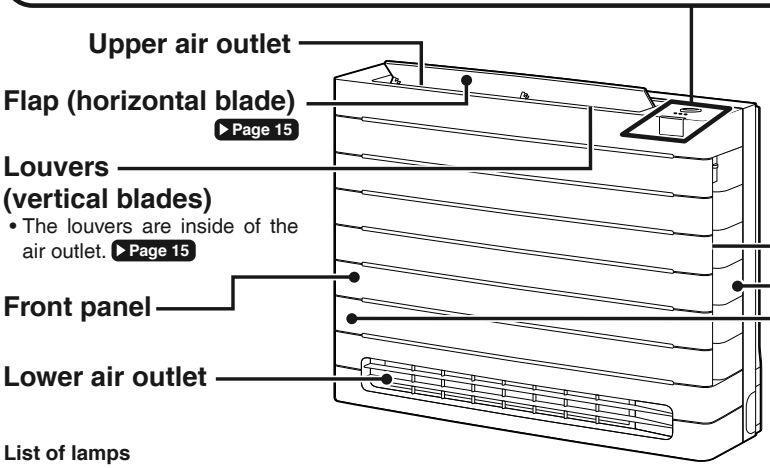
**CLEAN lamp (Green)** Page 17, 18

**HOME LEAVE lamp (Green)** Page 19

**TIMER lamp (Orange)** Page 24-26, 29, 31

**Attention**

If you find that the lamps of the indoor unit are too bright, adjust lamp brightness to personal preference, or turn them OFF. Page 38



**Upper air outlet**

**Flap (horizontal blade)** Page 15

**Louvers (vertical blades)**
- The louvers are inside of the air outlet. Page 15

**Front panel**

**Lower air outlet**

**Air inlet (left / right)**

**Room temperature sensor and Room humidity sensor (inside)**

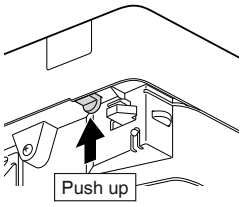
Left side of the unit
- Senses air temperature around the unit.

Right side of the unit
- Senses air temperature and humidity around the unit.

**List of lamps**
- Lamp color varies by operation.

| Lamp | Color | State | Description |
|---|---|---|---|
| Operation lamp | Red/Blue | Lights up | AUTO operation Page 13 |
| | Green | Lights up | DRY operation Page 13 |
| | Blue | Lights up | COOL operation Page 13 |
| | Red | Lights up | HEAT operation Page 13 |
| | White | Lights up | FAN operation Page 13 |
| | Depends on operation mode | Blinks | Check the error code. |
| | Red | Blinks | Operation is stopped but the wireless LAN connecting adapter is enabled. Page 36 |
| | Blue | Blinks | Operation is stopped but the wireless LAN connecting adapter is connected. Page 36 |
| TIMER lamp | Orange | Lights up | TIMER is set. Page 24-26, 29, 31 |
| CLEAN lamp | Green | Lights up | CLEAN operation Page 17, 18 |
| HOME LEAVE lamp | Green | Lights up | HOME LEAVE operation Page 19, 20 |

## ■ Open the front panel

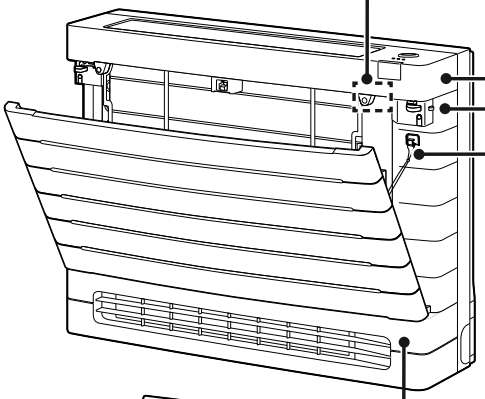



**Indoor unit ON/OFF switch (inside)**

- Press this switch once to start operation.
  Press once again to stop it.
- For the operation mode setting, refer to the following table.

| Mode | Temperature setting | Airflow rate |
|---|---|---|
| AUTO | 77 °F (25.0 °C) | AUTO |

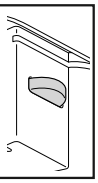
- This switch can be used when the remote controller is missing or out of batteries.



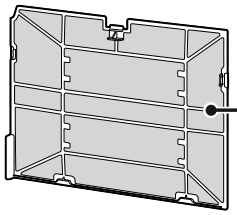
**Wireless LAN connecting adapter (inside)** ▶ Page 35-37

**Protrusions (left / right)**

- Push in the protrusions to open the front panel.

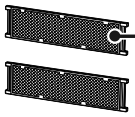


Careful when opening front panel - string is attached.



**Refrigerant sensor (inside)**
Detects refrigerant leakages.
Located inside.

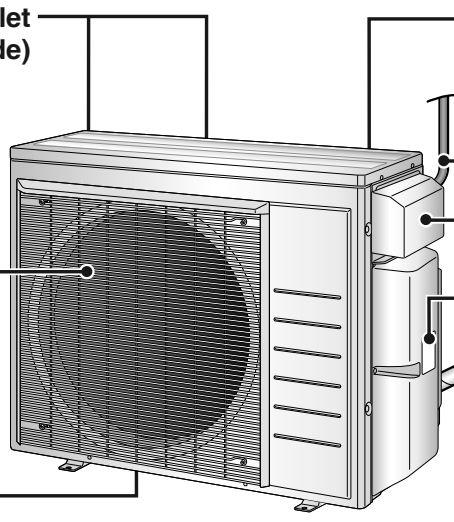
**Air filter**



**Titanium apatite deodorizing filter**

## Outdoor Unit

- The appearance of the outdoor unit may differ between different models.



**Air inlet (back and side)**

**Outdoor temperature sensor (back)**

**Drain hose**

**Inter-unit wire**

**Ground terminal (inside)**

**Air outlet**

**Model name**

**Refrigerant pipes**

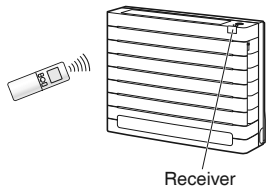
**Drain outlet (base)**

Read Before Operation

# Names of Parts

## Remote Controller

### Signal transmitter




- To use the remote controller, aim the transmitter at the indoor unit. If there is anything blocking the signals between the unit and the remote controller, such as a curtain, the unit may not operate.
- The maximum transmission distance is about 23 ft (7 m).

### POWERFUL button / HEAT PLUS button / Wireless LAN button

**POWERFUL button**

- POWERFUL operation. ▶ Page 21

**HEAT PLUS button**

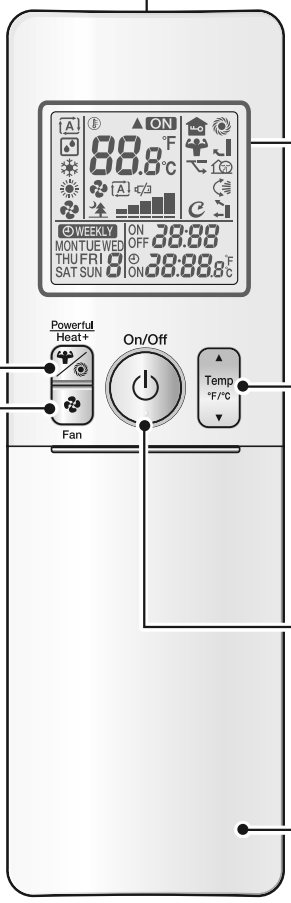
- HEAT PLUS operation. ▶ Page 21, 22

**Wireless LAN button (push 5 seconds)**

- Wireless LAN connection. ▶ Page 36, 37

### FAN setting button

- Selects the airflow rate setting. ▶ Page 14




### Display (LCD)

- Displays the current settings. (In this illustration, each section is shown with all its displays on for the purpose of explanation.)

### TEMPERATURE adjustment button

- Changes the temperature setting. ▶ Page 13

### ON/OFF button

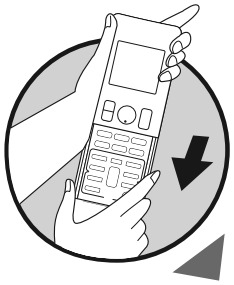
- Press this button once to start operation. Press once again to stop it. ▶ Page 13

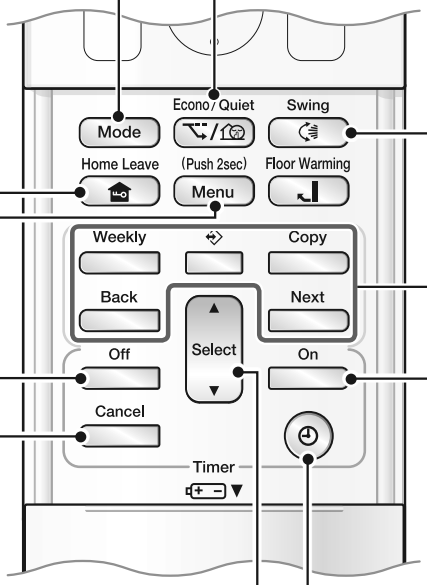
### Front cover

- Open the front cover. ▶ Page 8

| Model name | ARC466A89 |
|---|---|

## ■ Open the front cover






**MODE selector button**
- Selects the operation mode. (AUTO/DRY/COOL/HEAT/FAN) ▶ Page 13

**ECONO / QUIET button**
- ECONO / QUIET OUTDOOR UNIT operation. ▶ Page 23

**HOME LEAVE button**
- HOME LEAVE operation. ▶ Page 19

**SWING button**
- Adjusts the airflow direction. ▶ Page 15

**MENU button (push 2 seconds)**
- Adjusting the brightness of indoor unit LED lamps. ▶ Page 38
- Setting airflow when indoor unit reaches setpoint. ▶ Page 39
- Setting the air outlet. ▶ Page 12
- CLEAN operation. ▶ Page 17, 18

Weekly : **WEEKLY button**

: **PROGRAM button**

Copy : **COPY button**

Back : **BACK button**

Next : **NEXT button**
- WEEKLY TIMER operation. ▶ Page 27

**OFF TIMER button (NIGHT SET mode)** ▶ Page 25

**ON TIMER button** ▶ Page 24

**CLOCK button** ▶ Page 11

**TIMER CANCEL button**
- Cancels the timer setting. ▶ Page 24, 25
- Cannot be used for the WEEKLY TIMER operation.

**SELECT button**
- Changes the clock, ON/OFF TIMER and WEEKLY TIMER settings.

Read Before Operation

# Names of Parts

## Wireless LAN connection adapter

The Wireless LAN connection adapter function requires the Daikin One Home for connecting to the air conditioner and controlling it via your smartphone or tablet over your network.

**Attention**

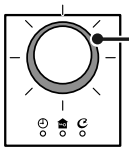
- **Wireless LAN sends and receives data using radio waves so there is a risk of transmitted data being subject to eavesdropping and illegal access. When using wireless LAN, manage the SSID/KEY of the wireless LAN connection adapter, the SSID/KEY of the wireless router, and the app login information so that they will not be known to others, and ensure that you have an adequate understanding of the risks involved. In the case that the product is accessed and operated illegally, turn off the wireless LAN connection adapter function.** ▶Page 37
- **Do not use this product near a microwave oven. (This can affect wireless LAN communications.)**
- **This product cannot be directly connected to the communication line of a telecommunications carrier (internet service provider, etc.). When connecting to the internet, be sure to connect via a device such as a router.**
  When the wireless LAN connection adapter function is turned on, the upper side of the air conditioner may become slightly warm, but this is not an abnormality.

### ⚠ WARNING

- While the Wireless LAN connection adapter operates, it may affect persons using cardiac pacemakers or defibrillators.
  This product may cause electromagnetic interference.
- While the Wireless LAN connection adapter operates, it may affect automatic doors or fire alarm equipment.
  This product may cause faulty behavior of the equipment.

## Configuration

- The user is responsible for providing the following items before using this product:
  - ■ Smartphone or tablet PC
  - ■ Internet line and communicating device (Modem/router or similar device)
  - ■ Wireless LAN access point
  - ■ Application name: [Daikin One Home] (free)
    For details on the installation method for the Daikin One Home, please see ▶Page 35.



Display

### Operation lamp

- The Operation lamp lights when connecting to a router (Wireless LAN access point). Please see ▶Page 36.
- For Wireless LAN connection adapter operation, please see ▶Page 37.

### ⚠ WARNING

**When operating an air conditioner from outside the home, it is not possible to check the air conditioner or the surroundings of the air conditioner, or the state of the people in the room. Therefore, make sure to adequately check for safety before use.**
**In some cases, there is a risk of death, severe injury, or property damage.**

■ **Check the following in advance (while at home)**

- Timer settings or reservations that other users may have made. (There is a risk of causing harm to the health of people, animals, or plants in the home if operation starts and stops unexpectedly)
- There are no signs of abnormality in the air conditioning. Harm will not be caused to people or to the room if there is a change in airflow. (For example, that there are no objects nearby that might blow over) (There is a risk of objects falling due to airflow and causing fire, bodily injury, or staining of household items)

■ **Check the following before/while operating a unit from outside the home**

- If you know that there is someone at home, inform the person when turning the air conditioner on or off from outside the home. (If someone at home is standing on something such as a stool, the air conditioner turning on or off unexpectedly could surprise them and cause them to fall or topple over. Additionally, a sudden change in the indoor/outdoor temperature could harm the health of people at home)
  · The air conditioner can be turned off and temperature adjustment can be made using a remote controller in the home.
  · Do not use the function if the only people at home are persons who are unable to make adjustments to temperature or other settings themselves, such as young children, disabled persons, or elderly persons.
- Regularly check the settings and operating status of the air conditioner. (Sudden changes in indoor/outdoor temperature pose a health hazard. There is a risk of harm to animals and plants)
  If an error occurs during operation, immediately turn off the air conditioner and contact your dealer.
  Double check the display to confirm that the power is off.



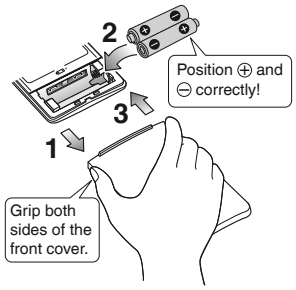
3P813525-1

# Preparation Before Operation

## ⚠ CAUTION

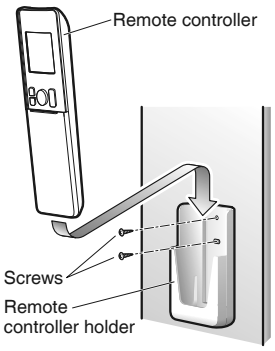
**Incorrect handling of batteries can result in injury from battery leakage, rupturing or heating, or lead to equipment failure.**
**Please observe the following precautions and use safely.**

- If the alkaline solution from the batteries should get in the eyes, do not rub the eyes. Instead, immediately flush the eyes with tap water and seek the attention of a medical professional.
- Keep batteries out of reach of children. In the event that batteries are swallowed, seek the immediate attention of a medical professional.
- Do not expose batteries to heat or fire. Do not disassemble or modify batteries. The insulation or gas release vent inside the battery may be damaged, resulting in battery leakage, rupturing, or heating.
- Do not damage or peel off labels on the batteries.



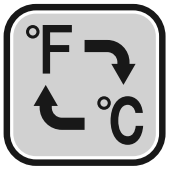

### To insert the batteries

1. Slide the front cover to take it off.
2. Insert 2 dry batteries AAA.LR03 (alkaline).
3. Replace the front cover.




### To attach the remote controller holder to a wall

1. Choose a place where the signals reach the unit.
2. Attach the holder to a wall, a pillar, or similar location with the screws supplied with the holder.
3. Place the remote controller in the remote controller holder.




### Fahrenheit / Celsius display switch

**Press Temp °F/°C and On (TIMER button) simultaneously for about 5 seconds.**

- The temperature will be displayed in Celsius when it is presently displayed in Fahrenheit, and vice versa.
- The switch operation is only possible when the temperature is being displayed.
- A reception sound will go off for the transmission of set temperature to the indoor unit at the time of setting the Fahrenheit / Celsius display change function.

## NOTE

**Notes on batteries**

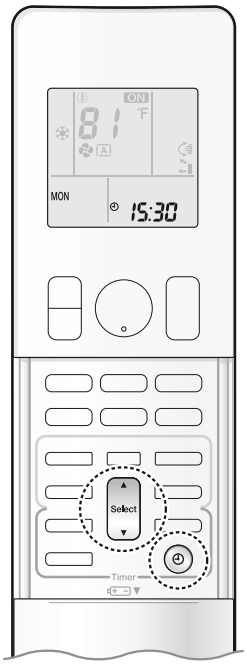
- To avoid possible injury or damage from battery leakage or rupturing, remove the batteries when not using the product for long periods of time.
- The standard replacement time is about 1 year. Both batteries should be replaced at the same time. Be sure to replace them with new dry batteries AAA.LR03 (alkaline).
- When battery power has run out, “battery mark” will begin blinking on the LCD as an alert that the batteries need replacing. In some cases, when battery consumption is accelerated due to usage conditions, signal reception may decline before the LCD begins blinking.
- The batteries supplied with the remote controller are for initial operation. The batteries may run out in less than 1 year.

**Notes on remote controller**

- Do not drop the remote controller. Do not get it wet.
- If dirt becomes an issue, wipe with a soft dry cloth.

Read Before Operation

# Preparation Before Operation




## Turn on the circuit breaker

- After the power is turned on, the flap of the indoor unit may move in order to set the reference position.

## To set the clock

**1.** Press ⏲.




" 0:00 " is displayed on the LCD.
" MON " and " ⏲ " blink.

**2.** Press Select to set the current day of the week.

**3.** Press ⏲.




" ⏲ " blinks.

**4.** Press Select to set the clock to the present time.

- Holding down Select or Select increases or decreases the displayed time.

**5.** Press ⏲.

- Point the remote controller at the indoor unit when pressing the buttons.




" : " blinks.

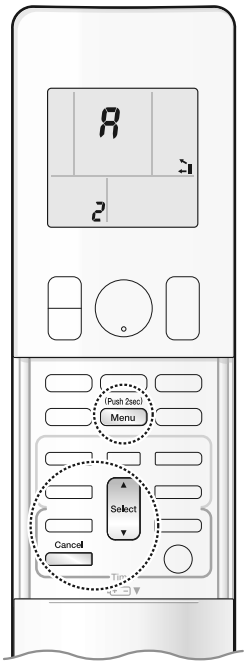
## To set the brightness of the indoor unit lamps

Turn OFF or adjust the brightness of the indoor unit LED lamps as desired. ▶Page 38

## NOTE

**Note on setting the clock**

- If the indoor unit's internal clock is not set to the correct time, the ON/OFF TIMER and WEEKLY TIMER will not operate punctually.

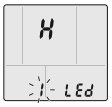



## To set the air outlet selection

Set so that the unit determines automatically which air outlet to use or select the upper air outlet only.

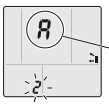
### 1. Press (Push 2sec) Menu and hold the button for 2 seconds.

- "LED" appears on the LCD.
- "1" (menu number) blinks.



### 2. Press Select or Select and select menu number 2.

- " " appears on the LCD.
- "2" (menu number) blinks.




### 3. Press (Push 2sec) Menu to confirm the selected setting.

### 4. Press Select or Select and select the air outlet direction as follows:

| Setting | Selection | LCD | Air outlet selection | |
|---|---|---|---|---|
| Automatic air outlet selection (factory default setting) | A |  |  | Upper and lower air outlets: The unit determines automatically the best air outlet depending on the operation mode or room conditions. |
| Upper air outlet only | 1 |  |  | Upper air outlet only: Air is only emitted from the upper air outlet regardless of the operation mode or room conditions. |

| Setting | Operation | Situation | Air outlet selection |
|---|---|---|---|
| | DRY | Any situation |  |
| | COOL | Upper air outlet: When the room temperature reaches the set point or the total operation time at high humidity reaches 60 minutes. | |
| | | Upper and lower air outlets: When the set point temperature is not reached yet, or the total operation time at high humidity is less than 60 minutes. |  |
| | HEAT / FAN | Any situation | |
| | DRY / COOL / HEAT / FAN | Any situation |  |

- During drying operation air is emitted from the upper air outlet only. Refer to **"Operation mode"** and **"To change the temperature setting"** for setting. ▶Page 13
- During FLOOR WARMING operation, air is emitted from the lower air outlet only. ▶Page 16

### 5. Press (Push 2sec) Menu again.

- This sets the selected air outlet for the indoor unit.

### 6. Press Cancel to return to the default screen.

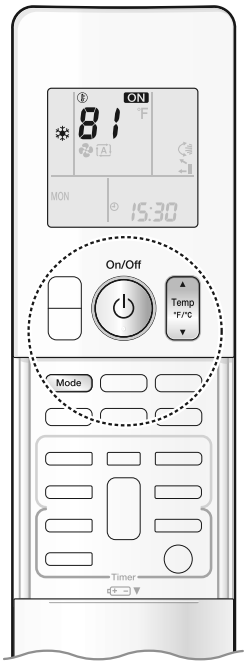
## NOTE

**Notes on setting the selected air outlet**

- The display automatically returns to the default screen after 60 seconds. To return to the default screen sooner, press Cancel twice.
- If you change the setting from automatic air outlet selection to upper air outlet only in during HEAT operation, heating is temporarily stopped to protect the unit.
- When the setting is changed to "Upper air outlet only", cooling/heating capacity will be reduced and operating sounds will increase. Additionally, hot or cold spots may form more easily. Use when you do not want air to flow from the lower air outlet (e.g., during sleep hours).
- During COOL operation, there are cases where air flows from the upper outlet only even when set to Automatic air outlet selection. In such cases, if operating sound becomes an issue, lowering the airflow rate or setting it to AUTO may provide improvement.
- During FLOOR WARMING operation, air is emitted only from the lower air outlet. ▶Page 16
- When airflow direction changes, sounds may be heard from inside the lower air outlet as it opens/closes.

Basic Operation

# AUTO · DRY · COOL · HEAT · FAN Operation

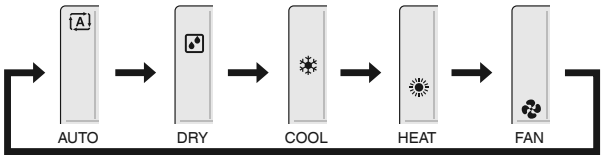



The air conditioner operates with the operation mode of your choice.
From the next time on, the air conditioner will operate with the same operation mode.

## To start operation

### 1. Press Mode and select an operation mode.

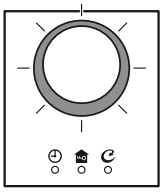
- Each pressing of the button changes the mode setting in sequence.




### 2. Press On/Off .

- " ON " is displayed on the LCD.
- The operation lamp lights up.
  The color of the lamp varies depending on the operation mode.

| Operation | Operation lamp |
|---|---|
| AUTO | Red / Blue |
| DRY | Green |
| COOL | Blue |
| HEAT | Red |
| FAN | White |



Display

## To stop operation

### Press On/Off again.

- " ON " disappears from the LCD.
- The OPERATION lamp goes off.

## To change the temperature setting

### Press Temp °F/°C .

- Press Temp °F/°C to raise the temperature and press Temp °F/°C to lower the temperature.

| COOL operation | HEAT operation | AUTO operation | DRY or FAN operation |
|---|---|---|---|
| 64-90 °F (18.0-32.0 °C) | 50-86 °F (10.0-30.0 °C) | 64-86 °F (18.0-30.0 °C) | The temperature setting cannot be changed. |

## NOTE

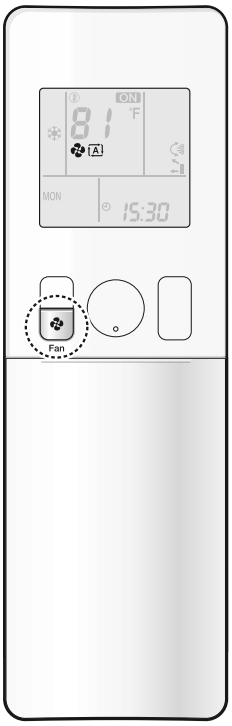
**Notes on AUTO operation**

- In AUTO operation, the system selects an appropriate operation mode (COOL or HEAT) based on the indoor temperature and starts the operation.
- The system automatically reselects setting at a regular interval to bring the indoor temperature to the user-setting level.

**Note on DRY operation**

- Eliminates humidity while maintaining the indoor temperature as much as possible. It automatically controls temperature and airflow rate, so manual adjustment of these functions is unavailable.

# Adjusting the Airflow Rate

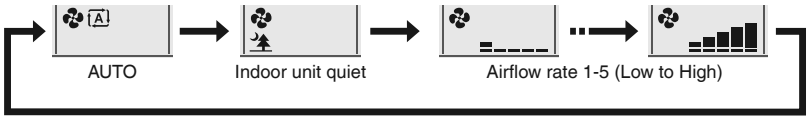



You can adjust the airflow rate to increase your comfort.

## To adjust the airflow rate setting

### Press Fan .

- Each pressing of Fan changes the airflow rate setting in sequence.




- When the airflow is set to " ", quiet operation starts and noise from the indoor unit will become quieter.
- In the quiet operation mode, the airflow rate is set to a weak level.

| AUTO, COOL, HEAT and FAN operation | DRY operation |
|---|---|
| | The airflow rate setting cannot be changed. |

## NOTE

**Note on airflow rate setting**

- At smaller airflow rates, the cooling (heating) effect is also smaller.

## Tips for saving energy



**Keeping the temperature setting at a moderate level helps save energy.**

- Recommended temperature setting
  - For cooling: 79-82 °F (26.0-28.0 °C)
  - For heating: 68-75 °F (20.0-24.0 °C)

**Cover windows with a blind or a curtain.**

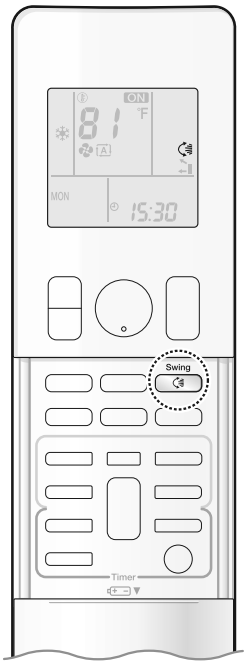
- Blocking sunlight and air from outdoors increases the cooling (heating) effect.

**Keep the air filter clean.**

- A clogged air filter causes inefficient operation and wastes energy. Clean it once every 2 weeks. ▶ Page 42

Basic Operation

# Adjusting the Airflow Direction



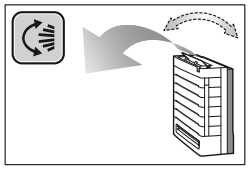

You can adjust the airflow direction to increase your comfort.

**Attention**

- Always use a remote controller to adjust the angles of the flap.
  –If you attempt to move the flap and louvers forcibly by hand when they are swinging, the mechanism may be damaged.
- Be careful when adjusting the louvers.
  –Inside the air outlet, a fan is rotating at a high speed.

## To start auto swing

### Up and down airflow direction



**Press Swing .**

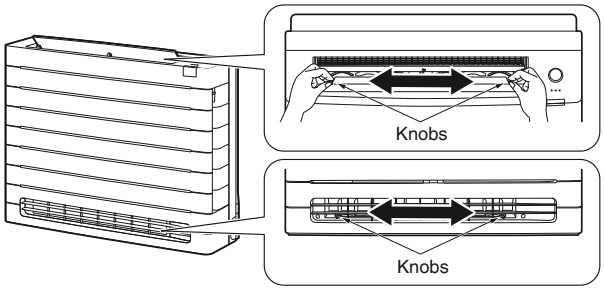
- " " appears on the LCD.
- The flap (horizontal blade) will begin to swing.
  The flap will always swing back to its default position each time an adjustment is made.
  It moves at high speed when performing initial processing.
  If you want to stop the movement of the flap, press Swing again when the flap reaches the desired position.
  Depending on installation conditions, the flap will be fixed near the lowest position.
  Even if Swing is pressed, " " will blink and airflow direction cannot be adjusted.
  For details, contact your dealer.

## To adjust the louvers to the desired position

### Right and left airflow direction

**Hold the knobs and move the louvers (vertical blades) to the desired position.**

- There are knobs in 2 places in the upper outlet and the lower outlet.




## CAUTION

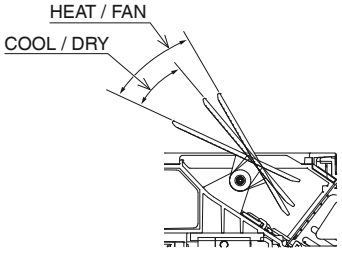
- Only use the remote controller for adjusting up/down airflow direction. (Forcibly moving the flap by hand may cause it to move incorrectly or result in dew dripping from the air outlet.)
- Do not adjust the left/right airflow direction during HEAT PLUS operation as the emission of hot air poses a safety hazard. (Risk of burns.)

## NOTE

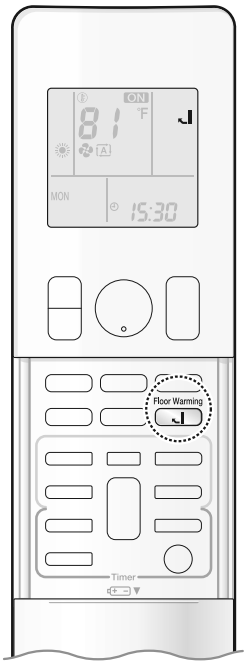
**Notes on airflow direction setting**

- The movable range of the flap varies according to the operation mode.
- When the unit is installed near a wall or installed in a corner of a room, the louvers should be directed away from the wall.
  Efficiency will drop if a wall blocks airflow and room temperature detection will be compromised.

**Movable range of the flap**

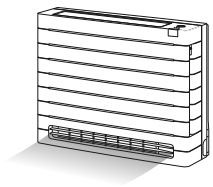


# FLOOR WARMING Operation




FLOOR WARMING operation can effectively warm large floor areas by closing the upper air outlet and increasing the air velocity to reach distant floor areas.

Airflow in FLOOR WARMING operation:
Air is emitted from the lower air outlet



HEAT operation

**Attention**

- Although the flap will be closed, air will still be emitted from around the flap.
- Operating sounds will be louder than when air is emitted from both the upper and lower air outlets.
- Only the automatic air outlet selection setting can be used during FLOOR WARMING operation. Air is emitted from the lower air outlet only.
- FLOOR WARMING operation can only be used in HEAT operation mode and with the automatic air outlet selection setting.
- If the room temperature is low, the room may not get warm enough.

## To start

- Check that the unit is operating, " ON " appears on the LCD.

**Press** Floor Warming **.**

- " " appears on the LCD.
- FLOOR WARMING operation is not available in AUTO / DRY / COOL / FAN mode.

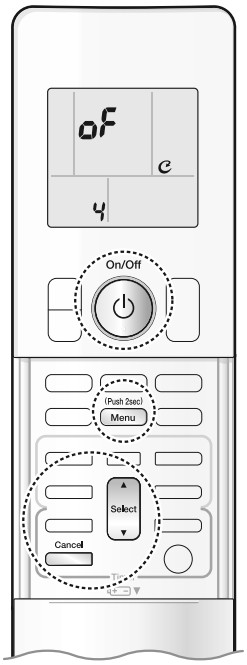
## To cancel

**Press** Floor Warming **again.**

- " " disappears from the LCD.

Useful Functions

# CLEAN Operation



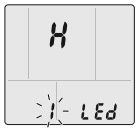

The CLEAN function dries the interior of the indoor unit to reduce the amount of condensation present. When COOL or DRY operation is performed, condensation may occur inside the air conditioner. It is recommended to dry the inside of the air conditioner using CLEAN operation.

## [To operate automatically]

### To set

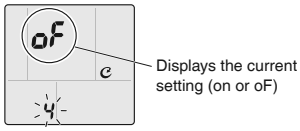
**1. Press (Push 2sec) Menu and hold the button for 2 seconds.**

- "LEd" appears on the LCD.
- "1" (menu number) blinks.



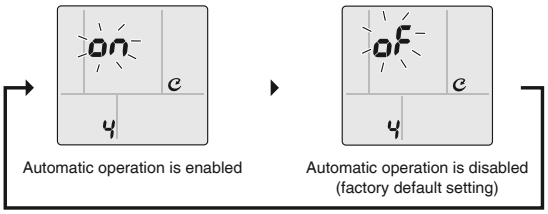

**2. Press Select or Select and select menu number 4.**

- "C" appears on the LCD.
- "4" (menu number) blinks.



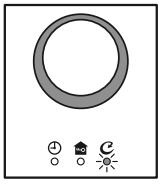

**3. Press (Push 2sec) Menu to confirm the selected setting.**

**4. Press Select or Select to change the setting as follows:**



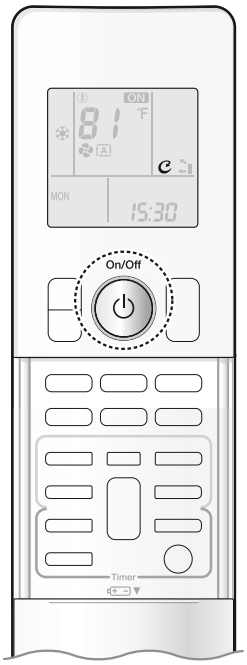

**5. Press (Push 2sec) Menu again.**

- Automatic CLEAN operation will be enabled or disabled according to the chosen setting.
- If automatic CLEAN operation is enabled, "C" appears on the LCD and the CLEAN lamp lights green when CLEAN operation is in progress.



Display

**6. Press Cancel to return to the default screen.**




## To stop CLEAN operation

**Press On/Off twice when you want to stop CLEAN operation midway.**

## NOTE

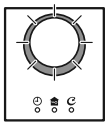
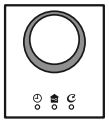
**Note on CLEAN setting**

- The display automatically returns to the default screen after 60 seconds. To return to the default screen sooner, press Cancel twice.

**Notes on CLEAN operation**

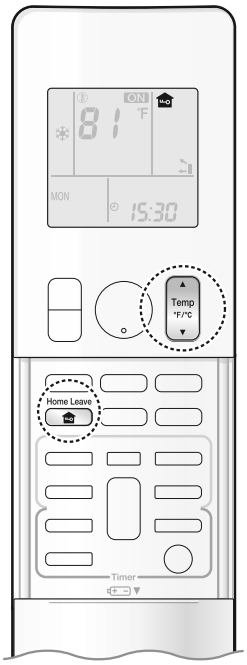
- After DRY or COOL operation stops, the air conditioner starts CLEAN operation automatically, and FAN operation will operate for approximately 120 minutes and then stops automatically.
- This operation dries the inside of the air conditioner using FAN operation. The indoor temperature and humidity may not suit your preferences.
- The CLEAN operation dries the interior of the indoor unit to reduce the amount of condensation present.
- CLEAN operation is not available when the unit is turned off using the OFF TIMER or turned off using a smartphone.
- CLEAN operation may not be performed if the COOL or DRY operation time is short.
- If CLEAN operation does not suit your preference, set operation to “oF” (Automatic operation is disabled). ▶Page 17
- When multiple indoor units are connected, if another indoor unit is in HEAT operation, CLEAN operation will not start or will be interrupted.

**Relation between CLEAN operation and indoor unit lamps**

| Air conditioner | CLEAN setting | CLEAN lamp | Operation lamp |
|---|---|---|---|
|  **Air conditioner operating** (Operation lamp lights up) | CLEAN is “ON” | Lights up (green) | Lights up (color depends on mode setting) |
| | CLEAN is “OFF” | Goes off | |
|  **Air conditioner stopped** (Operation lamp goes off) | CLEAN is “ON” | Lights up (green) | Goes off |

Useful Functions

# HOME LEAVE Operation



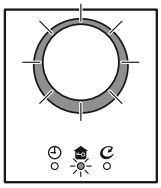

HOME LEAVE operation is a function that allows you to record your preferred temperature and airflow rate settings.

## To start

• Check that the unit is operating, " ON " appears on the LCD.

**Press** Home Leave **.**

• " " appears on the LCD.
• The HOME LEAVE lamp lights green.



Display

## To cancel

**Press** Home Leave **again.**

• " " disappears from the LCD.
• The HOME LEAVE lamp goes off.

## NOTE

**Notes on HOME LEAVE Operation**

• HOME LEAVE operation can be used in HEAT and COOL operation modes.
• **To set the temperature and airflow rate for HOME LEAVE operation**
When using HOME LEAVE operation for the first time, set the temperature and airflow rate for HOME LEAVE operation.
Record your preferred temperature and airflow rate.

| | Initial setting | | Selectable range | |
|---|---|---|---|---|
| | Temperature | Airflow rate | Temperature | Airflow rate |
| COOL operation | 90 °F (32.0 °C) | " A " | 64-90 °F (18.0-32.0 °C) | 5 levels, " A " and " " |
| HEAT operation | 50 °F (10.0 °C) | | 50-86 °F (10.0-30.0 °C) | |

**1. Press the "HOME LEAVE" button. Make sure that " " is displayed on the remote controller display.**
**2. Adjust the set temperature with Temp or Temp according to preference.**
**3. Adjust the airflow rate with the "FAN" setting button according to preference.**
HOME LEAVE operation will run with these settings the next time you use the unit.
To change the recorded information, repeat steps 1 - 3.

## What is HOME LEAVE operation?

Is there a temperature or airflow rate that is most comfortable? or a temperature or airflow rate setting you use the most?
HOME LEAVE operation is a function that allows you to record your favorite temperature or airflow rate.
You can start your favorite operation mode simply by pressing the “HOME LEAVE” button on the remote controller.
This function is convenient in the following situations.

## Useful in these cases

### 1. Use as an energy-saving mode.

Sets the temperature 4-6 °F (2-3 °C) higher (cooling) or lower (heating) than normal. Also convenient for use while you are out or sleeping.

- **Every day before you leave the house...**



When you go out, push the “HOME LEAVE” button, and the air conditioner will adjust capacity to reach the preset temperature for HOME LEAVE operation.



When you return, you will be welcomed by a comfortably air conditioned room.



Push the “HOME LEAVE” button again, and the air conditioner will adjust capacity to the set temperature for normal operation.

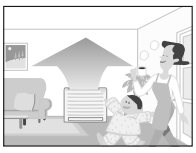
- **Before bed...**



Set the unit to HOME LEAVE operation before leaving the living room when going to bed.



The unit will maintain the temperature in the room at a comfortable level while you sleep.



When you enter the living room in the morning, the temperature will be just right. If you turn off HOME LEAVE operation, the set temperature will return to that for normal operation. Even the coldest winters will pose no problem!

### 2. Use as a favorite mode.

Once you record the temperature and airflow rate settings you most often use, you can retrieve them by pressing “HOME LEAVE” button. You do not have to go through troublesome remote controller operations.

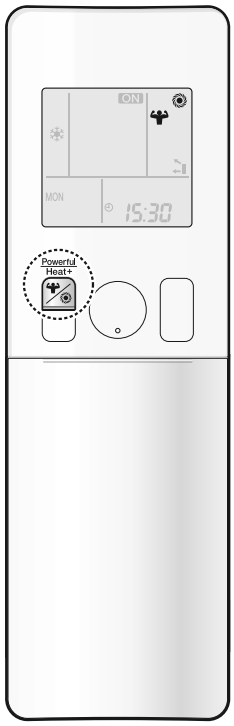
## NOTE

**Notes on HOME LEAVE setting**

- Once the temperature and airflow rate for HOME LEAVE operation are set, those settings will be used whenever HOME LEAVE operation is used in the future. To change the settings, please refer to the “**Notes on HOME LEAVE Operation**” section above.
- HOME LEAVE operation is only available in COOL operation and HEAT operation. It cannot be used in AUTO, DRY, or FAN operation.
- HOME LEAVE operation runs with the settings of the operation mode (COOL or HEAT) that last in use before HOME LEAVE operation was enabled.
- HOME LEAVE operation and POWERFUL operation cannot be used at the same time. The last button that was pressed will be given precedence.
- The operation mode cannot be changed while HOME LEAVE operation is in use.

Useful Functions

# POWERFUL / HEAT PLUS Operation




**POWERFUL operation** quickly maximizes the cooling (heating) effect in any operation mode. In this mode, the air conditioner operates at maximum capacity.

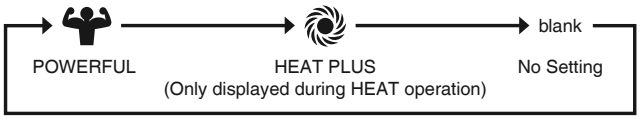
In **HEAT PLUS operation** the emission of high-temperature air remains constant. During the normal HEAT operation, airflow temperature drops as the set temperature is approached, but in HEAT PLUS operation, high-temperature airflow is maintained.
Use this mode when you want to make the area around you warmer.

## To start

- Check that the unit is operating, " ON " appears on the LCD.

### Press Powerful Heat+ during operation and select the desired mode.

- Each time Powerful Heat+ is pressed, a different setting option is displayed on the LCD.




- POWERFUL operation ends in 20 minutes. Then the system automatically operates again with the previous settings which were used before POWERFUL operation.
- HEAT PLUS operation automatically ends after about 30 minutes, after which HEAT operation resumes.

## To cancel

### Press Powerful Heat+ until no icon is displayed.

## NOTE

**Notes on POWERFUL operation**

- Pressing On/Off causes the settings to be canceled, and " " disappears from the LCD.
- POWERFUL operation will not increase the capacity of the air conditioner if the air conditioner is already in operation with its maximum capacity demonstrated.
  - **In COOL, HEAT and AUTO operation**
    To maximize the cooling (heating) effect, the capacity of outdoor unit increases and the airflow rate becomes fixed at the maximum setting. The temperature and airflow settings cannot be changed in COOL and HEAT operation. Airflow settings cannot be changed in AUTO operation.
  - **In DRY operation**
    The temperature setting is lowered by 5 °F (2.5 °C) and the airflow rate is slightly increased.
  - **In FAN operation**
    The airflow rate is fixed at the maximum setting.
  - **When using priority room setting**
    Refer to "**Note for Multi System**". ▶Page 33

**Regarding the combination of POWERFUL and other operations**

| | |
|---|---|
| POWERFUL + HEAT PLUS | Not available* |
| POWERFUL + FLOOR WARMING | |
| POWERFUL + ECONO | |
| POWERFUL + QUIET OUTDOOR UNIT | |

*Priority is given to the function of whichever button is pressed last.

## NOTE

**Notes on HEAT PLUS operation**

## ⚠ CAUTION

- Do not adjust the left/right airflow direction during HEAT PLUS operation as the emission of hot air poses a safety hazard. (Risk of burns.)
- Make sure to always maintain distance from the air outlets and keep children and pets away. (Risk of burns.)

- Pressing On/Off causes the setting to be canceled, and " " disappears from the LCD.
- In some cases, if the temperature of the room is very low, the entire room may not warm up completely.
- Do not remain near the air outlet and in the direct path of emitted air for a long time.
- After HEAT PLUS operation (about 30 minutes) ends, room temperature will be high. Depending on the temperature set for HEAT operation prior to activating HEAT PLUS operation, power may be reduced.
- While HEAT PLUS operation is active, the airflow rate setting cannot be changed.

**Regarding the combination of HEAT PLUS and other operations**

| | |
|---|---|
| **HEAT PLUS + POWERFUL** | Not available* |
| **HEAT PLUS + FLOOR WARMING** | |
| **HEAT PLUS + ECONO** | |
| **HEAT PLUS + QUIET OUTDOOR UNIT** | |

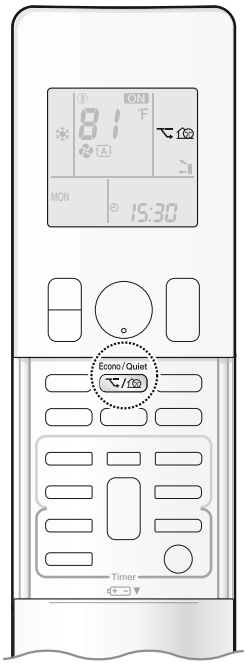
*Priority is given to the function of whichever button is pressed last.

**Possible combinations of POWERFUL / HEAT PLUS operation and basic operations**

| | Operation mode | | | | |
|---|---|---|---|---|---|
| | **AUTO** | **DRY** | **COOL** | **HEAT** | **FAN** |
| **POWERFUL** | ✓ | ✓ | ✓ | ✓ | ✓ |
| **HEAT PLUS** | – | – | – | ✓ | – |

Useful Functions

# ECONO / QUIET OUTDOOR UNIT Operation




**ECONO operation** enables efficient operation by limiting the maximum power consumption. This function is useful to prevent the circuit breaker from tripping when the unit operates alongside other appliances on the same circuit.

**QUIET OUTDOOR UNIT operation** lowers the noise level of the outdoor unit by changing the frequency and fan speed of the outdoor unit. This function is convenient during night-time operation.

## To start

### Press Econo / Quiet and select the desired mode.

• Each time Econo / Quiet is pressed, a different setting option appears on the LCD.

ECONO → QUIET OUTDOOR UNIT → Combination → blank (No Setting) → ECONO

## To cancel

### Press Econo / Quiet until no icon is displayed.

## NOTE

**Notes on ECONO operation**

- This operation is performed with lower power and therefore may not provide a sufficient cooling (heating) effect.
- Pressing On/Off causes the settings to be canceled, and " " disappears from the LCD.
- If the power consumption level is already low, switching to ECONO operation will not reduce the power consumption.

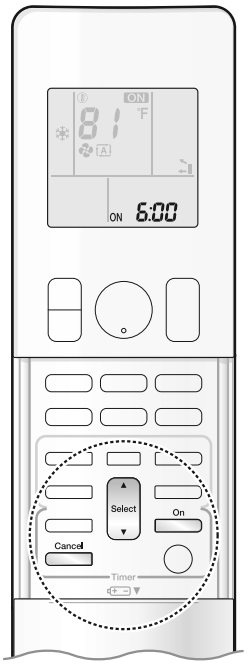
**Notes on QUIET OUTDOOR UNIT operation**

- If using a multi system, the QUIET OUTDOOR UNIT operation will work only when this function is set on all operated indoor units. However, if using priority room setting, refer to "**Note for Multi System**". Page 33
- Even if the operation is stopped by using the remote controller or the indoor unit ON/OFF switch when using QUIET OUTDOOR UNIT operation, " " will remain displayed on the remote controller.
- QUIET OUTDOOR UNIT operation will not reduce the frequency nor fan speed if they already are operating at reduced levels.
- This operation is performed with lower power and therefore may not provide a sufficient cooling (heating) effect.

**Possible combinations of ECONO / QUIET OUTDOOR UNIT operation and basic operations**

| | Operation mode | | | | |
|---|---|---|---|---|---|
| | AUTO | DRY | COOL | HEAT | FAN |
| ECONO | ✓ | ✓ | ✓ | ✓ | – |
| QUIET OUTDOOR UNIT | ✓ | – | ✓ | ✓ | – |

# ON/OFF TIMER Operation




Timer functions are useful for automatically switching the air conditioner on or off at night or in the morning. You can also use the ON TIMER and OFF TIMER together.

## To use ON TIMER operation

- Check that the clock is correct.
  If not, set the clock to the present time. ▶Page 11

### 1. Press On .




" 6:00 " is displayed on the LCD.
" ON " blinks.

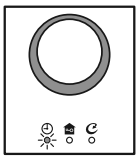
- " ⏲ " and day of the week disappear from the LCD.

### 2. Press Select until the time setting reaches the point you like.

- Each pressing of either button increases or decreases the time setting by 10 minutes.
  Holding down Select or Select increases or decreases the displayed time.

### 3. Press On again.

- " ON " and setting time are displayed on the LCD.
- The TIMER lamp lights orange.



Display

## To cancel ON TIMER operation

### Press Cancel .

- " ON " and setting time disappear from the LCD.
- " ⏲ " and day of the week are displayed on the LCD.
- The TIMER lamp goes off.

## NOTE

**Notes on TIMER operation**

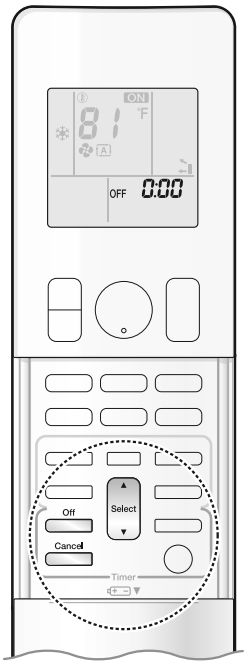
- When TIMER is set, the present time is not displayed.
- When using the ON/OFF TIMER to start/stop operation, the actual operation start/stop time may differ from the time set. (Maximum of about 10 minutes)

**In the following cases, set the timer again.**

- After the circuit breaker has turned off.
- After a power failure.
- After replacing the batteries in the remote controller.

TIMER Operation

# ON/OFF TIMER Operation




## To use OFF TIMER operation

- Check that the clock is correct.
  If not, set the clock to the present time. ▶Page 11

### 1. Press Off .




" 0:00 " is displayed on the LCD.
" OFF " blinks.

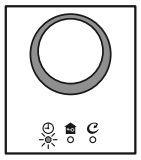
- " ◷ " and day of the week disappear from the LCD.

### 2. Press Select until the time setting reaches the point you like.

- Each pressing of either button increases or decreases the time setting by 10 minutes.
  Holding down Select or Select increases or decreases the displayed time.

### 3. Press Off again.

- " OFF " and setting time are displayed on the LCD.
- The TIMER lamp lights orange.



Display

## To cancel OFF TIMER operation

### Press Cancel .

- " OFF " and setting time disappear from the LCD.
- " ◷ " and day of the week are displayed on the LCD.
- The TIMER lamp goes off.

## To combine ON TIMER and OFF TIMER operation

- A sample setting for combining the 2 timers is shown below.

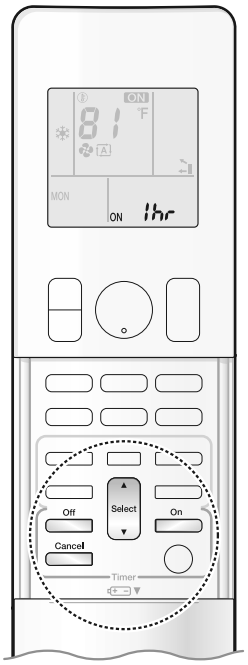
(Example)
Present time: 23:00 (The unit operating)
OFF TIMER at 0:00
ON TIMER at 14:00
Combined




## NOTE

**NIGHT SET mode**

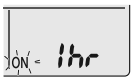
- When the OFF TIMER is set, the air conditioner automatically adjusts the temperature setting (0.9 °F (0.5 °C) up in COOL, 3.6 °F (2.0 °C) down in HEAT) to prevent excessive cooling (heating) during sleeping hours.



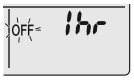

## To use the ON/OFF TIMER with an hours remaining display (COUNT UP-DOWN ON/OFF TIMER)

• Check that the clock is correct. If not, set the clock to the present time. ▶Page 11

### 1. Press and hold On or Off for about 5 seconds, when the signal indicator (▲) blinks, release your finger from the button.




For ON TIMER
" 1hr " appears on the LCD.
" ON " blinks.




For OFF TIMER
" 1hr " appears on the LCD.
" OFF " blinks.

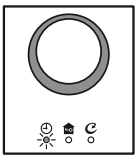
• " ◴ " and day of the week disappear from the LCD.

### 2. Press Select until the time setting reaches the point you like.

• Each pressing of the button increases or decreases the time setting by 1 hour.
• The time can be set between 1 and 12 hours.

### 3. Press On or Off again.

• " ON " and " OFF ", and setting time appear on the LCD.
• The TIMER lamp lights orange.
• To change the display mode from COUNT UP-DOWN ON/OFF TIMER to 24 HOUR ON/OFF TIMER, repeat **STEP 1**, and continue from **STEP 2** of "24 HOUR ON/OFF TIMER". ▶Page 24, 25
• Timer display mode cannot be changed while " ON " or " OFF "are blinking.
Press On or Off to stop the blinking.



Display

## Combining display modes

• Different display modes (24 HOUR ON/OFF TIMER and COUNT UP-DOWN ON/OFF TIMER) can be used for the ON TIMER and OFF TIMER simultaneously.

(Example)
Present time: 22:00 [unit is operating]
OFF TIMER at 1:00 (3 hours after present time)
ON TIMER at 6:00 (8 hours after present time)
Combined →




## NOTE

**Note on COUNT UP-DOWN ON/OFF TIMER**
• After setting, the time displayed on the LCD will automatically count down by 1 hour for every 1 hour that passes.
For example, if the OFF TIMER is set to 3 hours, the display will change as follows: 3hr → 2hr → 1hr → blank (OFF)

**Switching between ON/OFF TIMER display modes (24 hour clock and hours remaining display)**
• When changing timer display modes (from 24 HOUR ON/OFF TIMER to COUNT UP-DOWN ON/OFF TIMER or vice versa), the timer cancels. The timer must be set again to activate it.

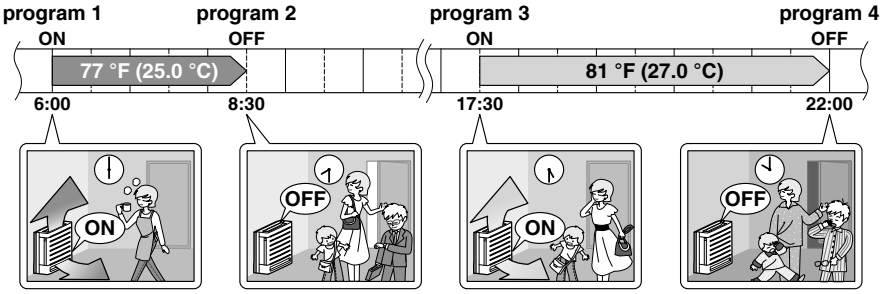
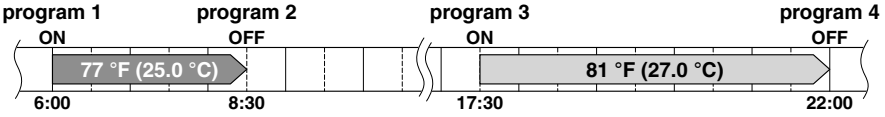
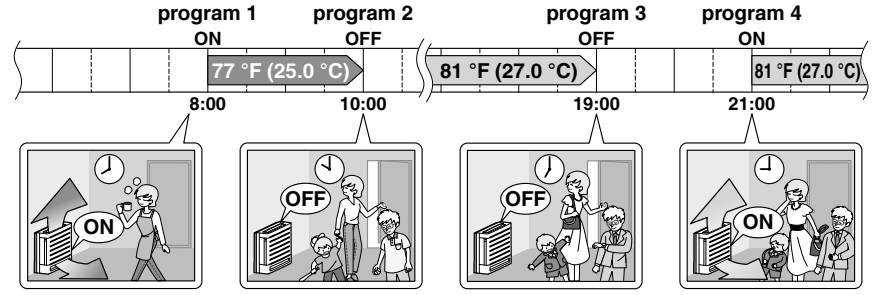
TIMER Operation

# WEEKLY TIMER Operation

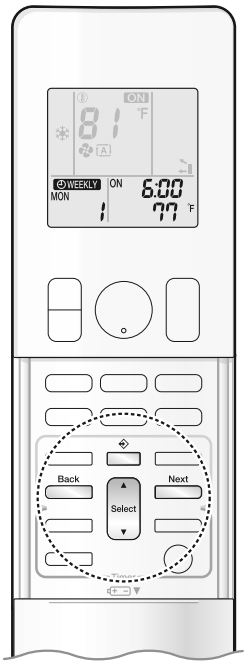
Up to 4 timer settings can be saved for each day of the week. This is convenient to adapt the WEEKLY TIMER to your family's life style.

## Setting example of the WEEKLY TIMER

The same timer settings are used from Monday through Friday, while different timer settings are used for the weekend.

| | |
|---|---|
| [Monday] | Make timer settings for programs 1-4. ▶Page 28<br>  |
| [Tuesday] to [Friday] | Use the copy mode to make settings for Tuesday to Friday, because these settings are the same as those for Monday. ▶Page 30<br>  |
| [Saturday] | No timer settings |
| [Sunday] | Make timer settings for programs 1-4. ▶Page 28<br>  |

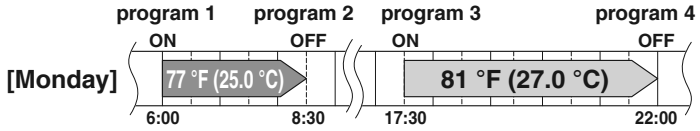
- Up to 4 reservations per day and 28 reservations per week can be set using the WEEKLY TIMER. The effective use of the copy mode simplifies timer programing.
- The use of ON-ON-ON-ON settings, for example, makes it possible to schedule operating mode and set temperature changes. Furthermore, by using OFF-OFF-OFF-OFF settings, only the turn off time of each day can be set. This will turn off the air conditioner automatically if you forget to turn it off.



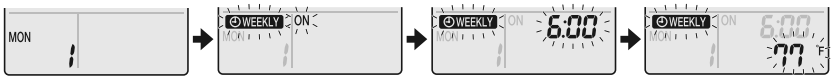

## To use WEEKLY TIMER operation

### Setting mode

- Make sure the day of the week and time are set.
  If not, set the day of the week and time. ▶Page 11




**Setting Displays**




Day and number | ON/OFF | Time | Temperature

### 1. Press ◈ .

- The day of the week and the reservation number of the current day will be displayed.
- 1 to 4 settings can be made per day.

### 2. Press Select to select the desired day of the week and reservation number.

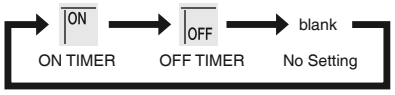
- Pressing Select changes the reservation number and the day of the week.

### 3. Press Next .

- The day of the week and reservation number will be set.
- " WEEKLY " and " ON " blink.

### 4. Press Select to select the desired mode.

- Pressing Select changes the " ON " or " OFF " setting in sequence.




Pressing Select puts the sequence in reverse.

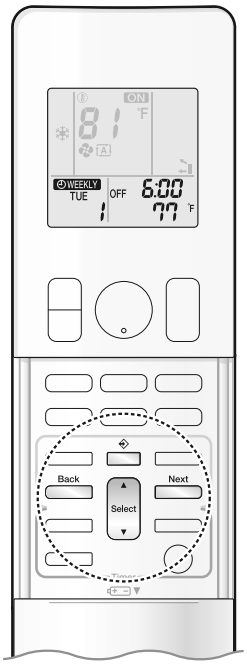
- In case the reservation has already been set, selecting " blank " deletes the reservation.
- Proceed to **STEP 9** if " blank " is selected.
- To return to the day of the week and reservation number setting, press Back.

### 5. Press Next .

- The ON/OFF TIMER mode will be set.
- " WEEKLY " and the time blink.

TIMER Operation

# WEEKLY TIMER Operation




## 6. Press Select to select the desired time.

- The time can be set between 0:00 and 23:50 in 10-minute intervals.
- To return to the ON/OFF TIMER mode setting, press Back.
- Proceed to **STEP *9*** when setting the OFF TIMER.

## 7. Press Next.

- The time will be set.
- " WEEKLY " and the temperature blink.

## 8. Press Select to select the desired temperature.

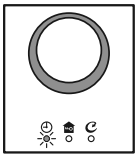
- The temperature can be set between 50 °F (10.0 °C) and 90 °F (32.0 °C).
  COOL or AUTO: The unit operates at 64 °F (18.0 °C) even if it is set at 50 °F (10.0 °C) to 63 °F (17.0 °C). ▶Page 13
  HEAT or AUTO : The unit operates at 86 °F (30.0 °C) even if it is set at 87 °F (30.5 °C) to 90 °F (32.0 °C). ▶Page 13
- To return to the time setting, press Back.
- The set temperature is only displayed when the mode setting is on.

## 9. Press Next.

- The temperature will be set and go to the next reservation setting.
- The temperature is set while in ON TIMER operation, and the time is set while in OFF TIMER operation.
- The next reservation screen will appear.
- To continue further settings, repeat the procedure from **STEP *4***.

## 10. Press ◈ to complete the setting.

- Be sure to direct the remote controller toward the indoor unit and check for a receiving tone and blinking of the OPERATION lamp.
- " WEEKLY " is displayed on the LCD and WEEKLY TIMER operation is activated.
- The TIMER lamp lights orange.



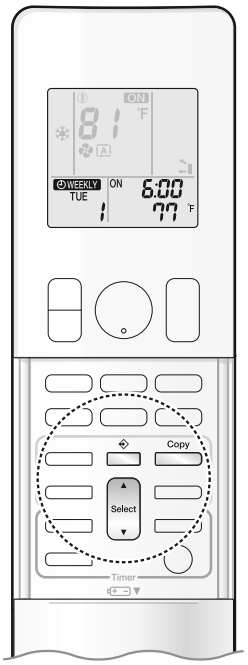
Display

- A reservation made once can be easily copied and the same settings used for another day of the week. Refer to **Copy mode**. ▶Page 30

## NOTE

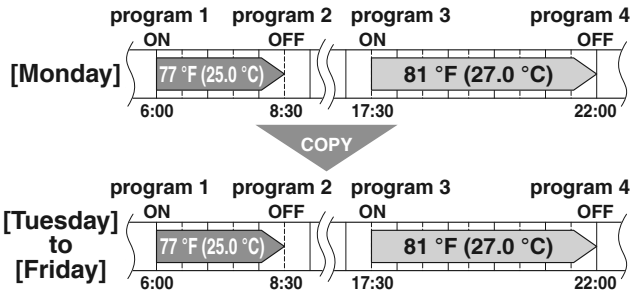
**Notes on WEEKLY TIMER operation**

- Do not forget to set the clock on the remote controller first. ▶Page 11
- The day of the week, ON/OFF TIMER mode, time and set temperature (only for ON TIMER mode) can be set with the WEEKLY TIMER. Other settings for the ON TIMER are based on the settings just before the operation.
- WEEKLY TIMER and ON/OFF TIMER operation cannot be used at the same time. The ON/OFF TIMER operation has priority if it is set while WEEKLY TIMER is still active. The WEEKLY TIMER will enter the standby state, and " WEEKLY " will disappear from the LCD. When the ON/OFF TIMER is up, the WEEKLY TIMER will automatically become active.
- Only the time and set temperature with the WEEKLY TIMER are sent with the ◈. Set the WEEKLY TIMER only after setting the operation mode, the airflow rate and the airflow direction ahead of time.
- Turning off the circuit breaker, power failure, and other similar events will render operation of the indoor unit's internal clock inaccurate. Reset the clock. ▶Page 11
- Back can be used only for the time and temperature settings. It cannot be used to go back to the reservation number.

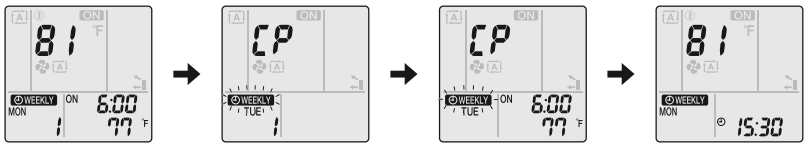



## Copy mode

- A reservation made once can be copied to another day of the week. The whole reservation of the selected day of the week will be copied.




**Setting Displays**




**1.** **Press** ◈ .

**2.** **Press** Select **to confirm the day of the week to be copied.**

**3.** **Press** Copy .

- The whole reservation of the selected day of the week will be copied.

**4.** **Press** Select **to select the destination day of the week.**

**5.** **Press** Copy .

- The reservation will be copied to the selected day of the week. The whole reservation of the selected day of the week will be copied.
- To continue copying the settings to other days of the week, repeat **STEP *4*** and **STEP *5***.

**6.** **Press** ◈ **to complete the setting.**

- " WEEKLY " is displayed on the LCD and WEEKLY TIMER operation is activated.

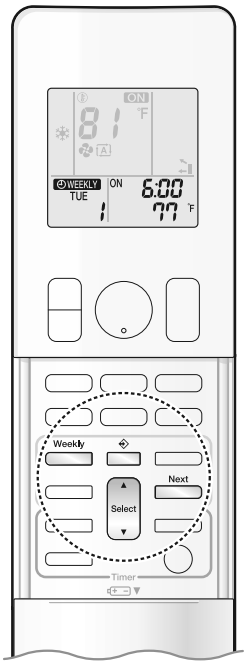
## NOTE

**Note on COPY MODE**

- The entire reservation of the source day of the week is copied in the copy mode.
  In the case of making a reservation change for any day of the week individually after copying the content of weekly reservations, press ◈ and change the settings in the steps of Setting mode . ▶Page 28

TIMER Operation

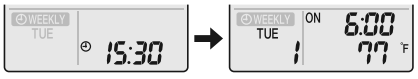
# WEEKLY TIMER Operation




## Confirming a reservation

• The reservation can be confirmed.

**Setting Displays**




Normal Confirmation

### 1. Press [Weekly] .

• The day of the week and the reservation number of the current day will be displayed.

### 2. Press [Select] to select the day of the week and the reservation number to be confirmed.

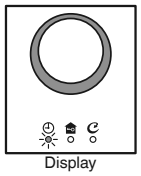
• Pressing [Select] displays the reservation details.

• To change the confirmed reserved settings, select the reservation number and press [Next] . The mode is switched to setting mode. Proceed to **Setting mode** **STEP 4.** ▶Page 28

### 3. Press [Weekly] to exit the confirmation mode.

• " WEEKLY " is displayed on the LCD and WEEKLY TIMER operation is activated.

• The TIMER lamp lights orange.



Display

## To deactivate WEEKLY TIMER operation

### Press [Weekly] while " WEEKLY " is displayed on the LCD.

• " WEEKLY " disappears from the LCD.

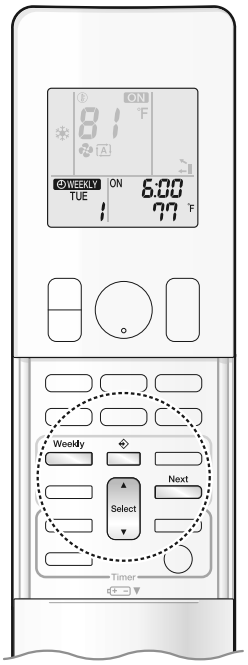
• The TIMER lamp goes off.

• To reactivate the WEEKLY TIMER operation, press [Weekly] again.

• If a reservation deactivated with [Weekly] is activated once again, the last reservation mode will be used.

## NOTE

• If not all the reservation settings are reflected, deactivate the WEEKLY TIMER operation once. Then press [Weekly] again to reactivate the WEEKLY TIMER operation.




## To delete reservations

### An individual reservation

**1. Press .**

• The day of the week and the reservation number will be displayed.

**2. Press Select to select the day of the week and the reservation number to be deleted.**

**3. Press Next .**

• " WEEKLY " and " ON " or " OFF " blink.

**4. Press Select until no icon is displayed.**

• Pressing Select changes the ON/OFF TIMER mode in sequence.

• Selecting "blank" will cancel any reservation you may have.

ON TIMER → OFF TIMER → No Setting → blank

Pressing Select puts the sequence in reverse.

**5. Press Next .**

• The selected reservation will be deleted.

**6. Press .**

• If there are still other reservations, WEEKLY TIMER operation will be activated.

### Reservations for each day of the week

• This function can be used for deleting reservations for each day of the week.

• It can be used while confirming or setting reservations.

**1. Press .**

• The day of the week and the reservation number will be displayed.

**2. Press Select to select the day of the week to be deleted.**

**3. Hold Weekly for about 5 seconds.**

• The reservation of the selected day of the week will be deleted.

**4. Press .**

• If there are still other reservations, WEEKLY TIMER operation will be activated.

### All reservations

**Hold Weekly for about 5 seconds with the normal display.**

• Be sure to direct the remote controller toward the indoor unit and check for a receiving tone.

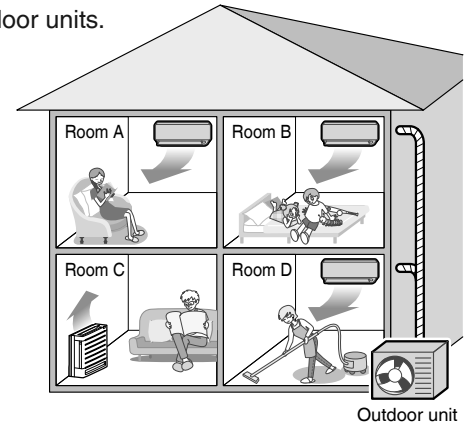
• This operation cannot be used for the WEEKLY TIMER setting display.

• All reservations will be deleted.

Multi Connection

# Note for Multi System

A multi system has one outdoor unit connected to multiple indoor units.




## Selecting the operation mode

### When the priority room setting is active but the set unit is not operating or when the priority room setting is inactive

When more than one indoor unit is operating, priority is given to the first unit that was turned on.
In this case, set the units that are turned on later to the same operation mode as the first unit.
Otherwise, they will enter the standby state, and the OPERATION lamp will blink; this does not indicate malfunction.

## NOTE

**Notes on operation mode for a multi system**

- COOL, DRY and FAN operation may be used at the same time.
- AUTO operation automatically selects COOL operation or HEAT operation based on the indoor temperature. Therefore, AUTO operation is available when selecting the same operation mode as that of the first unit to be turned on.

## ⚠ CAUTION

- Normally, the operation mode of the first unit that was turned on is given priority, but the following situations are exceptions to this rule. If the operation mode of the first room is FAN operation, using HEAT operation in any room after this will give priority to HEAT operation. In this situation, the indoor unit operating in FAN mode will switch to standby, and the OPERATION lamp will blink.

### When the priority room setting is active

Refer to "**Priority room setting**" on the next page.

## NIGHT QUIET operation (Available only for COOL operation)

NIGHT QUIET operation requires initial programing during installation. Please consult your retailer or dealer for assistance.
NIGHT QUIET operation reduces the operation noise of the outdoor unit during the night-time hours to prevent annoyance to neighbors.

- NIGHT QUIET operation is activated when the temperature drops 10.8 °F (6 °C) or more below the highest temperature recorded that day. When the temperature difference between the current outdoor temperature and the maximum outdoor temperature becomes less than 7.2 °F (4 °C), this function will be canceled.
- NIGHT QUIET operation slightly reduces the cooling efficiency of the unit.

## QUIET OUTDOOR UNIT operation

Refer to "**QUIET OUTDOOR UNIT Operation**". ▶Page 23

### When the priority room setting is active but the set unit is not operating or when the priority room setting is inactive

When using the QUIET OUTDOOR UNIT operation feature with a multi system, set all indoor units to QUIET OUTDOOR UNIT operation using their remote controllers.
When canceling QUIET OUTDOOR UNIT operation, simply cancel the mode on one of the operating indoor units using their remote controller.
However QUIET OUTDOOR UNIT operation will remain displayed on the remote controllers for the other rooms.
We recommend you cancel operation in all rooms using their remote controllers.

### When the priority room setting is active

Refer to "**Priority room setting**" on the next page.

## COOL/HEAT mode lock

The COOL/HEAT mode lock requires initial programing during installation. Please consult your authorized dealer for assistance. The COOL/HEAT mode lock sets the unit forcibly to either COOL or HEAT operation. This function is convenient when you wish to set all indoor units connected to the multi system to the same operation mode.

### NOTE

- The COOL/HEAT mode lock cannot be activated together with the priority room setting.

## Priority room setting

The priority room setting requires initial programing during installation. Please consult your authorized dealer for assistance. The room designated as the priority room takes priority in the following situations.

### Operation mode priority

- As the operation mode of the priority room takes precedence, you can select a different operation mode from other rooms.

**[Example]**

- Room A is the priority room in this examples.
  When COOL operation is selected in room A while operating the following modes in room B, C and D:

| Operation mode in room B, C and D | Status of room B, C and D when the unit in room A is in COOL operation |
|---|---|
| COOL or DRY or FAN | The current operation mode is maintained. |
| HEAT | The unit enters the standby mode. Operation resumes when the room A unit stops operating. |
| AUTO | If the unit is set to COOL operation, it continues. If the unit is set to HEAT operation, it enters the standby mode. Operation resumes when the room A unit stops operating. |

### Priority when POWERFUL operation is used

**[Example]**

- Room A is the priority room in this examples.
  The indoor units in rooms A, B, C and D are all operating. If the unit in room A enters POWERFUL operation, operation capacity will be concentrated in room A. In such a case, the cooling (heating) efficiency of the units in room B, C and D may be slightly reduced.

### Priority when QUIET OUTDOOR UNIT operation is used

**[Example]**

- Room A is the priority room in this examples.
  Just by setting the unit in room A to QUIET operation, the air conditioner starts QUIET OUTDOOR UNIT operation. You do not have to set all the indoor units in operation to QUIET OUTDOOR UNIT operation.

Mobile Controller

# Wireless LAN connection

## Wireless LAN connection

Web site: **https://daikinone.com/ductless**

For instructions on how to connect your unit to wireless LAN and to your Daikin One Home application, please see the website above.

Contains FCC ID: VPYLB1YA
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.
FCC CAUTION
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.
Contains IC: 772C-LB1YA
This device complies with Industry Canada's applicable licence-exempt RSSs.
Operation is subject to the following two conditions:
(1) This device may not cause interference; and
(2) This device must accept any interference, including interference that may cause undesired operation of the device.
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 7-7 / 8 inches (20 cm) or more away from person's body.
The FCC responsible party is Daikin Comfort Technologies Manufacturing, L.P., and may be contacted by calling (713)-861-2500, or at 19001 Kermier Rd., Waller, TX 77484.
(https://www.northamerica-daikin.com)
This device, which was assembled by Daikin Comfort Technologies Manufacturing, L.P., contains a component that is classified as an intentional radiator.
This intentional radiator has been certified by the FCC: FCC ID VPYLB1YA.
And this intentional radiator has an industry Canada ID: IC 772C-LB1YA.
The manufacturer of the intentional radiator (model no. Type1YA) is Murata Manufacturing co., Ltd (www.murata.com).
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 7-7 / 8 inches (20 cm) or more away from person's body.
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

## Application software installation

**For Android Phones**

1) Open [Google Play].
2) Search using the application name: [Daikin One Home].
3) Follow the directions on the screen to install.

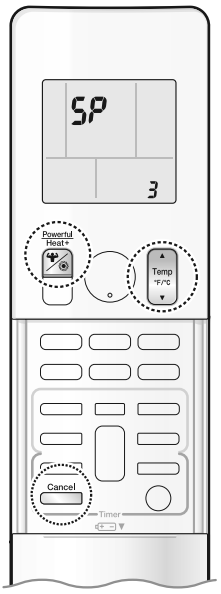
**For iOS Phones**

1) Open the [App Store].
2) Search using the application name: [Daikin One Home].
3) Follow the directions on the screen to install.

**Attention**

- The actual application screen layout and content may differ from what is shown. The layout and content of the application screen is subject to change without notice.

**Connect the air conditioner to your home network.**



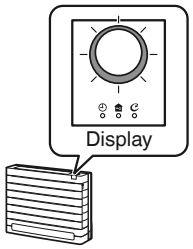

**1.** **While operation is stopped, press Powerful Heat+ and hold the button for 5 seconds.**

**2.** **Press Temp °F/°C or Temp °F/°C and select menu number 3.**

- "SP" appears on the LCD.
- "3" blinks.




**3.** **Press Powerful Heat+ to connect to the access point.**

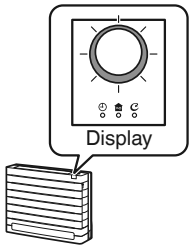



Operation lamp blinks for 1 second

**4.** **Press Cancel to return to the default screen.**
**No more settings need to be carried out from the remote controller.**

**5.** **Open Daikin One Home App and follow the instructions to set up the wireless LAN.**

**6.** **When the operation lamp switches from blinking to lit, the connection is complete.**



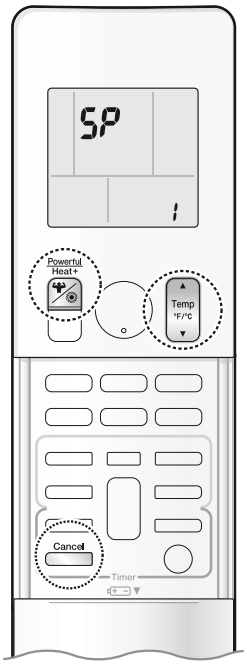

Operation lamp lights up

## NOTE

- While "SP" is displayed, the options that can be selected using Temp °F/°C or Temp °F/°C are 1, 3, A, and OFF.
- Perform wireless LAN connection one indoor unit at a time.
- If you are unable to establish a network connection, refer the troubleshooting provided by the Daikin One Home App.
- When the lamp blinks slowly, the connection is not ready. Perform the connection procedure while it blinks quickly.

Mobile Controller

# Wireless LAN connection

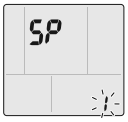



## To confirm the wireless LAN connection adapter connection

### ■ To confirm

**1.** While operation is stopped, press Powerful Heat+ and hold the button for 5 seconds.

**2.** Press Powerful Heat+ to confirm the selected setting.




- "SP" appears on the LCD.
- "1" blinks.

**Check the indoor unit LED.**

| Operation lamp | Status |
|---|---|
| Blinking for 1 second | Communication is not ready |
| Blinking for 3 seconds | Please initialize the wireless LAN connection adapter |
| Does not blink or light | Communication is abnormal<br>There is a possibility of equipment failure<br>Please request repair |

## To turn off the wireless connection

### ■ To use the remote controller

**1.** While operation is stopped, press Powerful Heat+ and hold the button for 5 seconds.

**2.** Press Temp or Temp and select menu oFF.




- "SP" appears on the LCD.
- "oFF" blinks, and communication is OFF.

**3.** Press Powerful Heat+ and hold the button for 2 seconds to confirm selected setting.

- The operation lamp will turns off.

**4.** Press Cancel to return to the default screen.

## To reset the connection setting to the factory default

- If you want to reset the connection settings, it is possible to initialize the wireless LAN connection adapter to its factory default state. If initialized, data including the network settings and power consumption history will be erased.
- When discarding or transferring to another user, initialize the connection adapter to erase the internal data.

### ■ To reset

**1.** While operation is stopped, press Powerful Heat+ and hold the button for 5 seconds.

**2.** Press Temp or Temp and select menu 8.




- "SP" appears on the LCD.
- "8" blinks.

**3.** Press Powerful Heat+ and hold the button for 2 seconds to confirm selected setting.

- The operation lamp blinks for 1 second.

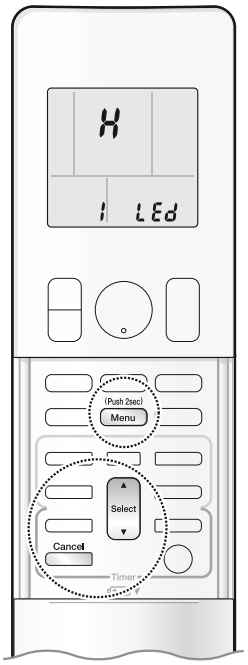
**4.** Press Cancel to return to the default screen.

## NOTE

**Note on wireless LAN operation**

- If the LED display is distracting, change the brightness setting. ▶Page 38

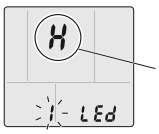
# Brightness of Indoor Unit LED Lamps




Changes can be made to the setting for the brightness of the LED lamps, to suit your preferences.

## 1. Press (Push 2sec) Menu and hold the button for 2 seconds.

- "LED" appears on the LCD.
- "1" (menu number) blinks.

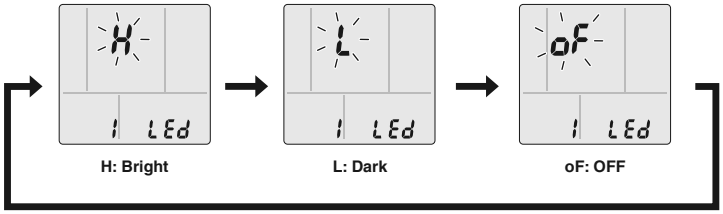



Displays the current setting (H, L or oF)

## 2. Press Select or Select and select menu number 1.

## 3. Press (Push 2sec) Menu to confirm the selected setting.

## 4. Press Select or Select to change the setting as follows:




H: Bright L: Dark oF: OFF

Pressing Select puts the sequence in reverse.

## 5. Press (Push 2sec) Menu again.

- Brightness will be set to the chosen value.

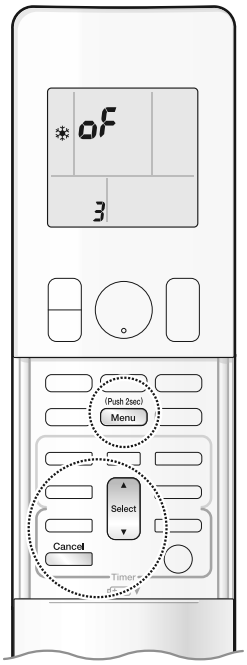
## 6. Press Cancel to return to the default screen.

## NOTE

- The display automatically returns to the default screen after 60 seconds. To return to the default screen sooner, press Cancel twice.
- Indoor unit default setting: H (Bright)

Making Changes to Default Settings

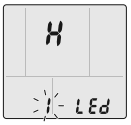
# Airflow Setting When Indoor Unit Reaches Setpoint




Changes can be made to the setting for airflow rate when unit reaches desired temperature (setpoint), to suit your preferences.
This function is effective when COOL operation is selected.

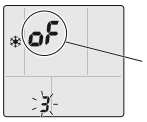
## 1. While operation is stopped, press (Push 2sec) Menu and hold the button for 2 seconds.

- "LEd" appears on the LCD.
- "1" (menu number) blinks.




## 2. Press Select or Select and select menu number 3.

- "❄" appears on the LCD.
- "3" blinks.

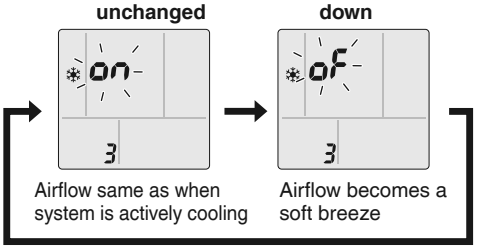



## 3. Press (Push 2sec) Menu to confirm the selected setting.

## 4. Press Select or Select and select setting option.

- The setting option will blink.

**on: Airflow rate unchanged** | **oF: Airflow rate down**




## 5. Press (Push 2sec) Menu again.

## 6. Press Cancel to return to the default screen.

## NOTE

- The display automatically returns to the default screen after 60 seconds. To return to the default screen sooner, press Cancel twice.
- Indoor unit default setting: oF (Airflow rate down)

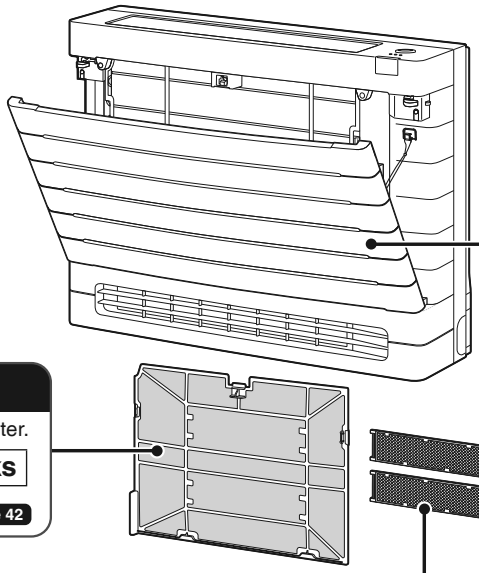
# Care and Cleaning

## ⚠ CAUTION

- **Before cleaning, be sure to stop unit operation and turn off the circuit breaker.**
  Otherwise, an electric shock and injury may result.
  If the refrigerant sensor detects a refrigerant leakage, the fan may suddenly start rotating even though operation is stopped.
- Do not touch the aluminum fins of the indoor unit. If you touch those parts, this may cause an injury.
- After cleaning, be sure to turn on the circuit breaker so that the refrigerant sensor can start operating.

## ■ Quick reference

### Cleaning parts



**Indoor unit and Remote controller**

- Wipe them with a soft cloth.

**If dirty**

**Front panel**

- Wipe it with a soft damp cloth. Only neutral detergent may be used.

**If dirty** ▶Page 41

**Air filter**

- Vacuum dust or wash the filter.

**Once every 2 weeks**

▶Page 42

**Titanium apatite deodorizing filter**

- Vacuum dust or replace the filter.

**[Cleaning]** **Once every 6 months** ▶Page 43

**[Replacement]** **Once every 3 years** ▶Page 43

### Notes on cleaning

**For cleaning, do not use any of the following:**

- Water hotter than 104 °F (40 °C)
- Volatile liquid such as benzine, gasoline and thinner
- Polishing compounds
- Rough materials such as a scrubbing brush
- Sprays such as deodorizers



Care

# Care and Cleaning

## ⚠ CAUTION

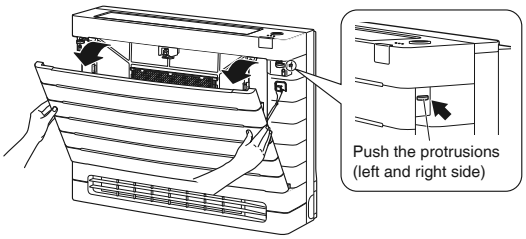
- When removing or attaching the front panel, stand on solid ground and use caution.
- When removing or attaching the front panel, support the panel securely with your hand to prevent it from falling.

## ■ Front panel

### 1. Open the front panel.

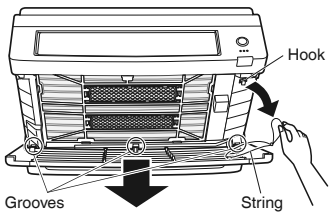
- Push in the protrusions on the unit (the left and right sides).

Careful when opening front panel - string is attached.



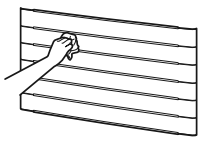

### 2. Remove the front panel.

- Unhook the string.
- Allow the front panel to tilt toward you and then remove it.



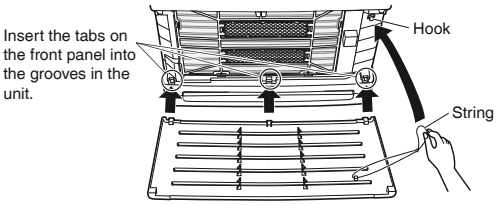

### 3. Clean the front panel.

- Wipe it with a soft damp cloth.
- Only neutral detergent may be used.
- Wash the panel with water, wipe it with a dry soft cloth, and let it dry in the shade after washing.



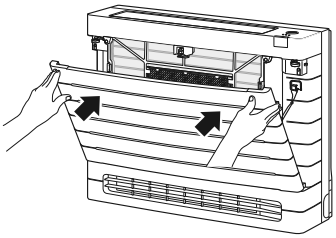
### 4. Reattach the front panel.

- Insert the front panel into the grooves of the unit (3 locations)
- Hook the string.




### 5. Close the front panel slowly.

- Slowly close the front panel until the left and right protrusions click into place.



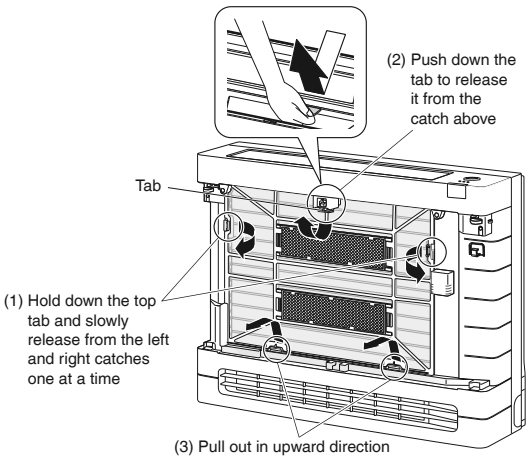
- Make sure that the front panel is securely fixed.

## ■ Air filter

### 1. Open the front panel. ▶Page 41

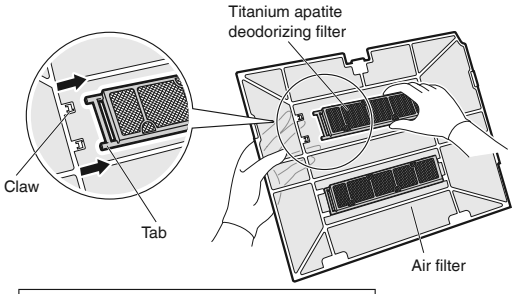
### 2. Pull out the air filter.

- Release from the catches on the left and right. After releasing the air filter from the catch above, the filter will bend which may cause dust to rise into the air.




### 3. Take off the titanium apatite deodorizing filters.

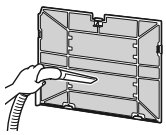
- These are attached to the reverse side of the air filter.
- Hold the recessed parts of the frame and unhook the 4 claws.
- Remove the filters from the tab.




Wear gloves when working.
(Dust from the filter may make your hands dirty.)

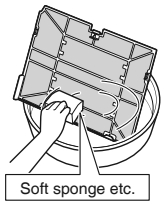
### 4. Wash the air filter with water or clean it with a vacuum cleaner.

- It is recommended to clean the air filter every 2 weeks.



**If the dust does not come off easily**

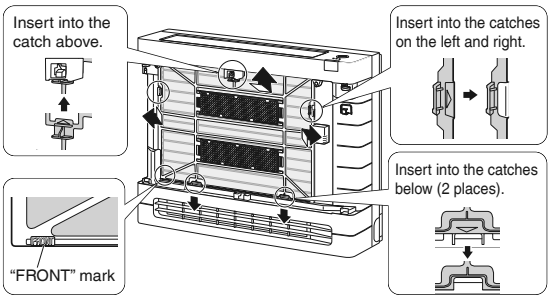
- Wash the air filter with neutral detergent thinned with lukewarm water, then let it dry in the shade.
- Be sure to remove the titanium apatite deodorizing filters.




### 5. Insert the titanium apatite deodorizing filters as they were.

### 6. Reattach the filter.

- Insert the air filter with the “FRONT” mark facing you.
- Insert the tabs (2 at the bottom, and 1 at the left, right and top) using the △ mark as a guide.




### 7. Close the front panel slowly.

▶Page 41

Care

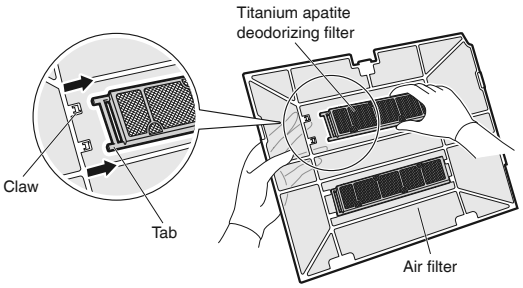
# Care and Cleaning

## ■ Titanium apatite deodorizing filter

### 1. Open the front panel and pull out the air filter. ▶Page 41, 42

### 2. Take off the filters.

- Hold the recessed parts of the frame and unhook the 4 claws.
- Remove the filters from the tabs.



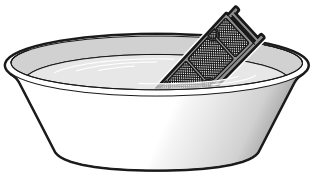

Wear gloves when working.
(Dust from the filter may make your hands dirty.)

### 3. Clean or replace.

**[Cleaning]**

**3-1 Vacuum dust, and soak in lukewarm water or water for about 10 to 15 minutes if very dirty.**

- Do not remove the filter from the frame when washing with water.



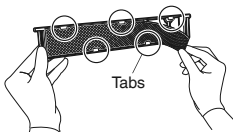
**3-2 After washing, shake off remaining water and let them dry in the shade.**

- This filter can be renewed by washing it with water once **every 6 months** and we recommend replacing it once **every 3 years**.
- Do not squeeze the filter to remove water from it.

**[Replacement]**

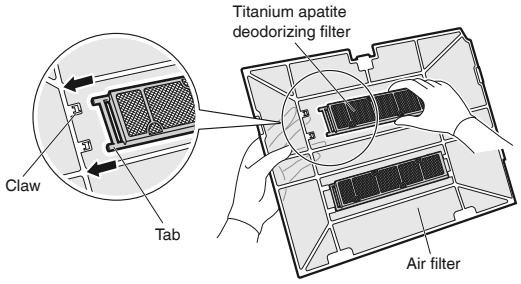
**Remove the filter from the filter frame and prepare a new one.**

- Do not throw away the filter frame.
- Reuse the filter frame when replacing the filter.




- When attaching the filter, check that the filter is properly set in the tabs.

### 4. Set the titanium apatite deodorizing filters as they were.




Wear gloves when working.
(Dust from the filter may make your hands dirty.)

### 5. Reattach the air filter. ▶Page 42

### 6. Close the front panel slowly.

▶Page 41

## NOTE

- Operation with dirty filters:
  – cannot deodorize the air,
  – cannot clean the air,
  – results in poor heating or cooling,
  – may cause odor.
- Dispose of old filters as non-flammable waste.
- To order a titanium apatite deodorizing filter, contact the dealer where you bought the air conditioner.

| Item | Titanium apatite deodorizing filter (without frame) 1 set (2 pieces) |
|---|---|
| Part No. | KAF970A46 |

## ■ Prior to a long period of non-use

### 1. Operate the CLEAN. Page 17

### 2. Clean the air filters and reattach them. Page 42

### 3. To prevent battery leakage, take out the batteries from the remote controller.

- When starting to use the air conditioner again, make sure that the drain hose outlet is not blocked. (Also, put the batteries into the remote controller.)

**Do not turn off the circuit breaker to ensure that the refrigerant sensor can keep operating.**

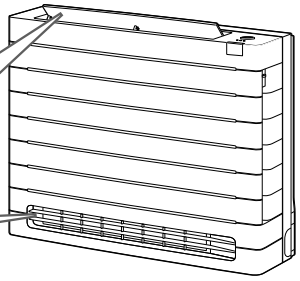
## ■ We recommend periodical maintenance

- In certain operating conditions, the inside of the air conditioner may get foul after several seasons of use, resulting in poor performance. It is recommended to have periodical maintenance by a qualified contractor in addition to regular cleaning by the user.
- For qualified contractor maintenance, please contact the dealer where you bought the air conditioner.

When the Need Arises

# FAQ

## Indoor unit



### The flap does not start swinging immediately.

- The air conditioner is adjusting the position of the flap. The flap will start moving soon.

### Different sounds are heard.

■ **A sound like flowing water**
- This sound is generated because the refrigerant in the air conditioner is flowing.
- This is a pumping sound of the water in the air conditioner and can be heard when the water is pumped out from the air conditioner during COOL or DRY operation.
- The refrigerant flows in the air conditioner even if the air conditioner is not working when the indoor units in other rooms are in operation.

■ **Blowing sound**
- This sound is generated when the flow of the refrigerant in the air conditioner is switched over.

■ **Ticking sound**
- This sound is generated when the cabinet and frame of the air conditioner slightly expand or shrink as a result of temperature changes.

■ **Whistling sound**
- This sound is generated when refrigerant flows during defrosting operation.

■ **Clicking sound during operation or idle time**
- This sound is generated when the refrigerant control valves or the electrical parts operate.

■ **Clopping sound**
- This sound is heard from the inside of the air conditioner when the exhaust fan is activated while the room doors are closed. Open the window or turn off the exhaust fan.

■ **Rotating machinery causes sound**
- Sound is heard when the horizontal swing flap moves.
- When the air conditioner is operating in a quiet environment and the airflow rate of the indoor unit is set to Quiet Mode or Low Mode, the motion of the swing flap may cause sound.

### The air conditioner stops generating airflow during HEAT operation.

- Once the set temperature is reached, the airflow rate is reduced and operation stopped in order to avoid generating a cool airflow. Operation will resume automatically when the indoor temperature falls.

### HEAT operation stops suddenly and a flowing sound is heard.

- The outdoor unit is defrosting. HEAT operation starts after the frost on the outdoor unit has been removed. This can take about 4 to 12 minutes.

### Operation does not start soon.

■ **When On/Off was pressed soon after operation was stopped.**

■ **When the mode was reselected.**
- This is to protect the air conditioner. You should wait for about 3 minutes.

## Outdoor unit

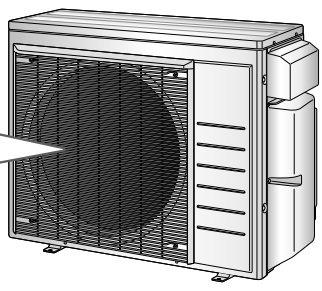
### Operating sound is loud.

- When frost forms on the heat exchanger of the outdoor unit, the operating sound level increases slightly.

### The outdoor unit emits water or steam.

■ **In HEAT operation**
- The frost on the outdoor unit melts into water or steam when the air conditioner is in defrosting operation.

■ **In COOL or DRY operation**
- Moisture in the air condenses into water on the cool surface of the outdoor unit piping and drips.



# Troubleshooting

Before making an inquiry or a request for repair, please check the following.
If the problem persists, consult your dealer.

**Not a problem**
This case is not a problem.

**Check**
Please check again before requesting repairs.

## Unit starts spontaneously

| Case | Description / what to check |
|---|---|
| **Fan starts rotating when the unit is off.<br>(OPERATION lamp is blinking)** | ■ This occurs when the refrigerant sensor has been triggered.<br>• If long beeps are heard.<br>There is a possibility of refrigerant leakage. Ventilate the room, do not switch off the circuit breaker and contact your dealer.<br>• If there are no beeps.<br>Refrigerant leak detection is in progress.<br>If it is determined that there is no refrigerant leakage, the fan will automatically stop after a few minutes.<br>If the blinking does not stop after 10 minutes or more, there may be a refrigerant leak. Do not switch off the circuit breaker and contact your dealer.<br>In addition to refrigerants, insecticides, hairspray etc., can also cause the refrigerant sensor to generate a false alarm. |

## The air conditioner does not operate

| Case | Description / what to check |
|---|---|
| **OPERATION lamp is off.** | • Has the circuit breaker been tripped or the fuse blown?<br>• Is there a power failure?<br>• Are batteries set in the remote controller? |
| **OPERATION lamp is blinking.** | • Check the error code and consult your dealer. ▶Page 51, 52 |

## The air conditioner suddenly stops operating

| Case | Description / what to check |
|---|---|
| **OPERATION lamp is on.** | • To protect the system, the air conditioner may stop operating after sudden large voltage fluctuations. It automatically resumes operation in about 3 minutes. |
| **OPERATION lamp is blinking.** | • Are the air filters dirty?<br>Clean the air filters.<br>• Is there anything blocking the air inlet or air outlet of the indoor unit or outdoor unit?<br>Stop operation and after turning off the circuit breaker, remove the obstruction. Then restart operation with the remote controller. If the OPERATION lamp is still blinking, check the error code and consult your dealer. ▶Page 51, 52<br>• In the case of multi systems, are all indoor units that are connected to the same outdoor unit in the same operation mode?<br>If not, set all indoor units to the same operation mode and confirm that the lamps.<br>Moreover, when the operation mode is in AUTO, set all indoor unit operation modes to COOL or HEAT for a moment and check again that the lamps are normal. If the lamps stop blinking after the above steps, there is no malfunction. ▶Page 33 |

## The air conditioner does not stop operating

| Case | Description / what to check |
|---|---|
| **The air conditioner continues operating even after operation is stopped.** | ■ **Immediately after the air conditioner is stopped**<br>• The outdoor unit fan continues rotating for about another 1 minute to protect the system.<br>■ **While the air conditioner is not in operation**<br>• When the outdoor temperature is high, the outdoor unit fan may start rotating to protect the system. |
| | • CLEAN operation is being performed.<br>It is possible to stop CLEAN operation while it is in progress.<br>(If this does not suit your preferences, set CLEAN to “oF” (Automatic operation is disabled).) ▶Page 17 |

When the Need Arises

# Troubleshooting

## The room does not cool down / warm up

| Case | Description / what to check |
|---|---|
| **Air does not come out.** | ■ **In HEAT operation**<br>• To prevent the release of cold air, air does not come out directly after operation is started. Please wait 1 to 4 minutes.<br>• During defrosting operation, hot air does not flow out of the indoor unit.<br>■ **When the air conditioner operates immediately after the circuit breaker is turned on**<br>• The air conditioner is preparing to operate. Wait for about 3 to 20 minutes. |
| **Air does not come out / Air comes out.** | ■ **Is the airflow rate setting appropriate?**<br>• Is the airflow rate setting low, such as “Indoor unit quiet” or “Airflow rate 1”? Increase the airflow rate setting.<br>■ **Is the set temperature appropriate?**<br>■ **Is the adjustment of the airflow direction appropriate?**<br>■ **Is the airflow rate set to AUTO in COOL operation? Or is the unit operating in DRY operation?**<br>• When the room temperature reaches the set temperature, the airflow rate will decrease to a gentle breeze in order to prevent over-cooling and overheating. When the room temperature deviates from the set temperature again, the gentle breeze will stop and the airflow will become stronger. Also, if the room temperature stabilizes near the set temperature, the airflow rate may repeatedly alter between strong and weak. (The unit may appear to be operating and stopping repeatedly, but this is not the case.) |
| **Air comes out.** | • Is there any furniture directly under or beside the indoor unit?<br>• Is the air conditioner in ECONO operation or QUIET OUTDOOR UNIT operation? ▶Page 23<br>• Is the air filter dirty?<br>• Is there anything blocking the air inlet or air outlet of the indoor unit or outdoor unit?<br>• Is a window or door open?<br>• Is an exhaust fan turning?<br>• Depending on the room conditions, number of occupants, or outdoor temperature and humidity, the set temperature may not be reached. |
| **The room temperature does not reach the set temperature.** | • If air emitted from the air conditioner is directed toward a wall, the set temperature may fail to be reached correctly. |
| **Unit switches to FAN operation spontaneously. (OPERATION lamp is blinking)** | ■ This occurs when the refrigerant sensor has been triggered.<br>• If long beeps are heard.<br>There is a possibility of refrigerant leakage. Ventilate the room, do not switch off the circuit breaker and contact your dealer.<br>• If there are no beeps.<br>Refrigerant leak detection is in progress.<br>If it is determined that there is no refrigerant leakage, the previous operation mode will resume after a few minutes.<br>If the flashing does not stop after 10 minutes or more, there may be a refrigerant leak. Do not switch off the circuit breaker and contact your dealer.<br>In addition to refrigerants, insecticides, hairspray etc., can also cause the refrigerant sensor to generate a false alarm. |

## A sound is heard

| Case | Description / what to check |
|---|---|
| **Continuous long beeps (OPERATION lamp is blinking)** | • This occurs when the refrigerant sensor has been triggered. There is a possibility of refrigerant leakage. Ventilate the room, do not switch off the circuit breaker and contact your dealer. |

## Display lamps

| Case | Description / what to check |
|---|---|
| **The operation lamp is off, but the air conditioner is operating.** | • Is the display brightness set to “Off”? ▶Page 38 |
| | • CLEAN operation is being performed. It is possible to stop CLEAN operation while it is in progress. (If this does not suit your preferences, set CLEAN to “oF” (Automatic operation is disabled).) ▶Page 17 |
| **The display lamps on the main unit are dark.** | • Is the display brightness set to “Low”? ▶Page 38 |

## Wireless LAN connection

| Case | Description / what to check |
|---|---|
| **The device (air conditioner) cannot be found on the device list screen.** | ☑ • Carry out connection setting again.<br>• Move the router (wireless LAN access point) close to the indoor unit. ▶Page 35-37<br>• There is a possibility that you are using an unsupported smartphone or router (wireless LAN access point). For details, refer to the web site. ▶Page 35-37 |
| **Even if the operation lamp is lit, operation from outside the home is not possible.** | ☑ • Communication between the router and the internet connection may not be working. Please confirm. |
| **The operation lamp does not blink or light up.** | ? • The wireless LAN connecting adapter is disabled.<br>• Malfunction in communication between the indoor unit and the wireless LAN connecting adapter.<br>• There may be a problem with your device. Please contact the store where you bought the air conditioner to request a repair service. |

## Discharge air temperature is low

| Case | Description / what to check |
|---|---|
| **High-temperature air is not emitted during HEAT PLUS operation.** | ☑ • When the outdoor temperature is low, and falls below freezing point, emitted air may fail reach a sufficient temperature. |

## Water or mist comes out

| Case | Description / what to check |
|---|---|
| **Mist comes out of the indoor unit.** | ☑ • This happens when the air in the room is cooled into mist by the cold airflow during COOL or other operation. |
| **Water is leaking from the indoor unit.** | ? • If the drain hose is crushed or clogged, water from the indoor unit may be unable to drain and start leaking. Stop operation of the unit immediately and contact your dealer. |

## Remote controller

| Case | Description / what to check |
|---|---|
| **The unit does not receive signals from the remote controller or has a limited operating range.** | ☑ • The batteries may be exhausted.<br>Replace both batteries with new dry batteries AAA.LR03 (alkaline).<br>For details, refer to "**Preparation Before Operation**". ▶Page 10<br>• Signal communication may be disabled if an electronic-starter-type fluorescent lamp (such as inverter-type lamps) is in the room. Consult your dealer if that is the case.<br>• The remote controller may not function correctly if the transmitter is exposed to direct sunlight.<br>• Is there a device in the room that redirects remote controller signals?<br>Some appliances such as TV speakers are equipped with these devices.<br>If there is such a device in the room, the signals it emits may interfere with signals from the remote controller, preventing reception.<br>• Infrared rays from smartphones and game consoles may interfere with signals from the remote controller, preventing reception. |
| **LCD is faint, is not working, or the display is erratic.** | ☑ • The batteries may be exhausted.<br>Replace both batteries with new dry batteries AAA.LR03 (alkaline).<br>For details, refer to "**Preparation Before Operation**". ▶Page 10 |
| **" " on the LCD is blinking and the remote controller cannot be operated.** | ☑ • Battery power has run out.<br>Replace both batteries at the same time with new size AAA.LR03 (alkaline) batteries.<br>Leaving exhausted batteries in the remote controller can result in injury due to battery leakage, rupturing or heating, or lead to equipment failure.<br>(Even when the is blinking, the OFF button remains functional.) |
| **Other electric devices start operating.** | ☑ • If the remote controller activates other electric devices, move them away or consult your dealer. |

When the Need Arises

# Troubleshooting

## Air has an odor

| Case | Description / what to check |
|---|---|
| **The air conditioner gives off an odor.** | ☑ • The room odor absorbed in the unit is discharged with the airflow. We recommend you to have the indoor unit cleaned. Please consult your dealer. |
| | ☑ • The indoor unit is blowing out room odor it has absorbed (the smell of walls or carpeting, furniture, clothes, and so on). If the air conditioner has been used for a long time, there is a chance that a dirty heat exchanger or fan are emitting an odor. We recommend you to have the indoor unit cleaned. Please consult your dealer. Do not spray the air conditioner unit with any deodorizers. |

## Others

| Case | Description / what to check |
|---|---|
| **Outdoor and indoor unit fans rotate even though the unit is off.** | ? ■ If the indoor unit fan is rotating and the OPERATION lamp is blinking, this indicates that the refrigerant sensor has been triggered. • If long beeps are heard. There is a possibility of refrigerant leakage. Ventilate the room, do not switch off the circuit breaker and contact your dealer. • If there are no beeps. Refrigerant leak detection is in progress. If it is determined that there is no refrigerant leakage, the fan will automatically stop after a few minutes. If the flashing does not stop after 10 minutes or more, there may be a refrigerant leak. Do not switch off the circuit breaker and contact your dealer. In addition to refrigerants, insecticides, hairspray etc., can also cause the refrigerant sensor to generate a false alarm. |
| **The air conditioner suddenly starts behaving strangely during operation.** | ? • The air conditioner may malfunction due to lightning or radio. If the air conditioner malfunctions, turn off the power with the circuit breaker and restart the operation with the remote controller. |
| **The WEEKLY TIMER does not operate according to the settings.** | ☑ • Check if the ON / OFF TIMER and the WEEKLY TIMER are set to the same time. Change or deactivate the settings in the ON / OFF TIMER. ▶Page 24, 25 |
| **The ON/OFF TIMER does not operate according to the settings.** | ☑ • Check if the ON / OFF TIMER and the WEEKLY TIMER are set to the same time. Change or deactivate the settings in the WEEKLY TIMER. ▶Page 27 |
| **The ceiling and walls around the indoor unit are black and dirty.** | ☑ • Due to the circulation pattern of the air and static electricity, the air conditioner is causing airborne dirt and dust to stick to walls and other surfaces. Depending on the wallpaper type, dirt may adhere more easily. A thorough cleaning of the area around the air conditioner is recommended. |

**Notes on the operating conditions**

- If operation continues under any conditions other than those listed in the table,
  - A safety device may activate to stop the operation. (With a multi connection in COOL operation, the safety device may work to stop the operation of the outdoor unit only.)
  - Dew may form on the indoor unit and drip from it when COOL or DRY operation is selected.

*1 Cutting the jumper on the outdoor unit PCB will extend the cooling operation range to 14 °F (–10.0 °C). Installing an air direction adjustment grille (sold separately) will further extend the operation range to –4 °F (–20.0 °C). Please consult your dealer.

*2 Installing a drain pan heater (sold separately) will further extend the heating operation range to –13 °F (–25.0 °C). Please consult your dealer.

| Mode | Operating conditions |
|---|---|
| **COOL / DRY** | Outdoor temperature<br>[RXP models] : 50*1 - 115 °F(10*1 - 46 °C)<br>[MXM, MXT, MXTH models] : 14 - 115 °F(–10 - 46 °C)<br>*1 –4 °F (–20 °C) if an air direction adjustment grille (sold separately) is installed.<br>Indoor temperature : 64 - 90 °F(18 - 32 °C)<br>Indoor humidity : 80% max. |
| **HEAT** | Outdoor temperature<br>[MXM models] : 5 - 75 °F(–15 - 24 °C)<br>[RXP, MXT models] : 5*2 - 75 °F(–15*2 - 24 °C)<br>[MXTH models] : –13 - 75 °F(–25 - 24 °C)<br>*2 –13 °F (–25 °C) if a drain pan heater (sold separately) is installed.<br>Indoor temperature : 50 - 86 °F(10 - 30 °C) |

## ■ Call your dealer immediately

### ⚠ WARNING

**When an abnormality (such as a burning smell) occurs, stop operation and turn off the circuit breaker.**
- Continued operation in an abnormal condition may result in problems, electric shock or fire.
- Consult the dealer where you bought the air conditioner.

**Do not attempt to repair or modify the air conditioner by yourself.**
- Incorrect work may result in electric shock or fire.
- Consult the dealer where you bought the air conditioner.

### If one of the following symptoms takes place, call your dealer immediately.

- **The power cord is abnormally hot or damaged.**
- **An abnormal sound is heard during operation.**
- **The circuit breaker, a fuse, or the ground fault circuit interrupter cuts off the operation frequently.**
- **A switch or a button often fails to work properly.**
- **There is a burning smell.**
- **Water leaks from the indoor unit.**

Turn off the circuit breaker and call your dealer.

**■ After a power failure**
- The air conditioner automatically resumes operation in about 3 minutes. You should just wait for a while.

**■ Lightning**
- If there is a risk lightning could strike in the neighborhood, stop operation and turn off the circuit breaker to protect the system.

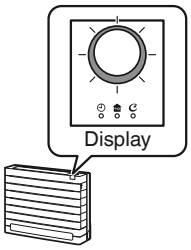
## ■ Disposal requirements

- Dismantling of the unit, handling of the refrigerant, oil and other parts, should be done in accordance with the relevant local and national regulations.

When the Need Arises

# Troubleshooting

## The OPERATION lamp blinks

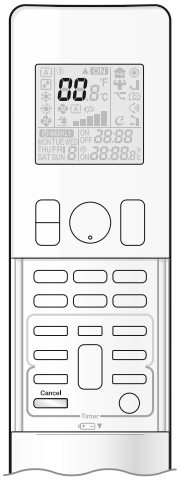



### ■ Check the interval time between blinks of the OPERATION lamp.

**If connecting to multiple indoor units**

**[Blink interval of about 2 to 3 seconds]**
Check the operation mode of any indoor units connected in other rooms.
Because this is a multi system air conditioner, it has one outdoor unit connected to multiple indoor units in different rooms.
If the operation mode is different from the operation mode of the indoor unit in another room, the OPERATION lamp may blink and operation may not be performed, or operation may stop while in progress.
COOL, DRY and HEAT operation may not be used at the same time.

**[Blink interval of about 0.5 seconds]**
This is a notification of an abnormality.
Check the error code following the procedure below, and respond according to the instructions in the table.




### ■ Fault diagnosis by remote controller

**1.** **When Cancel is held down for about 5 seconds, " 00 " blinks in the temperature display section.**

**2.** **While pointing the remote controller at the indoor unit, press Cancel repeatedly.**

A beep indicates a non-corresponding error code
A long beep indicates a corresponding error code

**3.** **When a long beep is produced, check the error code and respond according to the instructions in the table.**

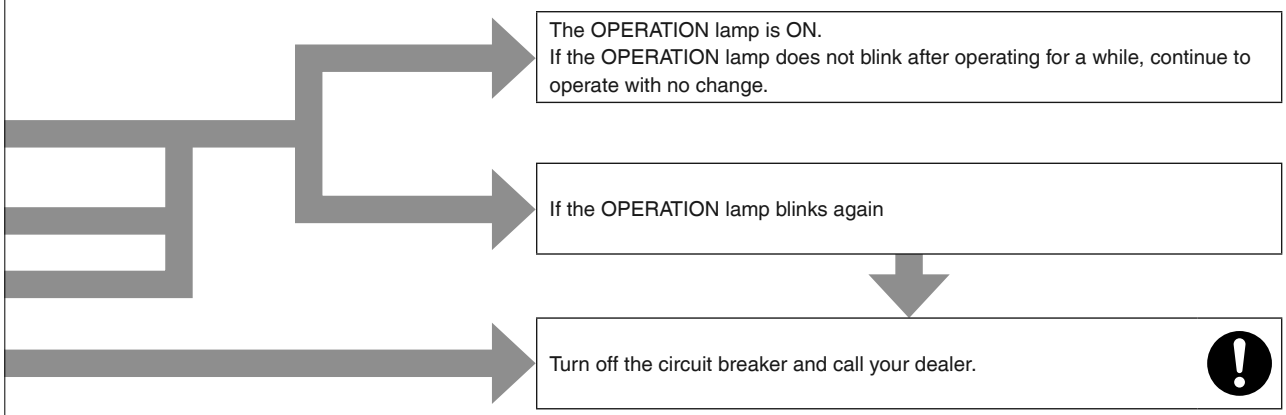
- To cancel the code display, hold down Cancel for about 5 seconds (the code display also clears if no button is pressed for a while).

| CODE | Cause | Description / what to check |
|---|---|---|
| **A0** | The refrigerant sensor has detected refrigerant or another gas.<br>• Can long beeps be heard? | ■ If beeps are heard.<br>There is a possibility of refrigerant leakage. Ventilate the room, **do not switch off the circuit breaker** and contact your dealer.<br>■ If there are no beeps.<br>Refrigerant leak detection is in progress. This may take a few minutes.<br>If the blinking does not stop after 10 minutes or more, there may be a refrigerant leak.<br>**Do not switch off the circuit breaker** and contact your dealer.<br>In addition to refrigerants, insecticides, hairspray etc., can also cause the refrigerant sensor to generate a false alarm. |
| **E7** | The fan of the outdoor unit is stopped.<br>• Is there any foreign matter inside the outdoor unit? | After turning off the circuit breaker, remove the foreign matter, then turn the power on again and operate. |
| **L3, L4, L5** | The temperature inside the outdoor unit has become too high, so operation has stopped.<br>• Is there anything blocking the air outlet of the outdoor unit? | After turning off the circuit breaker, remove the obstruction, then turn the power on again and operate. |
| Other error codes, or if the error code cannot be checked | | An abnormality has occurred. |

In the case of error code **U0** or **F3**

| | CODE | MEANING |
|---|---|---|
| SYSTEM | 00 | NORMAL |
| | UA | INDOOR-OUTDOOR UNIT COMBINATION FAULT |
| | U0 | REFRIGERANT SHORTAGE |
| | U2 | DROP VOLTAGE OR MAIN CIRCUIT OVERVOLTAGE |
| | U4 | FAILURE OF TRANSMISSION (BETWEEN INDOOR UNIT AND OUTDOOR UNIT) |
| INDOOR UNIT | A0 | REFRIGERANT LEAK DETECTION IN PROGRESS |
| | A1 | INDOOR PCB DEFECTIVENESS |
| | A5 | HIGH PRESSURE CONTROL OR FREEZE-UP PROTECTOR |
| | A6 | FAN MOTOR FAULT |
| | CH | REFRIGERANT SENSOR ERROR |
| | C4 | FAULTY HEAT EXCHANGER TEMPERATURE SENSOR |
| | C9 | FAULTY SUCTION AIR TEMPERATURE SENSOR |
| OUTDOOR UNIT | EA | COOLING-HEATING SWITCHING ERROR |
| | E1 | CIRCUIT BOARD FAULT |
| | E3* | HIGH PRESSURE SWITCH (HPS) ACTIVATED |
| | E5 | OL (COMPRESSOR OVERLOAD) STARTED / HIGH PRESSURE SWITCH (HPS) ACTIVATED* |
| | E6 | FAULTY COMPRESSOR START UP |
| | E7 | DC FAN MOTOR FAULT |
| | F3 | HIGH TEMPERATURE DISCHARGE PIPE CONTROL |
| | F6 | HIGH PRESSURE CONTROL (IN COOLING) |
| | H0 | SENSOR FAULT |
| | H6 | OPERATION HALT DUE TO FAULTY POSITION DETECTION SENSOR |
| | H8 | DC CURRENT SENSOR FAULT |
| | H9 | FAULTY SUCTION AIR TEMPERATURE SENSOR |
| | J3 | FAULTY DISCHARGE PIPE TEMPERATURE SENSOR |
| | J6 | FAULTY HEAT EXCHANGER TEMPERATURE SENSOR |
| | L3 | ELECTRICAL PARTS HEAT FAULT |
| | L4 | HIGH TEMPERATURE AT INVERTER CIRCUIT HEATSINK |
| | L5 | OUTPUT OVERCURRENT |
| | P4 | FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR |

*The contents of the error differ depending on the connected outdoor unit.



## 2.6 CMXV12/18/24

DAIKIN

# OPERATION MANUAL

# MULTI-SPLIT AIR HANDLER AIR CONDITIONER

**MODELS**
**Air Handling Unit**

**CMXV12AVJUA**
**CMXV18AVJUA**
**CMXV24AVJUA**

Read these instructions carefully before installation. Keep this manual in a handy place for future reference. This manual should be left with the equipment owner.

Lire soigneusement ces instructions avant l'installation. Conserver ce manuel à portée de main pour référence ultérieure. Ce manuel doit être donné au propriétaire de l'équipement.

Lea cuidadosamente estas instrucciones antes de instalar. Guarde este manual en un lugar a mano para leer en caso de tener alguna duda. Este manual debe permanecer con el propietario del equipo.

**WARNING**

Only personnel that have been trained to install, adjust, service, maintenance or repair (hereinafter, "service") the equipment specified in this manual should service the equipment.

This equipment is not intended for use by persons (including children) with reduced physical, sensory or mental capacities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the equipment.

The manufacturer will not be responsible for any injury or property damage arising from improper supervision, service or service procedures. If you service this unit, you assume responsibility for any injury or property damage which may result. In addition, in jurisdictions that require one or more licenses to service the equipment specified in this manual, only licensed personnel should service the equipment. Improper supervision, installation, adjustment, servicing, maintenance or repair of the equipment specified in this manual, or attempting to install, adjust, service or repair the equipment specified in this manual without proper supervision or training may result in product damage, property damage, personal injury or death.

**WARNING**

Do not bypass safety devices.

**WARNING**

This unit should be installed in a manner so that it is not accessible to the public.

Our continuing commitment to quality products may mean a change in specifications without notice.
© 2025 Daikin Comfort Technologies Manufacturing, Inc.
19001 Kermier Rd., Waller, TX 77484
www.daikincomfort.com

IOD-4067
08/2025

**NOTE: Refer also to the General safety considerations attached to the outdoor unit.**

| | |
|---|---|
|  | service indicator; read technical manual |
|  | operator's manual; operating instructions |
|  | warning; flammable materials |
|  | UN GHS flame symbol |

**Marking Symbol Table**

## Table of Contents

**Safety Instructions**.....2
**Part Nomenclature**.....5
**Maintenance**.....6
**Precautions**.....7

## SAFETY INSTRUCTIONS

Read these “SAFETY INSTRUCTIONS for Operations” carefully before installing. After completing the installation, make sure that the unit operates properly during the startup operation.

Instruct the customer on how to operate and maintain the unit. Inform customers that they should store this Operation Manual with the Installation Manual for future reference.

Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electrical shock, fire, or explosion.

Rated performance is achieved after 20 hours of operation. Rated performance is delivered at the specified airflow. See product specification sheet for light commercial models. Specification sheets can be found at www.daikincomfort.com for Daikin brand products. Within the website, please select the commercial product menu and then select the submenu for the type of product to be installed, such as air conditioners or heat pumps, to access a list of product pages that each contain links to that model's specification sheet.

**Meanings of DANGER, WARNING, CAUTION and NOTE Symbols:**

**DANGER:**.....Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

**WARNING**.....Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

**CAUTION**.....Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

**NOTE:**.....Indicates situations that may result in equipment or property-damage accidents only.

**DANGER: Any abnormalities in the operation of the air handler such as smoke of fire could result in severe injury or death. Turn off the power and contact your dealer immediately.**

**DANGER: Refrigerant gas may produce toxic gas if it comes in contact with fire, such as from a fan, heater, stove or cooking device. Exposure to this gas could cause severe injury or death.**

**DANGER: For refrigerant leakage, consult your dealer. Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements and an asphyxiation hazard could occur leading to serious injury or death.**

**DANGER: If equipment utilizing a burner is used in the same room as the air handler, there is the danger of oxygen deficiency which could lead to an asphyxiation hazard resulting in serious injury or death. Be sure to ventilate the room sufficiently to avoid this hazard.**

**DANGER: Safely dispose of the packing materials. Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.**

**DANGER: Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death by suffocation.**

**WARNING**

**A refrigerant leak detection system is installed. The unit must be powered on at all times except for service.**

**WARNING**

Contact your dealer for repair and maintenance. Improper repair and maintenance may result in water leakage, electric shock and fire. Only use accessories made by Daikin that are specifically designed for use with this equipment and have them installed by a professional.

**WARNING**

Contact your dealer to move and reinstall the air handler. Incomplete installation may result in water leakage, electric shock and fire.

**WARNING**

Never let the indoor unit or the remote controller get wet. Water can cause an electric shock or a fire.

**WARNING**

Never remove the front panel of the unit. A fan rotating at high speed without the front panel is very dangerous.

**WARNING**

Never inspect or service the unit by yourself. Contact a qualified service person to perform this work.

**CAUTION**

Refrigerant R-32 in the system must be kept clean, dry and tight.

A. Clean and Dry - Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.
B. Tight - R-32 does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R-32 can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter Refrigerant Piping and follow the procedures.

**WARNING**

Turn off all electrical power before doing any maintenance to avoid the risk of serious electric shock. Never sprinkle or spill water or liquids on the unit.

**WARNING**

Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.

**WARNING**

Do not allow children to play on or around the unit to prevent injury.

**WARNING**

Placing a flower vase or other containers with water or other liquids on the unit could cause a shock or fire if a spill occurs.

**WARNING**

Never touch the internal parts of the controller. Do not remove the front panel because some parts inside are dangerous to touch. To check and adjust internal parts, contact your dealer.

**WARNING**

Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.

**WARNING**

The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater). Do not pierce or burn. Be aware that refrigerants may not contain an odor.

**WARNING**

When installed in a room with an area less than that outlined in General Safety Consideration manual provided with Outdoor Unit, that room shall be without continuously operating open flames (for example an operating gas appliance) or other potential ignition sources (for example an operating electric heater, hot surfaces). A flame-producing device may be installed in the same space if the device is provided with an effective flame arrest.

**WARNING**

Auxiliary devices which may be a potential ignition source are not to be installed in the duct work. Such potential ignition sources include hot surfaces with a temperature exceeding 700°C and electric switching devices.

**WARNING**

ONLY AUXILIARY DEVICES APPROVED BY THE APPLIANCE MANUFACTURER OR DECLARED SUITABLE WITH THE REFRIGERANT SHALL BE INSTALLED IN CONNECTING DUCTWORK.

**CAUTION**

DO NOT USE THE AIR HANDLER FOR ANY OTHER PURPOSES OTHER THAN COMFORT COOLING OR HEATING. DO NOT USE THE UNIT FOR COOLING PRECISION INSTRUMENTS, FOOD, PLANTS, ANIMALS OR WORKS OF ART.

**CAUTION**

DO NOT PLACE ITEMS UNDER THE INDOOR UNIT AS THEY MAY BE DAMAGED BY CONDENSATES THAT MAY FORM IF THE HUMIDITY IS ABOVE 80% OR IF THE DRAIN OUTLET GETS BLOCKED.

**CAUTION**

BEFORE CLEANING, STOP THE OPERATION OF THE UNIT BY TURNING THE POWER OFF OR BY PULLING THE SUPPLY CORD OUT FROM ITS RECEPTACLE. OTHERWISE, AN ELECTRIC SHOCK AND INJURY MAY RESULT.

**CAUTION**

TAKE PRECAUTION TO PREVENT WATER ENTERING INTERNAL ELECTRICAL COMPARTMENT DURING SERVICING. FAILURE TO DO SO MAY RESULT AN ELECTRIC SHOCK OR FIRE.

**CAUTION**

AVOID PLACING THE CONTROLLER IN A SPOT SPLASHED WITH WATER. WATER ENTERING THE CONTROLLER MAY CAUSE AN ELECTRIC SHOCK OR DAMAGE THE INTERNAL ELECTRONIC PARTS.

**CAUTION**

DO NOT OPERATE THE AIR HANDLER WHEN USING A ROOM FUMIGATION TYPE OF INSECTICIDE. FAILURE TO OBSERVE THIS COULD CAUSE THE CHEMICALS TO BE DEPOSITED IN THE UNIT AND CAN ENDANGER THE HEALTH OF THOSE WHO ARE HYPERSENSITIVE TO CHEMICALS.

**CAUTION**

THE REMOTE CONTROLLER SHOULD BE KEPT AWAY FROM CHILDREN SO THEY CANNOT PLAY WITH IT.

**CAUTION**

CONSULT WITH THE INSTALLATION CONTRACTOR FOR CLEANING.

**CAUTION**

INCORRECT CLEANING OF THE INSIDE OF THE AIR HANDLER COULD MAKE THE PLASTIC PARTS BREAK AND CAUSE WATER LEAKAGE OR ELECTRIC SHOCK.

**CAUTION**

DO NOT TOUCH THE AIR INLET OR ALUMINUM FIN OF THE AIR HANDLER AS THEY CAN CUT AND CAUSE INJURY.

**NOTE: NEVER PRESS THE BUTTON OF THE REMOTE CONTROLLER WITH A HARD, POINTED OBJECT. THE REMOTE CONTROLLER MAY BE DAMAGED.**

**NOTE: NEVER PULL OR TWIST THE ELECTRIC WIRE OF THE REMOTE CONTROLLER. IT MAY CAUSE THE UNIT TO MALFUNCTION.**

**NOTE: DO NOT PLACE APPLIANCES THAT PRODUCE OPEN FLAMES IN PLACES THAT ARE EXPOSED TO THE AIR FLOW OF THE UNIT OR UNDER THE INDOOR UNIT. IT MAY CAUSE INCOMPLETE COMBUSTION OR DEFORMATION OF THE UNIT DUE TO THE HEAT.**

**NOTE: DO NOT EXPOSE THE CONTROLLER TO DIRECT SUNLIGHT. THE LCD DISPLAY CAN BECOME DISCOLORED AND MAY FAIL TO DISPLAY THE DATA.**

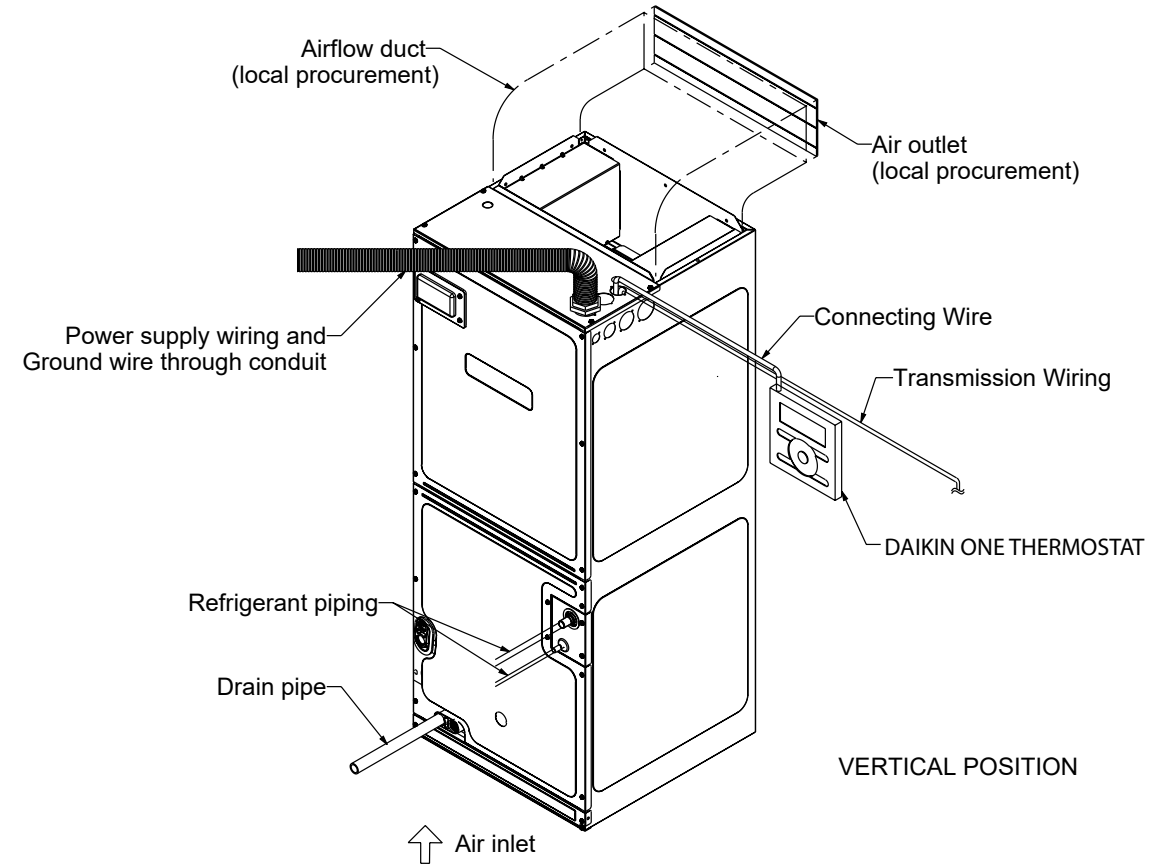
**NOTE: DO NOT WIPE THE CONTROLLER OPERATION PANEL WITH BENZENE, THINNER, CHEMICAL DUST CLOTH, ETC. THE PANEL MAY GET DISCOLORED OR THE COATING CAN PEEL OFF. IF IT IS HEAVILY DIRTY, SOAK A CLOTH IN WATER-DILUTED NEUTRAL DETERGENT, SQUEEZE IT WELL AND WIPE THE PANEL CLEAN. THEN WIPE IT WITH ANOTHER DRY CLOTH.**

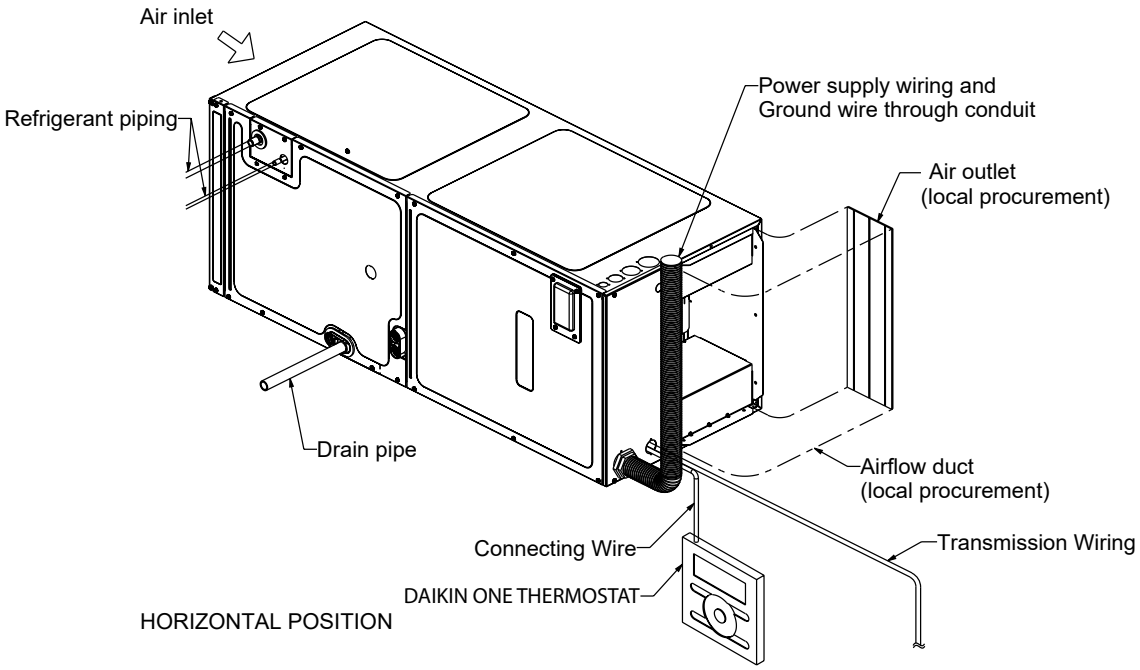
**NOTE: DISMANTLING OF THE UNIT, DISPOSAL OF THE REFRIGERANT, OIL, AND ADDITIONAL PARTS, SHOULD BE DONE IN ACCORDANCE WITH THE RELEVANT LOCAL, STATE, AND NATIONAL REGULATIONS.**

**NOTE: OPERATE THE AIR HANDLER IN A SUFFICIENTLY VENTILATED AREA AND NOT SURROUNDED BY OBSTACLES. DO NOT USE THE AIR HANDLER IN THE FOLLOWING PLACES.**

a. Places with a mist of mineral oil, such as cutting oil.
b. Locations such as coastal areas where there is a lot of salt in the air.
c. Locations such as hot springs where there is a lot of sulfur in the air.

## PART NOMENCLATURE




5

IOD-4067

d. Locations such as factories where the power voltage varies a lot.
e. In cars, boats, and other vehicles.
f. Locations such as kitchens where oil may splatter or where there is steam in the air.
g. Locations where equipment produces electromagnetic waves.
h. Places with an acid or alkaline mist.
i. Places where fallen leaves can accumulate or where weeds can grow.

- Do not attempt to do electrical work or grounding work, unless you are licensed to do so. Consult with your dealer for electrical work and grounding work.
- Pay attention to operating sound. Be sure to use the following places:
  a. Places that can sufficiently withstand the weight of the air handler yet can suppress the operating sound and vibration of the air handler.
  b. Places where warm air from the air outlet of the outside unit or the operating sound of the outside unit does not annoy neighbors.
- Consult your dealer if the air handler in operation generates unusual noise.
- Make sure that the drainpipe is installed properly to drain water. If no water is discharged from the drainpipe while the air handler is in the cooling mode, the drainpipe may be clogged with dust or dirt and water leakage from the indoor unit may occur. Stop operating the air handler and contact your dealer.

**NOTE: Install the power supply and control wires for the indoor and outdoor units at least 3.5 feet away from televisions or radios to prevent interference or noise. Depending on the radio waves, a distance of 3.5 feet may not be sufficient to eliminate the noise.**

**NOTE: Do not use the following tools that are used with conventional refrigerants: gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.**

**NOTE: This air conditioner or heat pump is an appliance that should not be accessible to the general public.**

## MAINTENANCE

**WARNING**

Only a qualified person is allowed to perform maintenance.

**WARNING**

Before touching any of the connection wirings, be sure to turn off all power supply switches.

**WARNING**

For installation of optional parts, only a qualified person is allowed to do so.

**WARNING**

Be sure to use optional parts specified by the manufacturer. Installation in your own manner may result in water leakage, electric shock or fire.

**WARNING**

Do not use flammable material (e.g. hair-spray or insecticide) near the product.

**CAUTION**

Only proceed with the unit cleaning after stopping the operation and turning the power supply off. Failure to do so may result in electric shocks or injury.

**CAUTION**

Consult with installation contractor for cleaning the inside of the air handler. Wrong cleaning procedures may break plastic parts or cause water leakage or electric shock.

**CAUTION**

Use a stable prep stand. Pay extra attention when cleaning the air handler.

### Maintenance and inspection

- Clean the drain pan periodically. The drain pipes clogged with dust will cause water leakage.
- For cleaning, consult with your Daikin dealer. (Before each season when cooling or heating is required, clean the air handler.)

### Cleaning the inside of the indoor unit

- It is necessary to clean the inside of the indoor unit periodically.
- Since the cleaning requires special technologies, request a Daikin dealer to clean them.

### Electric heater replacement interval

- The electric heater should be replaced every ten years.
- This replacement interval is a guideline for ensuring safe and trouble-free operation of the product for many years.

**CLEANING THE AIR FILTER**

- The air filter is an optional accessory.

**EXPLANATION:**

- Removing the air filter except when cleaning the air handler may result in dust and lint build up on internal parts. This can result in loss of efficiency, equipment damage, smoke and even have possibility of fire.
- Replace the filter when one of the following message is displayed on the bottom of remote controller screen.
  - Time to clean filter & element
  - Time to clean filter
- If using the air handler under very dusty environment, increase the frequency of air filter cleaning.
- Reset the filter sign on main menu of remote controller. Refer to the operation manual of remote controller for detail.
- Consult dealer to change filter setting time to display filter change alarm on remote controller screen. (The default factory setting is 2500 hours.)
- The change filter setting time can be changed to the following options: 1250, 2500, 5000, 10000.

## PRECAUTIONS

If the following phenomenon occurs, contact your dealer.

**DANGER: ANY ABNORMALITIES IN THE OPERATION OF THE HEAT PUMP OR AIR HANDLER LEADING TO SMOKE OR FIRE COULD RESULT IN SEVERE INJURY OR DEATH.**
**TURN OFF THE POWER AND CONTACT YOUR DEALER IMMEDIATELY FOR INSTRUCTIONS.**

**PHENOMENON**

- The unit may operate with the airflow rate at high speed even though the airflow rate was set to low speed using the remote controller during ELECTRIC HEATER operation.
- **Take the following actions before contacting your dealer:**
  Check to see if an optional electric heater is installed. The unit operates with the airflow rate at high speed during ELECTRIC HEATER operation regardless of the remote controller airflow rate setting or display.

**PHENOMENON**

- The safety devices such as fuse, breaker, ground fault interrupter, etc. often operate or operations of the operation switch are unstable.
- **Take the following actions before contacting your dealer:**
  Turn off the switch.
- If the ON/OFF switch does not properly work,
- **Take the following actions before contacting your dealer:**
  Turn off the main power switch.

**PHENOMENON**

- Water leaks out from the air handler.
- **Take the following actions before contacting your dealer:**
  Stop the operation.

**PHENOMENON**

- Error message is displayed. See the remote controller operation manual for details.
- **Inform the dealer of the details being displayed on the remote controller.**

# AIR HANDLER

## AIR HANDLER HOMEOWNER'S ROUTINE MAINTENANCE RECOMMENDATIONS

*We strongly recommend a bi-annual maintenance checkup be performed before the heating and cooling seasons begin by a **qualified servicer.***

### Replace or Clean Air Filter

**IMPORTANT NOTE:** Never operate unit without a filter installed as dust and lint will build up on internal parts resulting in loss of efficiency, equipment damage and possible fire.

An indoor air filter must be used with your comfort system. A properly maintained filter will keep the indoor coil of your comfort system clean. A dirty coil could cause poor operation and/or severe equipment damage.

Your air filter or filters could be located in your furnace, in a blower unit, or in "filter grilles" in your ceiling or walls. The installer of your air conditioner or heat pump can tell you where your filter(s) are, and how to clean or replace them.

Check your filter(s) at least once a month. When they are dirty, replace or clean as required. Disposable type filters should be replaced. Reusable type filters may be cleaned.

You may want to ask your dealer about high efficiency filters. High efficiency filters are available in both electronic and non-electronic types. These filters can do a better job of catching small airborne particles.

### Motors

Indoor and outdoor fan motors are permanently lubricated and do not require additional oiling.

**⚠ WARNING**

**HIGH VOLTAGE**
**Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury or death.**



### Aluminum Indoor Coil Cleaning (Qualified Servicer Only)

R-32 sensor must be removed from the unit before applying coil cleaners to avoid damage and contamination. Reassemble the R-32 sensor back in the unit after completing the coil cleaning process. This unit is equipped with an aluminum tube evaporator coil. The safest way to clean the evaporator coil is to simply flush the coil with water. This cleaning practice remains as the recommended cleaning method for both copper tube and aluminum tube residential evaporator coils.

It has been determined that many coil cleaners and drain pan tablets contain corrosive chemicals that can be harmful to aluminum tube and fin evaporator coils. Even a one-time application of these corrosive chemicals can cause premature aluminum evaporator coil failure. Any cleaners that contain corrosive chemicals including, but not limited to, chlorine and hydroxides, should not be used. An alternate cleaning method is to use one of the products listed in TP-109* to clean the coils. The cleaners listed are the only agents deemed safe and approved for use to clean round tube aluminum coils.

**⚠ CAUTION**

**To avoid risk of equipment damage or fire, install the same amperage breaker or fuse as you are replacing. If the circuit breaker or fuse should open again within thirty days, contact a qualified servicer to correct the problem. If you repeatedly reset the breaker or replace the fuse without having the problem corrected, you run the risk of severe equipment damage.**

### Before you Call your Servicer

- Check the controller to confirm that it is properly set.
- Wait 15 minutes. Some devices in the outdoor unit or in programmable controllers will prevent compressor operation for awhile, and then reset automatically. Also, some power companies will install devices which shut off air conditioners for several minutes on hot days. If you wait several minutes, the unit may begin operation on its own.
- Check the electrical panel for tripped circuit breakers or open fuses. Reset the circuit breakers or replace fuses as necessary.
- Check the disconnect switch near the indoor furnace or blower to confirm that it is closed.
- Check for obstructions on the outdoor unit. Confirm that it has not been covered on the sides or the top. Remove any obstruction that can be safely removed. If the unit is covered with dirt or debris, call a qualified servicer to clean it.
- Check for blockage of the indoor air inlets and outlets. Confirm that they are open and have not been blocked by objects (rugs, curtains or furniture).
- Check the filter. If it is dirty, clean or replace it.
- Listen for any unusual noise(s), other than normal operating noise, that might be coming from the outdoor unit. If you hear unusual noise(s) coming from the unit, call a qualified servicer.

## 2.7 FFA09/12/15/18

**Read Before Operation**

# Contents


### ■ Read Before Operation

Safety Considerations ..... 1

Names of Parts ..... 4

### ■ Multi Connection

Note for Multi System ..... 5

### ■ Care

Care and Cleaning ..... 7

### ■ When the Need Arises

Troubleshooting ..... 11


The pictures in this document are for illustrative purposes only.

# Safety Considerations

**Refer also to the General Safety Considerations in the separate booklet.**

| | |
|---|---|
|  | **Read the precautions in this manual carefully before operating the unit.** |
|   | **This appliance is filled with R32.** |

Read these **Safety Considerations for Operations** carefully before operating an air conditioner or heat pump.
Make sure that the unit operates properly during the startup operation. Instruct the user on how to operate and maintain the unit.
Inform users that they should store this operation manual with the installation manual for future reference.
Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

⚠ **DANGER** ····· Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING** ····· Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** ····· Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ **NOTE** ····· Indicates situations that may result in equipment or property-damage accidents only.

**⚠ DANGER**

- Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.
- Any abnormalities in the operation of the air conditioner or heat pump, such as smoke or fire, could result in severe injury or death. Turn off the power and contact your dealer immediately.
- Refrigerant gas may produce toxic gas if it comes into contact with fire, such as from a fan heater, stove, or cooking device. Exposure to this gas could cause severe injury or death.
- For refrigerant leakage, consult your dealer.
  Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- If equipment utilizing a burner is used in the same room as the air conditioner or heat pump, there is the danger of oxygen deficiency which could lead to an asphyxiation hazard resulting in serious injury or death. Be sure to ventilate the room sufficiently to avoid this hazard.

- Safely dispose of the packing materials. Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
- Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death by suffocation.

### ⚠ WARNING

- Contact your dealer for repair and maintenance. Improper repair and maintenance may result in water leakage, electric shock, and fire. Only use accessories made by Daikin that are specifically designed for use with the equipment and have them installed by a professional.
- Contact your dealer to move and reinstall the air conditioner or heat pump. Incomplete installation may result in water leakage, electric shock, and fire.
- Never let the indoor unit or the remote controller get wet. Water can cause an electric shock or a fire.
- Never use flammable spray such as hair spray, lacquer, or paint near the unit. Flammable spray may cause a fire.
- When a fuse blows out, never replace it with one of incorrect ampere ratings or different wires. Always replace any blown fuse with a fuse of the same specification.
- Never inspect or service the unit by yourself. Contact a qualified service person to perform this work.
- Turn off all electrical power before doing any maintenance to avoid the risk of serious electric shock; never sprinkle or spill water or liquids on the unit.
- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not put a finger or other objects into the air inlet or air outlet. The fan is rotating at high speed and will cause injury.
- Check the unit foundation for damage on a continuous basis, especially if it has been in use for a long time. If left in a damaged condition the unit may fall and cause injury.
- Never touch the internal parts of the controller. To check and adjust internal parts, contact your dealer.
- Be sure to establish a ground. Do not ground the unit to a utility pipe, arrester, or telephone ground. Incomplete grounding may cause electrical shock, or fire. A high surge current from lightning or other sources may cause damage to the air conditioner.
- Be sure to install a ground fault circuit interrupter. Failure to install a ground fault circuit interrupter may result in electric shock or fire.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.

### ⚠ CAUTION

- Do not use the air conditioner or heat pump for any other purposes other than comfort cooling or heating. Do not use the unit for cooling precision instruments, food, plants, animals or works of art.
- Do not place items under the indoor unit as they may be damaged by condensates that may form if the humidity is above 80% or if the drain outlet gets blocked.
- For care and cleaning, call service person.
- Before cleaning, stop the operation of the unit by turning the power off or by pulling the supply cord out from its receptacle. Otherwise, an electric shock and injury may result.
- Do not wash the air conditioner or heat pump with excessive water. An electric shock or fire may result.
- Avoid placing the controller in a spot which may be splashed with water. Water entering the controller may cause an electric shock or damage the internal electronic parts.
- Do not operate the air conditioner or heat pump when using a room-fumigation type of insecticide. Failure to observe this could cause the chemicals to be deposited in the unit and can endanger the health of those who are hypersensitive to chemicals.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- The appliance is not intended for use by young children or infirm persons without supervision.
- The remote controller should be kept away from children so they cannot play with it.
- Consult with the installation contractor for cleaning.
- Incorrect cleaning of the inside of the air conditioner or heat pump could make the plastics parts break and cause water leakage or electric shock.
- Do not touch the air inlet or aluminum fin of the air conditioner or heat pump as they can cut and cause injury.
- Do not place objects in direct proximity of the outdoor unit. Do not let leaves and other debris accumulate around the unit. Leaves are a hotbed for small animals which can enter the unit. Once inside the unit, animals can cause the unit to malfunction, and cause smoke or fire when they make contact with electrical parts.

Read Before Operation

# Safety Considerations

**⚠ NOTE**

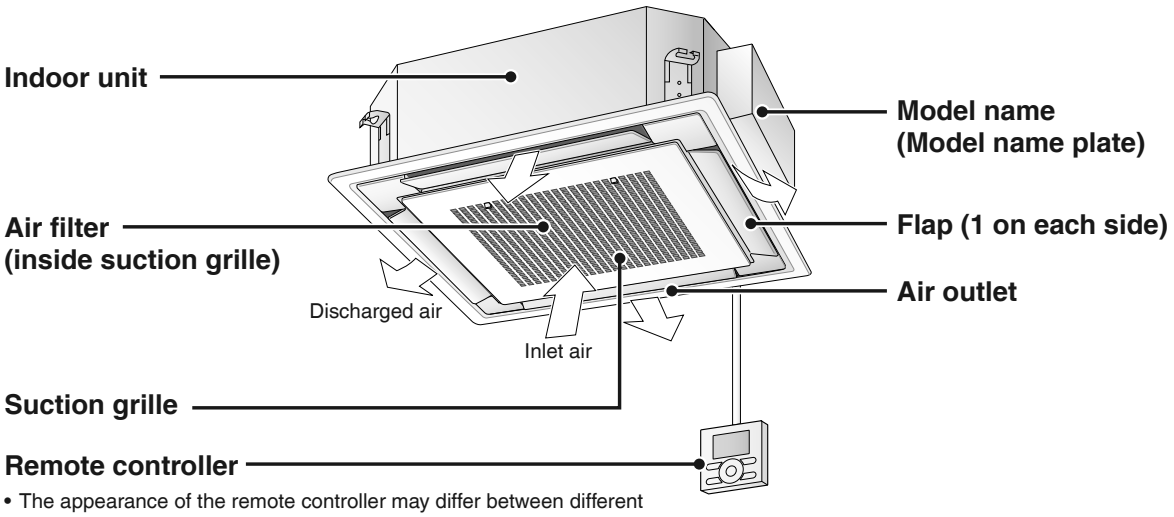
- Never press the button of the remote controller with a hard, pointed object. The remote controller may be damaged.
- Never pull or twist the electric wire of the remote controller. It may cause the unit to malfunction.
- Do not place appliances that produce open flames in places that are exposed to the airflow of the unit or under the indoor unit. It may cause incomplete combustion or deformation of the unit due to the heat.
- Do not expose the controller to direct sunlight. The LCD display can become discolored and may fail to display the data.
- Do not wipe the controller operation panel with benzine, thinner, chemical dust cloth, etc. The panel may get discolored or the coating can peel off. If it is heavily dirty, soak a cloth in a water-diluted neutral detergent, squeeze it well and wipe the panel clean. Then wipe it with another dry cloth.
- Dismantling of the unit, disposal of the refrigerant, oil, and additional parts, should be done in accordance with the relevant local, state, and national regulations.
- Operate the air conditioner or heat pump in a sufficiently ventilated area and not surrounded by obstacles. Do not use the air conditioner or heat pump in the following places.
  a. Places with a mist of mineral oil, such as cutting oil.
  b. Locations such as coastal areas where there is a lot of salt in the air.
  c. Locations such as hot springs where there is a lot of sulfur in the air.
  d. Locations such as factories where the power voltage varies a lot.
  e. In cars, boats, and other vehicles.
  f. Locations such as kitchens where oil may splatter or where there is steam in the air.
  g. Locations where equipment produces electromagnetic waves.
  h. Places with an acid or alkaline mist.
  i. Places where fallen leaves can accumulate or where weeds can grow.
- Take snow protection measures. Contact your dealer for the details of snow protection measures, such as the use of a snow protection hood.
- Do not attempt to do electrical work or grounding work unless you are licensed to do so. Consult with your dealer for electrical work and grounding work.
- Pay attention to operating sound. Be sure to use the following places:
  a. Places that can sufficiently withstand the weight of the air conditioner or heat pump yet can suppress the operating sound and vibration.
  b. Places where warm air from the air outlet of the outdoor unit or the operating sound of the outdoor unit does not annoy neighbors.
- Make sure that there are no obstacles close to the outdoor unit. Obstacles close to the outdoor unit may drop the performance of the outdoor unit or increase the operating sound of the outdoor unit.
- Consult your dealer if the air conditioner or heat pump in operation generates unusual noise.
- Make sure that the drainpipe is installed properly to drain water. If no water is discharged from the drainpipe while the air conditioner or heat pump is in the cooling mode, the drainpipe may be clogged with dust or dirt and water leakage from the indoor unit may occur. Stop operating the air conditioner or heat pump and contact your dealer.
- Do not spray the air conditioner unit with any deodorizers, etc. It may cause the unit to malfunction.

FCP003M(R32)-U

This is an appliance that is not accessible to the general public.

# Names of Parts

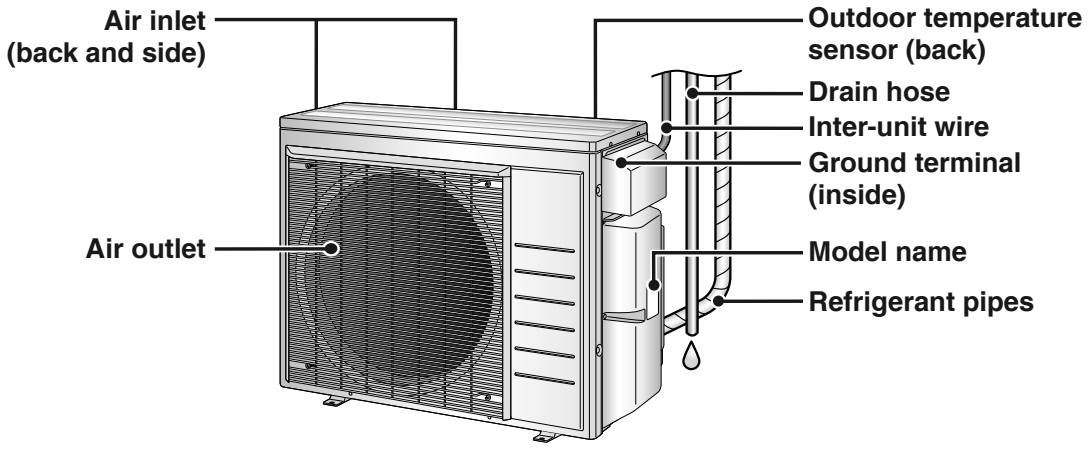
## Indoor Unit




- The appearance of the remote controller may differ between different models.
- For details on remote controller operation, refer to the operation manual included with the remote controller.

## Outdoor Unit

- The appearance of the outdoor unit may differ between different models.



Multi Connection

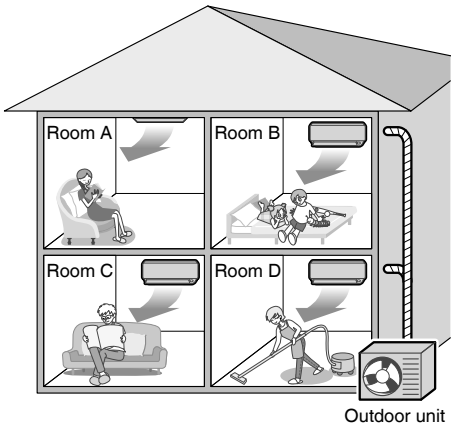
# Note for Multi System

A multi system has one outdoor unit connected to multiple indoor units.

## Selecting the operation mode

### When the priority room setting is active but the set unit is not operating or when the priority room setting is inactive

When more than one indoor unit is operating, priority is given to the first unit that was turned on.
In this case, set the units that are turned on later to the same operation mode as the first unit.
Otherwise, they will enter the standby state, and when using the remote controller the centralized control icon "CENTRAL CONTROL" will light up; this does not indicate malfunction.




## NOTE

**Notes on operation mode for a multi system**

- COOL, DRY and FAN operation may be used at the same time.
- AUTO operation automatically selects COOL operation or HEAT operation based on the indoor temperature. Therefore, AUTO operation is available when selecting the same operation mode as that of the first unit to be turned on.

## ⚠ CAUTION

- Normally, the operation mode of the first unit that was turned on is given priority, but the following situations are exceptions to this rule. If the operation mode of the first room is FAN operation, using HEAT operation in any room after this will give priority to HEAT operation. In this situation, the indoor unit operating in FAN mode will switch to standby, and when using the remote controller the centralized control icon "CENTRAL CONTROL" will light up.

### When the priority room setting is active

Refer to "**Priority room setting**" on the next page.

## COOL/HEAT mode lock

The COOL/HEAT mode lock requires initial programing during installation. Please consult your authorized dealer for assistance. The COOL/HEAT mode lock sets the unit forcibly to either COOL or HEAT operation. This function is convenient when you wish to set all indoor units connected to the multi system to the same operation mode.

### NOTE

- The COOL/HEAT mode lock cannot be activated together with the priority room setting.

## Priority room setting

The priority room setting requires initial programing during installation. Please consult your authorized dealer for assistance. The room designated as the priority room takes priority in the following situations.

### Operation mode priority

- As the operation mode of the priority room takes precedence, you can select a different operation mode from other rooms.

**[Example]**

- Room A is the priority room in this example.
  When COOL operation is selected in room A while operating the following modes in room B, C and D:

| Operation mode in room B, C and D | Status of room B, C and D when the unit in room A is in COOL operation |
|---|---|
| COOL or DRY or FAN | The current operation mode is maintained. |
| HEAT | The unit enters the standby mode. Operation resumes when the room A unit stops operating. |
| AUTO | If the unit is set to COOL operation, it continues. If the unit is set to HEAT operation, it enters the standby mode. Operation resumes when the room A unit stops operating. |

Care

# Care and Cleaning

**Only a qualified service person is allowed to perform maintenance.**

## ⚠ WARNING

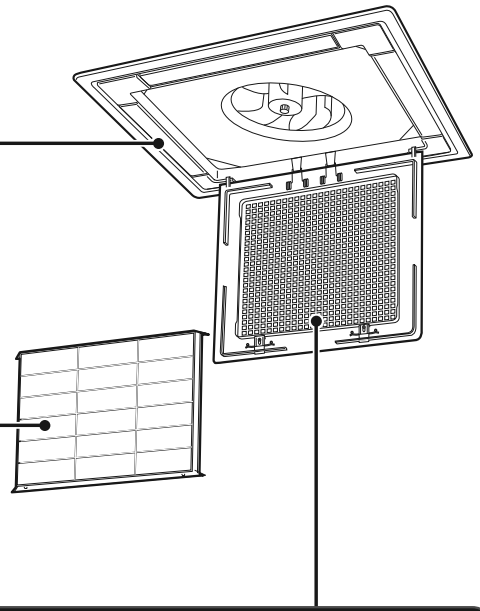
- **Only a qualified service person is allowed to perform maintenance.**
- **Before cleaning, be sure to stop unit operation and turn off the circuit breaker.**
  Otherwise, an electric shock and injury may result.
- **Contact a qualified person regarding the attachment of accessories and be sure to use only accessories specified by the manufacturer.**
  If an accessory is attached incorrectly, water leakage, an electric shock, or fire may result.

## ⚠ CAUTION

- **When cleaning, use a sturdy and stable stand and watch your step.**
- **Make sure to firmly support the suction grille with your hand while performing maintenance tasks to prevent it from falling out.**

## ■ Quick reference

### Cleaning parts



#### Outside panel and flaps

- Wipe the parts with a soft cloth.
- When it is difficult to remove stains, use water or a neutral detergent.
- If the flaps are stained severely, contact your dealer and have the flaps replaced.

**If dirty**

#### Air filter

- Vacuum dust or wash the filter.

**When "Time to clean filter" displays on the remote controller**

▶Page 8

#### Remote controller

- Wipe them with a soft cloth.

**If dirty**

#### Suction grille

- Wipe it with a soft damp cloth.

**If dirty** ▶Page 9, 10

### Notes on cleaning

**For cleaning, do not use any of the following:**

- Water hotter than 104°F (40.0°C)
- Volatile liquid such as benzine, gasoline and thinner
- Polishing compounds or liquid insecticide
- Rough materials such as a scrubbing brush
- Sprays such as deodorizers



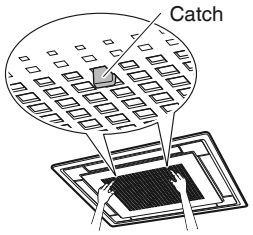
## ■ Cleaning the air filter

Clean the air filter when “Time to clean filter” displays on the remote controller.

- If the unit is installed in a room where the impurity content of the air is high, clean the filter more frequently.
- If the filter has become difficult to clean, replace the air filter. (Additional air filter sold separately.)

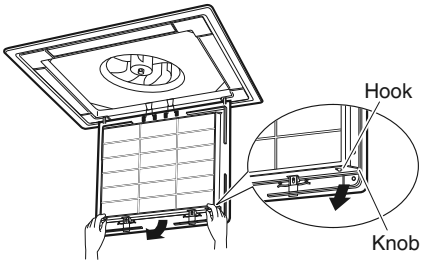
### 1. Open the suction grille.

- Push the 2 catches away from you and slowly open the suction grille. (To close, perform the steps in reverse.)

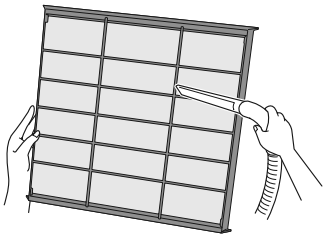



### 2. Remove the air filter.

- Pull the knobs of the air filter downward to disconnect the hooks, and remove the air filter.

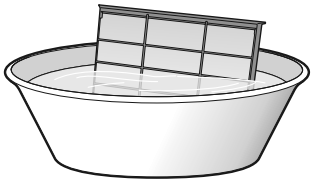



### 3. Clean the air filter with a vacuum cleaner or wash it with water.



**If the dust does not come off easily**

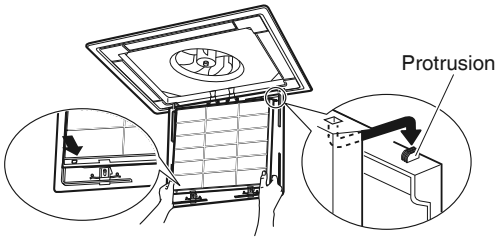
- Wash the air filter using a soft brush and a neutral detergent, then let it dry in the shade.



### 4. Reattach the air filter.

**4-1** Hook one side of the air filter on to the protrusions on the suction grille.

**4-2** Push the other side of the air filter into place.




### 5. Close the suction grille.

- Refer to STEP 1.

### 6. After turning on the power, reset the filter sign in accordance with the instructions in the operation manual for the remote controller.

“Time to clean filter” disappears from the display on the remote controller.

Care

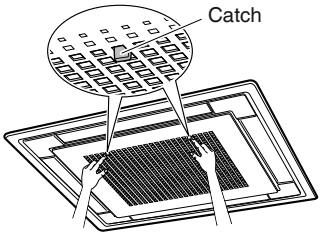
# Care and Cleaning

**Only a qualified service person is allowed to perform maintenance.**

## ■ Cleaning the suction grille

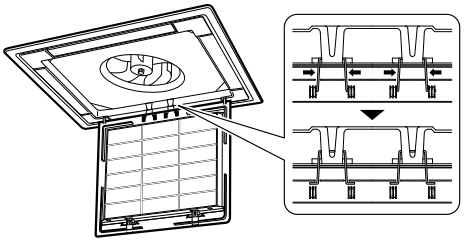
### 1. Open the suction grille.

- Push the 2 catches away from you and slowly open the suction grille. (To close, perform the steps in reverse.)




### 2. Remove the suction grille.

- Open the suction grille so that it hangs by the hinges at 90 degrees to the ceiling.
- Pinch the wire catches inward as shown in the figure.

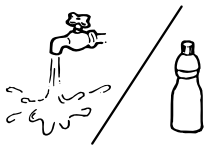


### 3. Remove the air filter.

Page 8

### 4. Clean the suction grille.

Wash with a soft bristle brush and a neutral detergent or water, and dry thoroughly.



- **When very dirty**
  Directly apply the type of detergent used for cleaning ventilation fans or ovens, wait for about 10 minutes, and then rinse with water.

### 5. Reattach the air filter.

Page 8

### 6. Reattach the suction grille.

- Refer to STEP 2.

### 7. Close the suction grille.

- Refer to STEP 1.

## ■ Prior to a long period of non-use

### 1. Operate the FAN mode for several hours to dry out the inside.

- To start the operation, refer to the operation manual for the remote controller.

### 2. After operation stops, turn off the circuit breaker for the room air conditioner.

### 3. Clean the air filter and reattach it.

## ■ We recommend periodical maintenance

- In certain operating conditions, the inside of the air conditioner may get foul after several seasons of use, resulting in poor performance. It is recommended to have periodical maintenance by a qualified contractor.
- For qualified contractor maintenance, please contact the dealer where you bought the air conditioner.

When the Need Arises

# Troubleshooting

Before making an inquiry or a request for repair, please check the following.
If the problem persists, consult your dealer.

**Not a problem**
This case is not a problem.

**Check**
Please check again before requesting repairs.

| Case | Description / what to check |
|---|---|
| **Operation does not start soon.**<br>• When ON/OFF button was pressed soon after operation was stopped.<br>• When the mode was reselected. | ☑ • This is to protect the air conditioner. You should wait for about 3 minutes. |
| **Air does not come out.** | ☑ ■ **In HEAT operation**<br>• The air conditioner is warming up. Wait for about 1 to 4 minutes.<br>• During defrosting operation, hot air does not flow out of the indoor unit.<br>■ **When the air conditioner operates immediately after the circuit breaker is turned on**<br>• The air conditioner is preparing to operate. Wait for about 3 to 20 minutes. |
| **The HEAT operation stops suddenly and a flowing sound is heard.** | ☑ • The system is taking away the frost on the outdoor unit. You should wait for about 4 to 12 minutes. |
| **The outdoor unit emits water or steam.** | ☑ ■ In HEAT mode<br>• The frost on the outdoor unit melts into water or steam when the air conditioner is in defrost operation.<br>■ In COOL or DRY mode<br>• Moisture in the air condenses into water on the cool surface of outdoor unit piping and drips. |
| **Mist comes out of the indoor unit.** | ☑ • This happens when the air in the room is cooled into mist by the cold airflow during cooling operation. |
| **The indoor unit gives out odor.** | ☑ • This happens when smells of the room, furniture, or cigarettes are absorbed into the unit and discharged with the airflow. (If this happens, we recommend you to have the indoor unit washed by a technician. Consult your dealer where you bought the air conditioner.) |
| **The outdoor fan rotates while the air conditioner is not in operation.** | ☑ ■ After operation is stopped:<br>• The outdoor fan continues rotating for another 1 minute for system protection.<br>■ While the air conditioner is not in operation:<br>• When the outdoor temperature is very high, the outdoor fan starts rotating for system protection. |
| **The operation stopped suddenly. (OPERATION lamp* is on.)** | ☑ • For system protection, the air conditioner may stop operating on a sudden large voltage fluctuation. It automatically resumes operation in about 3 minutes.<br>• In the case of **multi systems**, are all indoor units that are connected to the same outdoor unit in the same operation mode? If not, set all indoor units to the same operation mode. |
| **The air conditioner does not operate. (OPERATION lamp* is off.)** | ? • Hasn't the circuit breaker turned OFF or a fuse blown?<br>• Isn't it a power failure?<br>• Is the timer setting correct? |
| **Cooling (Heating) effect is poor.** | ? • Are the air filters clean?<br>• Is there anything blocking the air inlet or the outlet of the indoor and the outdoor units?<br>• Is the temperature setting appropriate?<br>• Are the windows and doors closed?<br>• Are the airflow rate and the air direction set appropriately? |
| **Operation stops suddenly. (OPERATION lamp* is blinking.)** | ? • Are the air filters clean?<br>• Is there anything blocking the air inlet or the outlet of the indoor and the outdoor units? Clean the air filters or take all obstacles away and turn the circuit breaker OFF. Then turn it ON again and try operating the air conditioner with the remote controller. If the lamp still blinks, call your dealer where you bought the air conditioner. |

* The OPERATION lamp is on the receiver of the separately sold remote controller.

| Case | Description / what to check |
|---|---|
| **An abnormal functioning happens during operation.** | • The air conditioner may malfunction with lightning or radio waves. Turn the breaker OFF, turn it ON again and try operating the air conditioner with the remote controller. |

**Notes on the operating conditions**

- If operation continues under any conditions other than those listed in the table,
  - A safety device may activate to stop the operation. (With a multi connection in COOL operation, the safety device may work to stop the operation of the outdoor unit only.)
  - Dew may form on the indoor unit and drip from it when COOL or DRY operation is selected.

*1 Cutting the jumper on the outdoor unit PCB will extend the cooling operation range to 14°F (–10.0°C). Installing an air direction adjustment grille (sold separately) will further extend the operation range to –4°F (–20.0°C). Please consult your dealer.

*2 Installing a drain pan heater (sold separately) will further extend the heating operation range to –13°F (–25.0°C). Please consult your dealer.

| Mode | Operating conditions |
|---|---|
| **COOL / DRY** | Outdoor temperature<br>[RXV models] : 50*1 - 115°F (10*1 - 46°C)<br>[MXM, MXT, MXTH models] : 14 - 115°F (–10 - 46°C)<br>*1 –4°F (–20°C) if an air direction adjustment grille (sold separately) is installed.<br>Indoor temperature : 63 - 90°F (17 - 32°C)<br>Indoor humidity : 80% max. |
| **HEAT** | Outdoor temperature<br>[MXM models] : 5 - 75°F (–15 - 24°C)<br>[MXT models] : 5*2 - 75°F (–15*2 - 24°C)<br>[MXTH models] : –13 - 75°F (–25 - 24°C)<br>[RXV models] : 5 - 75°F (–15 - 24°C)<br>*2 –13°F (–25°C) if a drain pan heater (sold separately) is installed.<br>Indoor temperature : 50 - 88°F (10 - 31°C) |

## ■ Call your dealer immediately

## ⚠ WARNING

**When an abnormality (such as a burning smell) occurs, stop operation and turn off the circuit breaker.**

- Continued operation in an abnormal condition may result in problems, electric shock or fire.
- Consult the dealer where you bought the air conditioner.

**Do not attempt to repair or modify the air conditioner by yourself.**

- Incorrect work may result in electric shock or fire.
- Consult the dealer where you bought the air conditioner.

### If one of the following symptoms takes place, call your dealer immediately.

- **The power cord is abnormally hot or damaged.**
- **An abnormal sound is heard during operation.**
- **The circuit breaker cuts off the operation frequently.**
- **A switch or a button often fails to work properly.**
- **There is a burning smell.**
- **Water leaks from the indoor unit.**

Turn off the circuit breaker and call your dealer.

**■ After a power failure**

- The air conditioner automatically resumes operation in about 3 minutes. You should just wait for a while.

**■ Lightning**

- If there is a risk lightning could strike in the neighborhood, stop operation and turn off the circuit breaker to protect the system.

## ■ Disposal requirements

- Dismantling of the unit, handling of the refrigerant, oil and other parts, should be done in accordance with the relevant local and national regulations.

# Part 4 Options

1. Options List....402
1.1 Indoor Unit....402
1.2 Outdoor Unit....404
2. Control Devices....405
2.1 <BRC073A6> Wired Remote Controller (Installation)....405
2.2 <BRC073A6> Wired Remote Controller (Operation)....434
2.3 <BRC944B2> Wired Remote Controller (Installation)....477
2.4 <BRC944B2> Wired Remote Controller (Operation)....479
2.5 <BRC1NRV71> Wired Remote Controller (Installation)....491
2.6 <BRC1NRV71> Wired Remote Controller (Operation)....523
2.7 <BRCW901A03/08> Wired Remote Controller Cord....577
2.8 <KRP413BB1S> Wiring Adaptor....578
2.9 <DCS302C71> Central Remote Controller (Installation)....582
2.10 <DCS302C71> Central Remote Controller (Operation)....587
2.11 <DCS301C71> Unified ON/OFF Controller (Installation)....613
2.12 <DCS301C71> Unified ON/OFF Controller (Operation)....618
2.13 <DST301BA61> Schedule Timer Controller (Installation)....620
2.14 <DST301BA61> Schedule Timer Controller (Operation)....625
2.15 <KRP1C76/77> Wire Renovated Adaptor (Installation)....638
2.16 <KRP4A74> Group Control Adaptor (Installation)....639
2.17 <KRP928BB2S> Interface Adaptor for DIII-NET....641
2.18 <KRCS01-6B> Remote Sensor (Installation)....644
3. Indoor Unit....647
3.1 <BRYQ60AAW> Sensor Kit....647
3.2 <BYFQ60C3W2W> Decoration Panel....649
3.3 <BDBHQ44C60> Sealing Member....652
3.4 <KDDQ44XA60> Fresh Air Intake Kit....654
4. Outdoor Unit....656
4.1 <KPW063B4> Air Direction Adjustment Grille....656
4.2 <KPW082A41> Air Direction Adjustment Grille....658
4.3 <KKG063A44> Back Protection Wire Net....660
4.4 <KKG082A41> Back Protection Wire Net....661
4.5 <BKP082A41> Drain Plug....663
4.6 <KEH064A41> Drain Pan Heater....665
4.7 <KPS063A41> Snow Hood (Side)....669
4.8 <KPS063A44> Snow Hood (Rear)....671
4.9 <KPS063A47> Snow Hood (Discharge)....673

# 1. Options List

## 1.1 Indoor Unit

**CTXV, FTXV Series**

| Option Name | | Model Name |
|---|---|---|
| Wired remote controller ★1 | | BRC944B2, BRC073A6 |
| Wired remote controller cord (shielded wire) | Length 9.8 ft (3 m) | BRCW901A03 |
| | Length 26.3 ft (8 m) | BRCW901A08 |
| Wiring adaptor for timer clock / remote controller ★2 (normal open pulse contact / normal open contact) | | KRP413BB1S |
| Central remote controller ★3 | | DCS302C71 |
| Unified ON/OFF controller ★3 | | DCS301C71 |
| Schedule timer controller ★3 | | DST301BA61 |
| Interface adaptor for DIII-NET (residential air conditioner) | | KRP928BB2S |
| Titanium apatite deodorizing filter (without frame) | | KAF970A46 ★4 |
| Remote controller loss prevention with chain | | KKF936A4 |

**Notes:** ★1 A wired remote controller cord BRCW901A03 or BRCW901A08 is necessary.
★2 Timer clock and other devices; obtained locally.
★3 An interface adaptor (KRP928BB2S) is also required for each indoor unit.
★4 Standard accessory

**CDMA, FDMA Series**

| Option Name | Model Name |
|---|---|
| Wired remote controller | BRC1NRV71 |
| Centralized management controller | DCS302C71 |
| Schedule timer controller | DST301BA61 |
| Remote sensor | KRCS01-6B |
| Wire renovated adaptor | KRP1C76 |
| Shield plate for side plate | KDBD63A160 |

**FVXV Series**

| Option Name | | Model Name |
|---|---|---|
| Wired remote controller ★1 ★5 | | BRC073A6 |
| Wired remote controller cord (shielded wire) | Length 9.8 ft (3 m) | BRCW901A03 |
| | Length 26.3 ft (8 m) | BRCW901A08 |
| Wiring adaptor for timer clock / remote controller ★1 ★3 ★4 (normal open pulse contact / normal open contact) | | KRP413BB1S |
| Centralized management controller ★2 | | DCS302C71 |
| Schedule timer controller ★2 | | DST301BA61 |
| Interface adaptor for DIII-NET ★1 ★4 (residential air conditioner) | | KRP928BB2S |
| Titanium apatite deodorizing filter (without frame) | | KAF970A46 |
| Remote controller loss prevention with chain | | KKF910A4 |
| S21 conversion connector | | KER087A41 |

**Notes:** ★1. S21 conversion connector (KER087A41) is required.
★2. An interface adaptor (KRP928BB2S) is also required for each indoor unit.
★3. Timer clock and other devices ; obtained locally.
★4. Wireless LAN adaptor (built-in) needs to be set ‘OFF’ when Wiring adaptor for timer clock/remote controller (KRP413BB1S) or Interface adaptor for DIII-NET (KRP928BB2S) is connected. If they are connected at the same time, the operation and display may not match.
★ 5. Wired remote controller (BRC073A6) can be used together with wireless LAN adaptor (built-in).

**FFA Series**

| Option Name | Model Name |
|---|---|
| Wired remote controller | BRC1NRV71 |
| Decoration panel | BYFQ60C3W2W |
| Central remote controller | DCS302C71 |
| Schedule timer controller | DST301BA61 |
| Remote sensor | KRCS01-6B |
| Wire renovated adaptor | KRP1C77 |
| Group control adaptor | KRP4A74 |
| Sensor kit | BRYQ60AAW<br>(for BYFQ60C3W2W) |
| Sealing member of air discharge outlet | BDBHQ44C60 |
| Fresh air intake kit (direct installation type) | KDDQ44XA60 |
| Longlife filter | KAF441C60 |

## 1.2 Outdoor Unit

| Option Name | Standard | | Cold Climate | | | |
|---|---|---|---|---|---|---|
| | 2/3/4MXM | 5MXM | 2MXT | 3/4/5MXT | 2MXTH | 3/4/5 MXTH |
| Air direction adjustment grille | KPW063B4 | KPW082A41 | KPW063B4 | KPW082A41 | KPW063B4 | KPW082A41 |
| Back protection wire net | KKG063A44 | KKG082A41 | KKG063A44 | KKG082A41 | KKG063A44 | KKG082A41 |
| Drain plug ★1 | KKP937A4 | BKP082A41 | KKP937A4 | BKP082A41 | KKP937A4 | BKP082A41 |
| Drain pan heater ★2 | KEH064A41 | KEH082A41A | KEH064A41 | KEH082A41A | — | — |
| Snow hood (intake side plate) | KPS063A41 | — | KPS063A41 | — | KPS063A41 | — |
| Snow hood (intake rear plate) | KPS063A44 | — | KPS063A44 | — | KPS063A44 | — |
| Snow hood (outlet) | KPS063A47 | — | KPS063A47 | — | KPS063A47 | — |

★1 Standard accessory

★2 The installation of the drain pan heater is indispensable at 5°F (–15°C) or less.

In areas with high humidity and heavy snowfall, users are advised to install the drain pan heater even if the temperature does not fall below –15°C.

# 2. Control Devices

## 2.1 <BRC073A6> Wired Remote Controller (Installation)



# 1. Safety Considerations

The original instructions are written in English. All other languages are translations of the original instructions.

### ■ Also see the installation manual attached to the indoor unit.

**Please read these Safety Considerations carefully before installing the user interface.**

- This manual classifies the precautions into WARNING and CAUTION. They both contain important information regarding safety. Be sure to follow all the precautions below.

| | |
|---|---|
| ⚠ **WARNING** | Failure to follow these instructions properly may result in personal injury or loss of life. |
| ⚠ **CAUTION** | Failure to observe these instructions properly may result in property damage or personal injury, which may be serious depending on the circumstances. |

- After completing the installation, conduct a trial operation to check for faults and explain to the customer how to operate the air conditioner with the aid of the User reference guide. Ask the customer to store the Installer reference guide along with the User reference guide for future reference.

Safety Considerations

| ⚠ WARNING |
| --- |
| Ask your dealer or qualified personnel to carry out installation work.<br>Do not attempt to install the user interface yourself. Improper installation may result in water leakage, electric shocks or fire. |
| Consult your local dealer regarding relocation and reinstallation of the user interface.<br>Improper installation work may result in leakage, electric shocks or fire hazards. |
| Install the user interface in accordance with the instructions in this Installer reference guide.<br>Improper installation may result in water leakage, electric shocks or fire. |
| Be sure to use only the specified accessories and parts for installation work.<br>Failure to use the specified parts may result in the unit falling down, water leakage, electric shocks or fire. |
| Install the user interface on a foundation strong enough to withstand the weight of the user interface.<br>Insufficient strength may result in the user interface falling down and causing injury. |
| Electrical work must be performed in accordance with the relevant local and national regulations and with the instructions in this Installer reference guide.<br>Be sure to use a dedicated power supply circuit only. Insufficient power circuit capacity and improper workmanship may result in electric shocks or fire. |
| Always perform installation work with the power turned off.<br>Touching electric parts may result in electric shock. |
| Do not disassemble, reconstruct or repair.<br>This may result in electric shock and/or fire. |
| Make sure that all wiring is secured, the specified wires are used and that there is no strain on the terminal connections or wires.<br>Improper connections or securing of wires may result in abnormal heat build-up or fire. |
| The choice of materials and installations must comply with the applicable national and international standards. |

## ⚠ CAUTION

To avoid leakage and electric shock due to entry of water or insects, fill the wiring through hole with putty.

To avoid electric shocks, do not operate with wet hands.

Do not wash the user interface with water, as this may result in electric shocks or fire.

Install the indoor and outdoor units, power cord and connection wires at least 3.3ft (1m) away from televisions or radios to prevent interference and noise.
(Depending on the incoming signal strength, a distance of 3.3ft (1m) may not be sufficient to eliminate noise.)

Do not install the air conditioner in the following locations:

1. Where there is a high concentration of mineral oil spray or vapor (e.g. a kitchen).
   Plastic parts may deteriorate and fall off which could result in water leakage.
2. Where corrosive gas, such as sulphurous acid gas, is produced.
   Corroding of copper pipes or soldered parts may result in refrigerant leakage.
3. Near machinery emitting electromagnetic radiation.
   Electromagnetic radiation may disturb the operation of the control system and result in malfunctioning of the unit.
4. Where flammable gas may leak, where there is carbon fiber or ignitable dust suspensions in the air or where volatile flammables such as paint thinner or gasoline are handled.
   Operating the unit in such conditions may result in fire.
5. High temperature areas or direct flames.
   Overheating and/or fire may occur.
6. Moist areas or places which may be exposed to water.
   If water enters the user interface, electric shock may be caused and the inner electronics may fail.

When the thermostat function of the user interface is used, select the installation location while considering it should be a place:

- Where the average temperature in the room can be detected.
- Which is not exposed to direct sunlight.
- Which is not near a heat source.
- Which is not affected by the outside air or air draught due to, for example, opening/closing of doors, the air outlet of the indoor unit or the like.
- Which is NOT located outdoors.

# 2. Accessories

Not included but required: BRCW901A*.

| Item No. | Length |
|---|---|
| BRCW901A03 | 10ft |
| BRCW901A08 | 26ft |

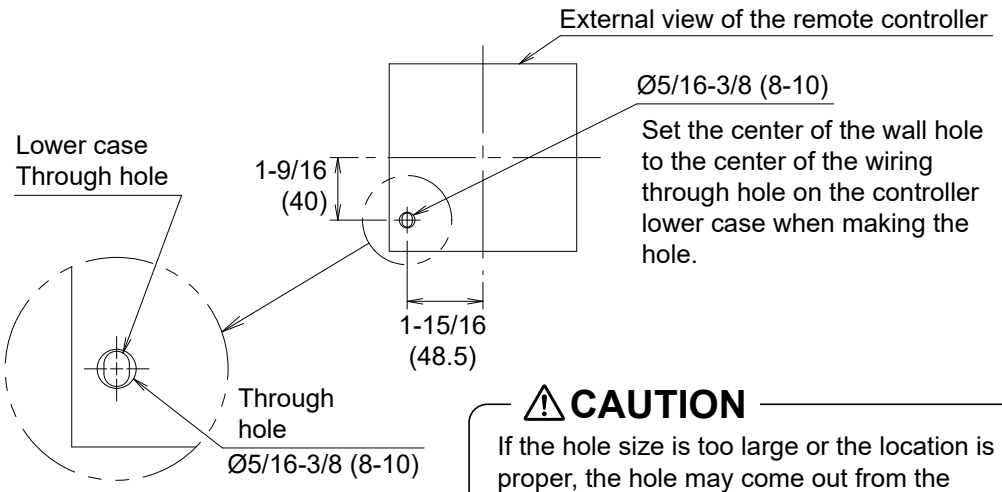
# 3. User interface installation procedure

## 3-1 Determine where to install the user interface.

Make sure to follow "1. Safety Considerations" when determining the location.

## 3-2 Make a wiring through hole on the wall if the wires are coming out from the rear.

[Unit: inch (mm)]




**⚠CAUTION**

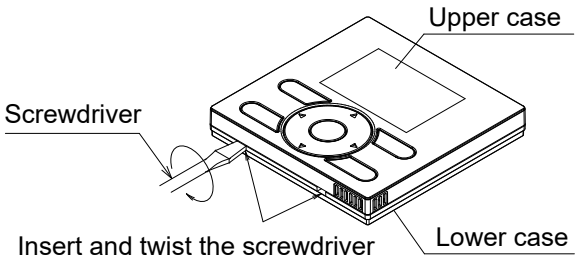
If the hole size is too large or the location is not proper, the hole may come out from the controller.

## 3-3 Remove upper case.

Insert a screwdriver in the recess of lower case to remove the upper case (2 points).

Remote controller printed-circuit board is installed on the upper case. Be careful not to damage the printed-circuit board with the screwdriver.

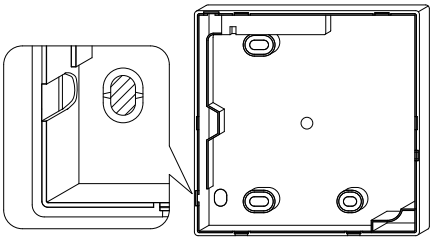
Be careful not to let dust or moisture touch the printed-circuit board.




Insert and twist the screwdriver lightly for removal.

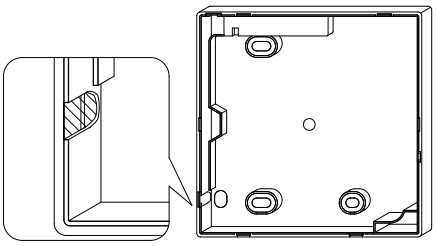
## 3-4 Determine the direction of the controller wiring outlet (rear outlet, left outlet, top left outlet).

### 3-4-1 Rear outlet



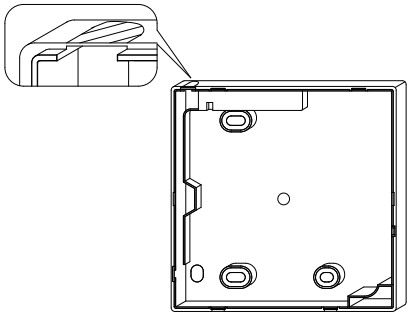
Cut off the resin area (hatched area).

### 3-4-2 Left outlet



Cut off the thin area (hatched area) with nippers or the like and then remove the burrs with a file or the like.

### 3-4-3 Top left outlet

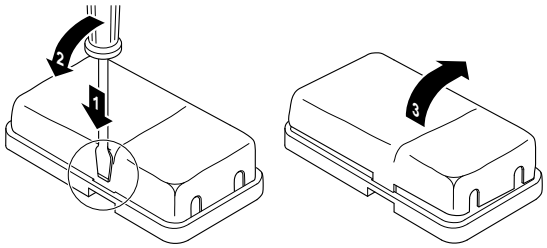


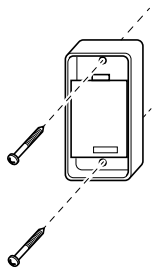
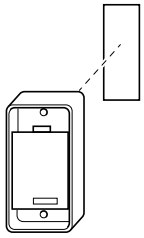
Cut off the thin area (hatched area) with nippers or the like and then remove the burrs with a file or the like.

User interface installation procedure

## 3-5 Securing the user interface adapter.

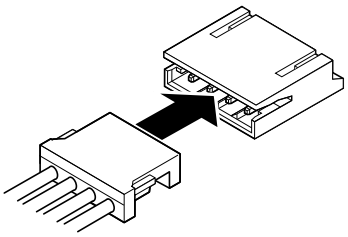
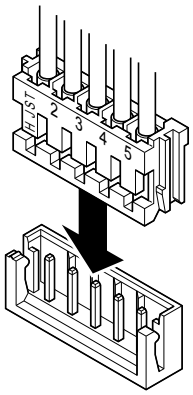
Remove the upper case of the user interface adapter and secure the lower case assembly.



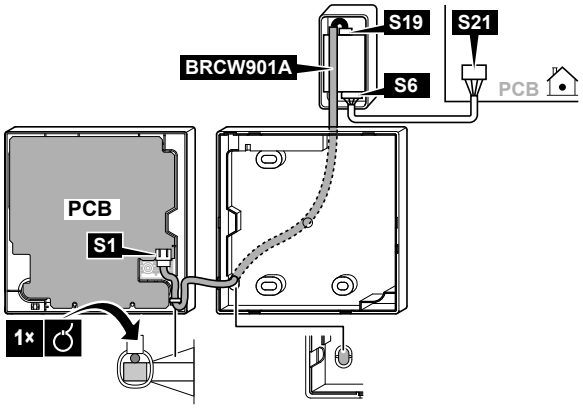

| Mounting with supplied wood screws | Mounting with supplied double-face adhesive tape |
|---|---|
|  |  |

# 3-6 Conduct wiring.

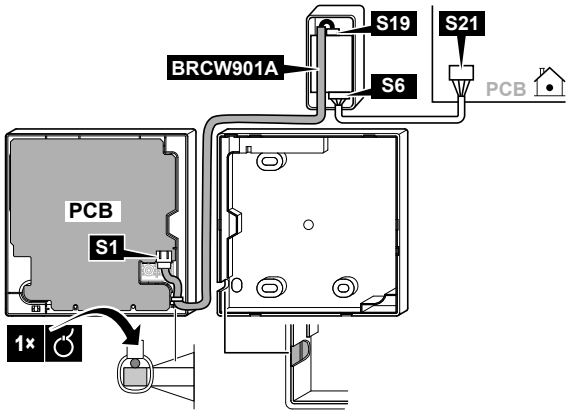
## 3-6-1 Connections overview

| S1 and S19 connection | S6 and S21 connection |
|---|---|
|  |  |

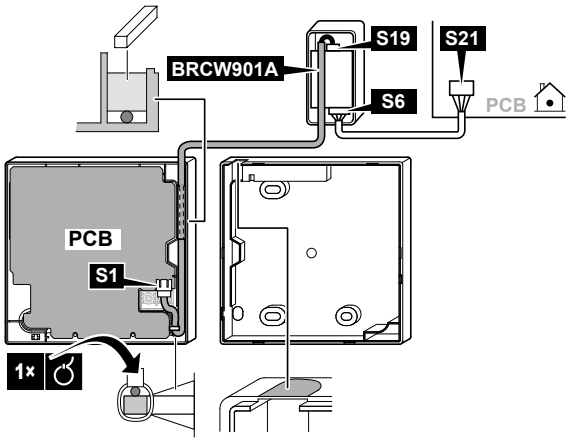
## 3-6-2 Rear outlet




## 3-6-3 Left outlet



### 3-6-4 Top left outlet




**⚠CAUTION**

- Do not perform wiring close to a power line in order to avoid electrical noise (external noise).
- Seal the wiring draw-in port securely with putty (field supply) to prevent the entry of insects or the like.

**⚠CAUTION**

- The adapter does not provide any form of strain release. The installer must provide something to release the strain on the cables near the adapter.

**NOTICE**

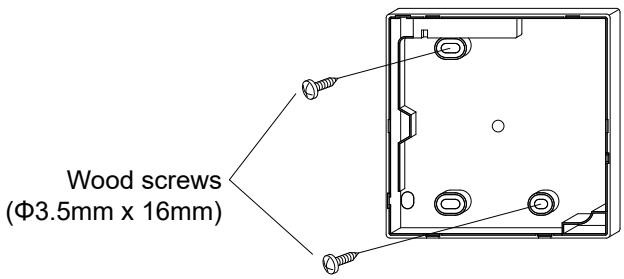
- Ground both ends of the BRCW901A* option cable.

## 3-7 Fixing procedure of the lower case.

In the case of wiring a user interface through the rear outlet, perform the wiring through the outlet hole in the lower case before it is installed on the wall.

### 3-7-1 Wall mounting

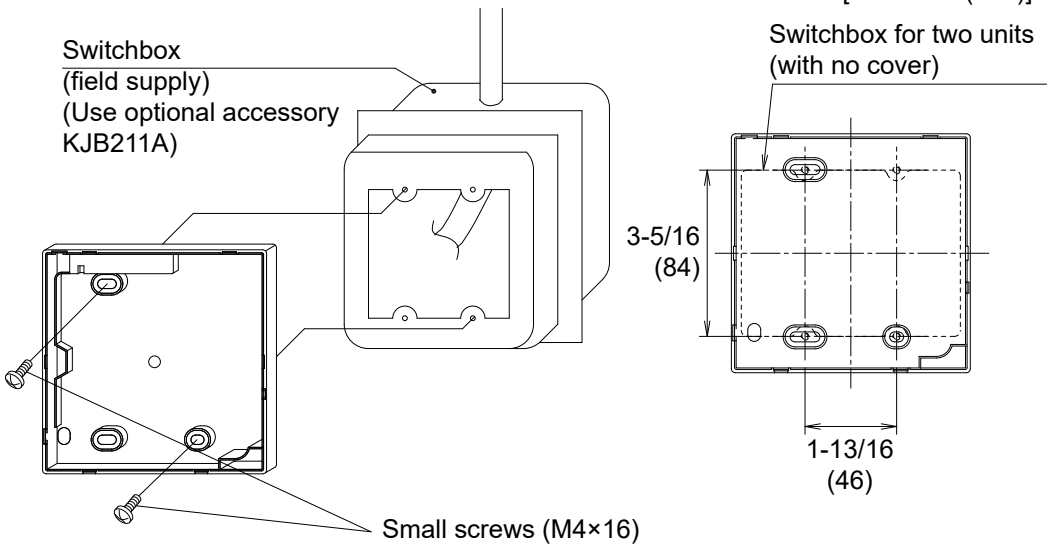
Secure by using furnished wood screws (2 pcs.).

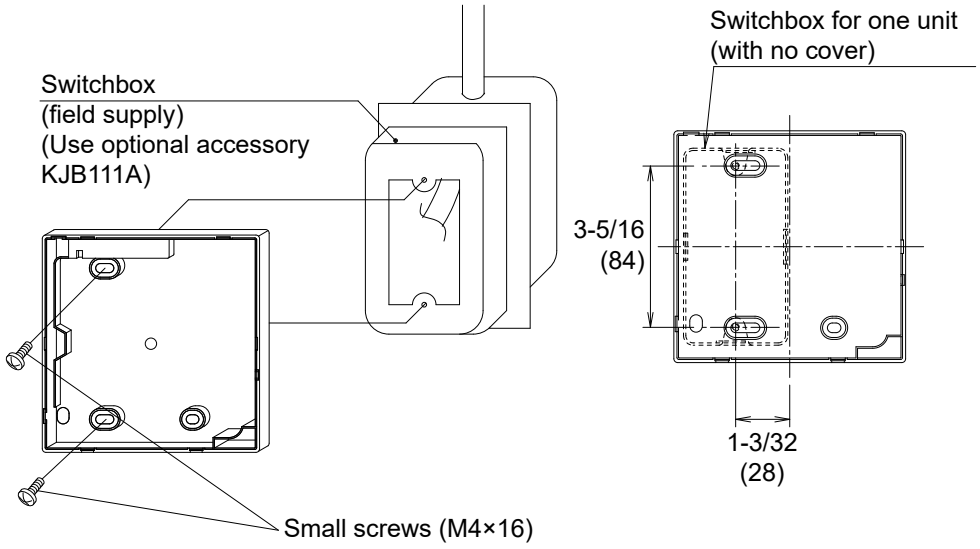


## 3-7-2 Switchbox mounting

Secure by using furnished small screws (2 pcs).

[Unit: inch (mm)]



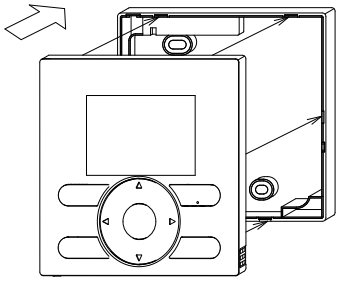




### ⚠CAUTION

- Select a flat surface for installation if possible.
- Do not tighten the installation screws too much to avoid deforming the lower case.

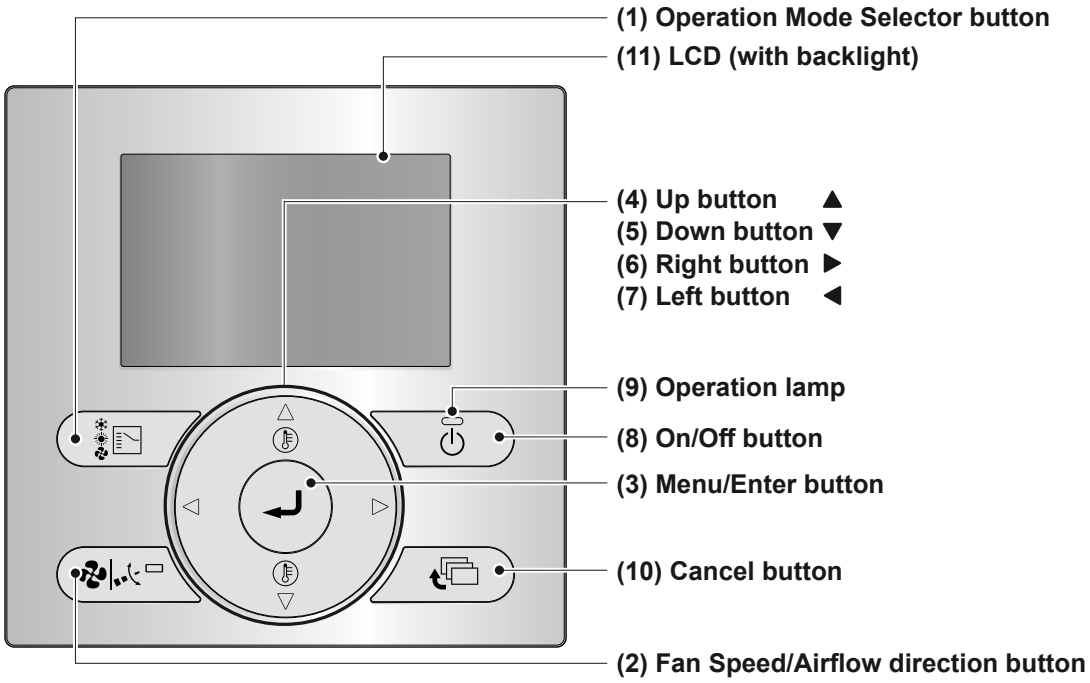
## 3-8 Attach the upper case.

- Align the upper case with the tabs of the lower case (6 points) and insert the upper case.
- Be careful not to pinch the wiring when attaching.
- Peel off the protective seal which is attached to the upper case.



# 4. Functions and menu items of the user interface buttons

## 4-1 Functions and menu items




**(1) Operation Mode Selector button**

- This button is enabled by default. To disable, refer to "13. Prohibit Buttons" on page 27.
- Press this button to select the operation mode of your preference.
- Available modes may vary with the connected model.

**(2) Fan Speed/Airflow direction button**

- Used to change the fan speed and airflow direction.
- Available fan speeds and airflow directions may vary with the connected model.

**(3) Menu/Enter button**

- This button is enabled by default. To disable, refer to "4-2 Enable/disable the Menu/Enter and Cancel button" on page 14.
- Used to display the main menu or enter the selected item. (For details on the main menu, see the User reference guide.)

**Main menu***

| |
|---|
| Airflow Direction |
| Energy Saving Options |
| Schedule |
| Maintenance Information |
| Configuration |
| Current Settings |
| Clock & Calendar |
| Language |

**(4) Up button ▲**

- Used to raise the set temperature.
- The next item on the upper side will be highlighted.
  (Keep pressing the button to cycle through the values or items.)
- Used to change the selected item.

Functions and menu items of the user interface buttons

**(5) Down button ▼**
- Used to lower the set temperature.
- The next item on the lower side will be highlighted.
  (Keep pressing the button to cycle through the values or items.)
- Used to change the selected item.

**(6) Right button ▶**
- Used to highlight the next item on the right-hand side.
- The display contents are changed to the next screen.

**(7) Left button ◀**
- Used to highlight the next items on the left-hand side.
- The display contents are changed to the previous screen.

**(8) On/Off button**
- Press to start or stop the air conditioner.

**(9) Operation lamp (Green)**
- This lamp lights up during operation.
- This lamp will blink if an error or mode conflict occurs.
- This lamp is not lit when the unit operation is OFF.

**(10) Cancel button**
- Used to return to the previous screen.
- Press and hold this button for 4 seconds or longer to display the Service Settings menu.

**(11) LCD (with backlight)**
- The backlight will be lit for approximately 30 seconds when one of the buttons is pressed.
- The actions linked to the buttons, except for the On/Off button, are not carried out when the backlight is not lit.

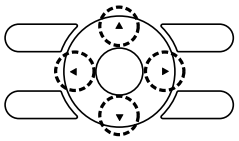
**Service Settings menu***

| |
|---|
| Test Operation** |
| Maintenance Contact |
| Field Settings |
| Error History |

*Available menu items are depending on the connected model.
**Not displayed in case of multi-split setup.

## ⚠CAUTION

- To operate the Up/Down/Left/Right button, always press ▲, ▼, ◀, or ▶.

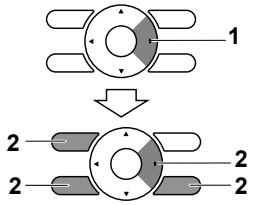


## 4-2 Enable/disable the Menu/Enter and Cancel button

To disable the Menu/Enter and Cancel button in the Basic screen, proceed as follow:

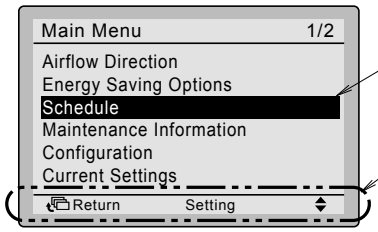
1. Keep the ▶ button pressed.
2. Push the 3 indicated keys simultaneously while keeping the ▶ button pressed.

To enable the Menu/Enter and Cancel button in the Basic screen, follow the same procedure.




## 4-3 Description of button operation

**<Main Menu>**




Highlighted display (selected items)

Instructions for manipulating the buttons will appear.

# 5. Power-on

- Check that the indoor/outdoor unit wiring is completed.
- Check that the switchbox cover of the indoor and outdoor units are closed before powering on.

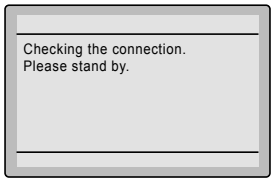
## Split air conditioner is connected to a user interface

**5-1** Turn on the power.

**5-2** "Checking the connection. Please stand by." is displayed.

**<Main user interface>**

**5-2**



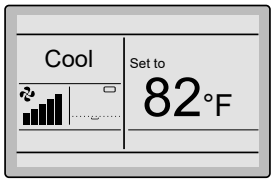

**NOTE**

When the text on the left is displayed, the backlight does not light up when one of the buttons is pressed.

**<Basic screen>**

**5-3** The Basic screen is displayed.

**5-3**




**NOTE**

- When selecting a different language, refer to "12. Language" on page 26.
- The displayed operation mode on the user interface at first startup depends on the operation mode of the indoor unit.

# 6. Field settings

**6-1** Press and hold the Cancel button for 4 seconds or longer. The Service Settings menu is displayed.

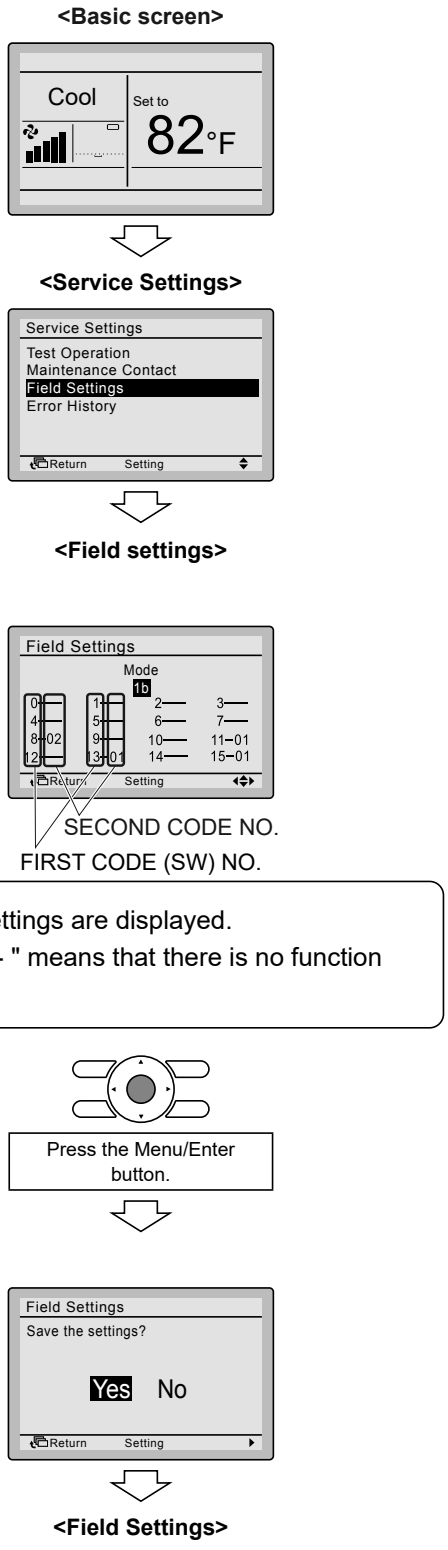
**6-2** Select Field Settings and press the Menu/Enter button.

**6-3** Highlight the "Mode No.", and select the desired "Mode No." by using the ▲▼ (Up/Down) buttons. For the most commonly used field settings, refer to page 17.

**6-4** Highlight the SECOND CODE. of the FIRST CODE NO. to be changed and select the desired SECOND CODE NO. by using the ▲▼ (Up/Down) buttons. Multiple identical mode number settings are available.

**6-5** Press the Menu/Enter button. The confirmation screen is displayed.

**6-6** Select Yes and press the Menu/Enter button. The settings are saved and the Field settings screen returns.




- The current settings are displayed.
- CODE NO. " -- " means that there is no function available.

Field settings

**6-7** After all changes are completed, press the Cancel button twice.

**6-8** The backlight goes out and "Checking the connection. Please stand by" is displayed during initialization. After the initialization, the Basic screen returns.

| Mode No. | First Code No. | Description of the setting | Second code No. | | | |
|---|---|---|---|---|---|---|
| | | | 01 | 02 | 03 | 04 |
| 1b | 8 | Daylight Saving Time | Disable | Enable* | — | — |
| | 11 | (Private use) | NA* | NA | — | — |
| | 13 | Basic screen display | Icon+Text* | Icon | — | — |
| | 15 | (Private use) | NA* | NA | — | — |
| 1c | 0 | (Private use) | NA | NA* | — | — |
| | 2 | (Private use) | NA | NA* | — | — |
| | 4 | (Private use) | NA | NA* | — | — |
| | 5 | (Private use) | NA* | — | — | — |
| | 6 | (Private use) | NA* | — | — | — |
| | 14 | (Private use) | NA* | NA | — | — |
| 1e | 1 | (Private use) | NA | NA* | — | — |
| | 2 | Setback function | Do not use | Heat only | Cool only | Cool and Heat* |
| | 5 | (Private use) | NA | NA* | — | — |
| | 6 | (Private use) | NA | NA* | — | — |
| | 8 | (Private use) | NA* | — | — | — |
| | 9 | (Private use) | NA | NA* | — | — |
| | a | (Private use) | NA* | — | — | — |

* Factory default setting

# 7. Test operation method (pair split only)

* In case of multi-split models, see the manual attached to the outdoor unit.

**NOTE**

- In case of multi-split setup, test operation cannot be used.

**Also see the installation manuals attached to the indoor unit and the outdoor unit.**

- Check that the wiring of the indoor unit and the outdoor unit is completed.
- Check that the switchbox cover of the indoor unit and the outdoor unit is closed.
- Perform the test operation according to the following procedure.

**NOTE**

- The backlight will be lit for approximately 30 seconds when pressing one of the operation buttons.
- Operate the buttons only when the backlight is lit. However, the On/Off button can be operated when the backlight is not lit.

**7-1** Make sure the electric work is properly completed and proper voltage is available before turn on the power.

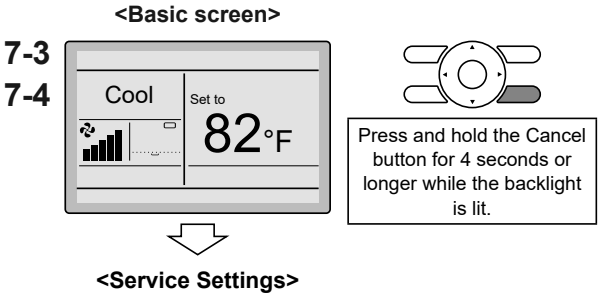
**⚠CAUTION**

Make sure that the outer panel and piping cover are closed before operation (danger of electric shock).

**7-2** Confirm that both the liquid and gas stop valves are opened.

**7-3** Set the operation mode to cooling by using the Operation Mode Selector button.

**7-4** Press and hold the Cancel button for 4 seconds or longer. The Service Settings menu is displayed.



Test operation method (pair split only)

**7-5** Select Test Operation and press the Menu/Enter button. The Basic screen returns and "Test operation" is displayed.

**7-6** Press the On/Off button within about 10 seconds. Test operation starts. Check the operation condition for 3 minutes.

**NOTE**

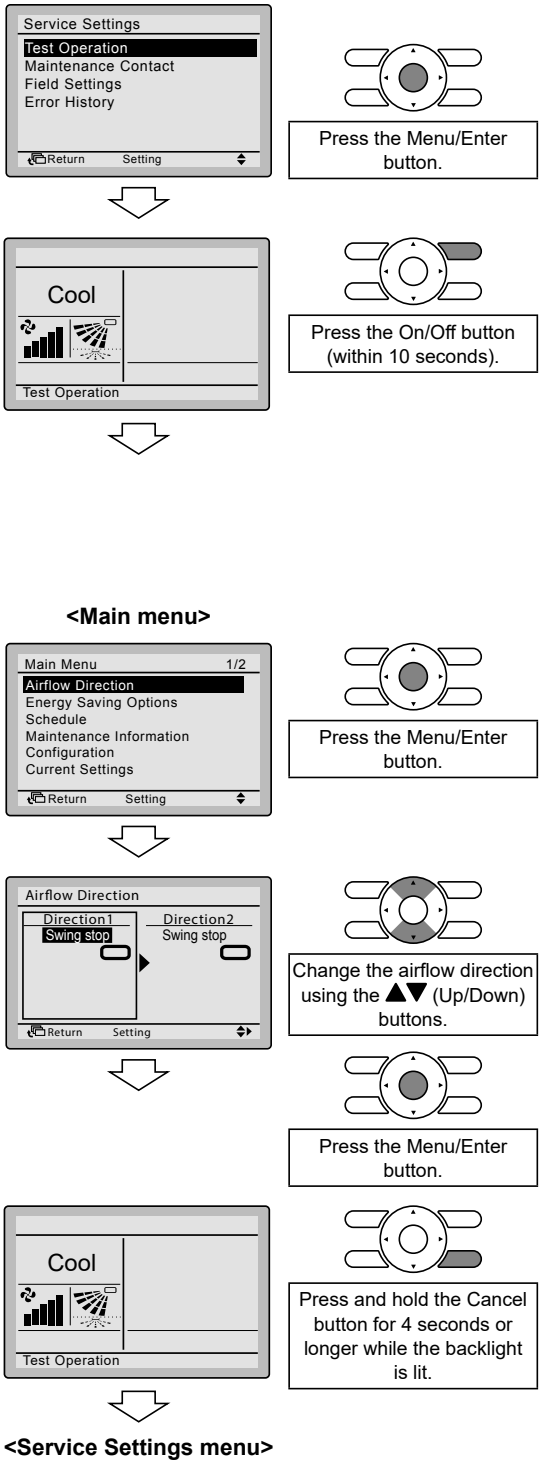
Test operation can also be started by first performing 7-6, followed by 7-5.

**7-7** Press the Menu/Enter button in the Basic screen. The Main menu is displayed.

**7-8** Select Airflow Direction and press the Menu/Enter button.

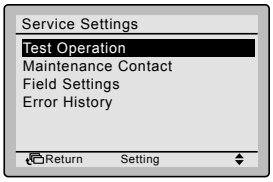
**7-9** Press the ▲▼ buttons to select the desired airflow direction and press the Menu/Enter button. The Basic screen returns.

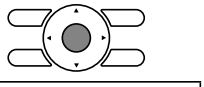
**7-10** Press and hold the Cancel button for 4 seconds or longer in the Basic screen. The Service Settings menu is displayed.



**7-11** Select **Test Operation** in the Service Settings menu and press the Menu/Enter button. The Basic screen returns and normal operation is possible.

**7-11**



Press the Menu/Enter button.

**<Basic screen>**

**7-12** Check the functions according to the User reference guide.

**7-13** When the decoration panel is not installed, turn off the power after test operation finishes.

**NOTE**

Test operation will automatically finish after 30 minutes.

## ⚠CAUTION

- If the interior work is not completed when the test operation is finished, explain to the customer that he should not operate the unit until the interior work is completed in order to protect the indoor unit.
- (If the indoor unit is operated, the indoor unit may be contaminated with the materials which arise from paints or adhesives during the interior work and water splash or water leak may occur.)

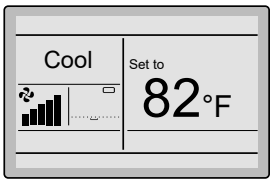
## ⚠CAUTION

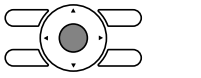
- If it is not possible to operate the unit due to any malfunction, refer to **Malfunction diagnosis method**.
- When the test operation finishes, check that the error code history is not displayed in the Maintenance Information screen according to the following procedure.

**<Basic screen>**

**7-14** Press the Menu/Enter button in the Basic screen. The Main menu is displayed.

**7-14**



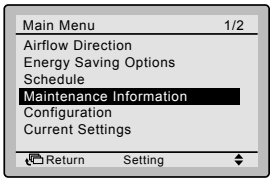



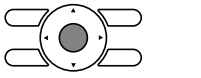
Press the Menu/Enter button.

**<Main menu>**

**7-15** Select **Maintenance Information** and press the Menu/Enter button.

**7-15**



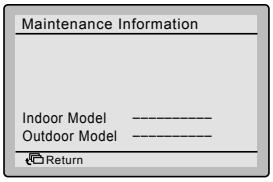
Press the Menu/Enter button.

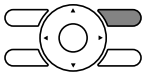
Test operation method (pair split only)

**7-16** The Maintenance Information screen is displayed. Check that the last error code is not displayed in the screen.

**7-17** If the last error code is displayed, conduct the malfunction diagnosis referring to "Error code list" in the installation manual of the indoor unit. After the malfunction diagnosis finishes, press and hold the On/Off button for 4 seconds or longer in the "Maintenance Information" screen to erase the error code history.

**7-16**
**7-17**



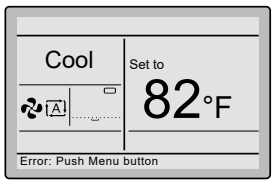
Press and hold the On/Off button for 4 seconds or longer.

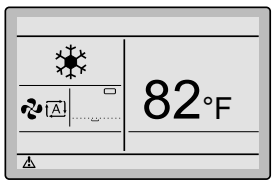
**NOTE**

If no error code is displayed when this procedure is followed, the system has completed the test operation normally.

## Malfunction diagnosis method

- When the user interface displays any item in the following table, inspect the details in the table.
- If an error occurs, "Error: Push Menu button" or "⚠" is displayed. Conduct the malfunction analysis referring to "Error code list" in the installation manual of the indoor unit. To see the RC Error History screen, refer to "8. Checking procedure of Error History".




| User interface display | Description |
|---|---|
| No display | • Power outage, power voltage failure or open-phase<br>• Wrong wiring (between indoor and outdoor units)<br>• Indoor PCB assembly failure<br>• User interface wiring disconnection<br>• User interface failure<br>• Blown fuse (outdoor unit) |
| Display "Checking the connection Please stand by" is shown.* | • Indoor PCB assembly failure<br>• Wrong wiring (between indoor and outdoor units) |

* Though "Checking the connection Please stand by" is displayed for up to 180 seconds after powering on, this does not mean there is a failure. (Determine after 180 seconds if error code "U5" is displayed.)

# 8. Checking procedure of Error History

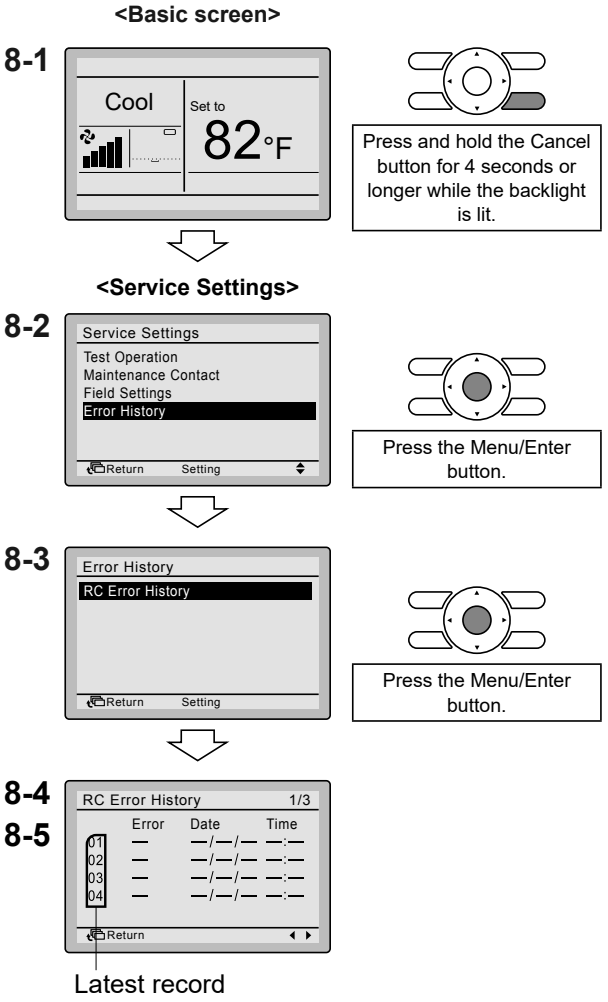
**8-1** Press and hold the Cancel button for 4 seconds or longer in the Basic screen. The Service Settings menu is displayed.

**8-2** Select Error History and press the Menu/Enter button. The Error History menu is displayed.

**8-3** Select RC Error History and press the Menu/Enter button. The error codes can be confirmed in the RC Error History screen.

**8-4** In the RC Error History screen the last 10 items are displayed in order.

**8-5** Press the Cancel button in the RC Error History screen 3 times. The Basic screen returns.



# 9. Registration method of the Maintenance Contact information

- Registration of the service contact information.

**9-1** Press and hold the Cancel button for 4 seconds or longer in the Basic screen. The Service Settings menu is displayed.

**9-2** Select Maintenance Contact and press the Menu/Enter button. The "Maintenance Contact" screen is displayed.

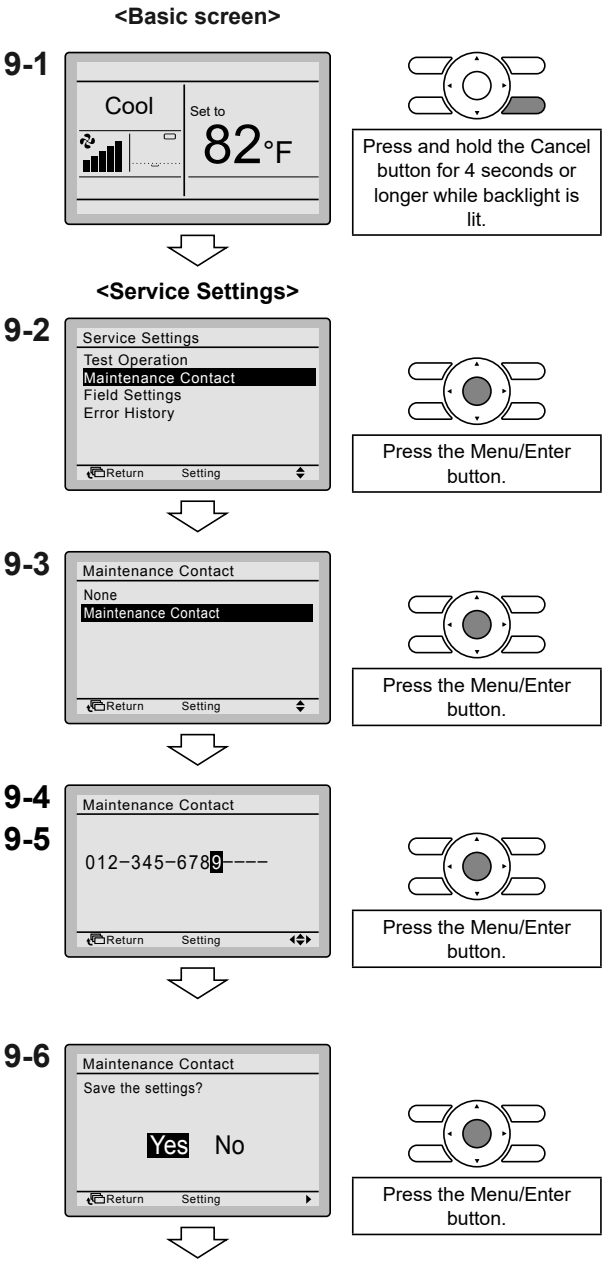
**9-3** Select Maintenance Contact and press the Menu/Enter button.

**9-4** Enter the telephone number by using the ▲▼ (Up/Down) buttons. Enter from the left to the right and blank digits should be left as " - ".

**9-5** Press the Menu/Enter button. The setting confirmation screen is displayed.

**9-6** Select Yes and press the Menu/Enter button. The settings are entered and the Service Settings menu returns.

**9-7** Press the Cancel button once. The Basic screen returns.



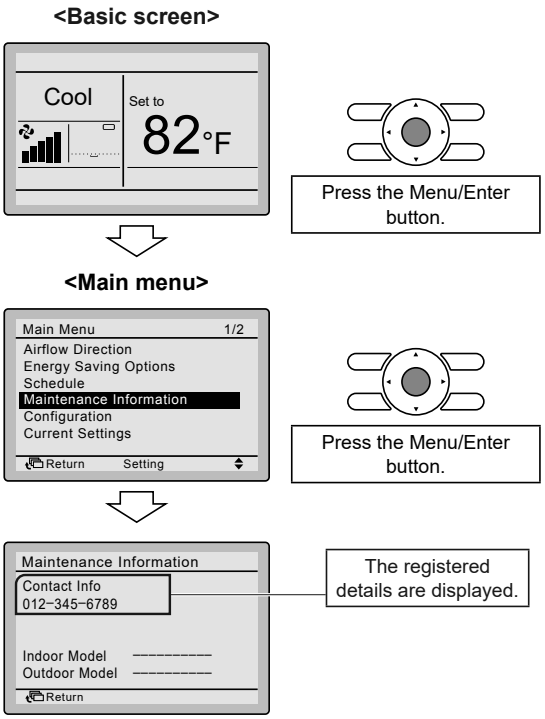
# 10. Confirmation of registered details

**10-1** Press the Menu/Enter button in the Basic screen. The Main menu is displayed.

**10-2** Select Maintenance Information and press the Menu/Enter button. The "Maintenance Information" screen is displayed.

**10-3** Confirm that the contact information is entered correctly.

**10-4** Press the Cancel button twice. The Basic screen returns.



# 11. Clock & Calendar

**11-1** Press the Menu/Enter button in the Basic screen. The Main menu is displayed.

**11-2** Select Clock & Calendar and press the Menu/Enter button. The "Clock & Calendar" menu is displayed.

**11-3** Select Date & Time and press the Menu/Enter button. The "Date & Time" screen is displayed.

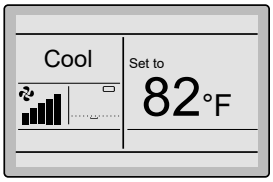
**11-4** Select the "Year", "Month", "Day" and time by using the ◀▶ (Left/Right) buttons and change the value by using the ▲▼ (Up/Down) buttons. When the buttons are pressed and held, the values change continuously.

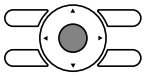
**11-5** Press the Menu/Enter button. The confirmation screen is displayed.

**11-6** Select Yes and press the Menu/Enter button. The settings are confirmed and the Basic screen returns.

<Basic screen>

11-1

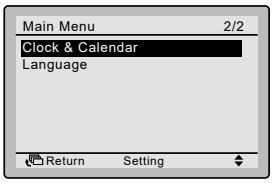


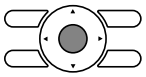



Press the Menu/Enter button.

<Main menu>

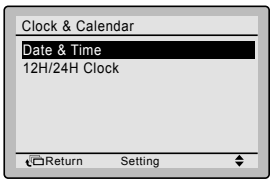
11-2

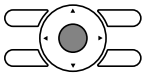


Press the Menu/Enter button.

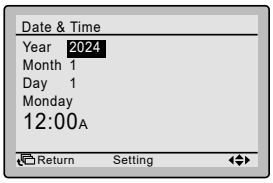
11-3

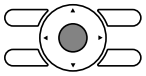


Press the Menu/Enter button.

11-4
11-5



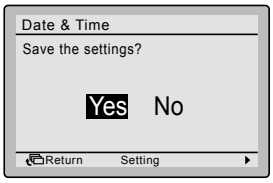



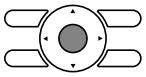
Press the Menu/Enter button.

**NOTE**

The day of the week is set automatically.

11-6



Press the Menu/Enter button.

<Basic screen>

**NOTE**

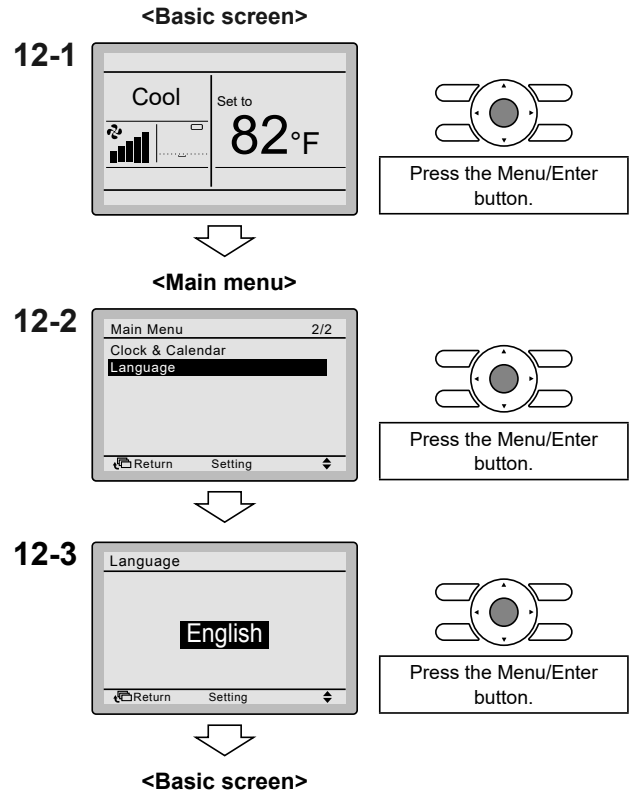
If a power outage lasts longer than 48 hours, the time is reset and needs to be set again.

# 12. Language

**12-1** Press the Menu/Enter button in the Basic screen. The Main menu is displayed.

**12-2** Select Language and press the Menu/Enter button. The "Language" screen is displayed.

**12-3** Press the ▲▼ (Up/Down) buttons to select the preferred language (English, French or Spanish) and press the Menu/Enter button. The settings are confirmed and the Basic screen returns.



# 13. Prohibit Buttons

- Restriction of the number of operable buttons.

**13-1** Press the Menu/Enter button in the Basic screen. The Main menu is displayed.

**13-2** Lock Function can be made visible by pressing the Menu/Enter button for 4 seconds.

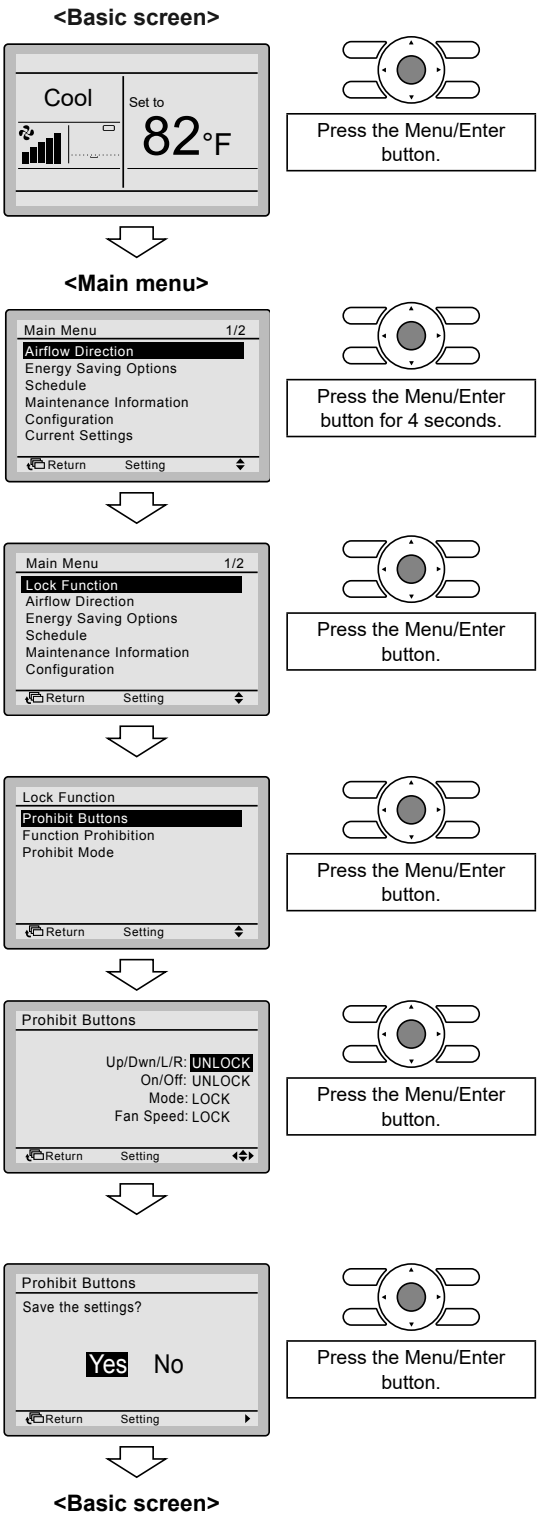
**13-3** Select Lock Function and press the Menu/Enter button. The "Lock Function" menu is displayed.

**13-4** Select Prohibit Buttons and press the Menu/Enter button. The "Prohibit Buttons" screen is displayed.

**13-5** Select "Up/Dwn/L/R", "On/Off", "Mode" or "Fan Speed" by using the ◀▶ (Left/Right) buttons and "Lock/Unlock" by using the ▲▼ (Up/Down) buttons.

**13-6** Press the Menu/Enter button. The confirmation screen is displayed.

**13-7** Select Yes and press the Menu/Enter button. The settings are entered and the Basic screen returns.



# 14. Function Prohibition

- Restriction of the number of operable functions.

**14-1** Press the Menu/Enter button in the Basic screen. The Main menu is displayed.

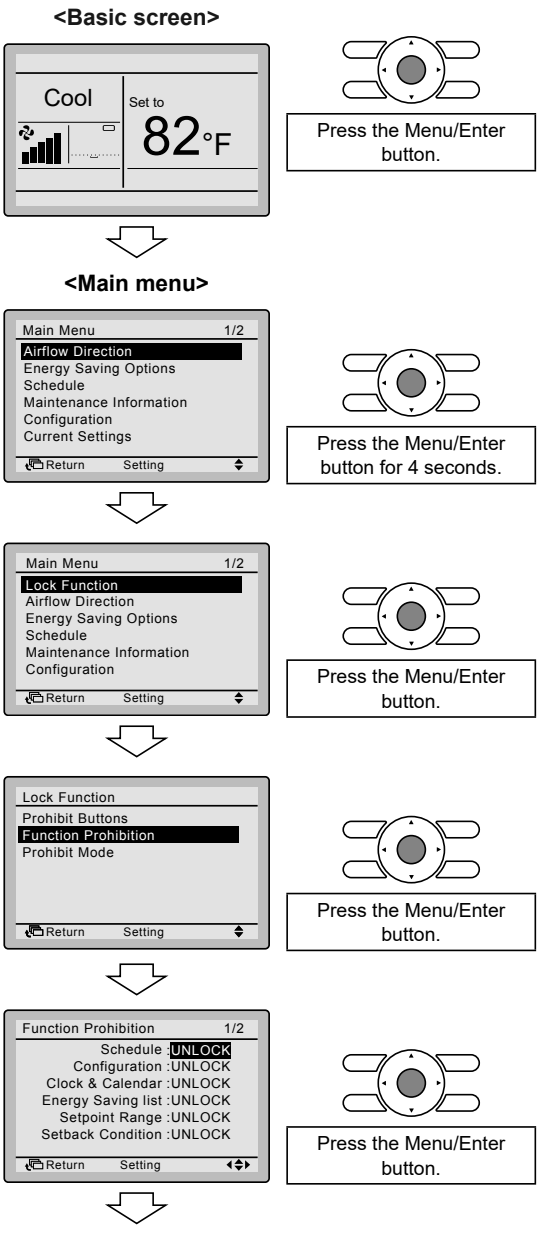
**14-2** Lock Function can be made visible by pressing the Menu/Enter button for 4 seconds.

**14-3** Select Lock Function and press the Menu/Enter button. The "Lock Function" menu is displayed.

**14-4** Select Function Prohibition and press the Menu/Enter button. The "Function Prohibition" screen is displayed.

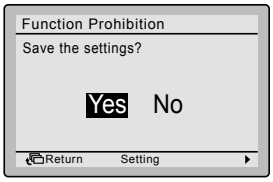
**14-5** Select the desired function by using the ◀▶ (Left/Right) buttons and "Lock/Unlock" by using the ▲▼ (Up/Down) buttons.

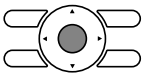
**14-6** Press the Menu/Enter button. The confirmation screen is displayed.



**14-7** Select Yes and press the Menu/Enter button. The settings are entered and the Basic screen returns.

**14-7**



Press the Menu/Enter button.

**<Basic screen>**

**NOTE**

- When a function is prohibited, the icon will be displayed next to the function.

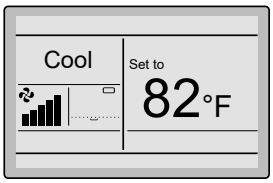
# 15. Prohibit Mode

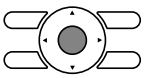
- Restriction of the number of operable modes.

**<Basic screen>**

**15-1** Press the Menu/Enter button in the Basic screen. The Main menu is displayed.

**15-1**



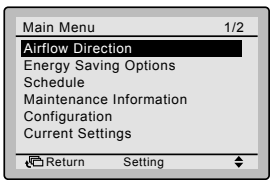



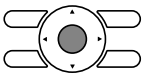
Press the Menu/Enter button.

**<Main menu>**

**15-2** Lock Function can be made visible by pressing the Menu/Enter button for 4 seconds.

**15-2**

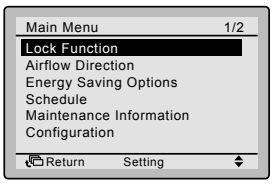


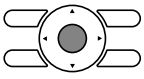



Press the Menu/Enter button for 4 seconds.

**15-3** Select Lock Function and press the Menu/Enter button. The "Lock Function" menu is displayed.

**15-3**



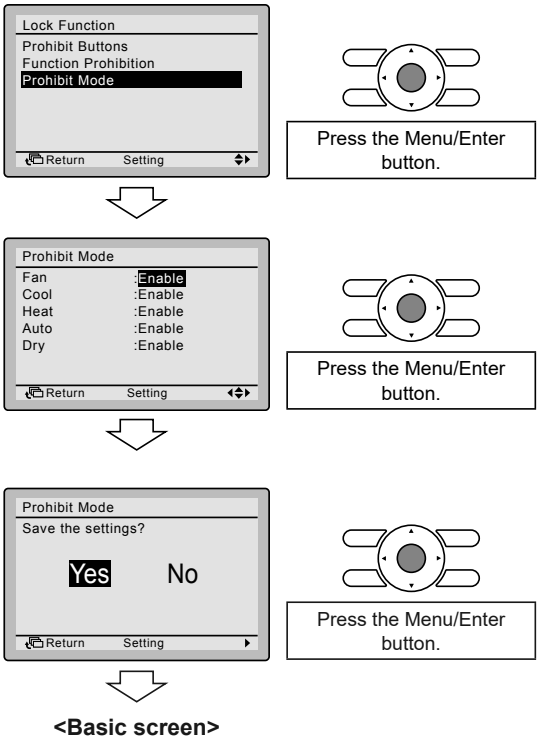
Press the Menu/Enter button.

**15-4** Select Prohibit Mode and press the Menu/Enter button. The "Prohibit Mode" screen is displayed.

**15-5** Select “Fan”, “Cool”, “Heat”, “Auto” or “Dry” using the ◀▶ (Left/Right) buttons and “Enable/Disable” the selected mode by using the ▲▼ (Up/ Down) buttons.

**15-6** Press the Menu/Enter button. The confirmation screen is displayed.

**15-7** Select Yes and press the Menu/Enter button. The settings are confirmed and the Basic screen returns.




**<Basic screen>**

## NOTE

- When the currently active mode is locked, this mode will still be active upon returning to the Basic screen. Only when the mode is changed, the disabled mode will not be available anymore. When all modes are locked, it is not possible to change to another mode other than the currently active mode.

## 2.2 <BRC073A6> Wired Remote Controller (Operation)

# Safety Considerations

The original instructions are written in English. All other languages are translations of the original instructions.
This appliance is not intended to be used by persons, including children, with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless they are supervised or have been given instructions on how to use the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

**Please read these Safety Considerations carefully before installing the remote controller.**

- This manual classifies the precautions into WARNING and CAUTION.
  They both contain important information regarding safety. Be sure to follow all the precautions below.

| | |
|---|---|
| ⚠ **WARNING** | Failure to follow these instructions properly may result in personal injury or loss of life. |
| ⚠ **CAUTION** | Failure to observe these instructions properly may result in property damage or personal injury, which may be serious depending on the circumstances. |

- The following pictograms are used in this manual.

| | | | |
|---|---|---|---|
|  | Never do. |  | Always follow the instructions given. |
|  | Be sure to ground the unit. |  | Absolutely keep wet hands away. |
|  | Absolutely keep water and moisture away. | | |

## ■ About Remote Controller

| ⚠ **WARNING** | |
|---|---|
|  | • **Do not install the remote controller by yourself.**<br>Improper installation may result in electric shocks or fire.<br>Consult your Daikin dealer. |
|  | • **Do not modify or repair the remote controller.**<br>This may result in electric shocks or fire.<br>Consult your Daikin dealer. |
|  | • **Do not relocate or reinstall the remote controller by yourself.**<br>Improper installation may result in electric shocks or fire.<br>Consult your Daikin dealer. |
|  | • **Do not use flammable materials (e.g., hair spray or insecticide) near the product.**<br>Do not clean the product with organic solvents such as paint thinner.<br>The use of organic solvents may cause crack damage to the product, electric shocks or fire. |

# Items to be Strictly Observed

| ⚠ CAUTION | |
|---|---|
|  | • **Do not play with the unit or its remote controller.**<br>Accidental operation by a child may result in impairment of bodily functions and harm health. |
|  | • **Never disassemble the remote controller.**<br>Touching the interior parts may result in electric shocks or fire.<br>Consult your Daikin dealer or authorized contractor for internal inspections and adjustments. |
|  | • **To avoid electric shocks, do not operate with wet hands.** |
|  | • **Do not wash the remote controller.**<br>Doing so may cause electric leakage and result in electric shocks or fire. |
|  | • **Do not leave the remote controller wherever there is a risk of wetting.**<br>If water gets into the remote controller there is a risk of electrical leakage and damage to electronic components. |

## ■ Indoor Unit and Outdoor Unit

| ⚠ WARNING | |
|---|---|
|  | • **Be aware that prolonged, direct exposure to cool or warm air from the air conditioner or to air that is too cold or too warm can be harmful to your physical condition and health.** |
|  | • **Do not place objects, including rods, your fingers, etc. in the air inlet or outlet.**<br>Injury may result due to contact with the air conditioner's high-speed fan blades. |
|  | • **Contact professional personnel about attachment of accessories and be sure to use only accessories specified by the manufacturer.**<br>If a defect results from your own workmanship, it may result in water leaks, electric shock or fire. |
|  | • **Do not use the product in atmospheres contaminated with oil vapor, such as cooking oil or machine oil vapor.**<br>Oil vapor may cause crack damage, electric shocks or fire. |
|  | • **Do not use the product in places with excessive oily smoke, such as cooking rooms or in places with flammable gas, corrosive gas or metal dust.**<br>Using the product in such places may cause fire or product failures. |

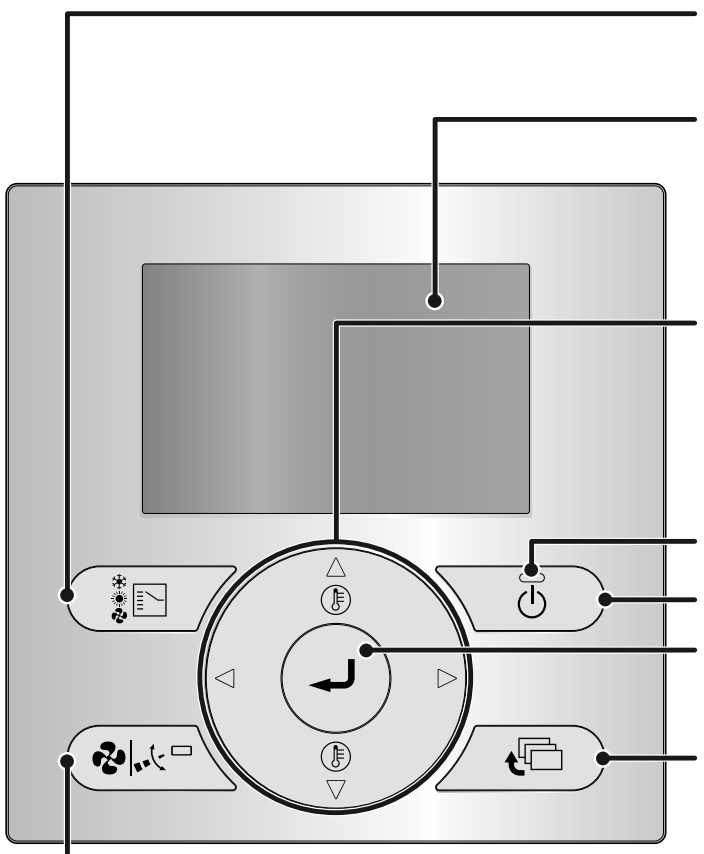
| WARNING | |
|---|---|
|  | • **Beware of fire in case of refrigerant leakage.**<br>If the air conditioner is not operating correctly, i.e. not generating cool or warm air, refrigerant leakage could be the cause. Consult your dealer for assistance. The refrigerant within the air conditioner is safe and normally does not leak. However, in the event of a leakage, contact with a naked burner, heater or cooker may result in generation of noxious gas. Do not longer use the air conditioner until a qualified service person confirms that the leakage has been repaired. |
|  | • **In the case of using a load breaker provided with a fuse, make sure that the capacity of the fuse is correct.**<br>Use of an ordinary conductive wire may cause malfunctions or fire. |
|  | • **Do not use the power supply breaker to start or stop the air conditioner.**<br>Otherwise, fire or water leakage may result.<br>Furthermore, the fan will rotate abruptly if power failure compensation is enabled, which may result in injury. |
|  | • **Be sure to ground the unit.**<br>Do not ground the unit to a utility pipe, lightning conductor or telephone ground lead. Imperfect grounding may result in electric shocks or fire. A high surge current from lightning or other sources may cause damage to the air conditioner. |
|  | • **When the air conditioner is malfunctioning (giving off a burning odor, etc). turn off the power and contact your local dealer.**<br>Continued operation under such circumstances may result in a failure, electric shocks or fire hazards. |
|  | • **Consult your local dealer regarding what to do in case of refrigerant leakage.**<br>When the air conditioner is to be installed in a small room, it is necessary to take proper measures so that the amount of any leaked refrigerant does not exceed the concentration limit in the event of a leakage.<br>Otherwise, this may lead to an accident due to oxygen depletion. |
|  | • **Be sure to install a ground leakage breaker.**<br>Failure to install a ground leakage breaker may result in electric shocks or fire. |
|  | • **Consult the dealer if the air conditioner submerges owing to a natural disaster such as a flood or typhoon.**<br>Do not operate the air conditioner in that case or otherwise a malfunction, electric shock or fire may result. |
|  | • **Be sure to use a dedicated power supply for the air conditioner.**<br>The use of any other power supply may cause heat generation, fire or product failures. |

Items to be Strictly Observed

| ⚠ CAUTION | |
|---|---|
| | • **After prolonged use, check the unit stand and its mounts for damage.**<br>If left in a damaged condition, the unit may fall and cause injury. |
| | • **Do not allow a child to mount on the outdoor unit or avoid placing any object on it.**<br>Falling or tumbling may result in injury. |
| | • **Do not block air inlets nor outlets.**<br>Impaired airflow may result in insufficient performance or trouble. |
| | • **To avoid injury, do not touch the air inlet or aluminium fins of the unit.** |
| | • **Do not remove the outdoor unit's fan guard.**<br>The guard protects against the unit's high speed fan, which may cause injury. |
| | • **Do not place objects that are susceptible to moisture directly beneath the indoor or outdoor units.**<br>Under certain conditions, condensation on the main unit or refrigerant pipes, air filter dirt or drain blockage may cause dripping, resulting in fouling or failure of the object concerned. |
| | • **Do not place water containers (flower vases, etc). on the unit, as this may result in electric shocks or fire.** |
| | • **Do not use the air conditioner for purposes other than those for which it is intended.**<br>Do not use the air conditioner for cooling precision instruments, food, plants, animals or works of art as this may adversely affect the performance, quality and/or longevity of the object concerned. |
| | • **Do not place appliances that produce naked flames in places exposed to the airflow from the unit as this may impair combustion of the burner.** |
| | • **Do not place heaters directly below the unit as resulting heat can cause deformation.** |
| | • **Be sure that children, plants or animals are not exposed directly to airflow from the unit as adverse effects may ensue.** |
| | • **Do not put flammable containers, such as spray cans, within 1 m from the blow-off mouth.**<br>The containers may explode because the warm air output of the indoor or outdoor unit will affect them. |
| | • **Do not install the air conditioner at any place where there is a danger of flammable gas leakage.**<br>In the event of a gas leakage, build-up of gas near the air conditioner may result in fire hazards. |

| ⚠ CAUTION | |
|---|---|
| | • **Do not sit or stand on any unstable base at the time of operating or maintaining the air conditioner.**<br>The base may topple down and injury may occur. |
| | • **Do not touch the motor when replacing the filter.**<br>The motor can be very hot which may result in burns. |
| | • **Do not wash the air conditioner with water as this may result in electric shocks or fire.** |
| | • **Perform ventilation from time to time.**<br>Be careful when using the air conditioner with other heating equipment.<br>Insufficient ventilation may result in oxygen deficiency. |
| | • **Always stop the operation of the air conditioner and turn OFF the power supply breaker when cleaning.**<br>Failure to do so may result in an electric shock or injury. |
| | • **Do not wash the interior of the indoor and outdoor units by yourself. Always consult your Daikin dealer.**<br>The use of an incorrect washing method or incorrect detergent may damage the resin parts of the indoor unit or cause water leakage.<br>Moreover, malfunctions, smoke generation or ignition may result if the electric parts or the motor in the indoor unit come in contact with a detergent or water. |
| | • **Do not place objects in direct proximity of the outdoor unit and do not let leaves and other debris accumulate around the unit.**<br>Leaves are a hotbed for small animals which can enter the unit. Once in the unit, such animals can cause malfunctions, smoke or fire when making contact with electrical parts. |
| | • **Fix the units securely.**<br>If the units are not mounted securely, the units may fall or topple and result in personal injury. |
| | • **Arrange the drain to ensure complete drainage.**<br>If proper drainage from the outdoor drain pipe does not occur during air conditioner operation, there could be a blockage due to dirt and debris build-up in the pipe.<br>This may result in water leakage from the indoor unit. Under these circumstances, stop the air conditioner operation and consult your dealer for assistance. |

# Names and Functions




**Functions other than the basic operation items (i.e., ON/OFF, operation mode selection, fan speed, up/down direction, and temperature setting) are set from the menu screen.**

**NOTE**

- **Do not install the remote controller in places exposed to direct sunlight. Otherwise, the LCD may become discolored and nothing may be displayed.**
- **Do not pull or twist the remote controller cord. Otherwise, the remote controller may malfunction.**
- **Do not press the buttons on the remote controller with objects with sharp ends. Otherwise, the remote controller may be damaged or malfunction.**

## 1. Operation Mode Selector button

- Press this button to select the operation mode of your preference. (See "Cool/Heat/Fan/Dry/Auto Operation" on page 12)
- Available modes may vary with the connected model.

## 2. Fan Speed/Airflow Direction button

- Used to change the fan speed and airflow direction. (See "Cool/Heat/Fan/Dry/Auto Operation" on page 12)
- Available fan speeds and airflow directions may vary with the connected model.

## 3. Menu/Enter button

- This button is enabled by default. To disable, refer to "Enable/disable the Menu/Enter and Cancel button" on page 11.
- Used to display the Main Menu or enter the selected item (See "Main Menu Items Overview" on page 19).

## 4. Up button ▲

- Used to raise the set temperature.
- The next item on the upper side will be highlighted. (Keep pressing the button to cycle through the values or items).
- Used to change the selected item.

## 5. Down button ▼

- Used to lower the set temperature.
- The next item on the lower side will be highlighted. (Keep pressing the button to cycle through the values or items).
- Used to change the selected item.

## 6. Right button ▶

- Used to highlight the next items on the right-hand side.
- The display contents are changed to the next screen.

## 7. Left button ◀

- Used to highlight the next items on the left-hand side.
- The display contents are changed to the previous screen.

## 8. ON/OFF button

- Press to start or stop the air conditioner.

## 9. Operation lamp (Green)

- This lamp lights up during operation.
- This lamp is not lit when the unit operation is OFF.
- This lamp blinks if an error or mode conflict occurs.

## 10. Cancel button

- This button is enabled by default. To disable, refer to "Enable/disable the Menu/Enter and Cancel button" on page 11.
- Used to return to the previous screen.

## 11. LCD (with backlight)

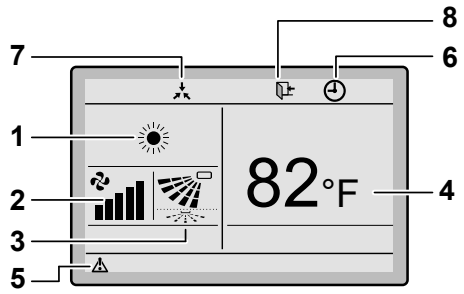
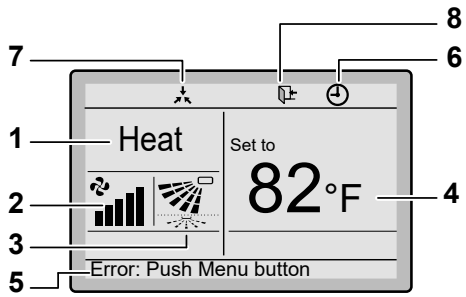
- The backlight will be lit for approximately 30 seconds when one of the buttons is pressed.
- The actions linked to the buttons , except for the ON/OFF button, are not carried out when the backlight is not lit.

Names and Functions

# Liquid Crystal Display

- There are four display methods for the liquid crystal display (LCD) available. The Standard display, which is used by default, and the Detailed display. There is also the possibility to use only Icon or Icon and Text mode (see the Installation manual).
- To change the active display method, select the desired display method in the Display Method screen (See "Display" on page 34).
- The displayed contents on the screen may vary with the operation mode of the connected models. (E.g.: The following display will appear when the air conditioner is in heating operation).

## Standard display

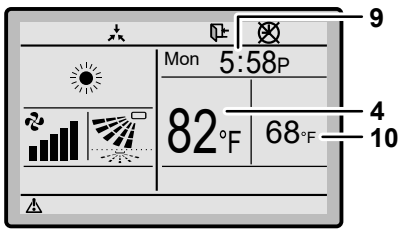
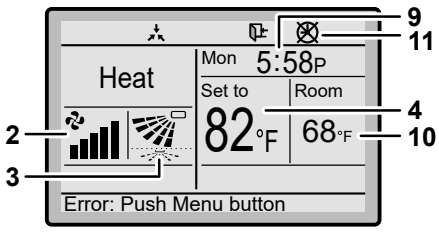
| With icons | With icons and text (default) |
|---|---|
|  |  |





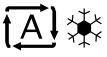
## Detailed display

### ■ The clock and Detailed selection items appear on the Detailed display in addition to the items appearing on the Standard display.

| With icons | With icons and text |
|---|---|
|  |  |

## 1. Operation mode

- Indicates the current operation mode.

| Operation Mode | | |
|---|---|---|
| Cool | Heat | Auto (Heat) |
|  |  |  |
| Fan | Dry | Auto (Cool) |
|  |  |  |

## 2. Fan speed

**(See "Cool/Heat/Fan/Dry/Auto Operation" on page 12)**

- Indicates the fan speed that is set for the air conditioner.
- The fan speed will not be displayed if the air conditioner does not have the fan speed control function.

## 3. Airflow direction

- Displayed only when the air conditioner is in operation.
- Indicates the airflow direction that is set for the air conditioner.
- The possible directions depend on the indoor unit.

## 4. Set/Setback temperature display

**(See "Setback" on page 17)**

- When the unit is turned ON, the temperature that is set for the air conditioner is displayed.
- When the unit is turned OFF and Setback is disabled, the temperature that is set for the air conditioner is displayed.
- When the unit is turned OFF and Setback is enabled, the temperature that is set for the setback function is displayed in smaller digits.

## 5. Error "⚠"

**(See "Error Code Display" on page 42)**

- Indicates a unit error.

## 6. Timer enabled "🕘"

**(See "OFF Timer" on page 27 and "Schedule" on page 28)**

- Indicates that the schedule timer or the OFF timer is enabled.

## 7. Under Centralised control "⛓"

- Indicates that the air conditioner is under the management of central control equipment (optional accessories) and the operation of the system through the remote controller is prohibited.

## 8. Setback "⎆"

**(See "Setback" on page 17)**

- The setback icon flashes when the unit is turned on under the setback control.

## 9. Clock (12/24 hours real time clock)

**(See "Clock & Calendar" on page 38)**

- Indicates that the clock is set.
- If the clock is not set, " -- : -- " will be displayed.

## 10. Detailed selection

**(See "Display Mode" on page 34)**

- Displayed when the detailed display mode is selected.
- No detailed items are selected by default.

## 11. Timer problem "⊠"

- Indicates that the clock needs to be set again.
- The schedule timer function will not work unless the clock is set again.

# Basic Operation Method

**Remote Controller Functions**

**Operation procedure**

Operate the buttons according to the procedure.

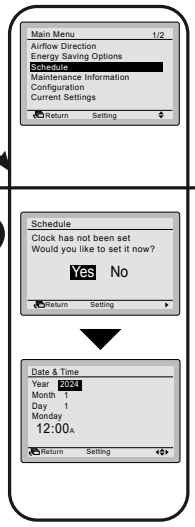
**Button display**

Displays the positions of the buttons to be operated.

**Operation Method**

**Screen display**

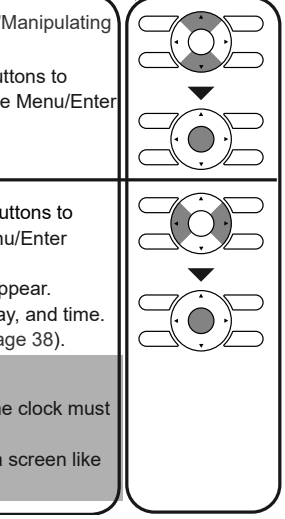
Screens that will be displayed on the remote controller.




1 • Display the Main Menu. (See "Manipulating the Main Menu" on page 21).
• Press the ▼▲ (Up/Down) buttons to select Schedule and press the Menu/Enter button.

2 • Press the ◀▶ (Left/Right) buttons to select Yes and press the Menu/Enter button.
• The Date & Time screen will appear.
• Set the current year, month, day, and time. (See "Clock & Calendar" on page 38).

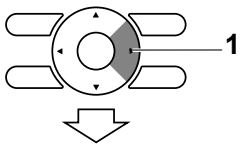
**Note**
- Before setting the schedule, the clock must be set.
- If the clock has not been set, a screen like the one on the left will appear.



## Enable/disable the Menu/Enter and Cancel button

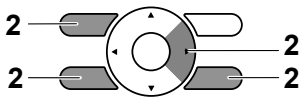
**Operation Method** By default, the Menu/Enter and Cancel button are enabled.

1




- To enable/disable the Menu/Enter and Cancel button, keep the ▶ (Right) button pressed in the Basic Screen.

2

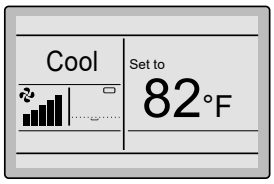



- Press the 3 keys simultaneously while keeping the ▶ (Right) button pressed.

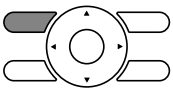
# Cool/Heat/Fan/Dry/Auto Operation

## Operation Method

**1**

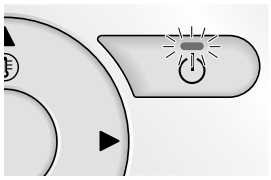



- Press the Operation Mode Selector button several times until the desired mode (Cooling, Heating, Fan Only, Dry or Auto) is selected.

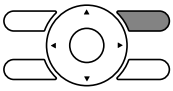


**Note**
- Unavailable operation modes are not displayed.
- Only Cooling, Dry or Fan Only mode can be selected if the air conditioner is a cooling-only model.

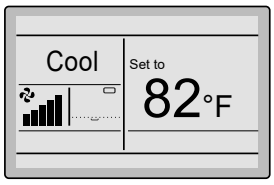
**2**



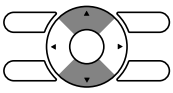
- Press the ON/OFF button.
  The Operation lamp (green) will be lit and the air conditioner will start operating.



**3**

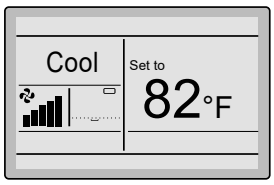



- The set temperature will increase by 1°F when the ▲ (Up) button is pressed and decrease by 1°F when the ▼ (Down) button is pressed.

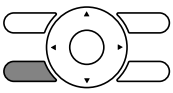


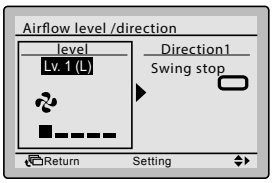
**Note**
Temperature settings are not possible while in Dry or Fan Only mode.

**4**

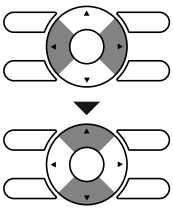



- To change the fan speed or airflow direction, press the Fan Speed/Airflow Direction button.

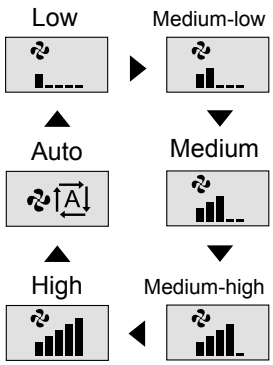





- To select air volume or airflow direction setting, press the ◀ ▶ buttons.
- Press the ▲▼ (Up/Down) buttons to select the desired level or position.

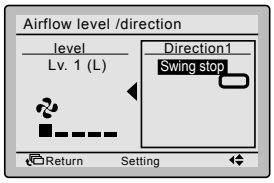


Basic Operation Method

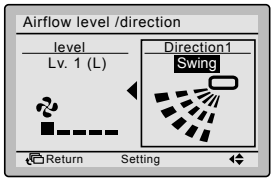



**Note**

- The air conditioner may be in automatic fan speed control for mechanical protection purposes.
- The air conditioner may be in automatic fan speed control according to the room temperature.
- The fan may stop operating, which is not a failure.
- It may take time until fan speed changes are actually carried out.
- In Auto fan speed, the fan speed is adjusted automatically according to the setpoint and indoor temperature.




- With airflow direction selected, select the desired airflow direction from Swing or Swing stop using the ▲▼ (Up/Down) buttons.




Airflow direction setting (up/down)

**Note**

- The airflow directions appear on the screen as follows:



Up/down direction



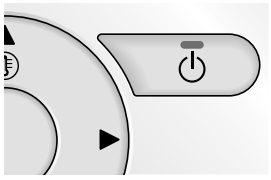
Left/right direction

- Selecting Swing will cause the airflow direction blades to swing back and forth.
- When you select Swing stop, the airflow direction blades stay in the position of when you press the Menu/Enter button.

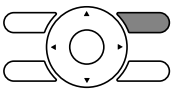
**Note**

- To change the left/right airflow direction, refer to "Change the Airflow direction" on page 22.

5



- When the ON/OFF button is pressed again, the air conditioner will stop operating and the Operation lamp will turn OFF.



**Note**

- When the system is stopped while in heating operation, the fan will continue to operate for approximately 1 minute in order to eliminate the residual heat in the indoor unit.

## Characteristics of Cooling Operation

- When the outdoor air temperature is high, it takes some time until the room temperature reaches the set temperature.

## Characteristics of Heating Operation

**Starting operation**

- Heating operation generally requires a longer time to attain the set temperature compared with cooling operation.
  It is recommended to start operating the air conditioner in advance by using the timer.

**Perform the following operation in order to prevent the degradation of the heating capability or cold drafts.**

**Defrost operation**

- The air conditioner will automatically go into defrost operation to prevent frost accumulation at the outdoor unit which results in loss of the heating capacity.
- The air conditioner will return to normal operation after approximately 4 to 12 minutes.
- During defrost mode the temperature near the indoor room temp is displayed. This may be affected by the location of the unit.

**Outdoor temperature and heating capability**

- The heating capacity of the air conditioner will drop when the outdoor temperature decreases.
  If the heating effect is insufficient, it is recommended to use another heating appliance in combination with the air conditioner. (When a combustion appliance is used, ventilate the room regularly).
  Do not use the heating appliance in places where the heating appliance is exposed to the airflow of the air conditioner.
- The air conditioner is a hot air circulation type. Therefore, it takes some time to warm up the room after the air conditioner starts operating.
  The indoor fan will automatically operate until the indoor temperature of the system rises to a certain level.
- If hot air stays around the ceiling and your feet feel cold, a circulator is recommended.
  For details, consult your Daikin dealer.

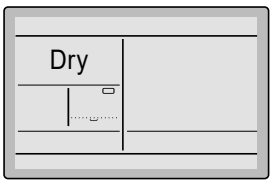
# Program Dry Operation

## Preparation

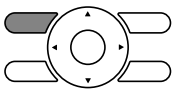
- The dry mode may not be selected if the remote controller has no eligibility to select cooling/heating mode.

### Operation Method

**1**

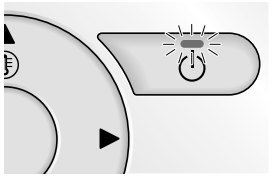



- Press the Operation Mode Selector button several times until Dry mode is selected.

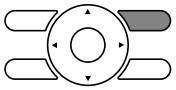


**Note**
Dry mode may not be available depending on the type of indoor unit.

**2**



- Press the ON/OFF button.
  The Operation lamp will be lit and the air conditioner will start operating.

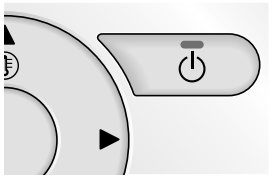


**Note**
The air conditioner is in automatic temperature and fan speed control. Therefore, the temperature or fan speed cannot be changed while the air conditioner is in operation.

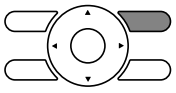
**3**

- To set the airflow direction, see "Airflow Direction" on page 22.

**4**



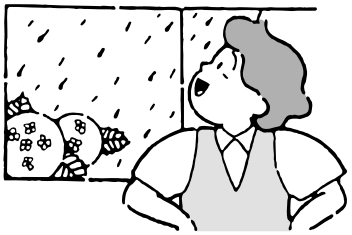
- When the ON/OFF button is pressed again, the air conditioner will stop operating and the Operation lamp will turn OFF.



**Note**
To prevent water leakage or system failure, do not turn OFF the power soon after the air conditioner stops operating. Be sure to wait at least 5 minutes so that the drain pump finishes discharging the residual water from the indoor unit.

## Characteristics of Dry Operation

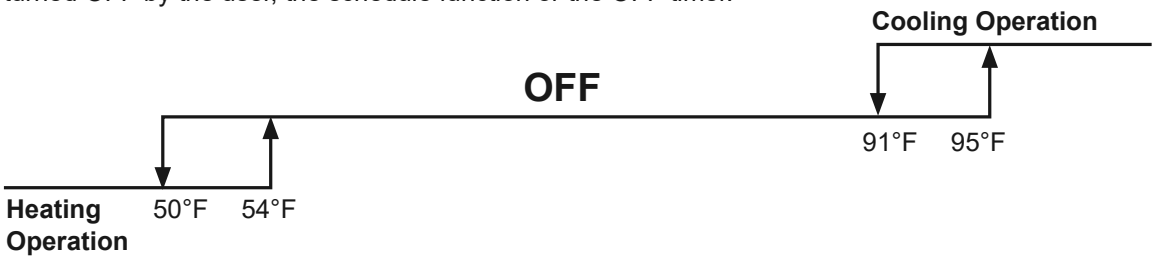
In Dry operation, the air humidity will be lowered by intermittently turning the air conditioner ON in cooling and OFF again to minimize the temperature decrease.



**Note**
- The temperature and fan speed are controlled automatically and cannot be controlled by the remote controller.
- Dry operation will not function if the room temperature is too low.

# Setback

The Setback function will maintain the room temperature in a specific range when the remote controller is turned OFF. This is done by temporarily starting the air conditioner that was previously turned OFF by the user, the schedule function or the OFF timer.




For example:

[ Setback setpoint temperature: cool 95°F, heat 50°F ]

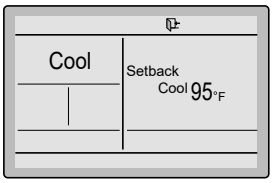
[ Recovery differential: cool -4°F, heat +4°F ]

- If the room temperature drops below 50°F, heating is started automatically. If after half an hour the temperature increases to 54°F or above, the controller returns to its original state.
- If the room temperature goes above 95°F, cooling is started automatically. If after half an hour the temperature drops to 91°F or below, the controller returns to its original state.

**Note**
- This function is disabled by default. This function can only be enabled/disabled in the Energy Saving List (See "Energy Saving Options" on page 23).
- The differential can be adjusted in the Setback Condition menu (See "Setback Condition" on page 25).
- The setback temperature can be set while the unit is turned off on the Basic Screen or set in the schedule.
- Setback will turn the unit ON for at least 30 minutes unless the setback temperature setpoint is changed or the unit is turned ON with the ON/OFF button.
- When setback turns the air conditioner ON while in Auto mode, the remote controller switches to Cooling or Heating only, depending on what is appropriate, and only the respective setback temperature setpoint is shown.
- The temperature is measured inside the air conditioner unit (when the unit is switched OFF). As there is no actual air flow, the measured temperature inside the air conditioner unit can deviate (up to 6°F) from the actual room temperature.

**Operation Method** Setback should not be enabled when a centralised controller is connected via the KRP928 Interface adapter for Room Air Conditioner.

1




The setback icon "" flashes when the unit is turned ON under the setback control.

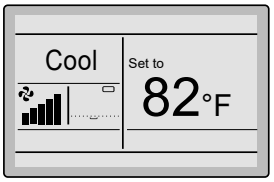
The fan speed cannot be changed when setback is active and, as a result, the fan speed is not visible.

The airflow direction can only be changed through the menu when setback is active.

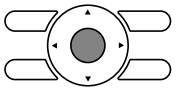
# Key Lock

**Operation Method** Disable the use of all buttons.

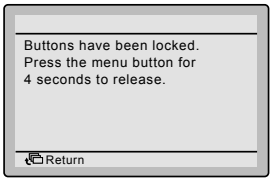
1




- Press the Menu/Enter button for at least 4 seconds. (During backlight lit)



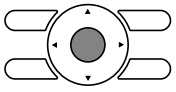
2




- All buttons are disabled when the keys are locked.
- When one of the buttons is pressed, the message on the left is displayed.

3

- To cancel the key lock, continue pressing the Menu/Enter button for at least 4 seconds. (During backlight lit)



# Quick Reference of Main Menu Items

## ■Main Menu Items Overview

**Note**
- The available items may vary with the connected model.
- Only the available items will appear in the menu.

| Setting and display items | | Description | Reference page |
|---|---|---|---|
| **Airflow Direction** | | Change the airflow direction.<br>• The airflow direction blades can be automatically operated up and down and left and right.<br>• There are swing or swing stop directions.<br>• This function is not available on all models. | 22 |
| **Energy Saving Options**(1) | **Energy Saving List** | **Enable** or **disable** the "Energy Saving Options". | 23 |
| | **Setpoint Range Setting** | The setpoint temperature range can be restricted for the Cooling, Heating and Auto Mode. | 24 |
| | **Setback Condition** | Set the setback differential temperature after which the unit will turn back OFF. | 25 |
| | **Setpoint Auto Reset** | Change the temperature setpoint to a preset temperature setpoint after running for a set period of time, even if the temperature setpoint has been changed.<br>• Possible to set from 30 to 120 minutes in 30 minute increments. | 26 |
| | **Off Timer** | The system is turned off automatically after the selected time each time the system is activated.<br>• Possible to set in 10 minute increments from 30 to 180 minutes. | 27 |
| **Schedule**(2) | **Enable/Disable** | **Enable or disable** schedule function. | 28 |
| | **Select Schedule** | Select the active schedule number (schedule nr 1, 2 or 3). | 29 |
| | **Holidays** | Select the days of the week for which the schedule will be disabled. This function is used for when the schedule doesn't need to be active, e.g. like when you are on holiday. | 30 |
| | **Schedule Settings** | Select when the operation modes start and/or stop for each day of the week. Up to 5 actions can be set for each day. | 31 |

1) Setback, Setpoint Range, Setback Condition and Setpoint Auto Reset should not be used when a centralised controller is connected via the KRP928 Interface adapter for Room Air Conditioner.
2) The schedule can be restricted when a centralised controller is connected via the KRP928 Interface adapter for Room Air Conditioner.

| Setting and display items | | Description | Reference page |
|---|---|---|---|
| **Maintenance Information** | | Display the service contact. | 33 |
| **Configuration** | **Display** | • Display:<br>Switch between Standard or Detailed display.<br>• Detailed display settings:<br>Select if room temperature (near the indoor unit), outdoor temperature, or nothing is displayed. | 34 |
| | **Celsius / Fahrenheit** | Choose the temperature values from Celsius or Fahrenheit. | 36 |
| | **Contrast Adjustment** | Adjust the LCD contrast. | 36 |
| **Current Settings** | | Display a list of the current settings of the available items. | 37 |
| **Clock & Calendar** | **Date & Time** | Configure the date and time settings.<br>• The default time display is 12H.<br>• The clock will maintain accurate within ±30 seconds per month.<br>• If there is a power failure for a period not exceeding 48 hours, the clock will continue working with the built-in backup power supply. | 38 |
| | **12H/24H Clock** | The time can be displayed in either a 12 hour or 24 hour time format. | 39 |
| | **Daylight Saving Time** | Enable or Disable the Daylight Saving Time. | 39 |
| **Language** | | Choose the language from English, French or Spanish. | 40 |

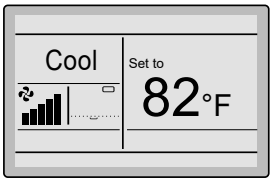
# Menu Manipulation

## Main Menu

### ■Manipulating the Main Menu

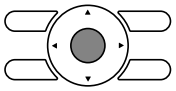
**Operation Method**

**1**

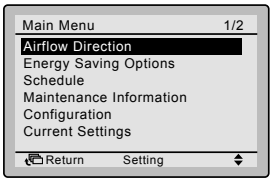



Basic Screen

- Press the Menu/Enter button.



**2**



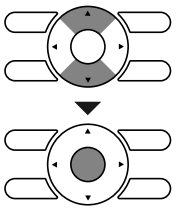

Main Menu

- The Main Menu will appear.

⇦ Instructions for operating the buttons will appear.

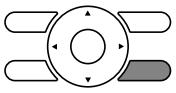
**3**

- Selecting items from the Main Menu.
  1. Press the ▼▲ (Up/Down) buttons to select the desired item.
  2. Press the Menu/Enter button to display the selected settings screen.



**4**

- To go back to the Basic Screen from the Main Menu, press the Cancel button.



**⚠ Caution**

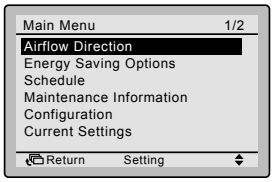
- When the Main Menu is visible and a button is not pressed for 5 minutes, the screen will automatically go back to the Basic Screen.

# Airflow Direction

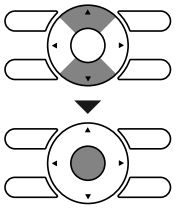
## ■Change the Airflow direction

### Operation Method

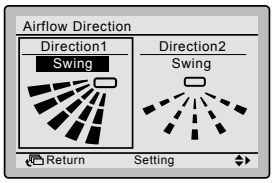
1



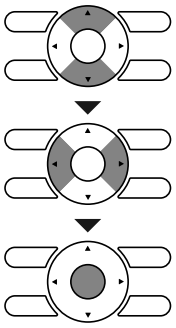

- Display the Main Menu (See "Manipulating the Main Menu" on page 21)
- Press the ▲▼ (Up/Down) buttons to select Airflow Direction and press the Menu/Enter button.

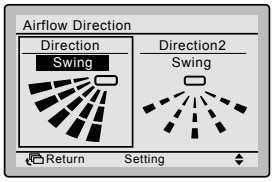


2

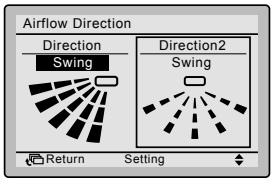



- Select the desired airflow direction from Swing or Swing stop using the ▲▼ (Up/Down) buttons.
- Select Up/down direction or Left/right direction using the ◀▶ (Left/Right) buttons.
- Press the Menu/Enter button to confirm the settings and to return to the Basic Screen.






Airflow direction setting (up/down)




Airflow direction setting (left/right)

Remark: Only visible if available.

**Note**

- The airflow directions appear on the screen as follows:



Up/down direction



Left/right direction

- Selecting Swing will cause the airflow direction blades to swing back and forth. When Swing is selected, all airflow directions will be visible at the same time.
- When you select Swing stop, the airflow direction blades stay in the position that you press the Menu/Enter button.

Menu Manipulation

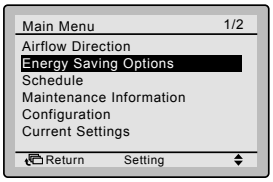
# Energy Saving Options

## ■Energy Saving List

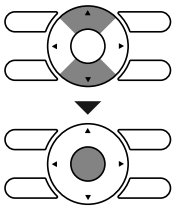
**Operation Method**

Some functions should not be enabled when a centralised controller is connected via the KRP928 Interface adapter for Room Air Conditioner.

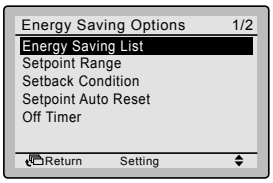
**1**



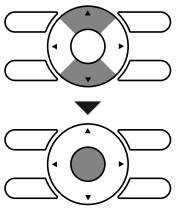

- Display the Main Menu. (See "Manipulating the Main Menu" on page 21).
- Press the ▼▲ (Up/Down) buttons to select Energy Saving Options and press the Menu/Enter button.



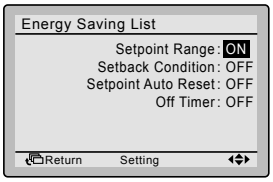
**2**



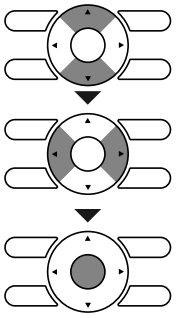

- Press the ▼▲ (Up/Down) buttons to select Energy Saving List and press the Menu/Enter button.



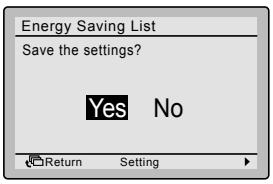
**3**



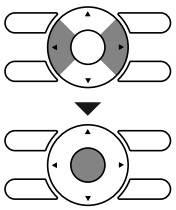

- Press the ▼▲ (Up/Down) buttons to change the setting to ON or OFF.
- Move the cursor using the ◀▶ (Left/Right) buttons.
- Press the Menu/Enter button when all changes are made. The confirmation screen will appear.



**4**




- Press the ◀▶ (Left/Right) buttons to select Yes.
- Press the Menu/Enter button to confirm the settings and to return to the Basic Screen.

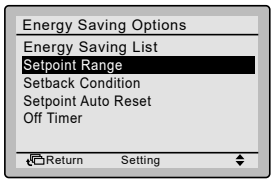


# ■Setpoint Range Setting

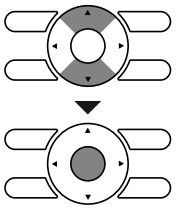
**Operation Method**

This function should not be used when a centralised controller is connected via the KRP928 Interface adapter for Room Air Conditioner.

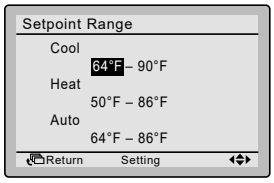
**1**



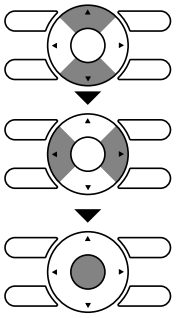

- Display the Energy Saving Options (See "Energy Saving List" on page 23).
- Press the ▼▲ (Up/Down) buttons to select **Setpoint Range** and press the Menu/Enter button.



**2**



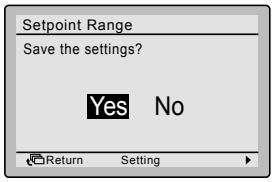

- Press the ▼▲ (Up/Down) buttons to change the cooling or heating temperature setpoint range.
- Move the cursor using the ◀▶ (Left/Right) buttons.
- Press the Menu/Enter button when all changes are made. The confirmation screen will appear.



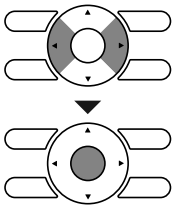
**Note**

- The default setpoint range restriction is [64°F→90°F] for cooling, [50°F→86°F] for heating, and [64°F→86°F] for auto. This setpoint range is the general setpoint range and is as a result always active regardless of whether Setpoint Range is enabled or disabled.
- The default setpoint range for setback operation is [92°F→99°F] for cooling and [50°F→59°F] for heating. This setpoint range cannot be changed.

**3**




- Press the ◀▶ (Left/Right) buttons to select **Yes**.
- Press the Menu/Enter button to confirm the settings and to return to the Basic Screen.



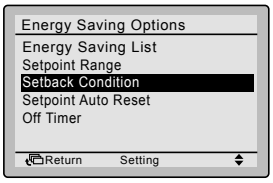
Menu Manipulation

# ■Setback Condition

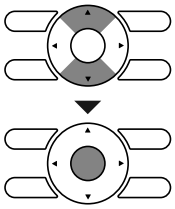
**Operation Method**

This function should not be used when a centralised controller is connected via the KRP928 Interface adapter for Room Air Conditioner.

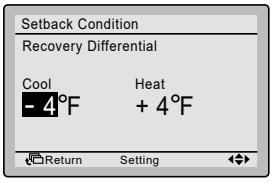
**1**



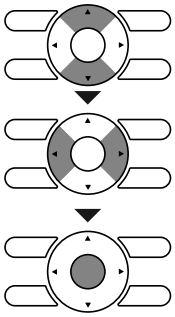

- Display the Energy Saving Options (See "Energy Saving List" on page 23).
- Press the ▼▲ (Up/Down) buttons to select Setback Condition and press the Menu/Enter button.



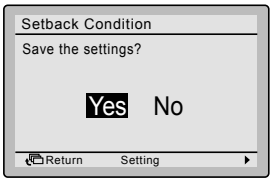
**2**



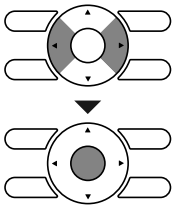

- Press the ▼▲ (Up/Down) buttons to change the differential for setback operation.
- Move the cursor using the ◀▶ (Left/Right) buttons.
- Press the Menu/Enter button when all changes are made. The confirmation screen will appear.



**3**




- Press the ◀▶ (Left/Right) buttons to select Yes.
- Press the Menu/Enter button to confirm the settings and to return to the Basic Screen.

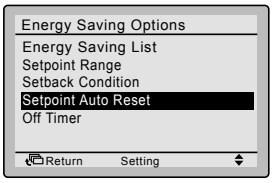


# ■Setpoint Auto Reset

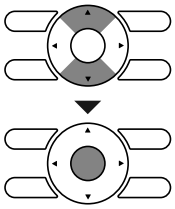
**Operation Method**

This function should not be used when a centralised controller is connected via the KRP928 Interface adapter for Room Air Conditioner.

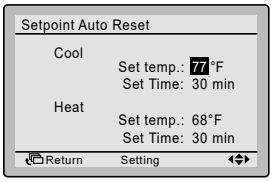
**1**



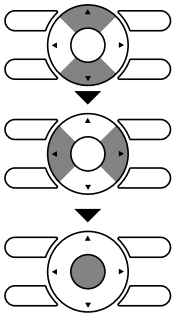

- Display the Energy Saving Options (See "Energy Saving List" on page 23).
- Press the ▼▲ (Up/Down) buttons to select **Setpoint Auto Reset** and press the Menu/Enter button.



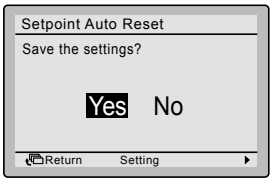
**2**



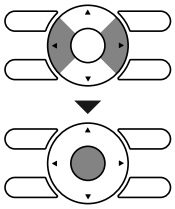

- Press the ▼▲ (Up/Down) buttons to set the preset temperature and timing for the auto reset of the setpoint.
- Move the cursor using the ◀▶ (Left/Right) buttons.
- Press the Menu/Enter button when all the changes are made. The confirmation screen will appear.



**3**




- Press the ◀▶ (Left/Right) buttons to select **Yes**.
- Press the Menu/Enter button to confirm the settings and to return to the Basic Screen.

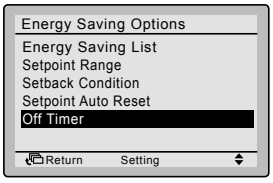


Menu Manipulation

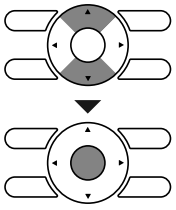
# ■OFF Timer

## Operation Method

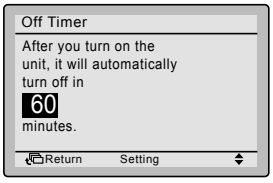
**1**



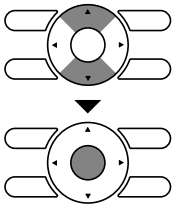

- Display the Energy Saving Options (See "Energy Saving List" on page 23).
- Press the ▼▲ (Up/Down) buttons to select **Off Timer** and press the Menu/Enter button.



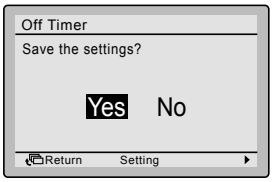
**2**



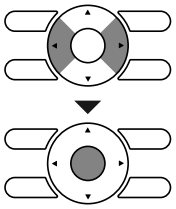

- Use the ▼▲ (Up/Down) buttons to set the time after which the unit automatically turns off again. Selections can be made in increments of 10 minutes from 30 to 180 minutes. Holding down the button causes the number to change continuously. The settings confirmation screen will appear when the Menu/Enter button is pressed.



**3**




- Press the ◀▶ (Left/Right) button to select **Yes**.
- Press the Menu/Enter button to confirm the settings and to return to the Basic Screen.



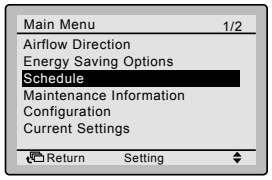
# Schedule

## ■Enable/Disable

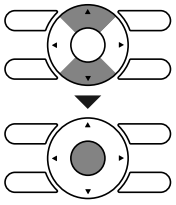
**Operation Method**

The schedule can be restricted when a centralised controller is connected via the KRP928 Interface adapter for Room Air Conditioner.

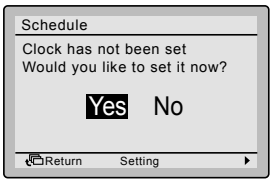
**1**



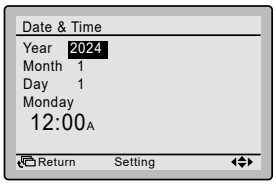

- Display the Main Menu. (See "Manipulating the Main Menu" on page 21).
- Press the ▼▲ (Up/Down) buttons to select Schedule and press the Menu/Enter button.



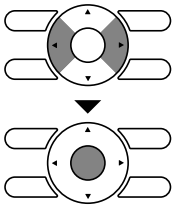
**2**



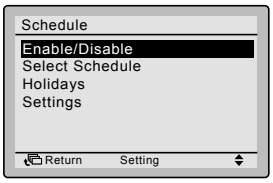

**Note**
- Before setting the schedule, the clock must be set.
- If the clock has not been set, a screen like the one on the left will appear.



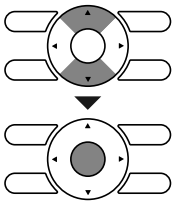

- Press the ◀▶ (Left/Right) buttons to select Yes and press the Menu/Enter button.
- The Date & Time screen will appear.
- Set the current year, month, day and time. (See "Clock & Calendar" on page 38).



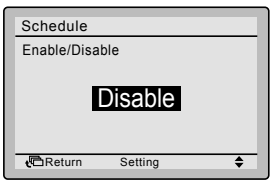
**3**



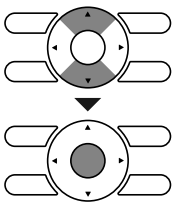

- Press the ▼▲ (Up/Down) buttons to select Enable/Disable and press the Menu/Enter button.



**4**

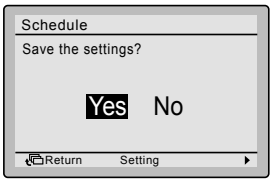



- Press the ▼▲ (Up/Down) buttons to select Enable or Disable.
- The confirmation screen will appear when the Menu/Enter button is pressed.

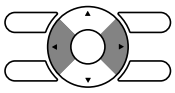


**Note**
The Schedule is enabled. To modify the Selected schedule number see "Select Schedule" on page 29.

5



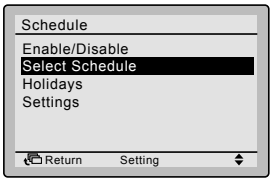

- Press the ◀▶ (Left/Right) buttons to select **Yes**.
- Press the Menu/Enter button to confirm the settings and to return to the Basic Screen.



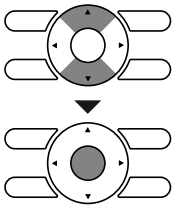
## ■Select Schedule

**Operation Method** It is possible to program up to three different schedules.

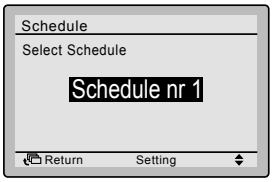
1



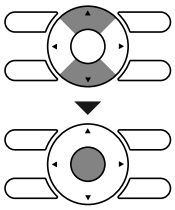

- Display the Schedule menu. (See "Enable/Disable" on page 28).
- Press the ▼▲ (Up/Down) buttons to select **Select Schedule** and press the Menu/Enter button.



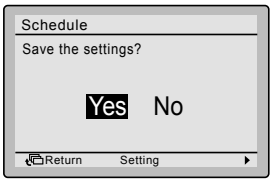
2



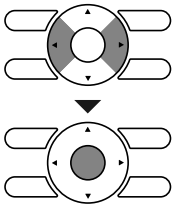

- Press the ▼▲ (Up/Down) buttons to select **Schedule nr 1**, **Schedule nr 2** or **Schedule nr 3**.
- The confirmation screen will appear when the Menu/Enter button is pressed.



3



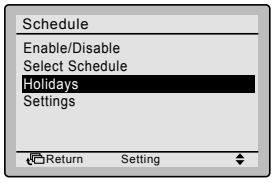

- Press the ◀▶ (Left/Right) buttons to select **Yes**.
- Press the Menu/Enter button to confirm the settings and to return to the Basic Screen.



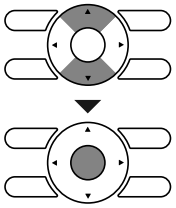
# ■Holidays

**Operation Method** The schedule timer will be disabled for days that have been set as a holiday.

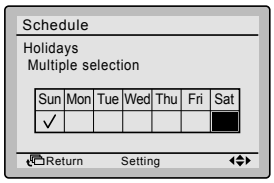
**1**



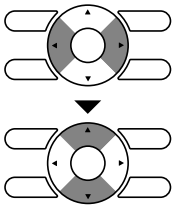

- Display the Schedule menu. (See "Enable/Disable" on page 28).
- Press the ▼▲ (Up/Down) buttons to select **Holidays** and press the Menu/Enter button.



**2**

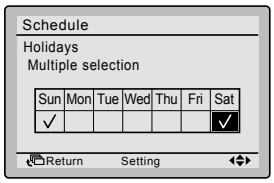



- Press the ◀▶ (Left/Right) buttons to select the desired day.
- Press the ▼▲ (Up/Down) buttons to display "✓" to set this day as a holiday.

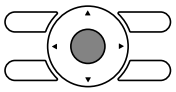


**Note**
- Multiple days can be selected as holidays.
- To re-enable the schedule timer for the day selected as a holiday, the holiday setting must be released.

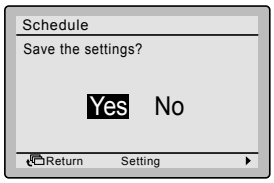
**3**



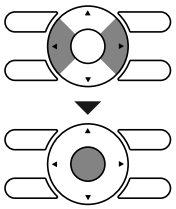

- Press the Menu/Enter button when all changes are made. The settings confirmation screen will appear.

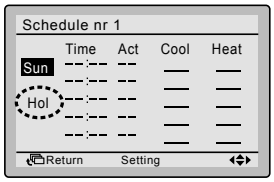


**4**




- Press the ◀▶ (Left/Right) button to select **Yes**.
- Press the Menu/Enter button to confirm the settings and to return to the Basic Screen.





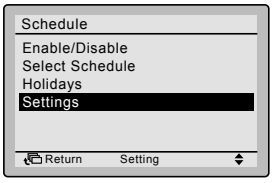

**Note**
"Hol" will be displayed on the schedule settings screen for days that have been set as a holiday.

Menu Manipulation

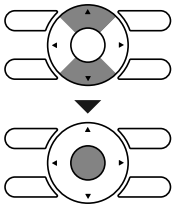
# ■Schedule Settings

**Operation Method** After saving a schedule, the schedule is automatically enabled.

1

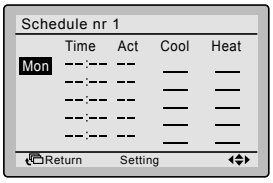



- Display the Schedule menu. (See "Enable/Disable" on page 28).
- Press the ▼▲ (Up/Down) buttons to select Settings and press the Menu/Enter button.

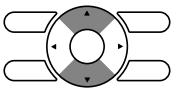


**Note**
The Schedule Settings of the selected schedule can be modified. To modify the selected schedule see "Select Schedule" on page 29.

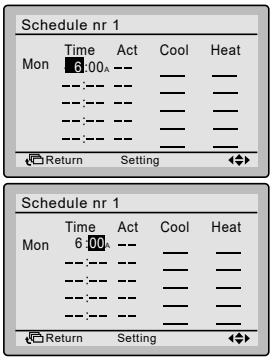
2



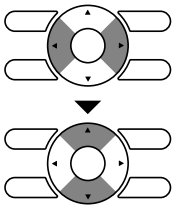

- Press the ▼▲ (Up/Down) buttons to select the day to be set.



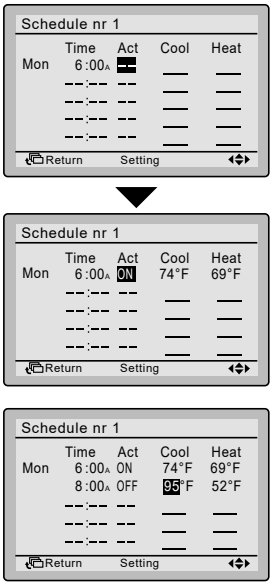
3



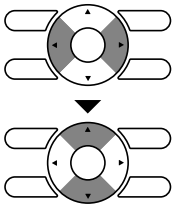

- Set the time for the selected day.
- Press the ◀▶ (Left/Right) buttons to move the highlighted item and press the ▼▲ (Up/Down) buttons to input the desired operation start time. Each press of the ▼▲ (Up/Down) buttons moves the numbers by 1 hour or 1 minute.



## 4




- Press the ◀▶ (Left/Right) buttons to move the highlighted item and press the ▼▲ (Up/Down) buttons to configure ON/OFF/-- settings.



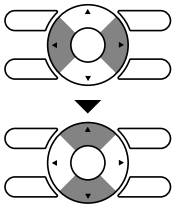
**"Act"-column:**

ON : The temperature setpoints can be configured.

OFF : The setback temperature setpoints can be configured.

– – : The temperature and setback temperature setpoints will be disabled.

- Press the ◀▶ (Left/Right) buttons to move the highlighted item and press the ▼▲ (Up/Down) buttons to input the cooling and heating temperature setpoints for ON or OFF (Setback) operation.

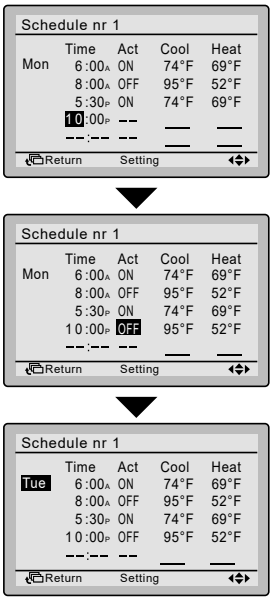


**"Cool" and "Heat" column:**

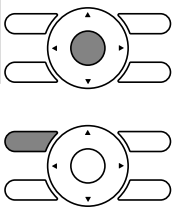
"__": Indicates that the temperature and setback temperature setpoint for this time period is not specified. The last active setpoint will be utilized.

"– –": Indicates that the setback function is disabled for this time period.

## 5



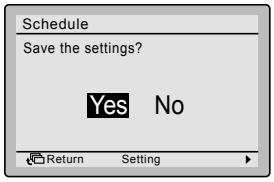

**Note**
A maximum of 5 actions per day can be set.



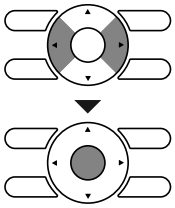
- Press the Menu/Enter button when all changes are made. The confirmation screen will appear.

**Note**
To copy the settings from the previous day, press the Operation Mode Selector button.
Example: To copy the contents of Monday to Tuesday, select Tuesday and press the Operation Mode Selector button.

6




- Press the ◀▶ (Left/Right) buttons to select Yes.
- Press the Menu/Enter button to confirm the settings and to return to the Basic Screen.

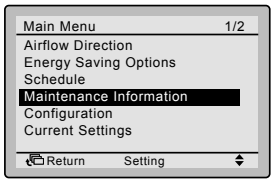


# Maintenance Information

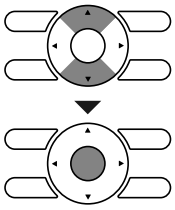
## ■Display the Maintenance Information

### Operation Method

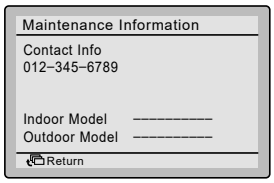
1



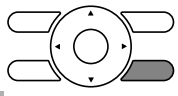

- Display the Main Menu. (See "Manipulating the Main Menu" on page 21).
- Press the ▼▲ (Up/Down) buttons to select Maintenance Information and press the Menu/Enter button.



2

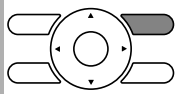



- The phone number for the contact address will appear at the top of the screen.
  (If you have not yet registered your product, it will not appear).
- The model information of the indoor and outdoor units of your product will always show ----------.
- Press the Cancel button to return to the previous screen.



**Note**

- The error code may also appear.
  If the operation lamp is not blinking, the unit is working properly.
- The error code record will disappear if you press the ON/OFF button for more than 4 seconds.



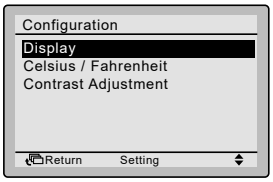
# Configuration

## ■Display

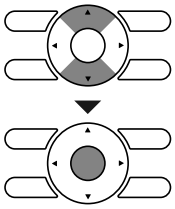
## Display Mode

### Operation Method

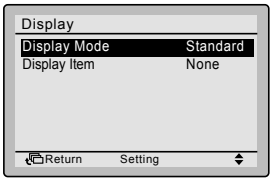
1



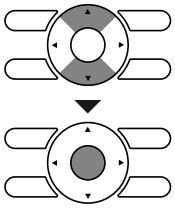

- Display the Configuration menu.
- Press the ▼▲ (Up/Down) buttons to select Display and press the Menu/Enter button.



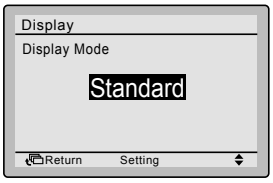
2



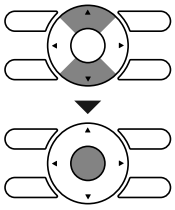

- Press the ▼▲ (Up/Down) buttons to select Display Mode and press the Menu/Enter button.



3




- Press the ▼▲ (Up/Down) buttons to select Standard or Detailed.
- Press the Menu/Enter button to confirm the settings and to return to the Basic Screen.



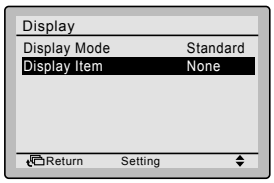
**Note**
To select which item is displayed in the detailed display selection area, refer to "Detailed Item" on page 35.

Menu Manipulation

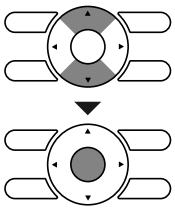
# Detailed Item

## Operation Method

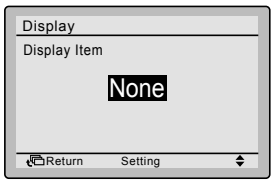
**1**



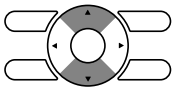

- Display the Display menu. (See "Display Mode" on page 34).
- Press the ▼▲ (Up/Down) buttons to select **Display Item** and press the Menu/Enter button.



**2**




- Press the ▼▲ (Up/Down) buttons to display the following.



**None** ◂▸* **Outside Air Temp**

**Room Temp**

* Some models may not display these items even if they are selected.

- Be sure to read the following regarding the display of the room and outdoor temperature.

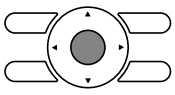
**Room Temp**

– The temperature near the indoor unit.
– The temperature that is detected may be affected by the location of the unit.

**Outside Air Temp**

– The temperature detected near the outdoor unit.
– The temperature that is detected may be affected by factors such as the location of the unit (e.g. if it is in direct sunlight) and unit operation during defrosting.
– "Outside Air Temp" will not display after stopping or immediately after starting.

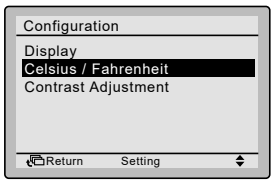
- Press the Menu/Enter button to confirm the settings and to return to the Basic Screen.



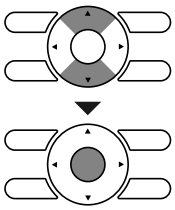
# ■Celsius / Fahrenheit

## Operation Method

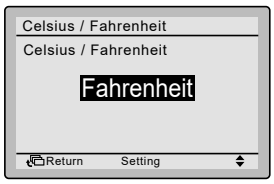
1



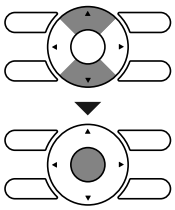

- Display the Configuration menu.
- Press the ▼▲ (Up/Down) buttons to select Celsius / Fahrenheit and press the Menu/Enter button.



2



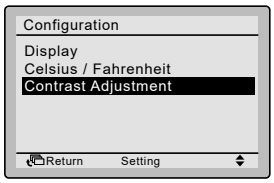

- Press the ▼▲ (Up/Down) buttons to select Fahrenheit or Celsius.
- Press the Menu/Enter button to confirm the settings and to return to the Basic Screen.



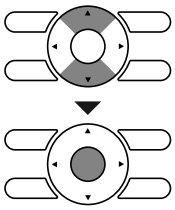
# ■Contrast Adjustment

## Operation Method

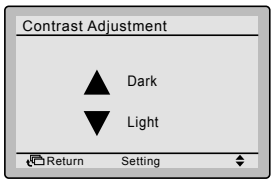
1



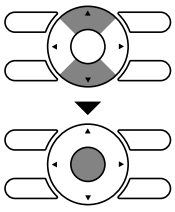

- Display the Configuration menu.
- Press the ▼▲ (Up/Down) buttons to select Contrast adjustment and press the Menu/Enter button.



2




- Press the ▼▲ (Up/Down) buttons until you reach the desired contrast.
- Press the Menu/Enter button to confirm the setting and to return to the Basic Screen.



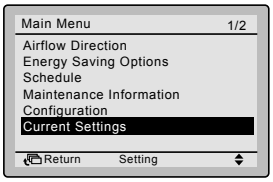
Menu Manipulation

# Current Settings

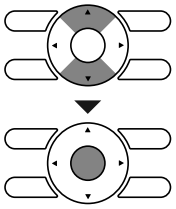
## ■Overview of the Current Settings

### Operation Method

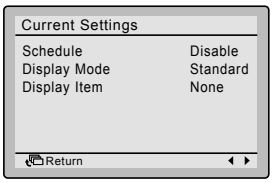
1



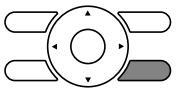

- Display the Main Menu. (See "Manipulating the Main Menu" on page 21).
- Press the ▼▲ (Up/Down) buttons to select Current Settings and press the Menu/Enter button.



2




- A list showing the status of the current settings will appear.
- Press the Cancel button to return to the Main Menu.



Display items

| | | |
|---|---|---|
| Schedule | Display Mode | Display Item |

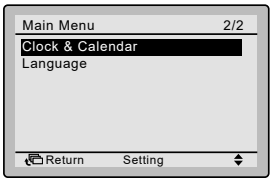
* Display items may differ depending on the model. Only the items that can be set are displayed.

# Clock & Calendar

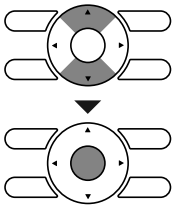
## ■Date & Time

### Operation Method

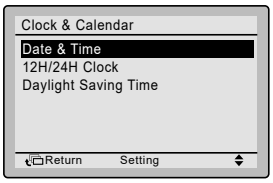
**1**



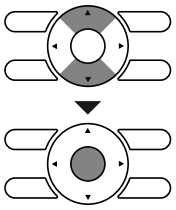

- Display the Main Menu. (See "Manipulating the Main Menu" on page 21).
- Press the ▼▲ (Up/Down) buttons to select **Clock & Calendar** and press the Menu/Enter button.



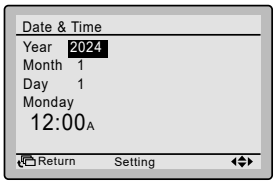
**2**



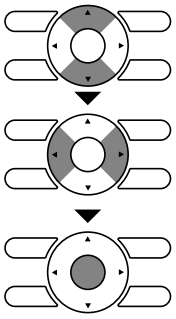

- Press the ▼▲ (Up/Down) buttons to select **Date & Time** and press the Menu/Enter button.



**3**




- Use the ▼▲ (Up/Down) buttons to change the date and time.
- Move the cursor using the ◀▶ (Left/Right) buttons.
- Press the Menu/Enter button when all changes are made. The confirmation screen will appear.

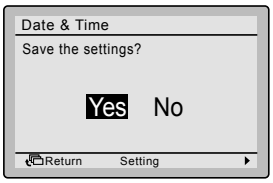


**⚠ Caution**

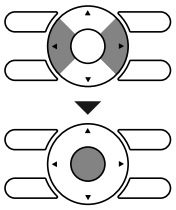
- By default, Daylight Saving Time (DST) is active. The following rules apply:
  - Start: Second Sunday of March 2:00 am
  - End: First Sunday of November 2:00 am
- Please consult your Daikin dealer if the DST settings need to be changed.

**Note**
The day of the week is set automatically.

**4**




- Press the ◀▶ (Left/Right) button to select **Yes**.
- Press the Menu/Enter button to confirm the settings and to return to the Basic Screen.

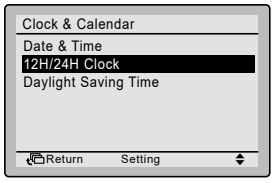


Menu Manipulation

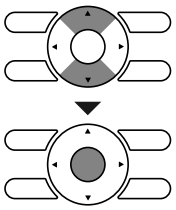
# ■12H/24H CLOCK

## Operation Method

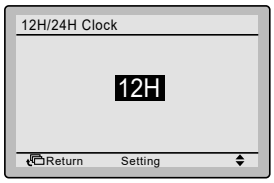
**1**




- Display the Clock & Calendar menu. (See "Date & Time" on page 38).
- Press the ▼▲ (Up/Down) buttons to select 12H/24H Clock and press the Menu/Enter button.

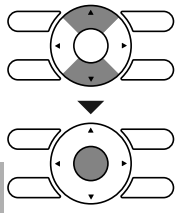


**2**

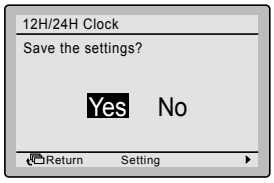



- Press the ▼▲ (Up/Down) buttons to select 12H or 24H.
- The confirmation screen will appear when the Menu/Enter button is pressed.

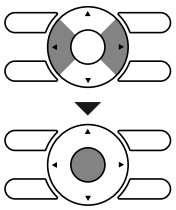
**Note**
By default, the time display is set to the 12H format.



**3**



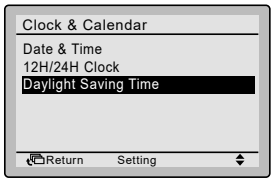

- Press the ◀▶ (Left/Right) buttons to select Yes.
- Press the Menu/Enter button to confirm the setting and to return to the Main Menu.



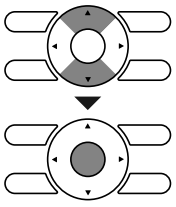
# ■Daylight Saving Time

## Operation Method

**1**



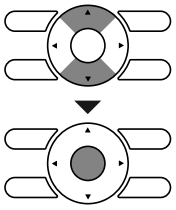

- Display the Clock & Calendar menu. (See "Date & Time" on page 38).
- Press the ▼▲ (Up/Down) buttons to select Daylight Saving Time and press the Menu/Enter button.



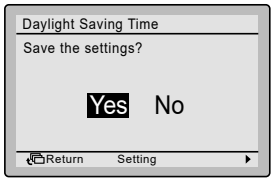
**2**



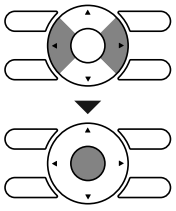

- Press ▼▲ (Up/Down) buttons to select Enable or Disable.
- Press Menu/Enter button to display the setting confirmation screen.



**3**




- Press the ◀▶ (Left/Right) buttons to select Yes.
- Press the Menu/Enter button to confirm the setting and to return to the Main Menu.

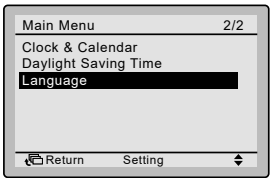


# Language

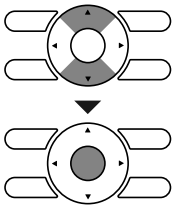
## ■Select the Language

### Operation Method

1



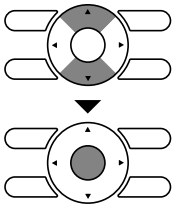

- Display the Main Menu. (See "Manipulating the Main Menu" on page 21).
- Press the ▼▲ (Up/Down) buttons to select **Language** and press the Menu/Enter button.



2




- Press the ▼▲ (Up/Down) buttons to select the preferred language (English, French or Spanish).
- Press the Menu/Enter button to confirm the settings and to return to the Basic Screen.



# Maintenance

## Caution

- **Do not wash the remote controller.**
  Doing so may cause electric leakage and result in electric shocks or fire.



- **Be sure to stop the operation of the air conditioner and turn off the power supply breaker when performing maintenance activities.**
  Failure to do so may result in electric shocks or injury.



## Maintenance of Unit and the LCD display

**Note:**
- Wipe the LCD display and the rest of the surface of the remote controller with a dry cloth when they become dirty.
- If the dirt on the surface cannot be removed, soak the cloth in neutral detergent diluted with water, squeeze the cloth tightly, and clean the surface. Wipe the surface with a dry cloth afterwards.
- Do not use any paint thinner, organic solvent or strong acid.

## Warning

**Do not use flammable materials (e.g., hair spray or insecticide) near the air conditioner.**
**Do not clean the product with organic solvents such as benzine or paint thinner.**
The use of organic solvents may cause crack damage to the product, electric shocks or fire.



# Reference Information

## Error Code Display

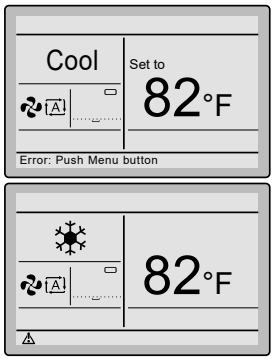
### ■Contact your Daikin dealer in the following cases

**Warning**

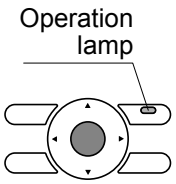
**When the air conditioner is malfunctioning (e.g., giving off a burning odor), stop the air conditioner and turn off the power.**
Continued operation under such circumstances may result in failure, electric shocks or fire. Contact your Daikin dealer.

**Operation Method**

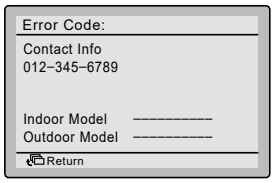
1




- If an error occurs, the error message or error icon and the operation lamp will blink.
- To display the error code and contact information, the Menu/Enter button needs to be enabled (See "Manipulating the Main Menu" on page 21).
- Press the Menu/Enter button.



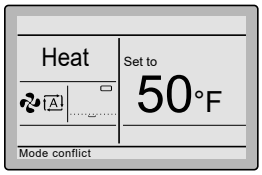

2




- The error code blinks and the contact address will appear.
- Notify your Daikin dealer of the Error code and Model name.

Reference Information

# "Mode Conflict" message




Only applicable in the case of multi systems (multiple indoor units connected to the outdoor unit) and for connected indoor units that support this functionality. When multiple indoor units are instructed to operate simultaneously, but in different operation modes, an operation mode conflict occurs:

- The operation lamp flashes
- Mode conflict appears on the user interface

- The units that do not have priority enter standby mode

This is not a malfunction. To solve the conflict, make the units that do not have priority run in the same operation mode as that of the unit that has priority. Which unit has priority depends on whether the Priority Room setting is present and/or active:

| If... | Then... |
|---|---|
| The Priority Room setting is present and active. | The operation mode of the indoor unit to which the Priority Room setting is applied takes priority. In case of an operation mode conflict, the other units will enter standby mode. |

**NOTICE**

- COOL, DRY and FAN operation can be used simultaneously.
- If the conflict is not solved manually, non-priority units will automatically resume operation as soon as the priority unit stops operating.

| If... | Then... |
|---|---|
| The Priority Room setting is not present OR present but not active. | The operation mode of the indoor unit that was turned on first takes priority. In case of an operation mode conflict, the units that were turned on later will enter standby mode. |

**NOTICE**

- COOL, DRY and FAN operation can be used simultaneously.
- Units running in HEAT operation mode always have priority over units running in FAN operation mode, even if they were not turned on first.
- When solving the conflict, it is possible to make the non-priority units run in AUTO operation mode: they will automatically start operation in the same operation mode as that of the priority unit.

### ⚠ Caution

The **MODE CONFLICT** can also happen to units that are turned on by the **setback** function. This means that due to priority, they will not run and consequently will not be able to maintain the temperature in the room. Please consider the use of the **setback** feature in a multi system carefully to avoid situations like these.

### ⚠ Caution

When a KRP928 Interface adapter for Room Air Conditioner is connected, the mode conflict message will not be shown on the user interface, but the indoor unit will go into standby mode.

## Combined use of the wired and wireless user interface

Avoid using the wired remote controller and the wireless remote controller at the same time.

- The wireless user interface does not receive feedback from the unit. When a setting is changed on the wired remote controller, the change is not communicated to the wireless remote controller.
- Since some functions of both controllers are not supported by each other, the displays will not match.

## FCC Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.
CAN ICES-003(B)/NMB-003(B)

The FCC responsible party is Daikin Comfort Technologies Manufacturing, L.P., and may be contacted by calling (713)-861-2500, or at 19001 Kermier Rd., Waller, TX 77484. (https://www.northamerica-daikin.com)

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

## 2.3 <BRC944B2> Wired Remote Controller (Installation)

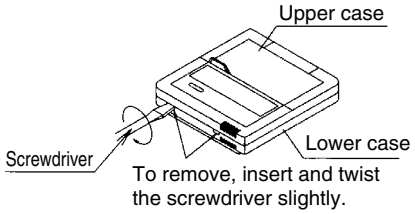
### ⚠ CAUTION

1. No switch box or staple is supplied. Prepare them locally.
2. No remote controller cord is supplied. Prepare the optional remote controller cord 4 wire.
3. Be sure to turn off the power to any apparatus connected prior to mounting.
4. Prior to mounting equipment, touch something metallic such as a doorknob to remove static electricity from your body. Never touch the remote controller board or the adapter board.
5. Keep the wiring away from any other power source lines to avoid electric noise (external noise).
6. Select a flat surface, wherever possible, to mount the remote controller. To prevent deformation of the cases, do not overtighten the mounting screws.

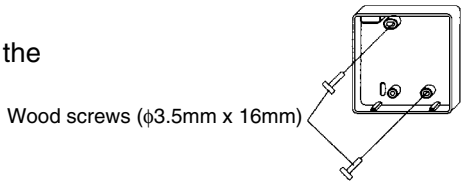
### 1. Securing the remote controller lower case

Insert a bladed screwdriver into the concave (凹) in the remote controller lower case to remove the upper case assembly (two locations).

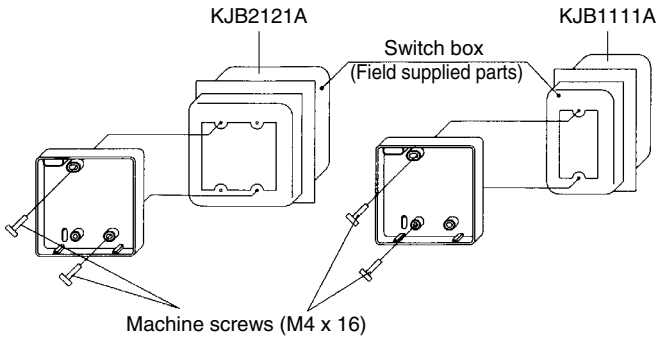
The remote controller board is located on the upper case. Take care not to scratch the board with the screwdriver.




(1) Exposed mounting
Secure the remote controller lower case with the two supplied wood screws.



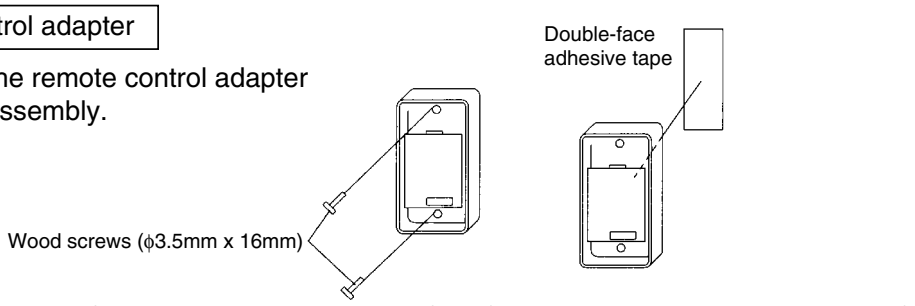

(2) Embedded mounting
Secure the remote controller lower case with the two supplied machine screws.



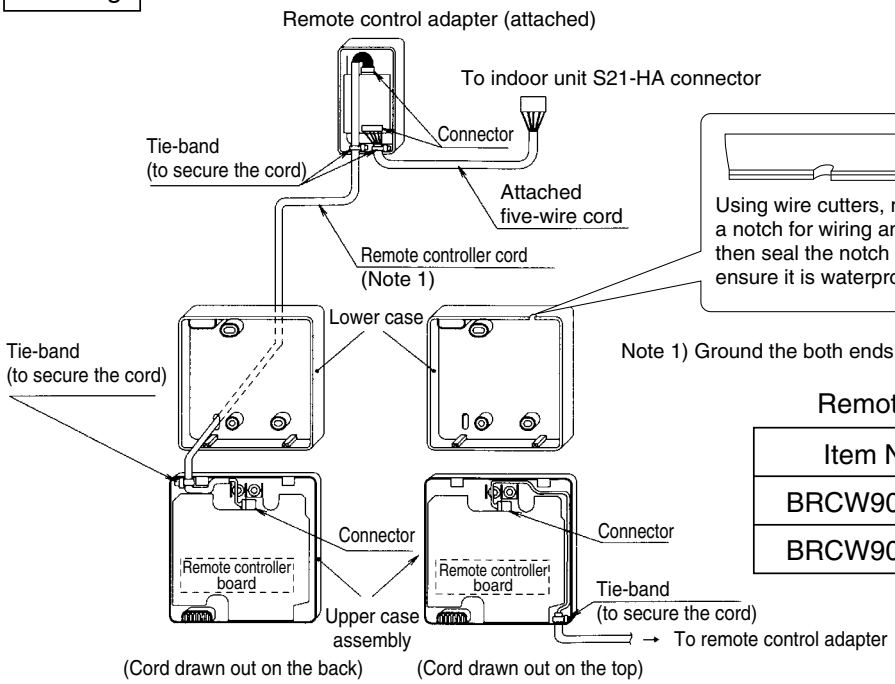

For the field supplied switch box, use optional accessories KJB1111A or KJB2121A.

## 2. Securing the remote control adapter

Remove the upper case of the remote control adapter and secure the lower case assembly.




## 3. Wiring

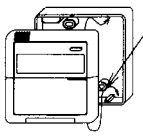



Note 1) Ground the both ends of the shielded wire.

Remote controller cord 4 wire

| Item No. | Length |
|---|---|
| BRCW901A03 | Approx. 3m (10ft) |
| BRCW901A08 | Approx. 8m (26ft) |

## 4. Placing the upper case assembly of the remote controller and the upper case of the remote controller adapter back into their original positions



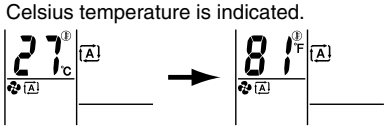

During mounting of the remote controller cord, be careful not to pinch or otherwise damage the wires. (Remote controller cord 4 wire)

## 5. Temperature indication change

To change from Celsius temperature indication to Fahrenheit one

Press and hold down ▲ TEMP ▼ at the same time for 5 seconds while the Celsius temperature is indicated.

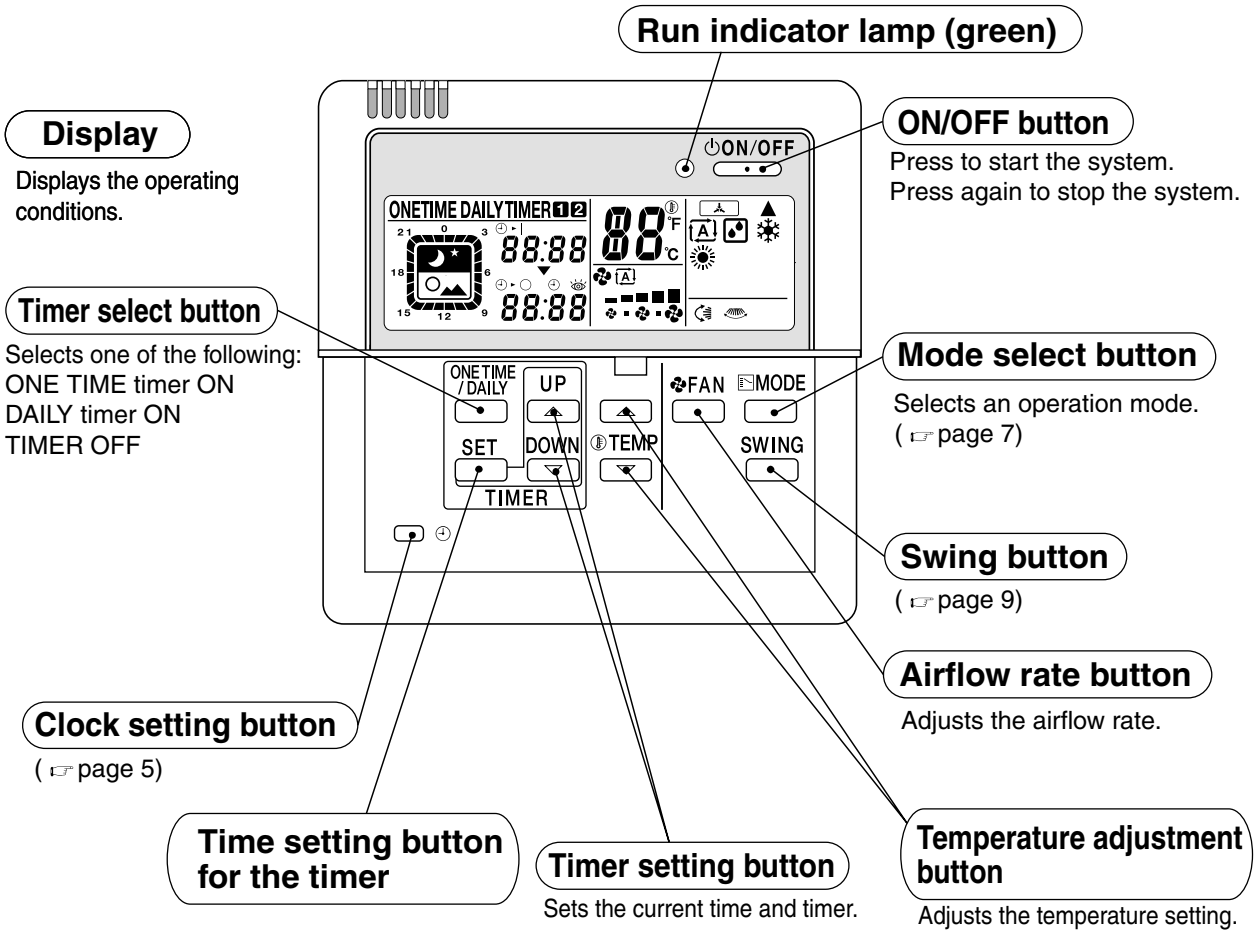
← See Operation Manual



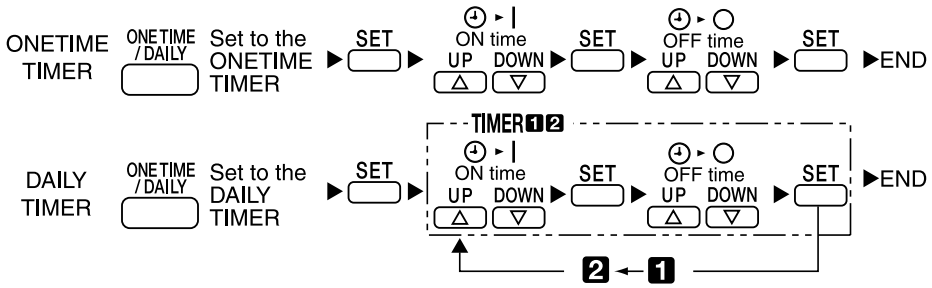

3P202923-2B

## 2.4 <BRC944B2> Wired Remote Controller (Operation)

# Controller Commands and their Corresponding Functions




### How to Set the Timer




### ⚠ CAUTION

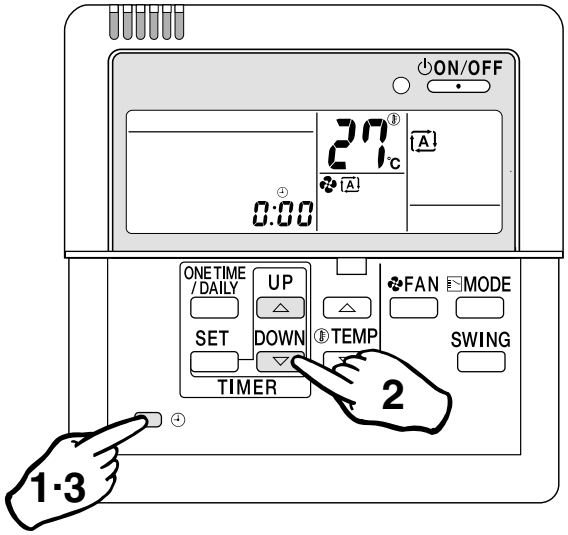
- This remote controller cannot be used together with a standard wireless remote controller. Otherwise, what appears on this remote controller's display may fail to correspond to actual operating conditions.

# Preparation before Operation

## ■ Checking the power

If nothing appears on the remote controller's display, turn on the circuit breaker.

## ■ Setting the current time




**1** Press ▭ 🕘.

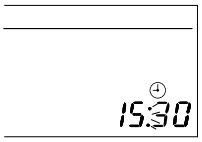



The current time starts blinking.
0:00 lights up.

**2** Press UP ▭ DOWN ▭ and set the current time.

- Hold the button down to rapidly advance the time.

**3** Press ▭ 🕘.




: blinks.
(This completes the current time setting)

- The clock's accuracy is ±30 seconds per month.



## Notes

### To use the unit efficiently

- Avoid overcooling or overheating. Moderate room temperature setting contributes to power saving.

  Recommended temperature setting
  For cooling ····· 26~28°C (79°F~82°F)
  For heating ····· 20~22°C (68°F~72°F)

- Hang a blind or a curtain on the window. This will enhance the cooling/heating effect by intercepting direct sunlight and drafts.
- A clogged air filter reduces the cooling/heating effect and wastes energy. Clean the air filter monthly (every two weeks as required) or so.

### Please take note of the following points

- Electric power is consumed even when the air conditioner is not in operation.
- When the unit is not used for a long period of time such as during off-season, turn off the breaker.

**Operating conditions**

- If the operation is continued under any conditions other than the following, the safety device may work to stop the operation. Also, dew may form on the indoor unit and drip from it. (Cooling/DRY)

| | | |
|---|---|---|
| Cooling | Outdoor temp. | -10 to 46°C (14°F to 115°F) |
| | Room temp. | 18 to 32°C (64°F to 90°F) |
| | Indoor humidity | Less than 80% |
| DRY | Outdoor temp. | -10 to 46°C (14°F to 115°F) |
| | Room temp. | 18 to 32°C (64°F to 90°F) |
| | Indoor humidity | Less than 80% |
| Heating | Outdoor temp. | -15 to 20°C (5°F to 68°F) |
| | Room temp. | Less than 27°C |

- Operation limit differ according to the model.

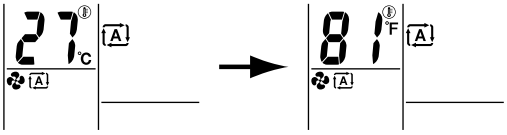
# Preparation before Operation

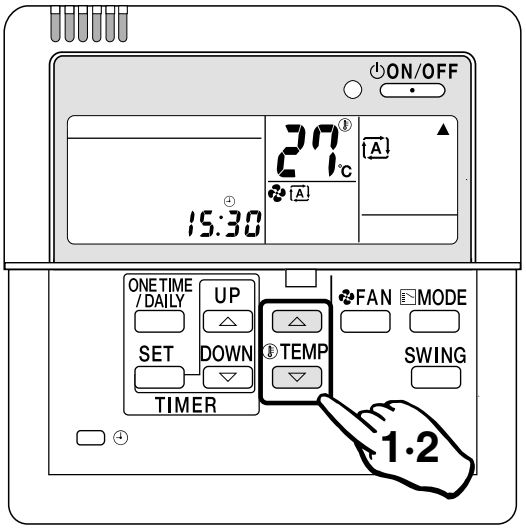
## ■ Setting Temperature Indication change

Temperature indication can be changed between Celsius and Fahrenheit before use.

### To change from Celsius temperature indication to Fahrenheit one

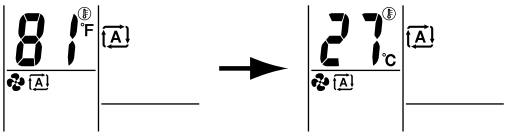
**1** Press and hold down TEMP at the same time for 5 seconds while the Celsius temperature is indicated.






### To change from Fahrenheit temperature indication to Celsius one

**2** Press and hold down TEMP at the same time for 5 seconds while the Fahrenheit temperature is indicated.





## Notes

■ **Temperature indication change between Celsius and Fahrenheit on the remote controller**

- Change the temperature indication in the modes other than the DRY mode.
  In the DRY mode, temperature indication setting cannot be changed because the temperature is not indicated.
- When the Fahrenheit temperature indication is changed to Celsius one, the temperature value (0.5°C) will be rounded up. Thus, the preset temperature may be changed.

Example:

A preset temperature of 65°F (equivalent to 18.5°C) will be changed to 19°C (66°F) by changing the temperature indication. In this case, if you change the Celsius temperature indication again to the Fahrenheit one, the preset temperature is shown not as 65°F but as 66°F (equivalent to 19°C). If the preset temperature is 66°F (equivalent to 19°C) and is changed to the Celsius temperature indication, the indication becomes 19°C (66°F). In this case, no change by the temperature indication change is observed.

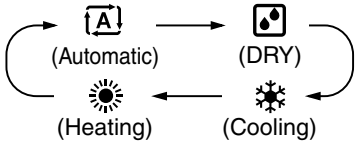
- When the temperature indication change is set, the preset temperature is transmitted to the indoor unit so that the reception sound will be heard from the indoor unit.

# Automatic·DRY·Cooling·Heating Operation

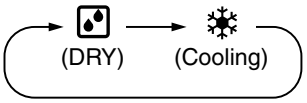
Select your desired operation mode.
Once preset, the system can get restarted in the same operation mode.

**1** Press MODE to select your desired operation mode.

- Each time the button is pressed, the mode changes as follows.

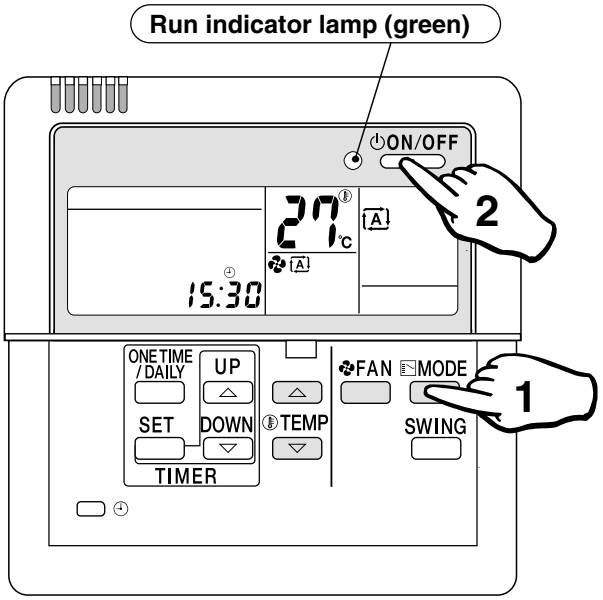



Heat pump model




Cooling only model

- The system does not have the FAN mode.




**2** Press ON/OFF .

The run indicator lamp lights up.

## ■ To stop the operation:

Press ON/OFF again.

The run indicator lamp goes out.

### Automatic operation

- In Automatic, the temperature setting and operation mode (DRY, Cooling or Heating) are automatically selected according to the room temperature and outdoor temperature at the time of starting operation.

### DRY operation

- In this mode, humidity is removed from the air.



**Note**

- While running in the DRY mode, you may feel cool or warm air from the air outlet. In this case, readjust the airflow direction with the vertical airflow direction louvers. (except Duct Connected type)

## ■ To adjust the temperature and airflow rate:

| Setting to be adjusted \ Operation mode | Automatic | Cooling | Heating | DRY |
|---|---|---|---|---|
| △ TEMP ▽ (Temperature) | Temperature is adjustable. Recommended temperature Cooling : 26°C-28°C (79°F~82°F) Heating : 20°C-22°C (68°F~72°F) | | | Temperature cannot be adjusted. |
| FAN (Airflow rate) | Five levels of airflow rate setting from " " to " " plus " A " are available.  | | | Airflow rate cannot be adjusted. |

- When the unit runs in the cooling or heating mode at a low airflow rate, the cooling or heating effect may be insufficient.

## ■ To adjust the airflow direction:

( ☞ page 9)

### Heating operation

- Since the heating operation is performed by taking the heat from outdoor into the room, the heating capacity decreases as the outdoor temperature lowers. If the room is not heated sufficiently, it is recommended to use other heating appliance at the same time.
- Since the air conditioner heats the whole room by circulating hot air, it takes some time to heat the entire room completely.
- If the outdoor unit gets frosted during heating operation, the heating capacity is decreased. In this case, the unit starts defrosting operation.
- No hot air comes out of the indoor unit during defrosting operation.

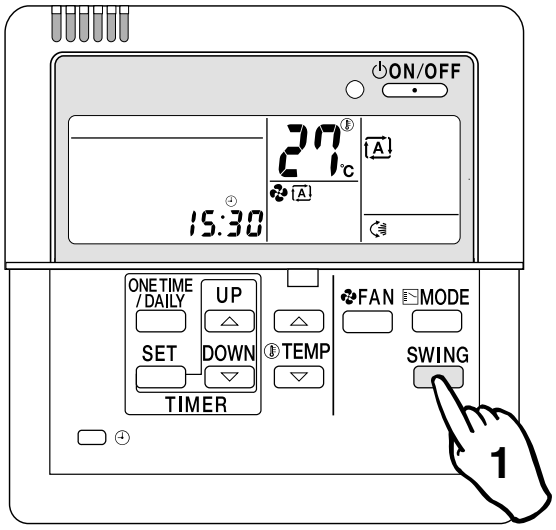
# Adjusting Airflow Direction

Adjust the airflow direction for maximum comfort.

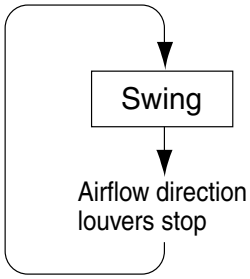
## To adjust the Airflow Direction

**1** Press SWING during operation.

- Each time the button is pressed, the airflow direction louvers change their movement.




## ■ Wall Mounted Types (without horizontal swing function)




The horizontal airflow direction louvers move up and down.

The louvers stop just when the button is pressed.

### Adjustment of horizontal airflow direction

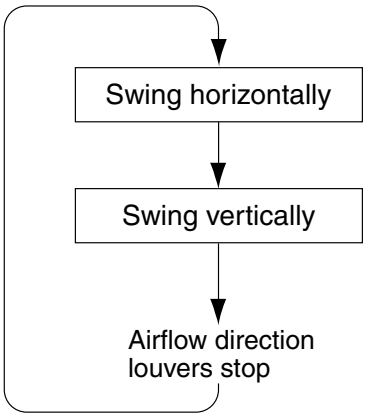
- The automatic moving range of the horizontal airflow direction louvers varies depending on the operation mode.



### Notes

- In fixing the horizontal airflow direction, keep the horizontal airflow direction louvers tilted downward in the heating mode, and keep them nearly horizontal level in the cooling or DRY mode. This will enhance the cooling and heating effect.
- On the air conditioners with vertical and horizontal swing function, be sure to adjust the airflow directions using the remote controller. Do not forcibly adjust louvers by hand or a malfunction may occur.

## ■ Wall Mounted Type (with horizontal swing function)




The horizontal airflow direction louvers move up and down.

The horizontal airflow direction louvers stop just when the button is pressed. Then the vertical ones start moving right and left.

The vertical airflow direction louvers stop just when the button is pressed.

- The vertical and horizontal louvers cannot move at the same time.

## ■ Duct Connected Type (without swing function)

This function cannot be used.



### Note

- The operating procedure and remote controller display are different depending on the indoor unit being connected.
  Read **How to Adjust the Airflow Direction** in the air conditioner's Operation Manual.

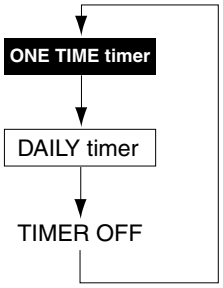
# Timer Operation

The Timer Operation feature automatically turns off operation when you go to sleep and turns it back on when you wake up.
Use the DAILY Timer mode on weekdays, and the ONE TIME timer mode on weekends.

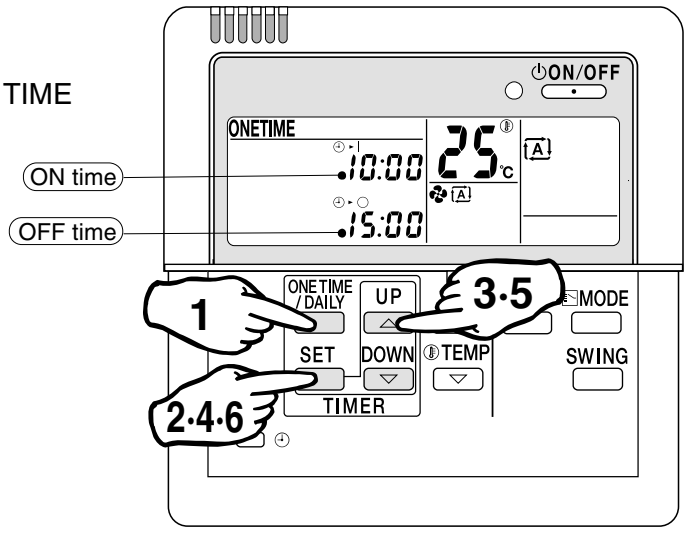
## ■ To select the ONE TIME timer mode:

**1** Press ONE TIME / DAILY to select the ONE TIME timer mode.

- Each time the button is pressed, the modes change as follows.



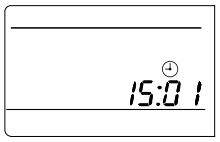

The timer lamp lights up.




(Timer settings displayed)

## ■ To cancel the timer settings:

**1** Press ONE TIME / DAILY to clear the timer settings.




The ONE TIME or DAILY TIMER disappears from the display, and the timer lamp goes out too.



### Notes

- Even when the timer has been off, its programmed settings are still in memory.
- If the system has the timer control ON but you start and stop it manually using the ON/OFF button before the designated ON time, the system will restart again at the programmed ON time.

### Precautions in setting the timer

- Before starting the timer operation, make sure the current time is correct. If not, set the clock correctly. (☞ page 5)
- In making time settings, --:-- is displayed to make it easy to disable the timer too.
- If one minute has passed before making any timer setting, the previous timer settings are reintroduced and the timer is on standby.
  In this case, use the SET (time setting) button and make your desired timer settings.

### Timer operation

- When the ON timer is programmed, the system starts one hour (maximum) earlier so that the temperature set by the remote controller is reached just in time.
- When the ONE TIME timer is programmed, the current time is no longer displayed.

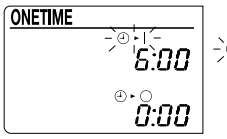
## ■ ONE TIME timer

Once the timer has been activated and then deactivated, it is in the OFF mode.
The ON or OFF timers can be programmed.

**1** Press ONE TIME / DAILY to select the ONE TIME timer.

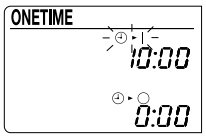
ONE TIME 6:00 light up.
0:00

**2** Press SET .



blinks.

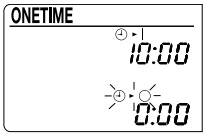
**3** Press UP / DOWN to make the ON timer setting.



When the ON timer is not used, save the setting as - - : - -

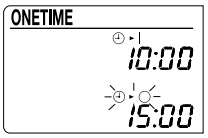
- Each time the button is pressed, the setting changes in a 10-minute increment or decrement. Hold the button down to advance quickly.

**4** Press SET .



blinks.

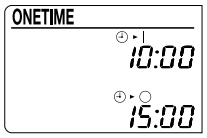
**5** Press UP / DOWN to make the OFF timer setting.



When the OFF timer is not used, save the setting as - - : - - .

**6** Press SET .

(The ONE TIME timer is now programmed.)



Both of the ON and OFF time cannot be set as - - : - -

**Example of display with the ONE TIME timer programmed**




ONE TIME timer programmed. (The set time is displayed.)

ON timer activated and system starts. (The ON timer setting no longer displays.)

OFF timer activated, and system stops. (The timer setting no longer displays.)



### Notes

■ In the following cases, reset the clock (the time setting is kept in the memory).

- The circuit breaker has been activated.
- The power fails.

# Timer Operation

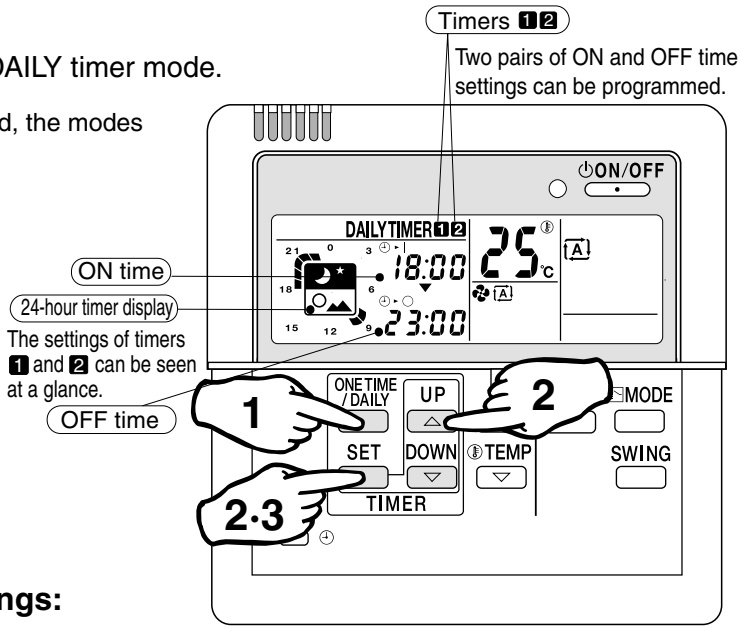
## ■ To select the DAILY timer mode:

**1** Press ONE TIME / DAILY to select the DAILY timer mode.

- Each time the button is pressed, the modes change as follows.

ONE TIME timer → **DAILY timer** → TIMER OFF

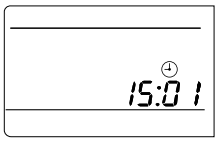
The timer lamp lights up.




(Timer settings displayed)

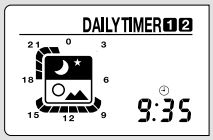
## ■ To cancel the timer settings:

**1** Press ONE TIME / DAILY to clear the timer settings.

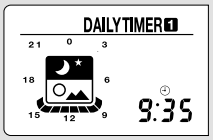



The ONE TIME or DAILY TIMER, and the timer lamp are no longer displayed.

**Example of display with DAILY timer programmed**




Timers 1 and 2 programmed.




Timer 1 alone programmed.



**Note**

- The system starts and stops repeatedly until the DAILY timer is set off. Before you leave home for a long time, set the DAILY timer off.

## ■ DAILY timer

After programming, the system starts and stops each day at the preset times. Two pairs of time settings can be programmed.

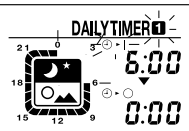
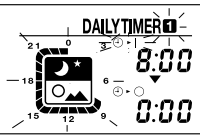
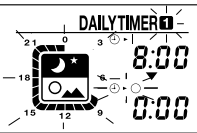
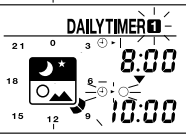
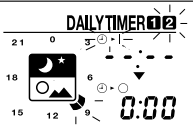
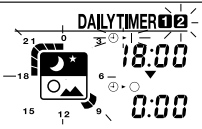
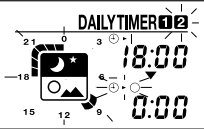
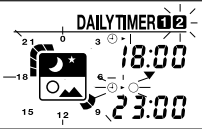
(Example: 8:00 ~ 10:00, and 18:00 ~ 23:00)

**1** Press ONE TIME / DAILY to select the DAILY timer.

DAILY timer indication appears.
lights up.

**2** Make the ON and OFF time settings. ● Take the steps from ① to ⑧.

Program example: 8:00 ~ 10:00, and 18:00 ~ 23:00

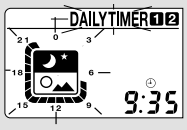
| Settings \ Procedure | | Press SET | Press UP / DOWN to make the timer setting. |
|---|---|---|---|
| Timer 1 | ON time setting<br>● When the timer 1 is not used, save the setting as --:-- | ①  | ②  |
| | OFF time setting | ③  | ④  |
| Timer 2 | ON time setting<br>● When the timer 2 is not used, save the setting as --:-- | ⑤  | ⑥  |
| | OFF time setting | ⑦  | ⑧  |

**3** Press SET . The DAILY timer is now programmed.



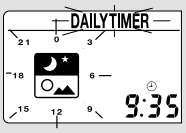
### Note

● If the following appears on the display, the timer must be reprogrammed.



The 24-hour timer display is blinking.

This means that Timers 1 and 2 are programmed for the same time settings. New time settings must be made.



The 24-hour timer display is blinking.

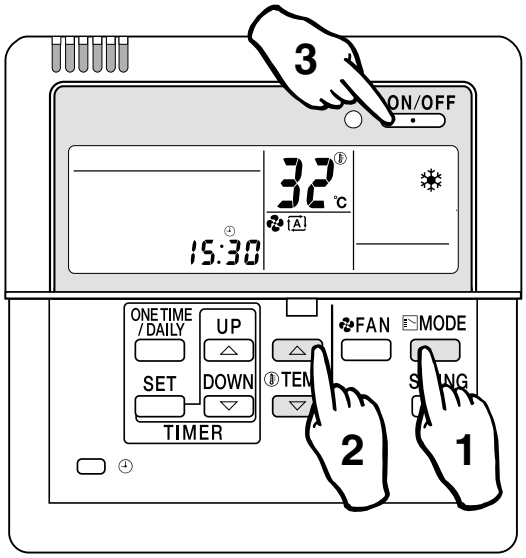
This means that the timer has not been programmed yet.

# Cleaning

## Cleaning the remote controller

- Wipe it clean with soft, dry cloth.
  Do not use any water hotter than 40°C (104°F), or volatile liquids such as benzine, gasoline and thinner, polishing powder, or anything hard such as a scrub brush.

## When the unit is not used for a long time




① On a sunny day, keep the system running for half a day in the FAN mode to dry it up inside.

**FAN mode**

**1** Press MODE to select the cooling mode.

**2** Press TEMP to adjust the set temperature to 32°C (90°F).

**3** Press ON/OFF .

- The airflow rate remains the same, and is not adjustable.
- Run the system when the room temperature is below 28°C (82°F).

② Finally turn off the circuit breaker dedicated for the room air conditioner.

③ Clean the air filter and place it back into position.

## 2.5 <BRC1NRV71> Wired Remote Controller (Installation)

# 1. Safety Considerations

The original instructions are written in English. All other languages are translations of the original instructions.
All phases of the field-installation, including, but not limited to, electrical, piping, safety, etc. must be in accordance with manufacturer's instructions and must comply with national, state, provincial and local codes.
Read these **SAFETY CONSIDERATIONS** carefully before installing the remote controller.
After completing the installation, ensure that the remote controller operates properly during the startup operation.
Train the customer to operate and maintain the remote controller. Inform customers that they should store this Installation Manual with the Operation Manual for future reference.
Always use a licensed installer or contractor to install this product. Improper installation can result in electrical shock, fire, or explosion.
Meanings of **WARNING, CAUTION**, and **NOTE** Symbols.

| | |
|---|---|
| ⚠ **WARNING** | Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury. |
| ⚠ **CAUTION** | Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.<br>It may also be used to alert against unsafe practices. |
| ⚠ **NOTE** | Indicates situations that may result in equipment or property-damage accidents only. |

| ⚠ WARNING |
|---|
| Only qualified personnel must carry out the installation work. |
| Consult your Daikin dealer regarding relocation and reinstallation of the remote controller.<br>Improper installation work may result in electric shocks or fire. |
| Electrical work must be performed in accordance with relevant local and national regulations and with instructions in this installation manual.<br>Improper installation may cause electrical shocks or fire. |
| Use only specified accessories and parts for installation work.<br>Failure to use specified parts may result in electric shocks, fire, or the unit falling. |
| Do not disassemble, reconstruct, or repair.<br>Electric shock or fire may occur. |
| Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires.<br>Improper connections or installation may result in fire. |
| Before touching electrical parts, confirm the power-off to the unit. |

## ⚠ CAUTION

Keep water out of the remote controller.
To avoid electric shock due to entry of water or insects, fill the wiring through-hole with putty.
Do not wash the remote controller with water as it may result in electrical shocks or fire.

Do not touch the remote controller buttons with wet fingers.
Touching the buttons with wet fingers can cause an electric shock.

Do not install the remote controller in the following locations:
(a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
Plastic parts may deteriorate.
(b) Where corrosive gas, such as sulfurous acid gas, is produced.
(c) Near machinery emitting electromagnetic waves.
Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
(d) Where flammable gas may leak, where there is carbon fiber or ignitable dust suspensions in the air, or where volatile flammables such as thinner or gasoline are handled.
Operating the unit in such conditions can cause a fire.
(e) High temperature area or direct flame.
Overheating and/or fire can occur.
(f) Moist area, where there is exposure to water. If water enters the inside of the remote controller, it may cause electric shock and electrical components may fail.

## ⚠ NOTE

Install the control wires for the unit and the remote controller at least 3.5 feet (1 meter) away from televisions or radios to prevent image interference or noise. Depending on the radio waves, a distance of 3.5 feet (1 meter) may not be sufficient to eliminate the noise.

When remote controller's temperature sensor is used, select the installation location as per the following:
- A place where average temperature in the room can be detected.
- A place where it is not exposed to direct sunlight.
- A place where it is far away from any heat source.
- A place where it is not affected directly by outside air.

# 2. Accessories

The following accessories are included.

| Drywall screw | Drywall anchor | Wire tie | Operation manual | Installation manual | Wiring retainer |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| (2 pcs.) | (2 pcs.) | (1 pc.) | (1 pc.) | (1 pc.) | (1 pc.) |

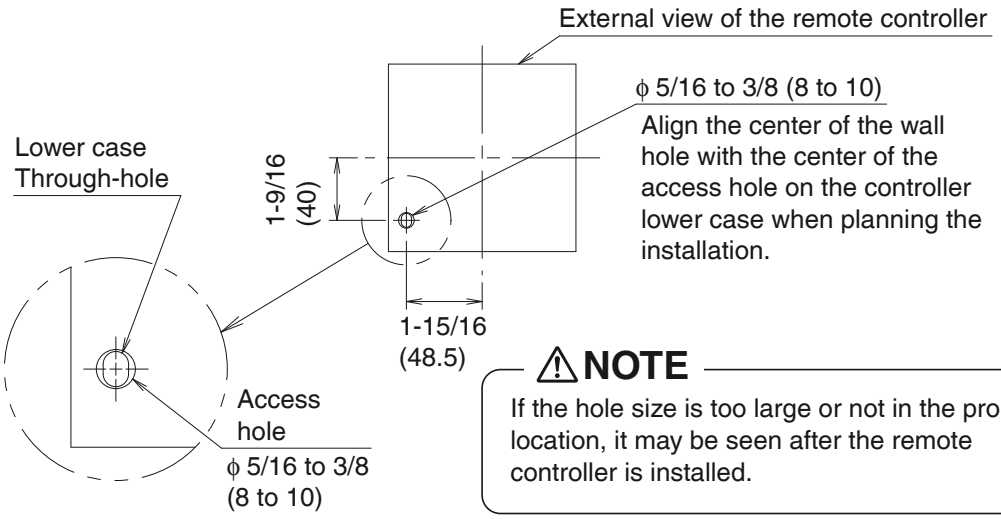
# 3. Remote Controller Installation Procedure

## 3-1 Determine where to install the remote controller.

Make sure to follow the **Safety Considerations** when determining the location.

## 3-2 If the control wire for the remote controller is to be routed from the rear, consider the location of the access hole in the lower case for making a hole in the wall.

[Unit : inch (mm)]




**⚠NOTE**

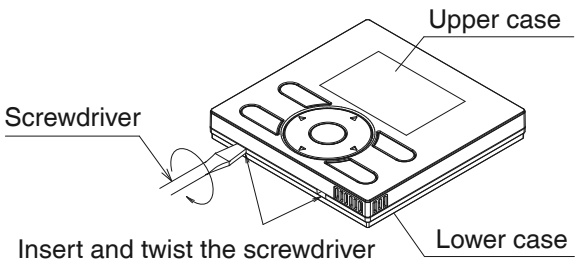
If the hole size is too large or not in the proper location, it may be seen after the remote controller is installed.

## 3-3 Remove upper case.

Insert a screwdriver in the recess of lower case to remove the upper case (2 points).

Remote controller printed-circuit board is installed on the upper case. Be careful not to damage the printed-circuit board with the screwdriver.

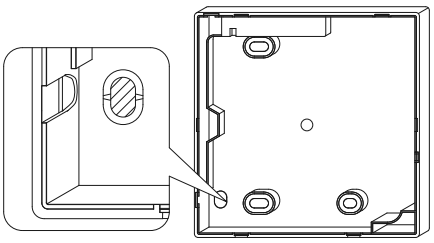
Be careful not to let dust or moisture touch the printed-circuit board.




Insert and twist the screwdriver lightly for removal.

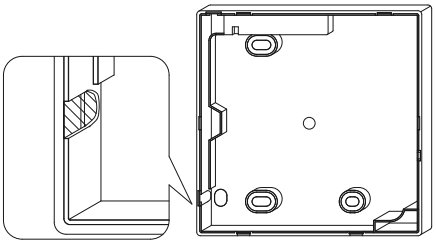
## 3-4 Determine the location where the wiring will enter the remote controller (back, left side, top left, top center).

### 3-4-1 Back outlet



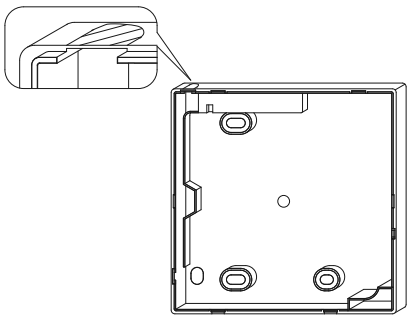
Cut off resin area (notched area).

### 3-4-2 Left outlet



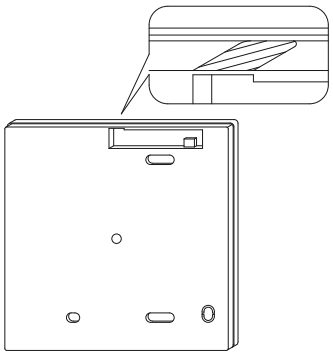
Cut the plastic at the notched area and remove any remaining burrs.

### 3-4-3 Top left outlet



Cut the plastic at the notched area and remove any remaining burrs.

### 3-4-4 Top center outlet



Cut the plastic at the notched area and remove any remaining burrs.

## 3-5 Install wiring.

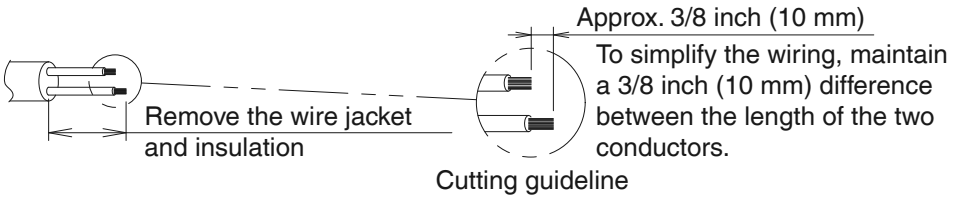
**⚠NOTE**

1. Switch box and control wiring are filed supplied.
2. Do not touch the remote controller printed-circuit board.

Wiring Specifications

| | |
|---|---|
| Wiring Type | Non-shielded, 2-conductor, stranded copper wire |
| Wiring Size | AWG-18 |
| Wiring Length | Maximum 1640 feet (500 m) |

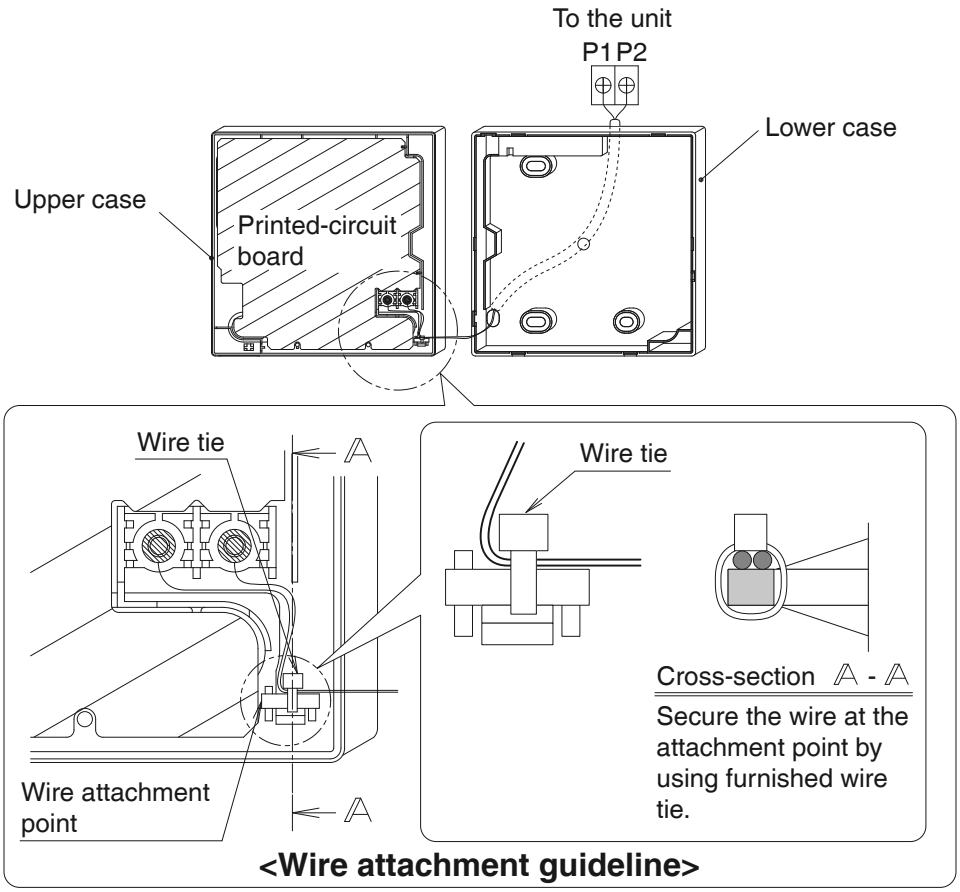
Prepare the wiring for connection to the remote controller following these instructions:




Length of jacket to be removed:
- Approx. 6 inch (150 mm) for top left outlet
- Approx. 8 inch (200 mm) for top center outlet

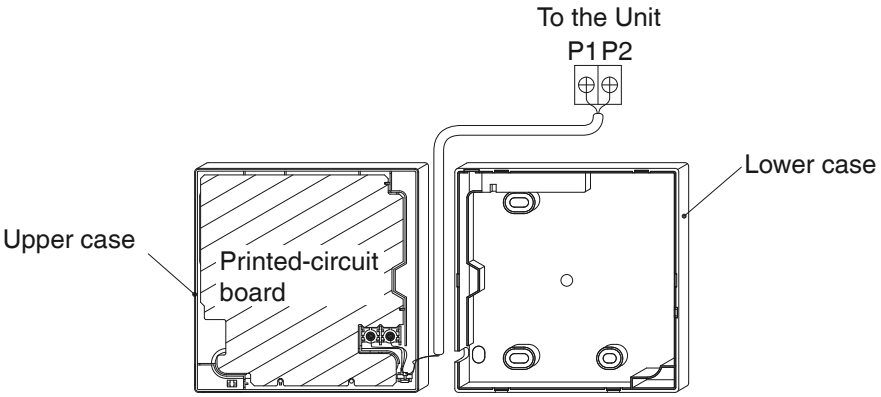
Connect the terminals (P/P1, N/P2) of the remote controller to the terminals (P1, P2) of the unit. (P1 and P2 are not polarity sensitive.)

## 3-5-1 Back outlet

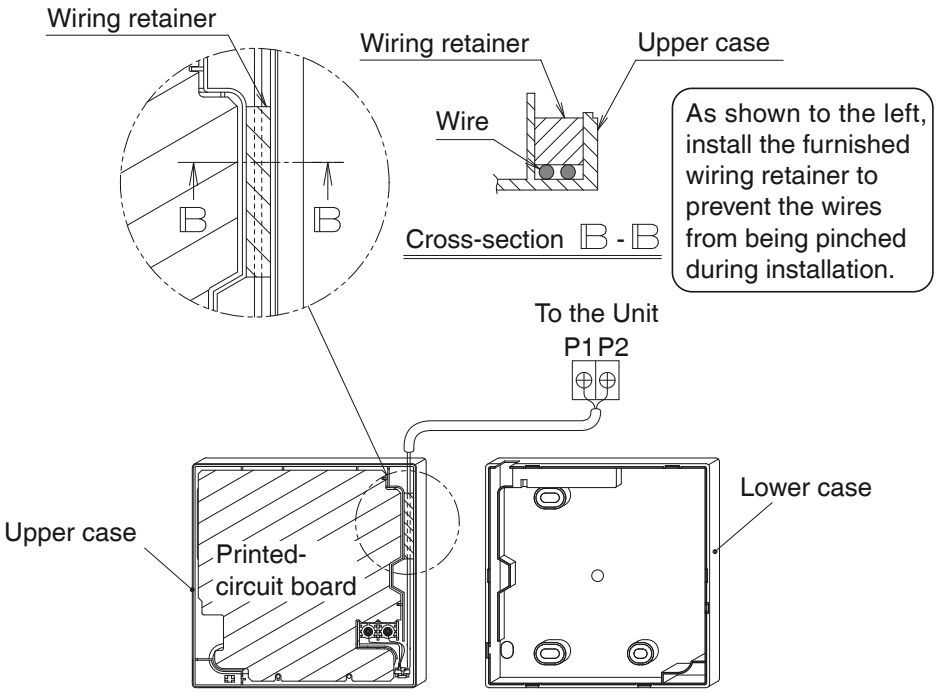



**<Wire attachment guideline>**

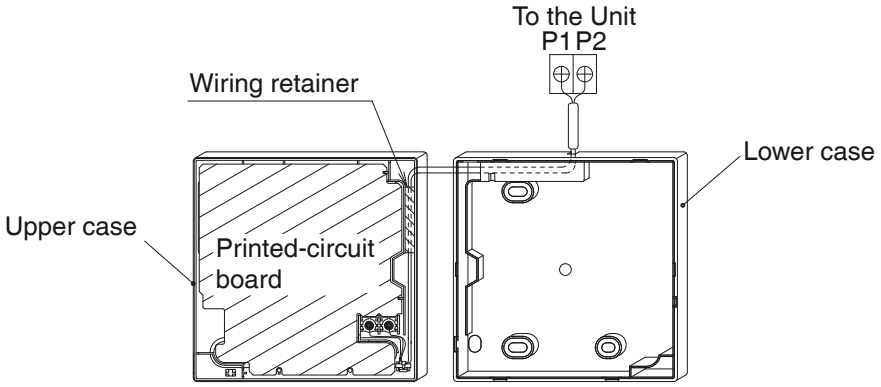
### 3-5-2 Left outlet




### 3-5-3 Top left outlet




### 3-5-4 Top center outlet



**⚠NOTE**

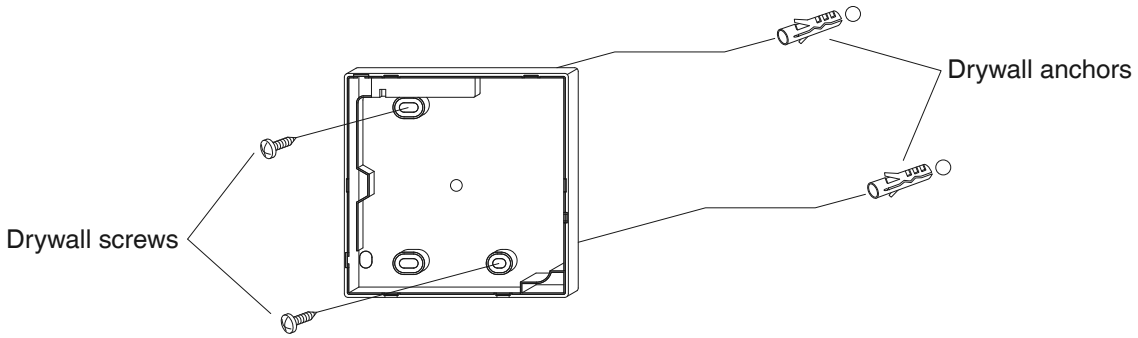
- To prevent electrical noise and possible communication errors, avoid installing the remote controller wiring parallel to or in the vicinity of line voltage circuits.

## 3-6 Installation procedure for the lower case.

When wiring the remote controller through the top center or rear access points, attachment of the wire to the lower case is required before it is wall mounted. Closely follow the wiring procedures.

### 3-6-1 Wall installation

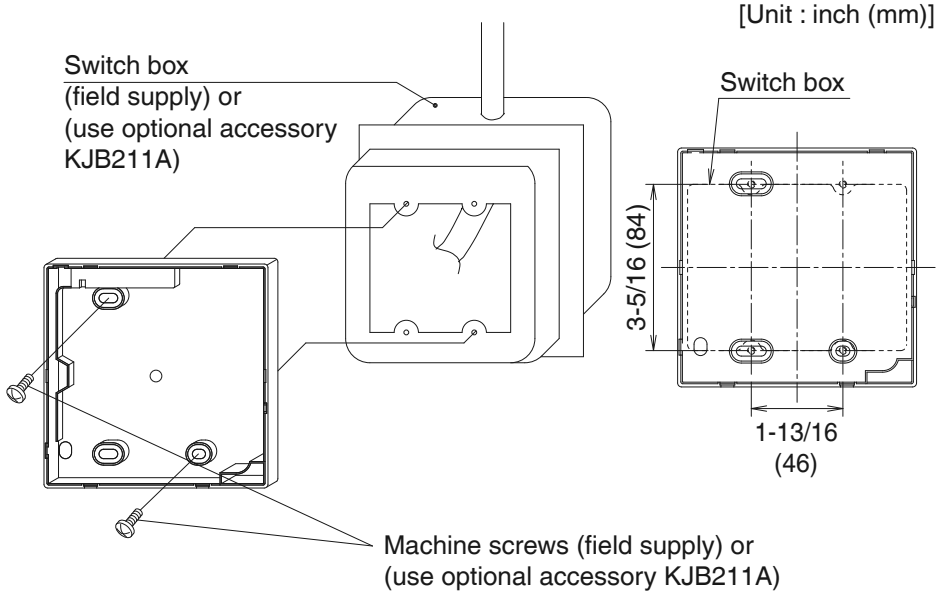
Secure by using furnished drywall anchors and screws (2 pcs.).




### 3-6-2 Switch box installation

Secure by using field supplied machine screws (2 pcs.).

[Unit : inch (mm)]

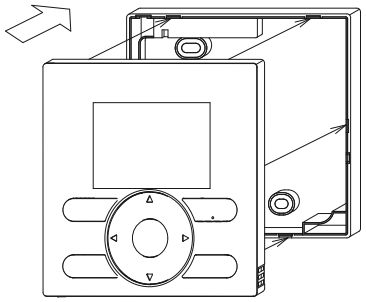



**⚠NOTE**

- Install the control on a flat surface only.
- To prevent deformation of the lower case, avoid over-tightening the installation screws.

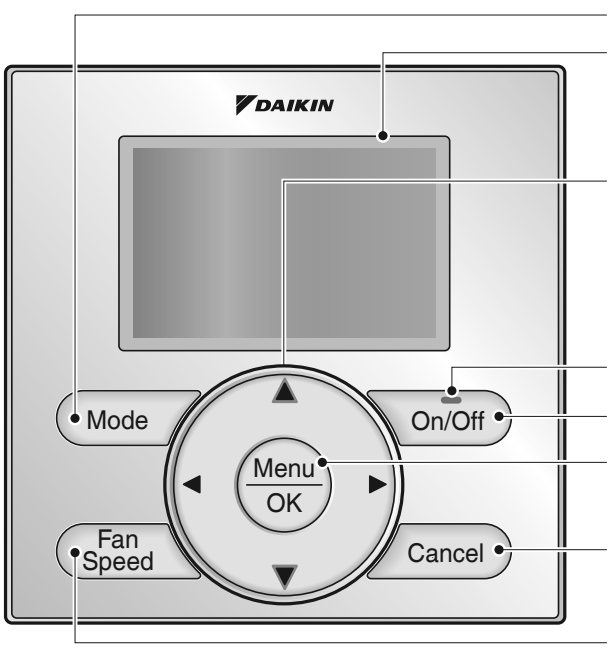
## 3-7 Install the upper case.

- Align the upper case with tabs of the lower case (6 points), insert and install the upper case.
- Install the wiring with care to prevent pinching.
- Peel off the protective membrane which overlays the upper case.



# 4. Functions and Menu Items of Remote Controller Buttons

## 4-1 Functions and menu items




(1) Operation mode selector button
(11) LCD (with backlight)
(4) Up button ▲
(5) Down button ▼
(6) Right button ▶
(7) Left button ◀
(9) Operation lamp
(8) On/Off button
(3) Menu/OK button
(10) Cancel button
(2) Fan speed control button

**(1) Operation mode selector button**
Used to change the mode.

**(2) Fan speed control button**
Used to change the fan control.

**(3) Menu/OK button**
- Used to access the main menu. (For details of the main menu, see the operation manual.)
- Used to enter the item selected.

**Main Menu**

CO2 Monitoring
∗Humidity
∗Airflow Direction
∗Individual Airflow Direction
∗Ventilation
Schedule
Override
∗Optimum Start/Stop
Celsius / Fahrenheit
Filter Auto Clean
Maintenance Information
Configuration
Current Settings
Clock & Calendar
Daylight Saving Time
Language

∗Depending on connected model

**(4) Up button ▲**
- Used to raise the setpoint temperature.
- The previous menu items will be highlighted. (The highlighted items will be scrolled continuously when the button is pressed continuously.)
- Used to change the selected item.

**(5) Down button ▼**
- Used to lower the setpoint temperature.
- Items below the currently selected item will be highlighted. (The highlighted items will be scrolled continuously when the button is pressed continuously.)
- Used to change the selected item.

**(6) Right button ▶**
- Used to highlight items to the right of the currently selected item.
- Display contents are changed to next screen per page.

**(7) Left button ◀**

- Used to highlight items to the left of the currently selected item.
- Display contents are changed to previous screen per page.

**(8) On/Off button**

Press once to operate, and press once again to stop.

**(9) Operation lamp**

Green lamp lights up during operation. The lamp will flash if a malfunction occurs.

**(10) Cancel button**

- Used to return to the previous screen.
- Press and hold this button for 4 seconds or longer to display service settings menu.

**(11) LCD (with backlight)**

The backlight will illuminate for approximately 30 seconds by pressing any operation button.

**Service Settings menu**

| |
|---|
| Test Operation |
| Maintenance Contact |
| ∗Blower Speed |
| Field Settings |
| ∗Energy Saving Options |
| Prohibit Function |
| Min Setpoints Differential |
| ∗Outdoor unit AirNet Address |
| ∗Unit Operation Hours |
| Error History |
| ∗Indoor Unit Status |
| ∗Outdoor Unit Status |
| ∗Unit Status |
| Forced Fan ON |
| Switch Main Sub Controller |
| Filter Indicator |
| ∗Brush/Filter Ind. |
| ∗Disable Filter Auto Clean |

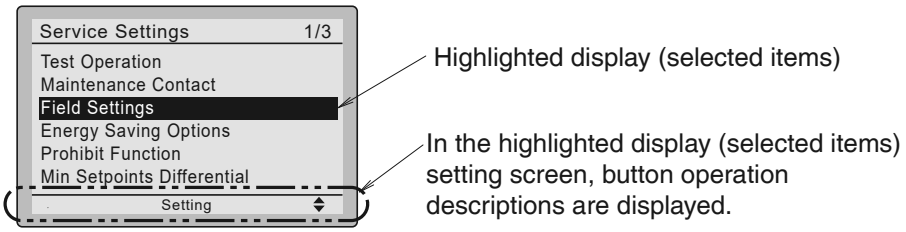
∗Depending on connected model

**⚠NOTE**

- Operate the button while the backlight is illuminated.
- When one indoor unit or rooftop unit is controlled by two remote controllers (main / sub) only the first controller to be accessed by the user will illuminate it's backlight.

## 4-2 Button menu display descriptions

**<Service settings menu screen>**



# 5. Power-on

- Check for completion of indoor/outdoor unit wiring (SkyAir and VRV only).
- Ensure that covers have been replaced on electrical component boxes for all units prior to restoring power.

**⚠NOTE**

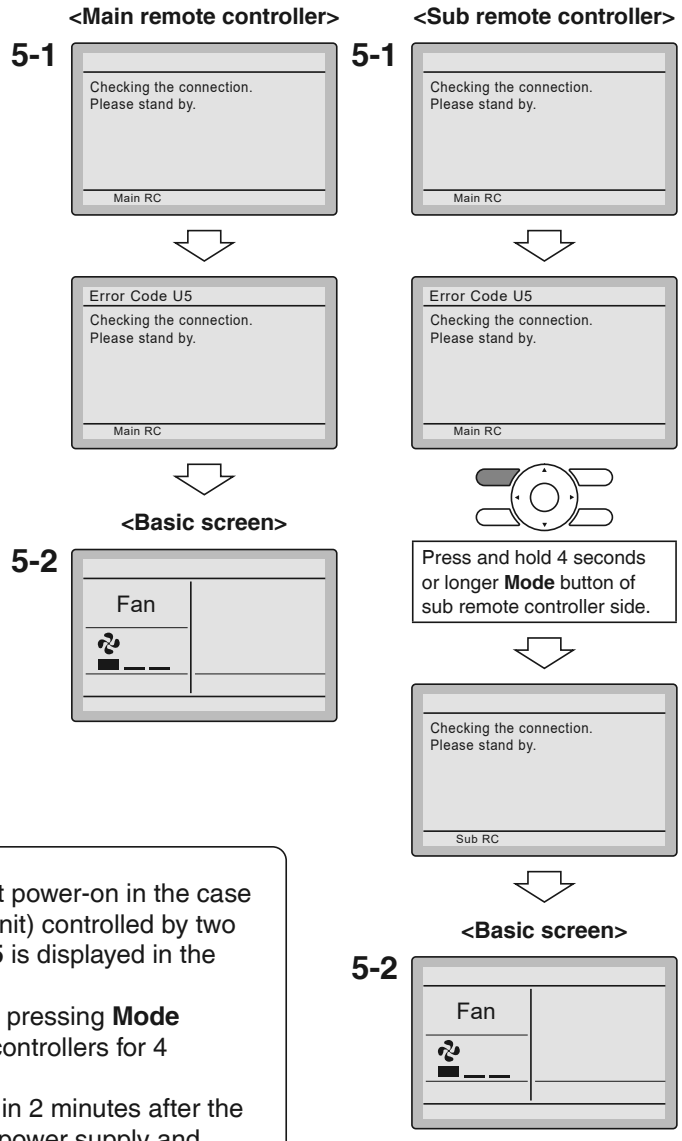
If construction activities are planned within the space following the test operation procedure, recommend to the customer that the unit is not operated to prevent contamination from paints, drywall dust and other airborne materials.

**5-1** The following message is displayed after power-on.
**Checking the connection.**
**Please stand by.**

When the above message is displayed, the backlight will not be ON.

**In the case that 1 indoor unit or 1 rooftop unit is controlled by 2 remote controllers:**

Make sure to set the sub remote controller when the above message is displayed. Hold **Mode** button for 4 seconds or longer to set.
When the display is changed from "Main RC" to "Sub RC" the setting is completed.




**5-2** Basic screen is displayed.

**NOTE**

If sub remote controller is not set at power-on in the case of one indoor unit (or one rooftop unit) controlled by two remote controllers, **Error Code: U5** is displayed in the connection checking screen.
Select the sub remote controller by pressing **Mode** button of either one of the remote controllers for 4 seconds or longer.
If the basic screen is not displayed in 2 minutes after the "Sub RC" is displayed, shut off the power supply and check the wiring.

**NOTE**

When selecting a different language, refer to **Chapter 12. Language.**
(See page 28.)



3P243521-8Q

# 6. Field Settings

- There are 2 setting ways for field settings when the unit is group controlled. One is individual setting, and another is group setting.
- Group Control is only for VRV and SkyAir.

**6-1** Press and hold **Cancel** button for 4 seconds or longer.
Service settings menu is displayed.

**6-2** Select Field Settings in the Service settings menu, and press **Menu/OK** button.
Field settings screen is displayed.

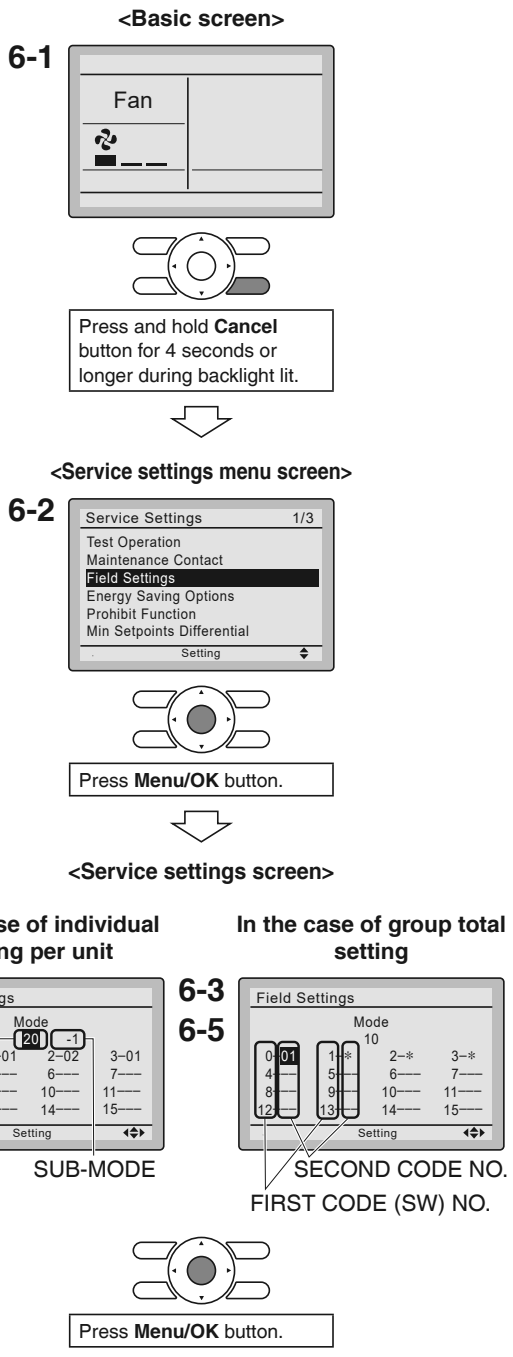
**6-3** Highlight the mode, and select desired "Mode No." by using ▲▼ (Up/Down) button.
∗ Depending on the mode number, sub mode number is displayed. See the unit's manual for details.

**6-4** In the case of setting per unit during group control (When Mode No. such as 20 , 21 , 22 , 23 , 25 are selected), highlight the unit No. and select "Unit No." to be set by using ▲▼ (Up/Down) button.
(In the case of group setting, this operation is not needed.)

> In the case of individual setting per unit, current settings are displayed. And, SECOND CODE NO. " - " means no function.

**6-5** Highlight SECOND CODE NO. of the FIRST CODE NO. to be changed, and select desired "SECOND CODE NO." by using ▲▼ (Up/Down) button. Multiple identical mode number settings are available.

> In the case of setting for all units in the remote control group, available SECOND CODE NO. is displayed as " ∗ " which means it can be changed. When SECOND CODE NO. is displayed as " - ", there is no function.



**6-6** Press **Menu/OK** button. Setting confirmation screen is displayed.

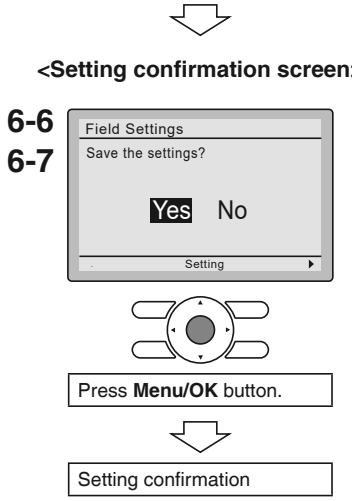
**6-7** Select Yes and press **Menu/OK** button. Setting details are determined and field settings screen returns.

**6-8** In the case of multiple setting changes, repeat "**6-3**" to "**6-7**".

**6-9** After all setting changes are completed, press **Cancel** button twice.

**6-10** Backlight goes out, and [**Checking the connection. Please stand by.**] is displayed for initialization. After the initialization, the basic screen returns.

**<Setting confirmation screen>**




## NOTE

- Installation of optional accessories in the unit require changes to field settings. See the manual of the optional accessory.
- For field setting details related to the unit, see installation manual shipped with the unit.

| Mode No. (Note 1) | First Code No. | Description | Second Code No. (Note 2) (Items in bold are factory default settings) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 |
| 1b | 7 | Standby display for Defrost/ Hot start/Oil return | Displayed | Not Displayed | — | — | — | — | — | — | — | — | — | — | — |
| | 11 | Clock display on detailed screen | Displayed | Not Displayed | — | — | — | — | — | — | — | — | — | — | — |
| | 12 | Setting temperature display when stopped | Displayed | Not Displayed | — | — | — | — | — | — | — | — | — | — | — |
| | 13 | Operation mode display when stopped | Displayed | Not Displayed | — | — | — | — | — | — | — | — | — | — | — |
| | 15 | Air volume/FAN operation icon display | Displayed | Not Displayed | — | — | — | — | — | — | — | — | — | — | — |
| 1c | 1 | Thermistor sensor for auto changeover and setback control by the remote controller | Utilize the return air thermistor | Utilize the remote controller thermistor | — | — | — | — | — | — | — | — | — | — | — |
| | 3 | Access permission level setting | Level 2 | Level 3 | — | — | — | — | — | — | — | — | — | — | — |
| | 10 | Remote controller thermostat offset (Main RC, Auto mode) (Note 3) | –5.4F (–3.0C) | –4.5F (–2.5C) | –3.6F (–2.0C) | –2.7F (–1.5C) | –1.8F (–1.0C) | –0.9F (–0.5C) | ±0.0F (±0.0C) | 0.9F (0.5C) | 1.8F (1.0C) | 2.7F (1.5C) | 3.6F (2.0C) | 4.5F (2.5C) | 5.4F (3.0C) |
| | 11 | Remote controller thermostat offset (Sub RC, Auto mode) (Note 3) | –5.4F (–3.0C) | –4.5F (–2.5C) | –3.6F (–2.0C) | –2.7F (–1.5C) | –1.8F (–1.0C) | –0.9F (–0.5C) | ±0.0F (±0.0C) | 0.9F (0.5C) | 1.8F (1.0C) | 2.7F (1.5C) | 3.6F (2.0C) | 4.5F (2.5C) | 5.4F (3.0C) |
| | 12 | Remote controller thermostat offset (Main RC, Cool mode) (Note 3) | –5.4F (–3.0C) | –4.5F (–2.5C) | –3.6F (–2.0C) | –2.7F (–1.5C) | –1.8F (–1.0C) | –0.9F (–0.5C) | ±0.0F (±0.0C) | 0.9F (0.5C) | 1.8F (1.0C) | 2.7F (1.5C) | 3.6F (2.0C) | 4.5F (2.5C) | 5.4F (3.0C) |
| | 13 | Remote controller thermostat offset (Main RC, Heat mode) (Note 3) | –5.4F (–3.0C) | –4.5F (–2.5C) | –3.6F (–2.0C) | –2.7F (–1.5C) | –1.8F (–1.0C) | –0.9F (–0.5C) | ±0.0F (±0.0C) | 0.9F (0.5C) | 1.8F (1.0C) | 2.7F (1.5C) | 3.6F (2.0C) | 4.5F (2.5C) | 5.4F (3.0C) |
| | 14 | Remote controller thermostat offset (Sub RC, Cool mode) (Note 3) | –5.4F (–3.0C) | –4.5F (–2.5C) | –3.6F (–2.0C) | –2.7F (–1.5C) | –1.8F (–1.0C) | –0.9F (–0.5C) | ±0.0F (±0.0C) | 0.9F (0.5C) | 1.8F (1.0C) | 2.7F (1.5C) | 3.6F (2.0C) | 4.5F (2.5C) | 5.4F (3.0C) |
| | 15 | Remote controller thermostat offset (Sub RC, Heat mode) (Note 3) | –5.4F (–3.0C) | –4.5F (–2.5C) | –3.6F (–2.0C) | –2.7F (–1.5C) | –1.8F (–1.0C) | –0.9F (–0.5C) | ±0.0F (±0.0C) | 0.9F (0.5C) | 1.8F (1.0C) | 2.7F (1.5C) | 3.6F (2.0C) | 4.5F (2.5C) | 5.4F (3.0C) |
| 1e | 2 | Setback availability | N/A | Heat only | Cool only | Cool/ Heat | — | — | — | — | — | — | — | — | — |
| | 11 | Cooling/Heating switching guard timer setting | 15min | 30min | 60min | 90min | — | — | — | — | — | — | — | — | — |
| | 12 | Cooling/Heating auto switching temperature | 0.9F (0.5C) | 1.8F (1.0C) | 2.7F (1.5C) | 3.6F (2.0C) | — | — | — | — | — | — | — | — | — |
| | 13 | Cooling/Heating immediate switching temperature | 0.9F (0.5C) | 1.8F (1.0C) | 2.7F (1.5C) | 3.6F (2.0C) | — | — | — | — | — | — | — | — | — |

Notes) 1. Field settings are normally applied to the entire remote control group, however if individual indoor units in the remote control group require specific settings or for confirmation that settings have been established, utilize the mode number in parenthesis.
2. Any features not supported by the connected unit will not be displayed.
3. If different offset values are set for cooling and heating modes, the following issues may occur in auto operation mode:
- The indoor unit may switch more frequently between cooling/heating modes
- The indoor unit may switch less frequently between cooling/heating modes
- Setback on/off may happen more frequently
- Setback on/off may happen less frequently
To avoid these issues, set the offset values for auto mode.

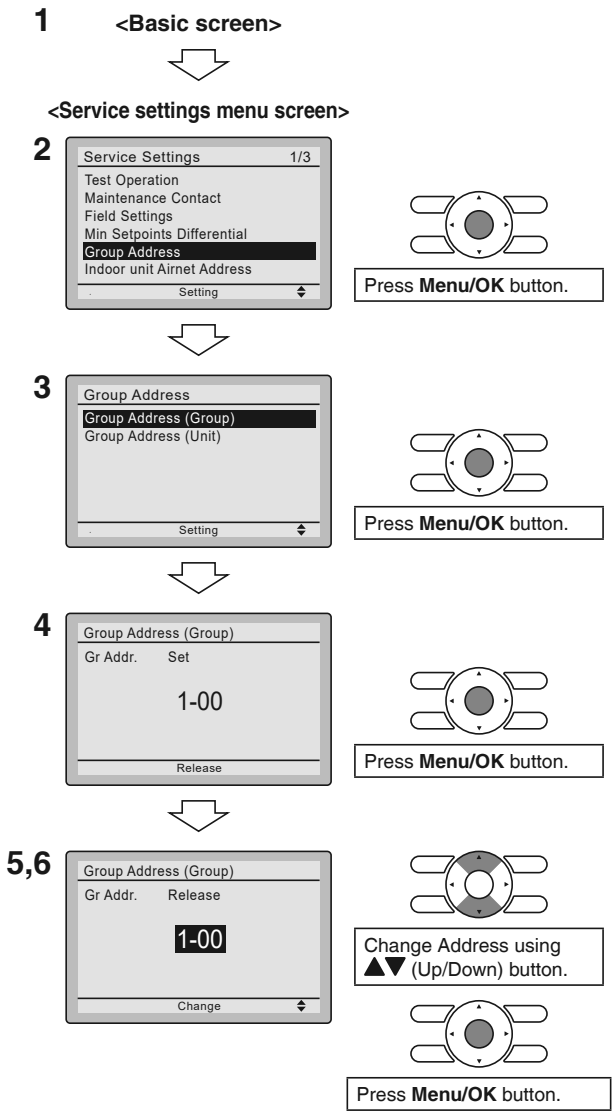
# 7. Setting Addresses

- This section describes how to set Group Address, Indoor unit Airnet Address, Outdoor unit Airnet Address, Indoor unit Label and Outdoor unit Label.

## 7-1 Group Address (Group) for VRV

This menu is displayed when multizone controller or BACnet MS/TP adaptor is connected.

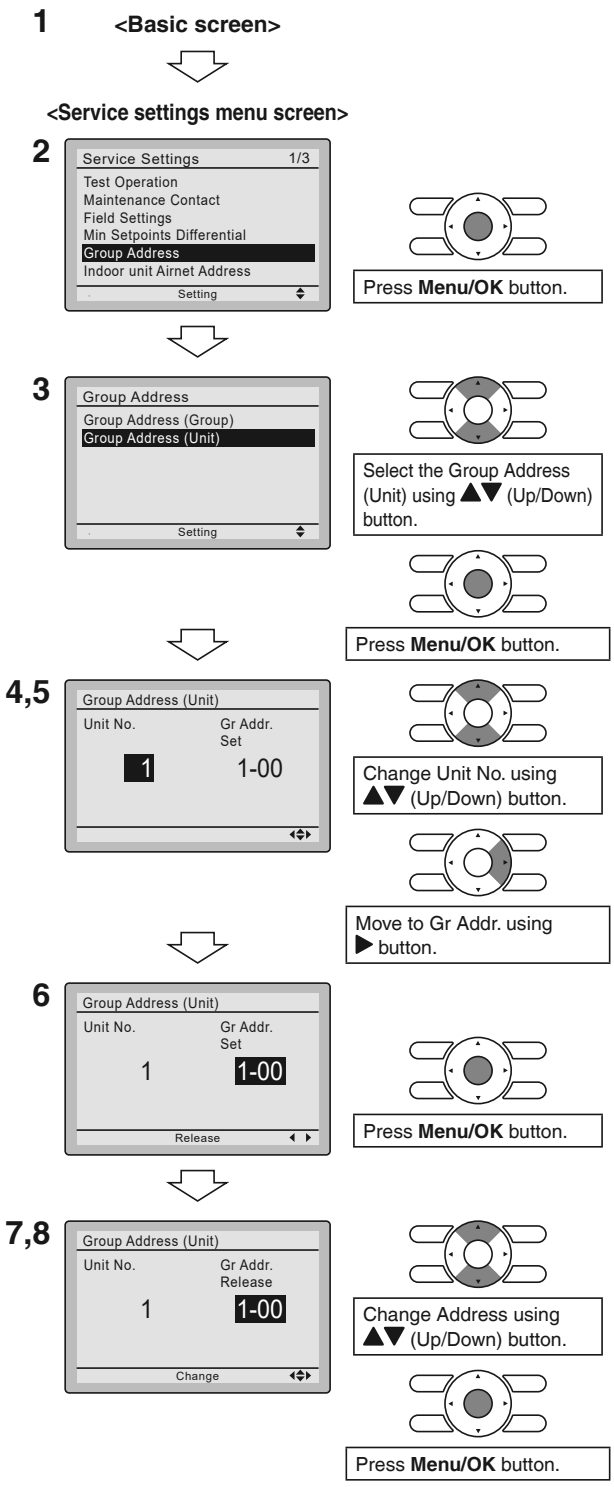
1. Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.
2. Select Group Address in the Service settings menu, and press **Menu/OK** button.
   Group Address screen is displayed.
3. Select Group Address (Group) and press **Menu/OK** button.
4. If an address is already “Set”, press **Menu/OK** button to release the current address setting. The mode indication changes from “Set” to “Release”, and you are now ready to change the address.
5. Select the address you want to set by using ▲▼ buttons.
6. Press **Menu/OK** button.
   The indication changes from “Release” to “Set”, then the group address is set.



## 7-2 Group Address (Unit) (VRV only)

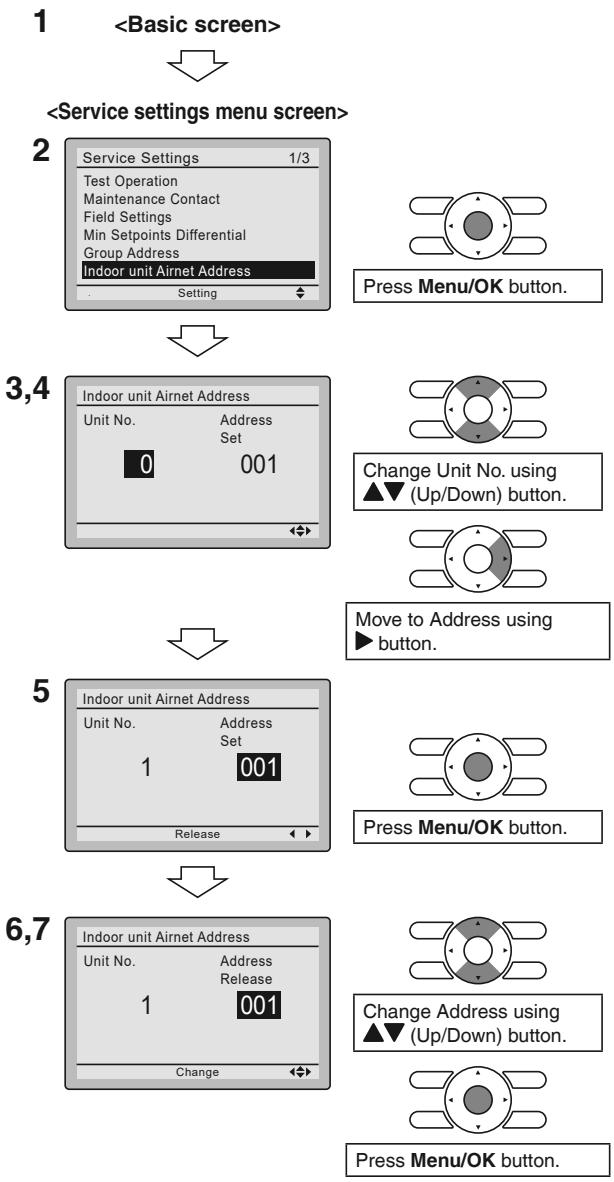
This menu is displayed when multizone controller or BACnet MS/TP adaptor is connected.

1. Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.
2. Select Group Address in the Service settings menu, and press **Menu/OK** button.
   Group Address screen is displayed.
3. Select Group Address (Unit) and press **Menu/OK** button.
4. Select the Unit No. you want to set by using ▲▼ buttons.
5. Press ▶ button to move to Gr. Addr.
6. If an address is already “Set”, press **Menu/OK** button to release the current address setting. The mode indication changes from “Set” to “Release”, and you are now ready to change the address.
7. Select the address you want to set by using ▲▼ buttons.
8. Press **Menu/OK** button.
   The indication changes from “Release” to “Set”, then the group address is set.



## 7-3 Indoor unit Airnet Address (VRV only)

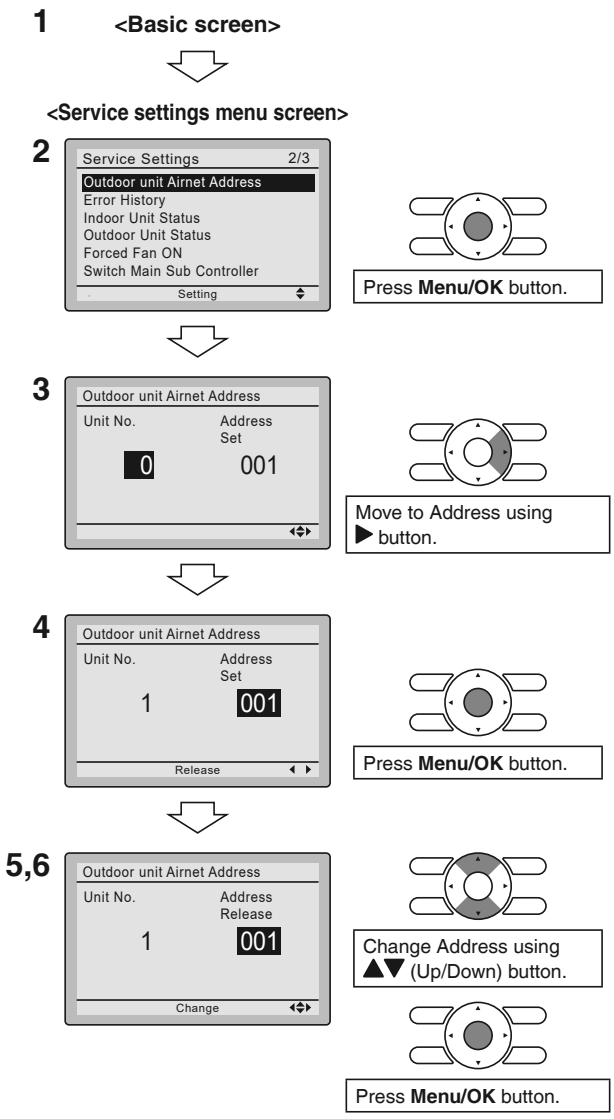
1. Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.
2. Select Indoor unit Airnet Address in the Service settings menu, and press **Menu/OK** button.
   Indoor unit Airnet Address screen is displayed.
3. Select the Unit No. you want to set by using ▲▼ buttons.
4. Press ▶ button to move to Address.
5. If an address is already “Set”, press **Menu/OK** button to release the current address setting. The mode indication changes from “Set” to “Release”, and you are now ready to change the address.
6. Select the address you want to set by using ▲▼ buttons.
7. Press **Menu/OK** button.
   The indication changes from “Release” to “Set”, then the Indoor unit Airnet Address is set.



## 7-4 Outdoor unit Airnet Address (VRV only)

This address menu is displayed when the Outdoor unit is recognized from the indoor unit.

1. Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.
2. Select Outdoor unit Airnet Address in the Service settings menu, and press **Menu/OK** button. Outdoor unit Airnet Address screen is displayed.
3. Press ▶ button to move to Address.
4. If an address is already “Set”, press **Menu/OK** button to release the current address setting. The mode indication changes from “Set” to “Release”, and you are now ready to change the address.
5. Select the address you want to set by using ▲▼ buttons.
6. Press **Menu/OK** button. The indication changes from “Release” to “Set”, then the Outdoor unit Airnet Address is set.



## 7-5 Group Address/Airnet Address (Rooftop unit only)

**1.** Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.

**2.** Select Group Address/ Airnet Address in the Service settings menu, and press **Menu/OK** button.
Group Address/Airnet Address screen is displayed.

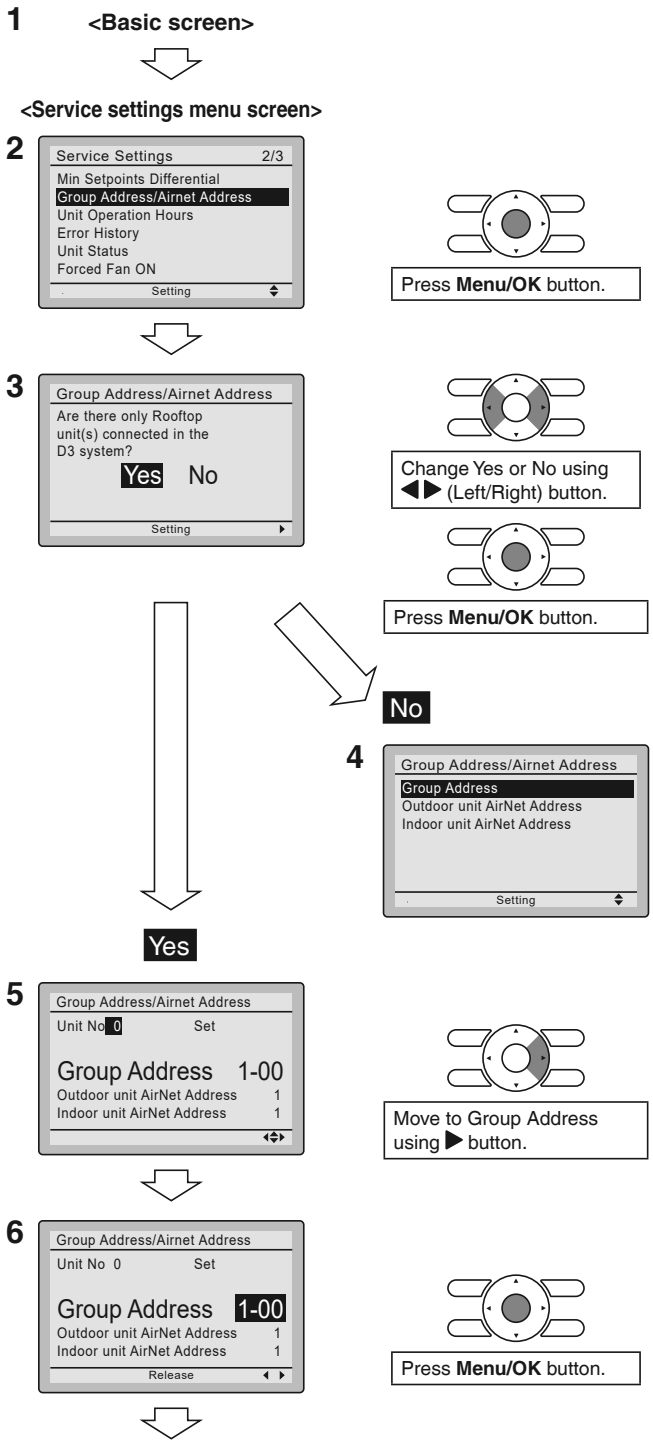
**3.** If there are only rooftop units connected in D3 system, select Yes, If no, Select No.

> If the rooftop unit has just been turned on and is preparing for communication, Step 3 will not appear. And goes to Step 4 directly.

**4.** Individual addresses can be set via No.4 screen on this page. Details of the setting procedures refer to 7-1 to 7-4.
(See page 17-20.)

**5.** Press ▶ button to move to Group Address.

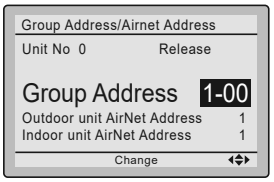
**6.** If an address is already “Set”, press **Menu/OK** button to release the current address setting. The mode indication changes from “Set” to “Release”, and you are now ready to change the address.

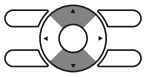


**7.** Select the address you want to set by using ▲▼ buttons.

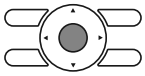
**8.** Press **Menu/OK** button.
The indication changes from "Release" to "Set", then addresses are set.

**7,8**



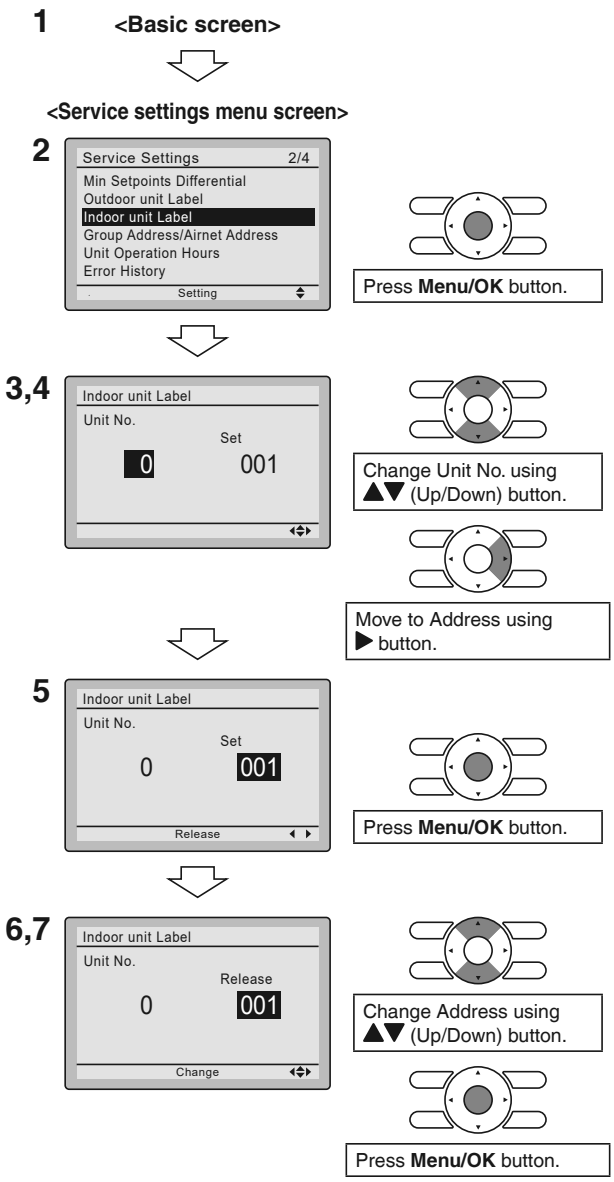
Change Address using ▲▼ (Up/Down) button.



Press **Menu/OK** button.

## 7-6 Indoor unit Label (VRV only)

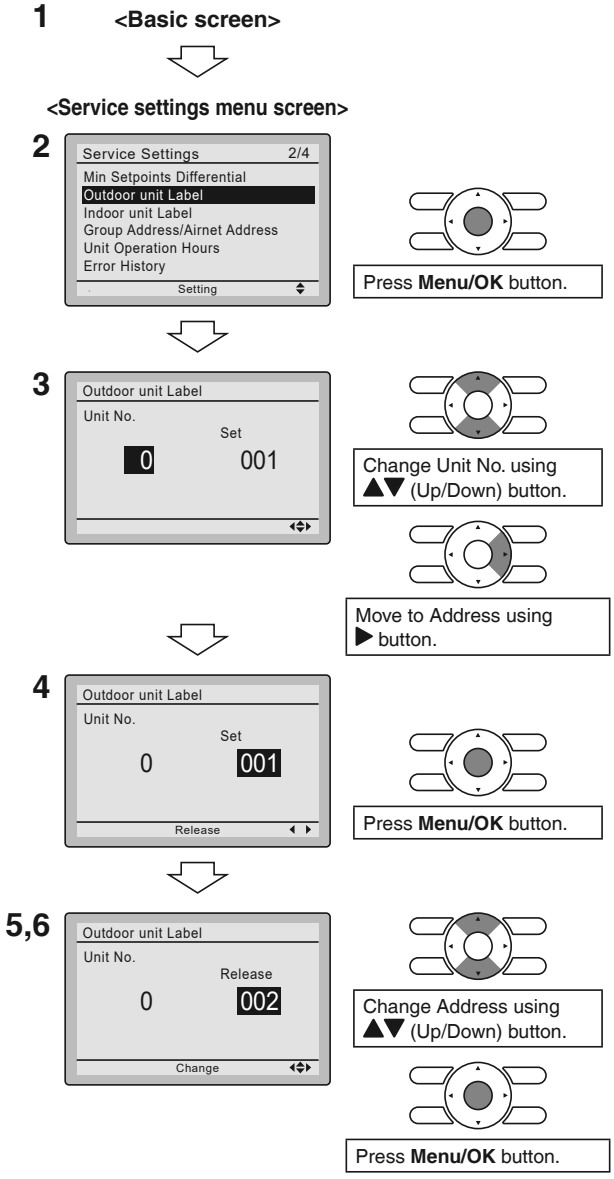
1. Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.
2. Select Indoor unit Label in the Service settings menu, and press **Menu/OK** button. Indoor unit Label screen is displayed.
3. Select the Unit No. you want to set by using ▲▼ buttons.
4. Press ▶ button to move to Address.
5. If an address is already “Set”, press **Menu/OK** button to release the current address setting. The mode indication changes from “Set” to “Release”, and you are now ready to change the address.
6. Select the address you want to set by using ▲▼ buttons.
7. Press **Menu/OK** button. The indication changes from “Release” to “Set”, then the Indoor unit Label is set.



## 7-7 Outdoor unit Label (VRV only)

This address menu is displayed when the Outdoor unit is recognized from the indoor unit.

1. Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.
2. Select Outdoor unit Label in the Service settings menu, and press **Menu/OK** button. Outdoor unit Label screen is displayed.
3. Press ▶ button to move to Address.
4. If an address is already “Set”, press **Menu/OK** button to release the current address setting. The mode indication changes from “Set” to “Release”, and you are now ready to change the address.
5. Select the address you want to set by using ▲▼ buttons.
6. Press **Menu/OK** button. The indication changes from “Release” to “Set”, then the Outdoor unit Label is set.



# 8. Procedure for Checking Error History

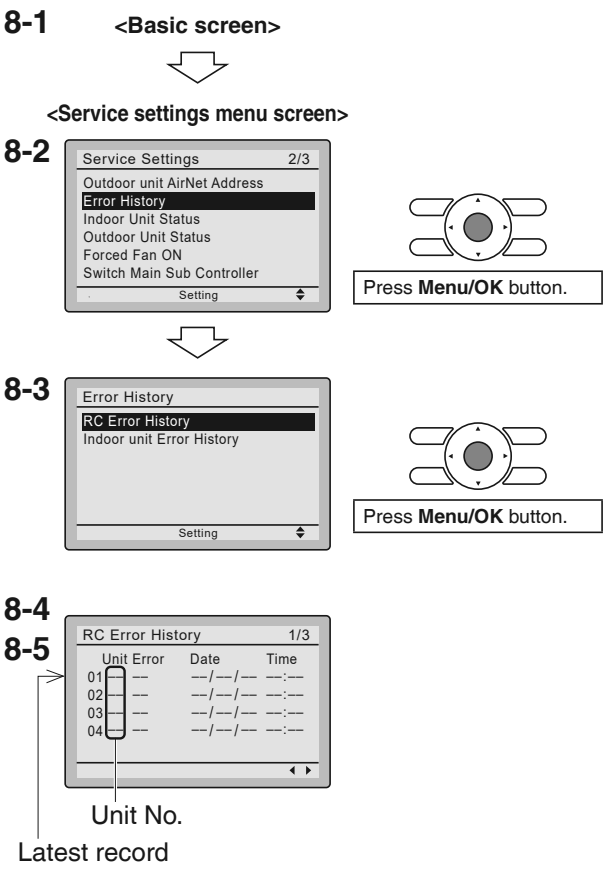
**8-1** Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.

**8-2** Select Error History in the service settings menu, and press **Menu/OK** button. The error history menu screen is displayed.

**8-3** Select RC Error History in the error history menu, and press **Menu/OK** button.
Error codes and unit No. can be confirmed in the RC error history screen.

**8-4** In the error history, the 10 most recent items are displayed in order of occurrence.

**8-5** Press **Cancel** button in the RC error history screen 3 times.
The basic screen returns.



# 9. Adding Maintenance Contact Information

- Registration of the maintenance contact.

**9-1** Press and hold **Cancel** button for 4 seconds or longer in the basic screen.
Service settings menu is displayed.

**9-2** Select Maintenance Contact in the service settings menu, and press **Menu/OK** button. Maintenance contact menu screen is displayed.

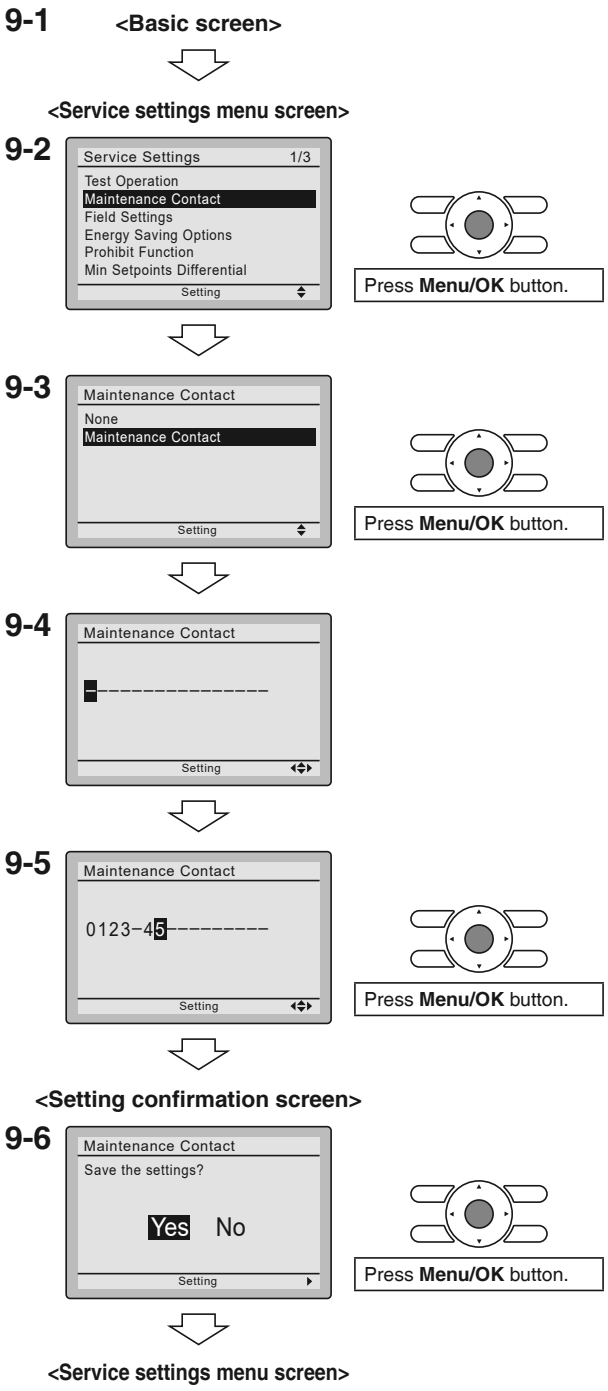
**9-3** Select Maintenance Contact , and press **Menu/OK** button.

**9-4** Enter the telephone number.
Scroll through the numbers by using ▲▼ (Up/Down) buttons. Start from the left side. Blank digits should remain as " - ".

**9-5** Press **Menu/OK** button.
Setting confirmation screen is displayed.

**9-6** Select Yes and press **Menu/OK** button.
Setting details are saved and service settings menu screen returns.

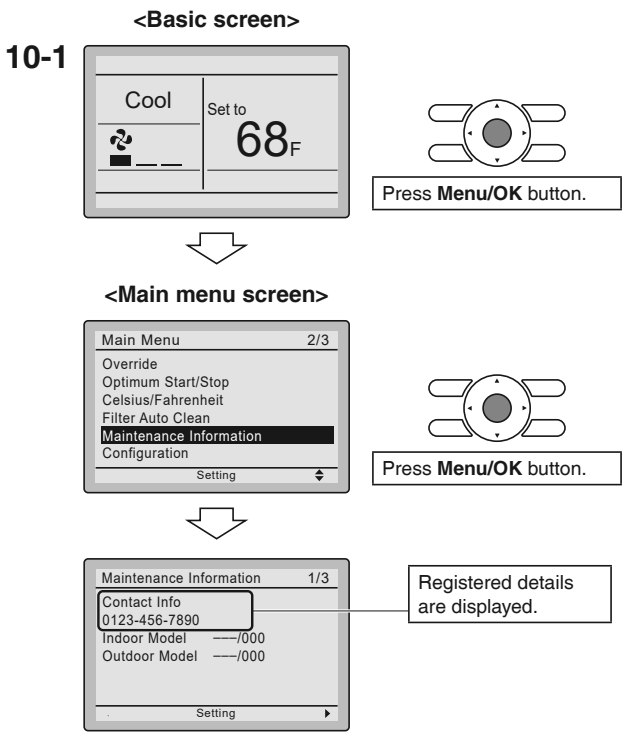
**9-7** Press **Cancel** button once.
The basic screen returns.



# 10. Confirming Registered Details

**10-1** Press **Menu/OK** button in the basic screen.
Main menu is displayed.
Select Maintenance Information in the main menu, and press **Menu/OK** button.

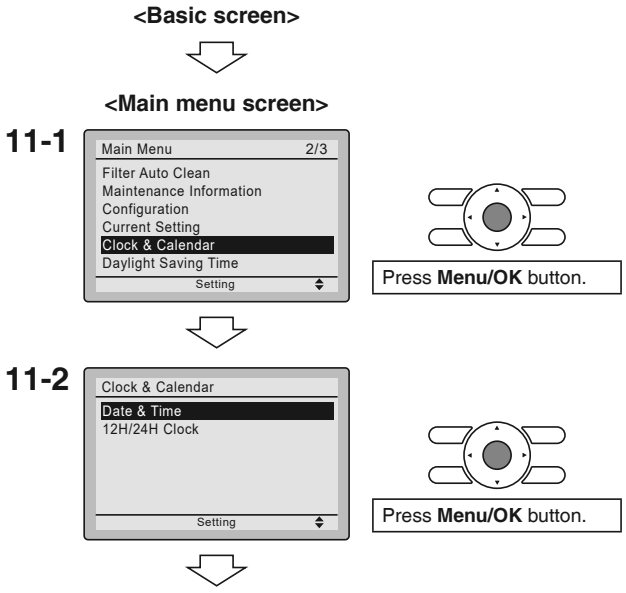
**10-2** Press **Cancel** button twice.
The basic screen returns.




# 11. Clock & Calendar

**11-1** Press **Menu/OK** button in the basic screen.
Main menu is displayed.
Select Clock & Calendar in the main menu, press **Menu/OK** button.

**11-2** Press ▲▼ buttons to select Date & Time on the clock & calendar screen.
∗ The date & time screen will appear when **Menu/OK** button is pressed.

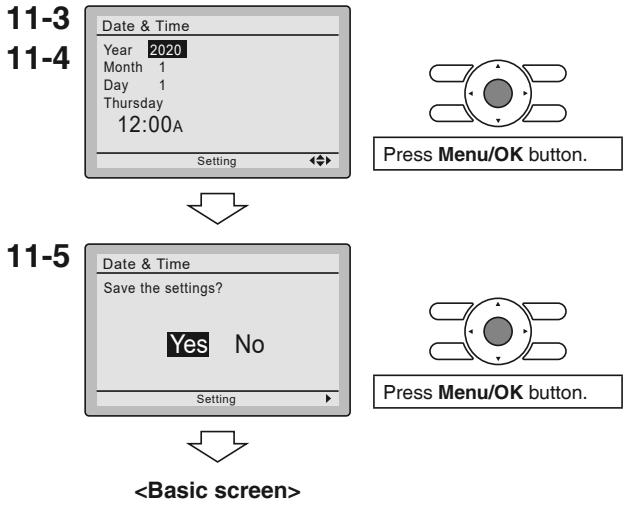


**11-3** Select **year**, **month**, **day** and **time** by using ◀▶ (Left/Right) button and set by using ▲▼ (Up/Down) button in the date & time screen. Press and hold the button for continuous change of the numeric value.
∗ Day of the week is set automatically.

**11-4** Press **Menu/OK** button.
Setting confirmation screen is displayed.

**11-5** Select Yes and press **Menu/OK** button.
Setting details are saved and basic screen returns.

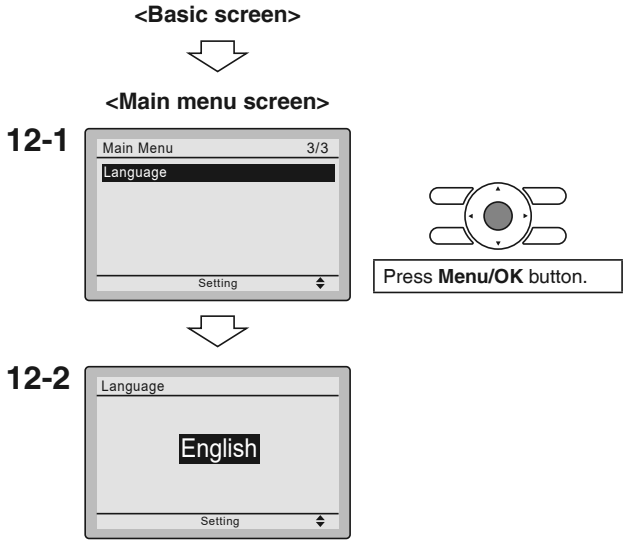
∗ If power outage exceeds 48 hours, reset is needed.




# 12. Language

**12-1** Press **Menu/OK** button in the basic screen.
Main menu is displayed.
Select Language in the main menu, press **Menu/OK** button.

**12-2** Press ▲▼ (Up/Down) buttons to select **Language** on the language screen.
**English/Français/Español**
Press **Menu/OK** button.



# 13. Unit Status (Rooftop unit only)

**13-1** Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.

**13-2** Select Unit Status in the service settings menu, and press **Menu/OK** button. Unit Status menu screen is displayed.

**13-3** Unit Status have 4 pages. Display contents are changed to use ◀ ▶ buttons per pages.

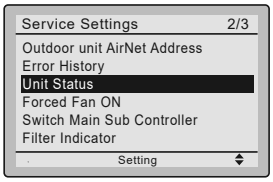
**Unit Status menu**

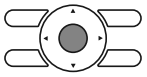
- Page 1
  Room Temp
  Remote Ctrl Temp
  Return Air Temp
  Return Air Humidity
  Return Air Enthalpy
- Page 2
  Supply Air Temp
  Supply Air Temp Mode
  O/D Temp
  O/D Humidity
  O/D Enthalpy
- Page 3
  Economizer
  Demand Ctrl Vent
  Free Cooling
  Mix-air low lim cycl
  Compressor
- Page 4
  Heating
  Liquid Temp
  Gas Temp
  Evaporated Temp
  Condensed Temp

**13-1** **<Basic screen>**

**<Service settings menu screen>**

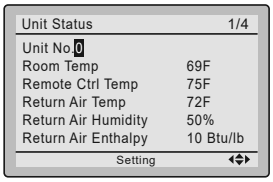
**13-2**



Press **Menu/OK** button.

**13-3**



# 14. Blower Speed (Rooftop unit only)

- The appropriate setting is shown on the manual of the unit.

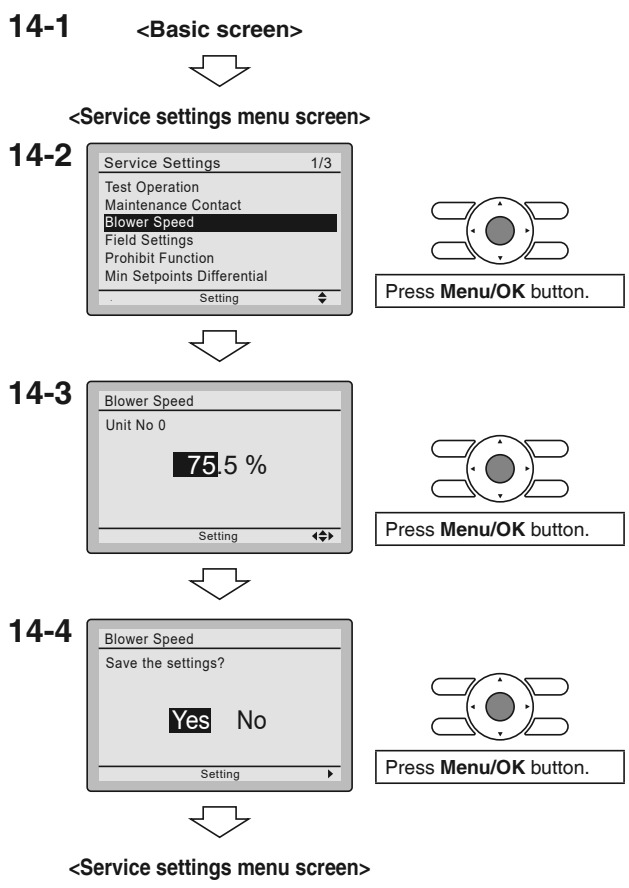
**14-1** Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.

**14-2** Select Blower Speed in the service settings menu, and press **Menu/OK** button. Blower Speed menu screen is displayed.

**14-3** Select Unit Number or % of blower speed using ◀ ▶ buttons. Use ▲▼ buttons to change number, and press **Menu/OK** button. Setting confirmation screen is displayed.

**14-4** Select Yes and press **Menu/OK** button. Setting details are saved and service settings menu screen returns.

**14-5** Press **Cancel** button once. The basic screen returns.



# 15. Unit Operation Hours (Rooftop unit only)

- Runtime is displayed and some of them are resettable.

**15-1** Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.

**15-2** Select Unit Operation Hours in the service settings menu, and press **Menu/OK** button. Unit Operation Hours menu screen is displayed.

**15-3** If Display Hours is selected, runtimes are displayed.

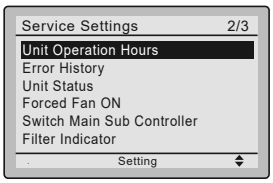
**15-4** If Reset is selected, it will display the title of runtimes that is resettable.

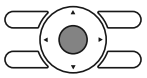
| |
|---|
| Total System Hrs |
| Total Fan Hrs (Resettable) |
| Comp Heat Mode (Resettable) |
| Aux Heat Hrs (Resettable) |
| Cool Mode Hrs (Resettable) |
| Econ Mode Hrs (Resettable) |
| Vent Mode Hrs (Resettable) |

**15-1** **<Basic screen>**

**<Service settings menu screen>**

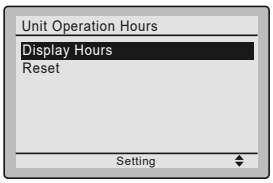
**15-2**

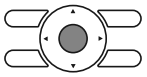


Press **Menu/OK** button.

**15-3**
**15-4**



Press **Menu/OK** button.

# 16. Prohibit Function

**16-1** Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.

**16-2** Select Prohibit Function in the service settings menu, and press **Menu/OK** button. Prohibit Function menu screen is displayed.

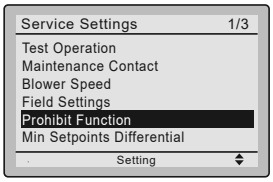
**16-3** Prohibit Buttons is for prohibiting each button input like Fan Speed button. Prohibit Mode is for prohibiting mode like “Cool” or “Heat”.

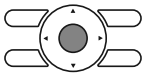
**16-4** To enable the Prohibit Buttons function in the basic screen, proceed as follows.
1. Keep ▶ button pressed.
2. Press Cancel, Mode, Fan speed buttons simultaneously while keeping ▶ button pressed.

**16-1** **<Basic screen>**

**<Service settings menu screen>**

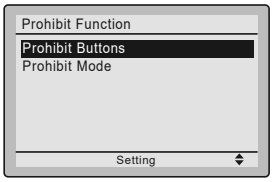
**16-2**

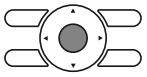


Press **Menu/OK** button.

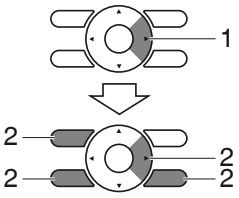
**16-3**



Press **Menu/OK** button.

**16-4**



# 17. Certification

## COMPLIANCE WITH FCC RULES AND REGULATIONS

15.21
You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.
15.105(b)
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase or decrease the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced remote control/ TV technician for help.

## FCC Authorization Label

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

## 2.6 <BRC1NRV71> Wired Remote Controller (Operation)

# Safety Considerations

The original instructions are written in English. All other languages are translation of the original instructions.
Read these **SAFETY CONSIDERATIONS** carefully before operating the remote controller.
Train the customer to operate and maintain the remote controller.
Inform customers that they should store this Operations Manual with the Installation Manual for future reference.
Meanings of **WARNING and CAUTION** Symbols:

| | |
|---|---|
| ⚠ **WARNING** | Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury. |
| ⚠ **CAUTION** | Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.<br>It may also be used to alert against unsafe practices. |
| ⚠ **NOTE** | Indicates situations that may result in equipment or property-damage accidents only. |

- The following pictograms are used in this manual.

| | | | |
|---|---|---|---|
|  | Never do. |  | Always follow the instructions given. |
|  | Keep water and moisture away. |  | Keep wet hands away. |

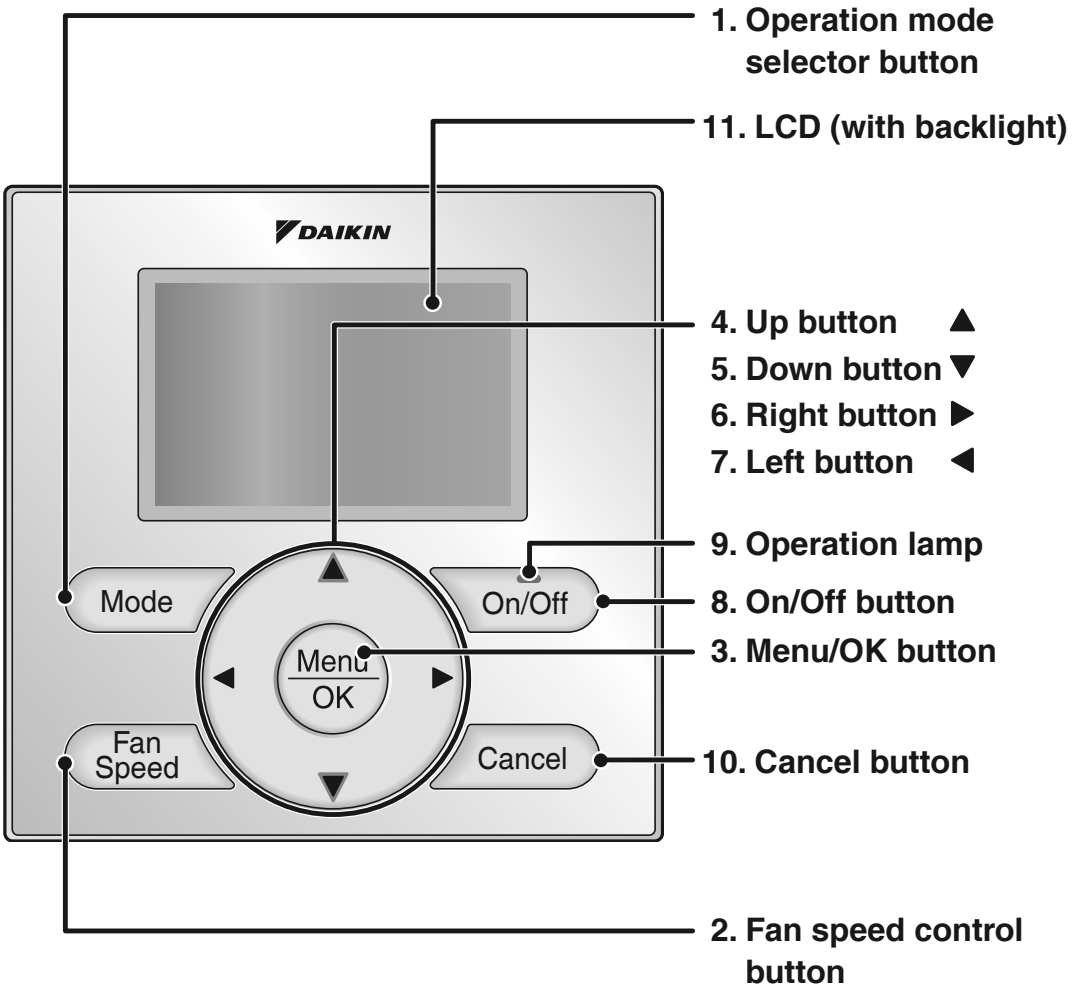
| ⚠ **WARNING** | |
|---|---|
|  | • **Do not modify or repair the remote controller.**<br>Consult your Daikin dealer for any modification or for repairs. |
|  | • **Do not relocate or reinstall the remote controller by yourself.**<br>Improper installation may result in electric shocks or fire.<br>Consult your Daikin dealer to relocate or for any reinstallation. |
|  | • **Do not use flammable materials (e.g., hairspray or insecticide) near the remote controller.**<br>Do not clean the product with organic solvents such as paint thinner.<br>The use of organic solvents may cause cracking, damaging the product, causing electric shocks, or fire. |
|  | • **Consult the dealer if the remote controller was submerged under water due to a natural disaster, such as a flood or hurricane.**<br>**Do not operate the remote controller at this time or a malfunction, electric shock, or fire can occur.** |

# ——Items to be Strictly Observed——

| ⚠ CAUTION | |
|---|---|
|  | • **Do not allow children to play with the remote controller to avoid causing damage to the product.** |
|  | • **Never disassemble the remote controller.**<br>Touching the interior parts may result in electric shocks or fire.<br>Consult your Daikin dealer for internal inspections and adjustments. |
|  | • **Do not touch the remote controller buttons with wet fingers.**<br>**Touching the buttons with wet fingers can cause an electric shock.** |
|  | • **Do not wash the remote controller.**<br>Doing so may cause electric leakage and result in electric shocks or fire. |
|  | • **Never let the remote controller to get wet.**<br>Water can cause damage to the remote controller, and may cause an electric shock or fire. |

| ⚠ NOTE | |
|---|---|
|  | • **Never press the button of the remote controller with a hard and pointed object.**<br>The remote controller may be damaged. |
|  | • **Never pull or twist the electric wire of the remote controller.**<br>It may cause the unit to malfunction. |
|  | • **Do not wipe the remote controller with benzine, thinner, chemical dustcloth, etc.**<br>The remote controller may get discolored or the coating peeled off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the remote controller clean. And wipe it with another dry cloth. |

# Button Locations and Descriptions




**Functions other than basic operation items (i.e., On/Off, Operation Mode, Fan Speed, and Setpoint) are set from the menu screen.**

**NOTE**

- **Do not install the remote controller in places exposed to direct sunlight, the LCD will be damaged.**
- **Do not pull or twist the remote controller cord, the remote controller may be damaged.**
- **Do not use objects with sharp ends to press the buttons on the remote controller, damage may result.**

## 1. Operation mode selector button

- Press this button to select the operation mode of your preference. **(See page 10.)**
  * Available modes vary with the model of unit.

## 2. Fan speed control button

- Press this button to select the fan speed of your preference. **(See page 11.)**
  * Available fan speeds vary with the model of unit.

## 3. Menu/OK button

- Used to enter the main menu. **(See page 20 for the menu items.)**
- Used to enter the selected item.

## 4. Up button ▲

- Used to raise the setpoint.
- The item above the current selection will be highlighted. (The highlighted items will be scrolled continuously when the button is continuously pressed.)
- Used to change the selected item.

## 5. Down button ▼

- Used to lower the setpoint.
- The item below the current selection will be highlighted. (The highlighted items will be scrolled continuously when the button is continuously pressed.)
- Used to change the selected item.

## 6. Right button ▶

- Used to highlight the next items on the right-hand side.
- Each screen is scrolled in the right-hand direction.

## 7. Left button ◀

- Used to highlight the next items on the left-hand side.
- Each screen is scrolled in the left-hand direction.

## 8. On/Off button

- Press this button and system will start.
- Press this button again to stop the system.

## 9. Operation lamp

- This lamp illuminates solid green during normal operation.
- This lamp flashes if an error occurs.

## 10. Cancel button

- Used to return to the previous screen.

## 11. LCD (with backlight)

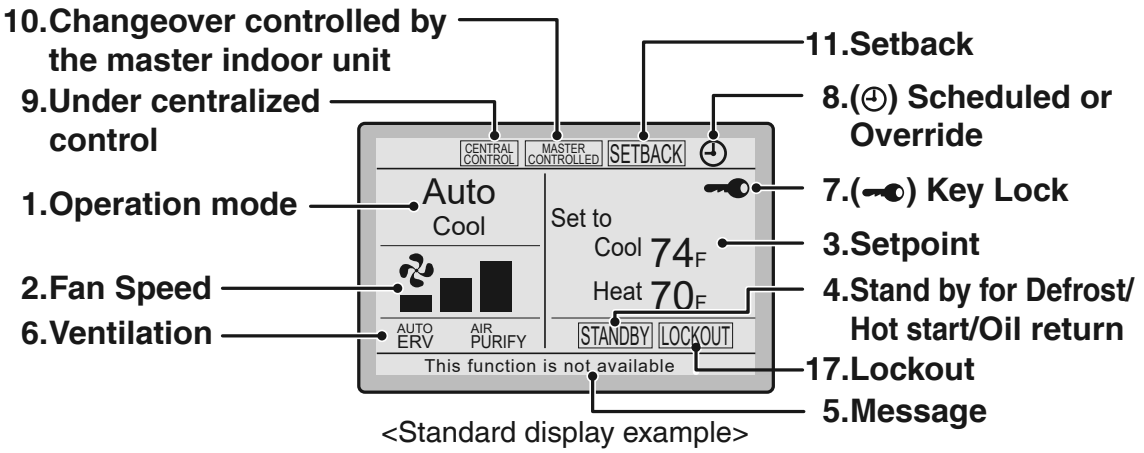
- The backlight will be illuminated for approximately 30 seconds by pressing any button.
- If two remote controllers are used to control a single unit, only the controller accessed first will have backlight functionality.

# Names and Functions

## Liquid Crystal Display

- Three types of display mode (Standard, Detailed and Simple) are available.
- Standard display is set by default.
- Detailed and Simple displays can be selected in the main menu. **(See page 44.)**

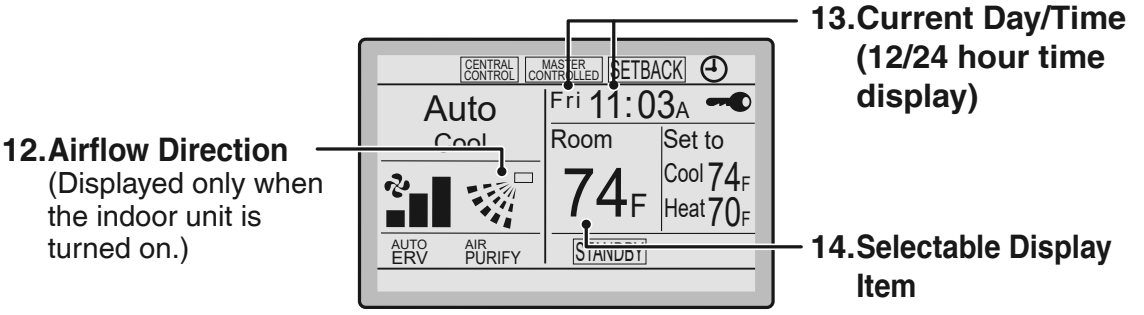
### Standard display



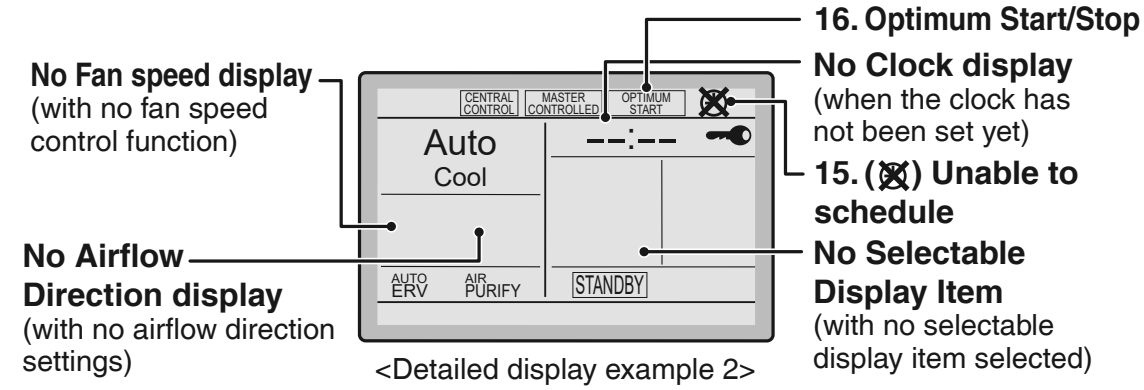

<Standard display example>

### Detailed display

■ **The airflow direction, clock, and selectable item appear on Detailed display screen in addition to the items appearing on Standard display.**

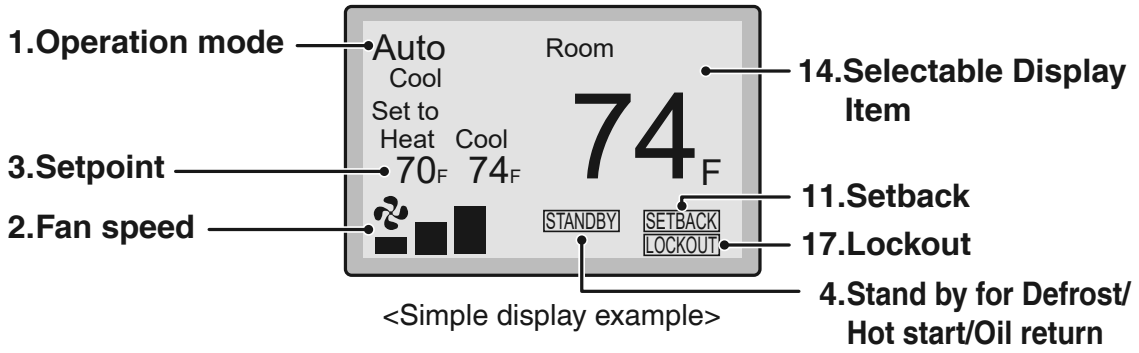



<Detailed display example 1>




<Detailed display example 2>

## Simple display




<Simple display example>

## Note for all display modes

- Depending on the field settings, while the unit is stopped, OFF may be displayed instead of the operation mode and/or the setpoint may not be displayed.

# Names and Functions

## 1. Operation mode

- Used to display the current operation mode: Cool, Heat, Vent, Fan, Dry or Auto.
- In Auto mode, the actual operation mode (Cool or Heat) will be also displayed.
- Operation mode cannot be changed when OFF is displayed.
  Operation mode can be changed after starting operation.

## 2. Fan Speed

- Used to display the fan speed that is set for the unit.
- The fan speed will not be displayed if the connected model does not have fan speed control functionality.

## 3. Setpoint

- Used to display the setpoint for the unit.
- Use the Celsius/Fahrenheit item in the main menu to select the temperature unit (Celsius or Fahrenheit).

## 4. Stand by for Defrost/Hot start/ Oil return " STANDBY " (See page 12.)

**If ventilation icon is displayed in this field:**

- Indicates that an energy recovery ventilator (ERV) is connected.
  For details, refer to the Operation Manual of the ERV.

## 5. Message

**The following messages may be displayed.**
**"This function is not available"**

- Displayed for a few seconds when an Operation button is pressed and the unit does not provide the corresponding function.
- In a remote control group, the message will not appear if at least one of the units provides the corresponding function.

**"Error: Push Menu button"**
**"Warning: Push Menu button"**

- Displayed if an error or warning is detected **(see page 54)**.

**"Time to clean filter"**
**"Time to clean element"**
**"Time to clean filter & element"**

- Displayed as a reminder when it is time to clean the filter and/or element **(see page 52).**

## 6. Ventilation

- Displayed when an energy recovery ventilator is connected.
- **Ventilation Mode icon."** AUTO ERV ERV BYPASS **"**
  These icons indicate the current ventilation mode (ERV only) (AUTO, ERV, BYPASS).
- **Air Purify ICON "** AIR PURIFY **"**
  This icon indicates that the air purifying unit (Optional) is in operation.

## 7. Key Lock (See page 19.)

- Displayed when the key lock is set.

## 8. Scheduled or Override (See page 33, 38.)

- Displayed if the Schedule or Override is enabled.
- For Schedule, see page 33, for override, see page 38.
- When the Override is active, the icon will flash. "

## 9. Under Centralized control " CENTRAL CONTROL "

- Displayed if the system is under the management of a multi-zone controller (Optional) and the operation of the system through the remote controller is limited.

## 10. Changeover controlled by the master indoor unit " MASTER CONTROLLED "

(VRV only)

- Displayed when another indoor unit on the system has the authority to change the operation mode between cool and heat.

## 11. Setback " SETBACK " (See page 14.)

- The setback icon flashes when the unit is turned on by the setback control.

## 12. Airflow Direction " "

- Displayed when the airflow direction and swing are set **(see page 26)**.
- If the connected model does not include oscillating louvers this item will not be displayed.

## 13. Current Day/Time (12/24 hour time display)

- Displayed if the clock is set **(see page 46)**.
- If the clock is not set, " -- : -- " will be displayed.
- 12 hour time format is displayed by default.
- Select 12/24 hour time display option in the main menu under "Clock & Calendar".

## 14. Selectable Display Item

- Room temperature is selected by default.
- For other choices see page 45.

## 15. Unable to schedule

- Displayed when the clock needs to be set.
- The schedule function will not work unless the clock is set.

## 16. Optimum Start/Stop " OPTIMUM START " " OPTIMUM STOP " (See page 40.)

- Displayed when the Optimum start or Optimum stop is enabled.
- " OPTIMUM START " or " OPTIMUM STOP " is flashing when the Optimum start or Optimum stop is active.

## 17. Lockout " LOCKOUT "

(Rooftop unit only)

- " LOCKOUT " is flashing when the lockout is active.

# Basic Operation

## Cool/Heat/Auto/Fan Operation (SkyAir, VRV and Rooftop)

**How to follow the operation manual**

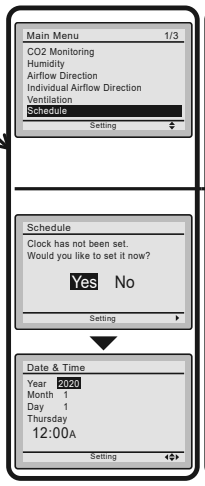
**Operation procedure**
Explains the sequence of operation for the remote controller. Operate the buttons according to the procedure.

**Operation button display**
Displays the location of buttons to be operated.

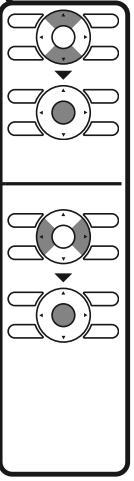
**Operation screen display**
Describes screens that will be displayed on the remote controller in operation.

**Operation**

**1**




- Display the main menu screen. (See page 23.)
- Press ▼▲ buttons to select Schedule Press **Menu/OK** button to display the schedule screen.



- Before setting the schedule, the clock must be set.
- If the clock has not been set, a screen like the one on the left will appear. Press ◀▶ buttons to select Yes and press **Menu/OK** button.
- The date & time screen will appear.
- Set the current year, month, day, and time. (See clock settings on page 46.)

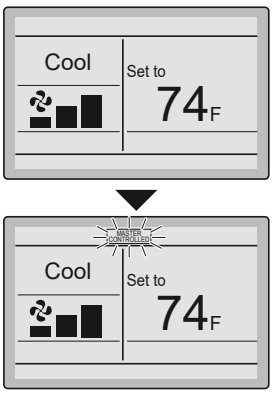


## Preparation

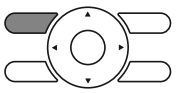
- For mechanical protection purposes, apply power to the outdoor units (rooftop units) at least six hours before starting the operation of the system.

**Operation**

**1**




- Press **Mode** button several times until the desired mode Cool, Heat, Fan, or Auto mode is selected.



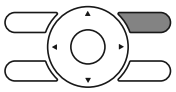
* Unavailable operation modes are not displayed.

**Note**
- Both heat and cool mode may not be selected if the unit is master controlled. See page 16 if MASTER CONTROLLED icon flashes.

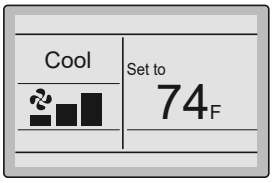
## 2




- Press **On/Off** button.
  The Operation lamp will illuminate solid green and the system will start operating.

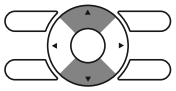


## 3

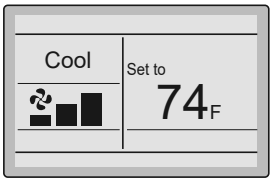


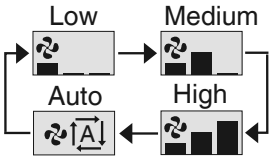

- The setpoint will increase by 1°F (or 1°C) when ▲ button is pressed and decrease by 1°F (or 1°C) when ▼ button is pressed.

  * Setpoint is not available in fan or dry mode.

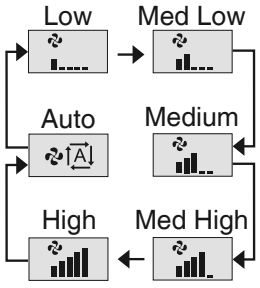


## 4



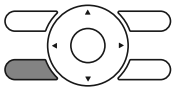

three fan speeds




five fan speeds

- To change the fan speed, press **Fan Speed** button and select the fan speed from;
  - Low/High/Auto for two-speed
  - Low/Medium/High/Auto for three-speed
  - Low/Med Low/Medium/Med High/High/Auto for five-speed

  depending on the model.



* Auto cannot be selected if the unit does not have Auto Fan speed function.
* The system may change the fan speed automatically for equipment protection purposes.
* The system may turn off the fan when the room temperature is satisfied.
* It is normal for a delay to occur when changing the fan speed.
* If the Auto is selected for the fan speed, the fan speed varies automatically based on the difference between setpoint and room temperature.

# Basic Operation

**5**

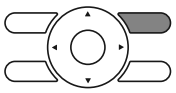
- Adjust Airflow Direction from the main menu (see page 26).

  * If the connected unit does not have oscillating louvers, this function will not be available.

**6**




- When **On/Off** button is pressed again, the system will stop operating and the Operation lamp will turn off.



  * When the system is stopped while in the heating mode, the fan will continue to operate for a few minutes to remove residual heat from the unit.

**Note**

- To prevent condensation water damage or system failure, do not shut off the power supply to the unit immediately after operation. Wait at least five minutes for the condensate pump to finish draining residual water from the unit.

## Characteristics of Defrost, Hot start, Oil return Mode

**The system automatically controls the following operating modes to prevent the reduction of heating capacity and space comfort.**

**Defrost operation**

- The system will automatically go into defrost operation to prevent frost accumulation at the outdoor unit (rooftop unit) and subsequent loss of heating capacity.
- The fan will stop, and " STANDBY " will be displayed on the remote controller.
- The system will finish the Defrost operation and return to normal usually within six to eight minutes. It won't last for more than ten minutes.

**Hot start**

- When the system starts heating operation, the fan will operate with a delay in order to prevent a cold draft.
  (In that case, " STANDBY " will be displayed on the remote controller.)

**Oil return**
(Rooftop unit only)

- At the cooling mode, the space may be cooled more than necessary in order to prevent a shortage of oil in the compressor.
  (In that case, " STANDBY " will be displayed on the remote controller.)

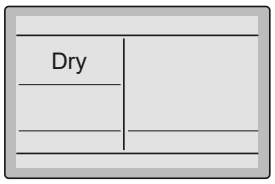
# Dry Mode

## Preparation

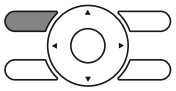
- For equipment protection purposes, apply power to the outdoor units (rooftop units) at least six hours before starting the operation of the system.
- The dry mode may not be selected if the remote controller is master controlled and the system is not already in the cooling mode of operation. (see page 18 for details)

## Operation

**1**




- Press **Mode** button several times until the Dry mode is selected.

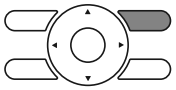


* The dry mode may not be available depending on the model of unit.

**2**




- Press **On/Off** button.
  The Operation lamp will illuminate solid green and the system will start operating.



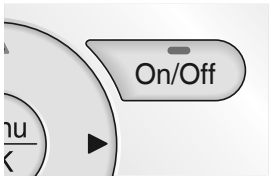
* In Dry mode, the system maintains automatic temperature and fan speed control. Therefore, temperature setpoint or fan speed settings are not available while the unit is in the Dry mode.

**3**

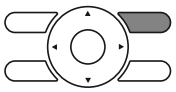
- Adjust Airflow Direction from the main menu (see page 26).

* If the connected unit does not have oscillating louvers, this function will not be available.

# Basic Operation

4 

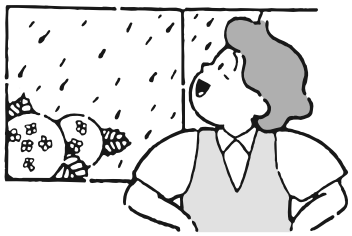

- When **On/Off** button is pressed again, the system will stop operating and the Operation lamp will turn off.



**Note**
- To prevent condensation water damage or system failure, do not shut off the power supply to the unit immediately after operation. Wait at least five minutes for the condensate pump to finish draining residual water from the unit.

## Characteristic of Dry mode

The Dry mode dehumidifies the space at reduced cooling capacity to prevent the room temperature from dropping to an uncomfortable level.



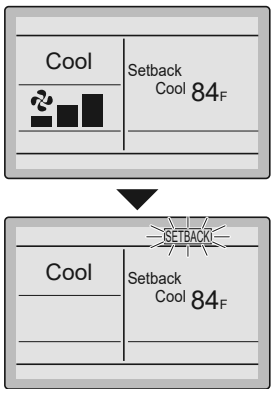
# Setback

The Setback function can be used to maintain the space temperature in an assigned range for an unoccupied period.

**Note**
- When enabled, the Setback mode becomes active when the unit is turned off by either the user, a schedule event or an Override.
- This function is not available by default. It can be enabled by the system installer.

## Operation

1




- The setback icon flashes when the unit is turned on by the setback control.

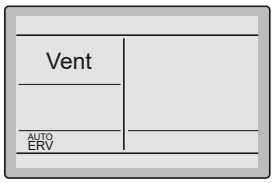
# Ventilation Mode When the Indoor Unit (VRV/SkyAir) is Interlocked with Energy Recovery Ventilator

## Preparation

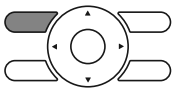
- For equipment protection purposes, apply power to the outdoor units at least six hours before starting the operation of the system.

## Operation

1




- When operating the energy recovery ventilator (ERV) between seasons without the indoor unit, set the control to ventilation mode.



2

- Changes to the ventilation mode are made from the main menu.

  * Ventilation Mode: Auto, ERV, and Bypass

3

- Changes to the ventilation rate are made from the main menu.

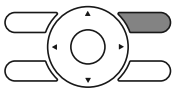
  * Ventilation Rate: Low or High

# Basic Operation

**4**



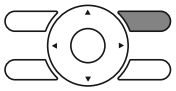

- Press **On/Off** button.
  The Operation lamp will illuminate solid green and the system will start operating.



**5**




- When **On/Off** button is pressed again, the system will stop operating and the Operation lamp will turn off.

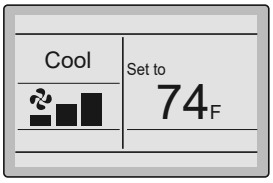


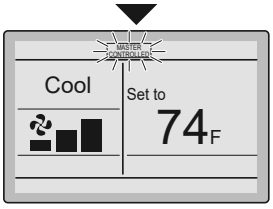
## Setting the Cool / Heat Changeover Master

**(VRV only)**

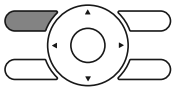
**Setting Changes** See page 18 for an explanation of the cool/heat changeover master indoor unit.

**1**




- Press **Mode** button on the remote controller of the changeover master indoor unit for at least four seconds while the backlight is illuminated.



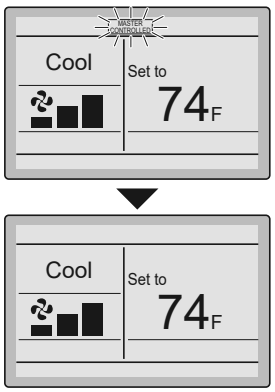
- The "MASTER CONTROLLED" icon on each remote controller for the indoor units connected to the same outdoor unit or Branch Selector unit will start flashing.

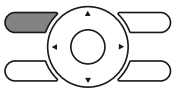
  * Vent mode setting changes are possible regardless of the cool/heat changeover master indoor unit.
  * If the outdoor unit is configured as cool/heat changeover master, all remote controllers serving the associated indoor units will display its "MASTER CONTROLLED" icon.

- Set the cool/heat changeover master indoor unit as outlined below.

**Selection Settings** The icon " MASTER CONTROLLED " will flash on all remote controllers when the power is turned ON for the first time.

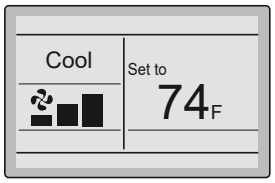
## 2

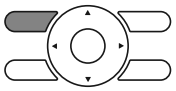


- Press **Mode** button on the remote controller of the indoor unit which is to serve as the cool/heat changeover master.
  The remote controller for the changeover master indoor unit is established and the MASTER CONTROLLED icon is no longer displayed.
  Other remote controllers in the system (indoor units served by the same outdoor unit or indoor units served by the same branch selector unit) will now display the MASTER CONTROLLED icon.

## 3



- Press **Mode** button on the remote controller of the indoor unit designated as the cool/heat changeover master (the remote controller not displaying the MASTER CONTROLLED icon) repeatedly until the desired mode is selected. The display will change to **Fan**, **Dry**, **Auto**, **Cool**, **Heat** each time the button is pressed.
- Simultaneously, the other indoor units on the system will follow suit and change modes to reflect the new mode selected at the changeover master remote controller.

# Basic Operation

## Cool / Heat Mode Selection Availability (VRV only)

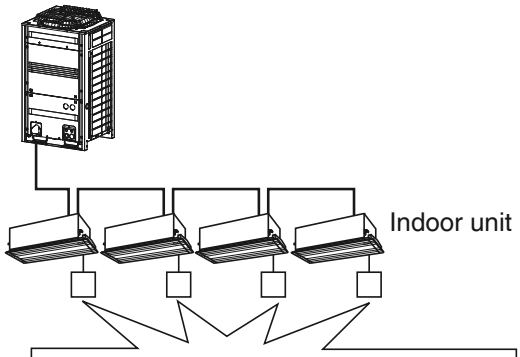
- "Cool", "Heat", and "Auto" are all only available for selection on the cool/heat changeover master indoor unit. The following table indicates the available operating modes of the other indoor units on the system based upon the selected mode of the master indoor unit.

| When the master indoor unit is set to | The other indoor units in the system can be set to | | | |
|---|---|---|---|---|
| | Cool | Dry | Heat | Fan |
| Cool mode | ✓ | ✓ | | ✓ |
| Dry mode | ✓ | ✓ | | ✓ |
| Heat mode | | | ✓ | ✓ |
| Fan mode | | | | ✓ |
| Auto mode (Cooling operation) | ✓ | ✓ | | ✓ |
| Auto mode (Heating operation) | | | ✓ | ✓ |

## Precautions for Selecting the Cool / Heat Changeover Master Indoor Unit (VRV only)

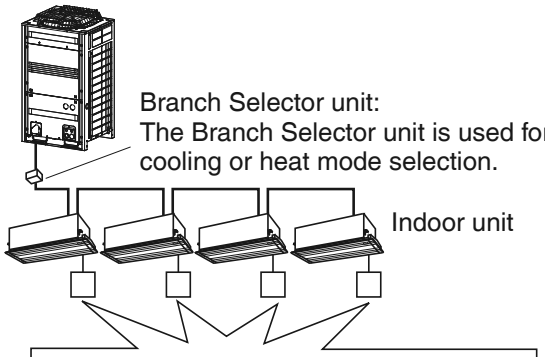
- The cool/heat changeover master must be set for a single indoor unit in the following applications

**(2-Pipe Heat Pump System)**




| **A number of indoor units are connected to a single outdoor unit.** |
|---|
| Set any one of the indoor units as the cool/heat changeover master. |

**(3-Pipe Heat Recovery System)**

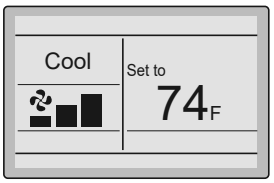



| **A number of indoor units are connected to a single Branch Selector unit.** |
|---|
| Set any one of the indoor units as the cool/heat changeover master. |

# Key Lock

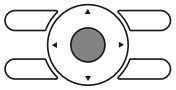
**Operation** Confirm and cancel Key Lock settings in the basic display screen.

**1**

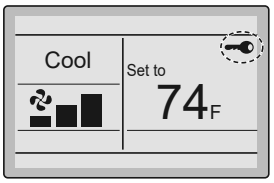



Basic screen

- Press **Menu/OK** button for at least four seconds while the backlight is illuminated.



**2**




- "🔑" is displayed.
  All buttons are disabled when the keys are locked.
- To cancel the key lock mode, continue pressing **Menu/OK** button for at least four seconds while the backlight is illuminated.

# Quick Reference

## ■The main menu has the following items.

| Menu item | | Description | Reference page |
|---|---|---|---|
| **CO2 Monitoring** | | Display CO2 history plot and current CO2. (If the unit has a CO2 sensor.) | 24 |
| **Humidity** | | Display the current room humidity and set the humidity setpoint. | 25 |
| **Airflow Direction** | | **Used to configure airflow direction settings.**<br>• The airflow direction louver is automatically operated up and down (left and right).<br>• The fixed airflow directions are configurable for five positions.<br>* Only for indoor unit that supports Airflow Direction setting. | 26 |
| **Individual Airflow Direction** (Depends on the model of unit) | **Louver Setting** | Set the airflow direction individually for each of the 4 louvers.<br>• Maximum 16 units (unit 0 till 15). | 28 |
| | **Louver Setting List** | Setting table for louver. | 29 |
| | **Reset All Louvers Position** | Reset all louvers to factory default setting. | 30 |
| **Ventilation** (Ventilation operation settings for energy recovery ventilator) | **Ventilation Rate** | Used to set “Low” or “High” | 31 |
| | **Ventilation Mode** | Used to set Auto, ERV, or Bypass. | 32 |
| **Schedule** | **Daily Patterns** | • Day settings are selected from four patterns, i.e., “7Days”, “Weekday/Sat/Sun”, “Weekday/Weekend”, and “Everyday”. | 34 |
| | **Settings** | • Set the startup time and operation stop time.<br>ON: Startup time, cooling and heating temperature setpoints can be configured.<br>OFF: Operation stop time, cooling and heating setback temperature setpoints can be configured.<br>( ––: Indicates that the setback function is disabled for this time period. )<br>__: Indicates that the temperature setpoint and setback temperature setpoint for this time period is not specified. The last active setpoint will be utilized.<br>• Up to five actions can be set for each day. | 35 |

| Menu item | | Description | Reference page |
|---|---|---|---|
| **Override** | | **Used to set the run time for the indoor unit and rooftop unit using this controller.**<br>• Possible to set in 10 minute increments from 10 minutes to 10 hours. | 38 |
| **Optimum Start/Stop** | | Optimum start and stop can be enabled or disabled by each.<br>• Optimum start is used to ensure comfortable space temp prior to occupancy.<br>• Optimum stop is used to ensure energy savings prior to unoccupancy without compromising on comfort. | 40 |
| **Celsius / Fahrenheit** | | • Used to select whether temperature values will be displayed in Celsius or Fahrenheit. | — |
| **Filter Auto Clean** | | Set the time when the filter needs to be automatically cleaned. For the detailed operation refer to the Operation Manual of the self cleaning decoration panel. | — |
| **Maintenance Information** | | Used to display the maintenance information. | 41 |
| **Configuration** | **Draft Prevention** (Only available with Occ. sensor installed model of the unit) | The draft prevention function can be **enabled** or **disabled**.<br>When enabled, the Occ. sensor will adjust the louver's position to prevent air blowing directly on occupant. | 42 |
| | **Contrast Adjustment** | Used to make LCD contrast adjustment. | 43 |
| | **Display** | **Used to set the display mode.**<br>• Display mode<br>Standard, Detailed, or Simple display<br>• Detailed and Simple displays provide the selectable display item among Room Temp, System, None or Outside Air Temp. | 44 |
| **Current Settings** | | • Used to display a list of current settings for available items. | 46 |
| **Clock & Calendar** | **Date & Time** | **Used to configure date and time settings and corrections.**<br>• The default time display is 12H.<br>• The clock will maintain accuracy to within ±30 seconds per month.<br>• If there is a power failure for a period not exceeding 48 hours, the clock will continue working with the built-in backup power supply. | 46 |
| | **12H/24H Clock** | The time can be displayed in either a 12 hour or a 24 hour time format. | 49 |
| **Daylight Saving Time** | | Used to adjust the clock in observance of daylight saving time. | 49 |
| **Language** | | The display language can be selected between **English**, **Francais**, or **Espanol**. | 52 |

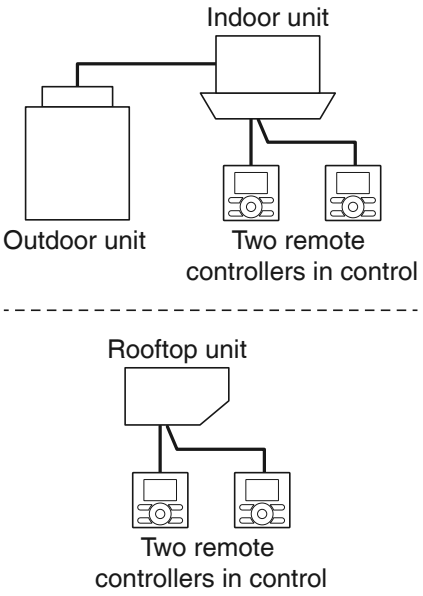
# Quick Reference

Note: Available setting items vary with the model of unit.

## Sub Remote Controller Menu Items

If two remote controllers are connected to a single indoor unit or rooftop unit, the following menu items are not set in the sub remote controller. In this case, the following items should be configured in the main remote controller.

- Individual Airflow Direction
- Schedule
- Override
- Humidity
- Setback
- Draft Prevention
- CO2 Monitoring
- Optimum Start/Stop



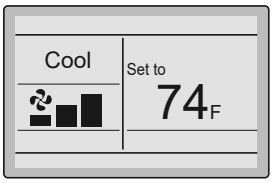
# Menu Options

## Navigating the Main Menu Screen

### ■Display Method for Main Menu

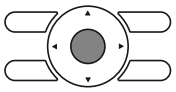
**Operation**

**1**

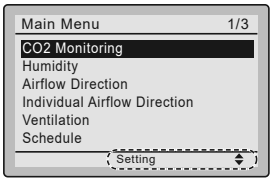



Basic screen

- Press **Menu/OK** button.



**2**



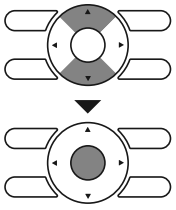

Main menu screen

- The main menu screen is displayed.

⇦ Instructions for navigating the main menu will appear.

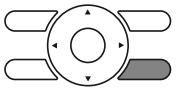
**3**

- Selecting items from the main menu.
  1. Press ▼▲ buttons to select the desired item to be set.
  2. Press **Menu/OK** button to display the details for the selected item.



**4**

- To go back to the basic screen from the main menu, press **Cancel** button.



### Note

- If a button is not pressed for 5 minutes during configuration, the controller will automatically revert to the basic screen.

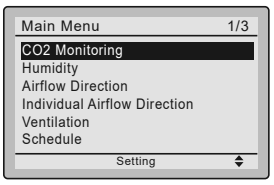
# Menu Options

## CO2 Monitoring

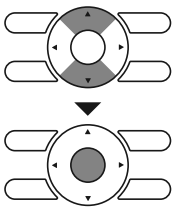
If the unit has CO2 sensor, CO2 history plot and current CO2 are displayed.

### Operation

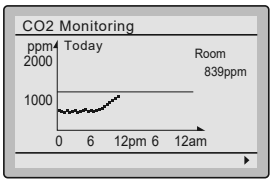
**1**




- Display the main menu screen. (See page 23.)
- Press ▼▲ buttons to select CO2 Monitoring and press **Menu/OK** button.

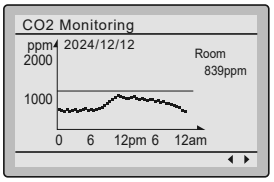


**2**

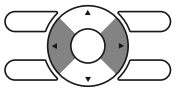



- Today's CO2 history plot and current CO2 are displayed.

**3**




- The date of the history plot can be changed using the ◀▶ buttons up to a week in the past.



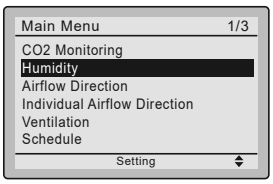
**Note**
- If the unit is powered off, history data only remains the latest 2 days.
- If the clock has not been set, the history plot is not displayed.

# Humidity

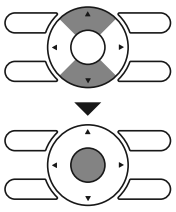
Display the current room humidity and set the humidity.

## Operation

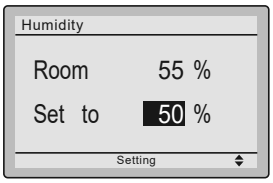
**1**



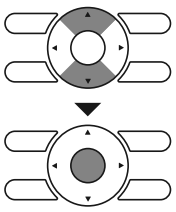

- Display the main menu screen. (See page 23.)
- Press ▼▲ buttons to select Humidity and press **Menu/OK** button.



**2**

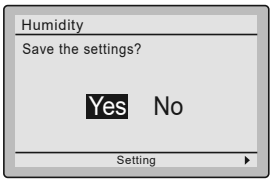



- Room Humidity is displayed.
- To set the humidity, use ▼▲ buttons for adjustment and press **Menu/OK** button. Then, the confirmation screen is displayed.

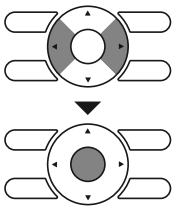


**Note**
- The menu appears when the connected unit has a humidity sensor.
- The humidity setting appears when the connected unit supports the humidity setting.

**3**




- Press ◀▶ button to select Yes on the confirmation screen. Pressing **Menu/OK** button confirms the humidity and takes you back to the basic screen.



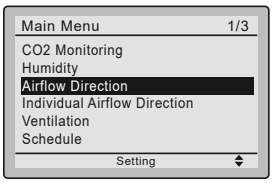
# Menu Options

## Airflow Direction

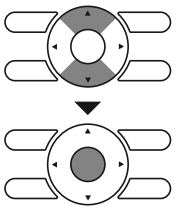
### ■Configuring Airflow direction

**Operation**

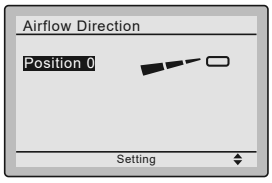
**1**




- Display the main menu screen.
(See page 23.)
- Press ▼▲ buttons to select Airflow Direction and press **Menu/OK** button.

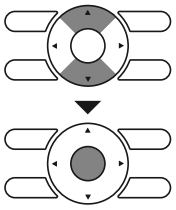


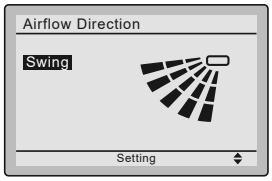
**2**



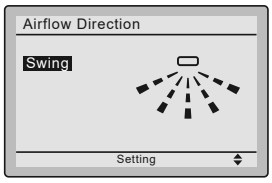

(1) Adjusting method when there is single airflow direction.

- Select the desired airflow direction from Position 0 , Position 1 , Position 2 , Position 3 , Position 4 , Swing or Auto using ▼▲ buttons.
- Press **Menu/OK** button to confirm the settings and to return to the basic screen.





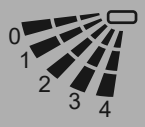

Airflow direction setting (up/down)



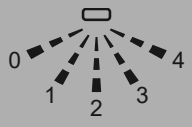

Airflow direction setting (left/right)

**Note**

- The airflow directions appear on the screen as follows:




Up/down direction



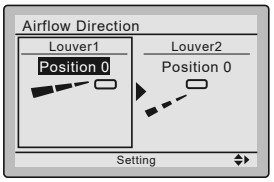

Left/right direction

0 : Position 0
1 : Position 1
2 : Position 2
3 : Position 3
4 : Position 4

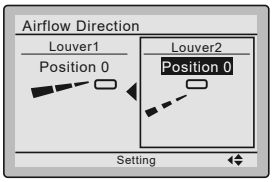
**Notice**

These operation and screen are example of single airflow direction type indoor unit.
It is different from Single flow cassette model.

## 3

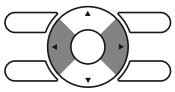



When front/back direction is selected




When left/right direction is selected

(2) Adjusting method for selecting dual airflow directions.

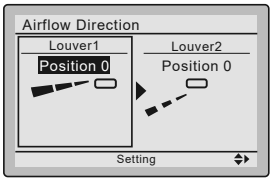


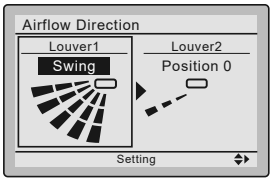
- Press ◀▶ buttons, to select front/back or left/right direction setting.

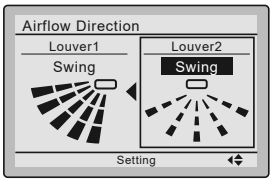
**Notice**

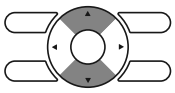
These operation and screen are example of dual airflow directions type directions indoor unit (Single flow cassette model).

## 4

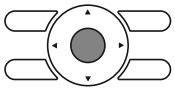


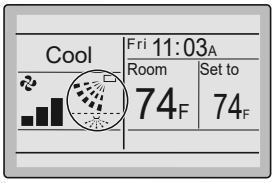



- Select the desired airflow direction from Position 0 , Position 1 , Position 2 , Position 3 , Position 4 , Swing or Auto using ▼▲ buttons.
- Selecting Swing will cause the airflow direction louver to swing position 0 to 4.
- Setting Auto is not available when left/right direction is selected.



- Press **Menu/OK** button to confirm the settings and return to the basic screen.

## 5




Basic screen (Detailed display)

- If dual airflow directions are set, then the dual airflow direction icons are displayed in the basic screen.

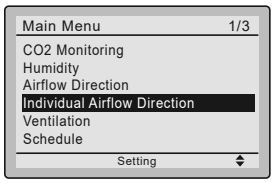
# Menu Options

## Individual Airflow Direction

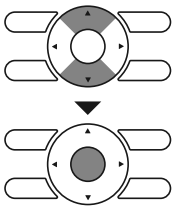
### ■Louver Setting

**Operation**

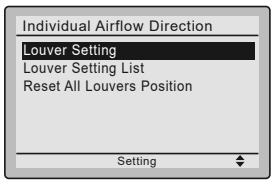
**1**



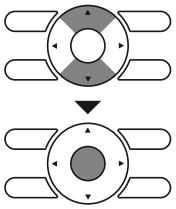

- Display the main menu screen.
  (See page 23.)
- Select **Individual Airflow Direction** and press **Menu/OK** button.



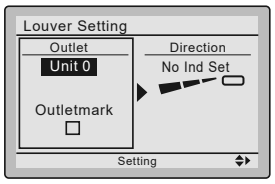
**2**



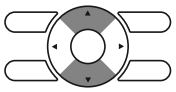

- Select **Louver Setting** and press **Menu/OK** button.

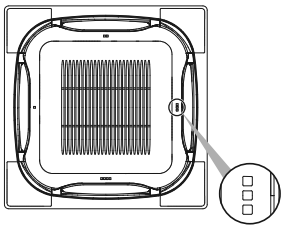


**3**



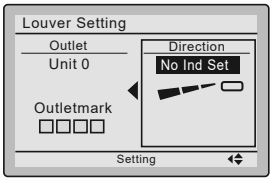

- Use ▼▲ buttons to select the unit and outlet mark.
- Maximum 16 units for each group (unit 0 till 15) can be selected.



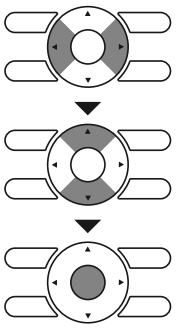


**Note**
In case of four outlets (cassette type), you can control each one of the four louvers individually (the following marks are beside each air outlet: □, □□, □□□, □□□□).

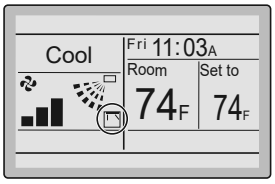
**4**




- Press ◀▶ button to select the airflow direction.
- Use ▼▲ buttons to change the airflow direction to the following:
  No Ind Set , Position 0 , Position 1 , Position 2 , Position 3 , Position 4 , Swing or Blocked .
  No Ind Set : No Individual Louver Setting.
  Blocked : Individual airflow is blocked.
- Press **Menu/OK** button to confirm the settings and to return to the basic screen.



**5**



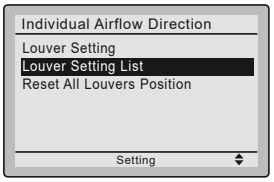

Basic screen
(Detailed display)

- If individual airflow direction is set, then the individual airflow direction icon is displayed in the basic screen.

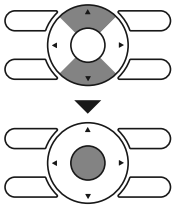
## ■Louver Setting List

### Operation

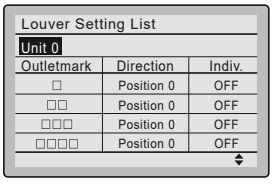
**1**



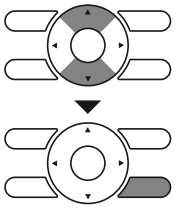

- Display the individual airflow direction screen. (See page 28.)
- Press ▼▲ buttons to select Louver Setting List and press **Menu/OK** button.



**2**




- A table shows the current settings. Press ▼▲ buttons to go to the next unit.
- Press **Cancel** button to return to the previous menu.

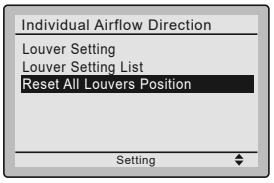


# Menu Options

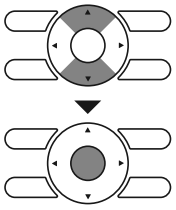
## ■Reset All Louvers Position

**Operation**

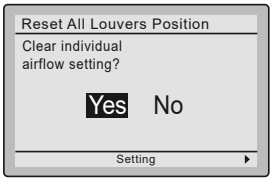
**1**



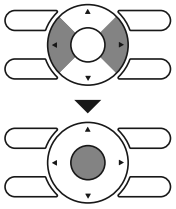

- Display the individual airflow direction screen.
  (See page 28.)
- Press ▼▲ buttons to select Reset All Louvers Position and press **Menu/OK** button.



**2**




- Press ◀▶ buttons to select Yes .
- Press **Menu/OK** button to confirm the reset and to return to the basic screen.

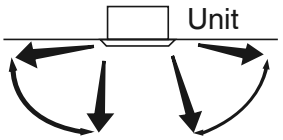


## Operational Details and Functions

### There are two types of airflow direction settings.

**Airflow direction swing**

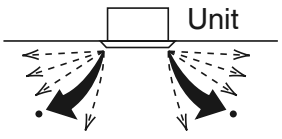
The louvers automatically oscillate up and down.




(Automatic swing) (Automatic swing)

**Airflow direction**

You can select from one of five fixed directions. (This has no relation to the angle of the louvers.)




(Desired position) (Desired position)

### Movement of airflow direction louver

Under the operating conditions shown next, airflow direction is controlled automatically. Actual operation may be different than what is displayed on the remote controller.

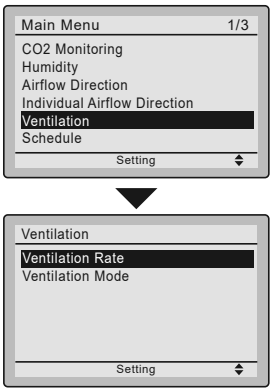
| Operating condition | • Room temperature is higher than the remote controller's setpoint (in heating operation).<br>• When defrosting (in heating operation).<br>(The airflow discharges horizontally to avoid creating a draft for the room occupants.)<br>• Under continuous operation with the airflow discharging horizontally. |
|---|---|

# Ventilation

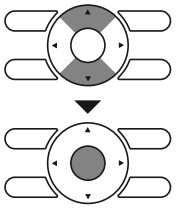
## ■Ventilation screen display properties

**Operation**

1



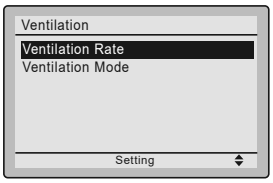

- Display the main menu screen.
  (See page 23.)
- Press ▼▲ buttons to select Ventilation on the main menu screen.
  (For models with no ventilation function, Ventilation will not be displayed on the main menu screen.)
  Press **Menu/OK** button to display the ventilation screen.



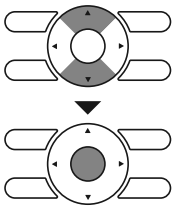
## ■Changing the ventilation rate

**Operation**

1




- Navigate to the ventilation screen
  (see above).
- Press ▼▲ buttons to select Ventilation Rate on the ventilation screen.
  Press **Menu/OK** button to display the ventilation rate screen.



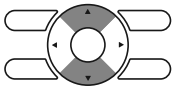
# Menu Options

**2**



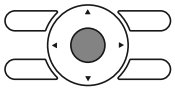

- Press ▼▲ buttons to toggle between the **Low** and **High** settings.

* Only modes that can be set are displayed.



**3**

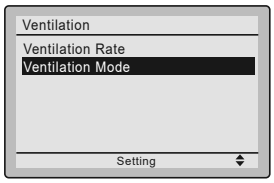
- Selecting and confirming the desired ventilation rate will take you back to the basic screen.
  (Pressing **Cancel** button takes you back to the previous screen without changing the ventilation rate.)



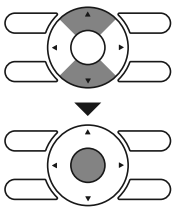
## ■Changing the ventilation mode

**Operation**

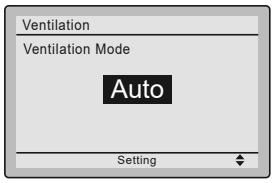
**1**



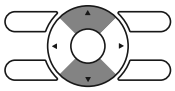

- Display the ventilation screen.
  (See page 31.)
- Press ▼▲ buttons to select **Ventilation Mode** on the ventilation screen.
  Press **Menu/OK** button to display the ventilation mode screen.



**2**



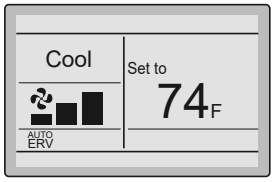

- Pressing ▼▲ buttons cycles through the settings in the order shown below.



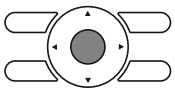
**Auto** ◂▸ **ERV** ◂▸ **Bypass**

* Only modes that can be set are displayed.

3




- Selecting and confirming the desired ventilation mode will take you back to the basic screen.
  (Pressing **Cancel** button takes you back to the previous screen without changing the ventilation mode. )



## Ventilation Mode

**Auto mode** Using information from the indoor unit (cool, heat, fan, and setpoint) and the energy recovery ventilator unit (indoor and outdoor temperatures), the ventilation mode is automatically changed between ERV and Bypass.

**ERV mode** Outside air is passed through the ERV core and is supplied to the conditioned space.

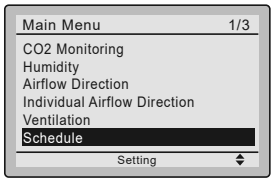
**Bypass mode** Outside air is supplied to the conditioned space without passing through the ERV core.

# Schedule

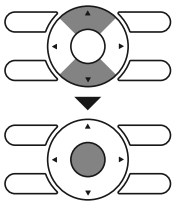
## ■Setting the schedule

**Operation** The schedule will disappear when a multizone controller is connected, but can be re-enabled by the system installer.
The schedule will disappear when a BACnet is connected, but can be re-enabled from BACnet. (Rooftop unit only)

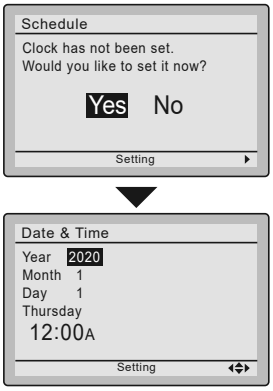
1



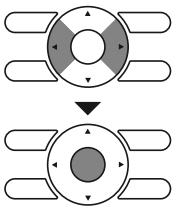

- Display the main menu screen.
  (See page 23.)
- Press ▼▲ buttons to select Schedule . Press **Menu/OK** button to display the schedule screen.



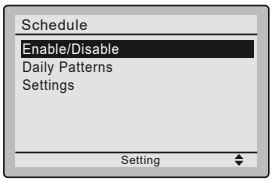
# Menu Options



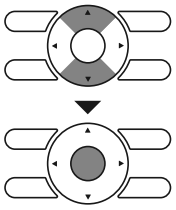

- Before setting the schedule, the clock must be set.
- If the clock has not been set, a screen like the one on the left will appear. Press ◀▶ buttons to select Yes and press **Menu/OK** button.
- The date & time screen will appear.
- Set the current year, month, day, and time. (See clock settings on page 46.)



**2**



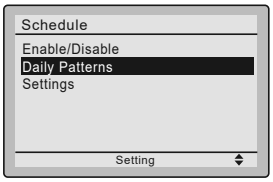

- Press ▼▲ buttons to select the desired function on the schedule screen and press **Menu/OK** button.



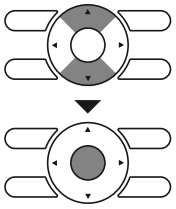
## ■Daily Patterns

**Operation**

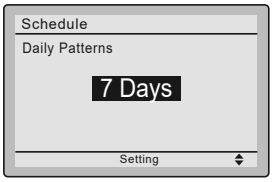
**1**



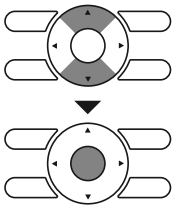

- The schedule screen will appear.
- Press ▼▲ buttons to select Daily Patterns on the schedule screen.
  The daily patterns screen will appear when **Menu/OK** button is pressed.



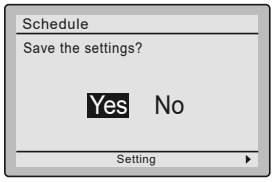
**2**



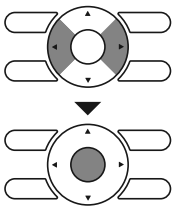

- Press ▼▲ buttons to select 7 Days, Weekday/Sat/Sun, Weekday/Weekend or Everyday on the daily patterns screen.
  The confirmation screen will appear when **Menu/OK** button is pressed.



**3**



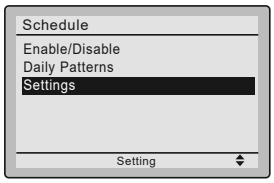

- Press ◀▶ buttons to select Yes on the confirmation screen.
  Pressing **Menu/OK** button enters the daily patterns in the schedule and takes you back to the main menu screen.



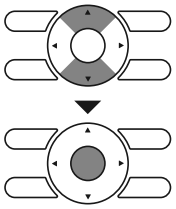
## ■Settings

### Operation

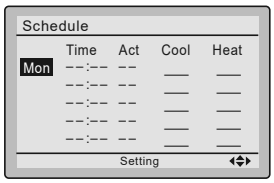
**1**




- The schedule screen will appear.
- Press ▼▲ buttons to select Settings on the schedule screen.
  The settings screen will appear when **Menu/OK** button is pressed.

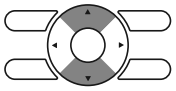


**2**

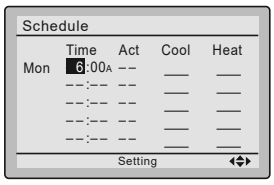


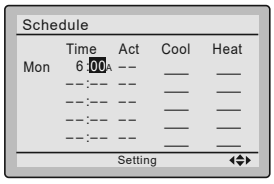

- Press ▼▲ buttons to select the day to be set.

* It cannot be selected in the case of EVDY .

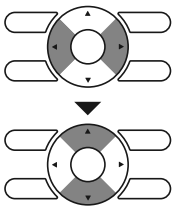


**3**



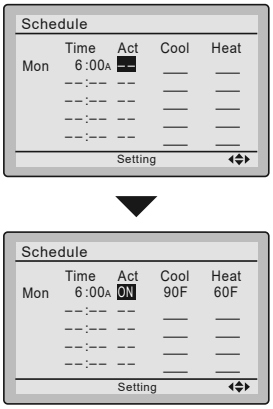



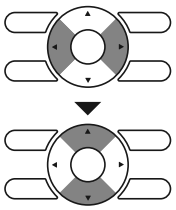

- Input the time for the selected day.
- Press ◀▶ buttons to move the highlighted item and press ▼▲ buttons to input the desired operation start time.
  Each press of ▼▲ buttons moves the numbers by 1 hour or 1 minute.



# Menu Options

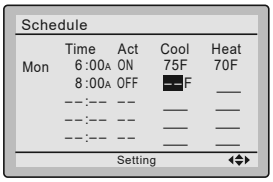
## 4



- Press ◀▶ buttons to move the highlighted item and press ▼▲ buttons to configure ON/OFF/-- settings. --, ON, or OFF changes in sequence when ▼▲ buttons are pressed.

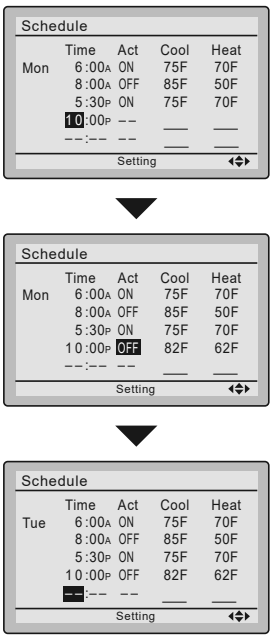
ON: The temperature setpoints can be configured.
OFF: The setback temperature setpoints can be configured.
– –: The temperature setpoints and setback temperature setpoints become disabled.

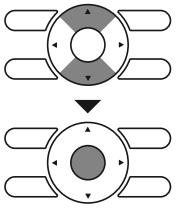



- The cooling and heating temperature setpoints for both ON and OFF (Setback) are configured.

__: Indicates that the temperature setpoint and setback temperature setpoint for this time period is not specified. The last active setpoint will be utilized.
– –: Indicates that the setback function is disabled for this time period.

## 5

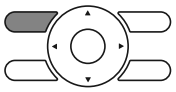


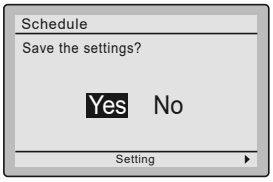
A maximum of five actions per day can be set.

- Press **Menu/OK** button when settings for each day are completed. The confirmation screen will appear.

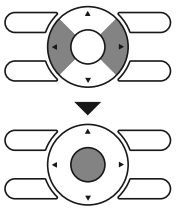
To copy the settings for the previous day, press **Mode** button so that the existing settings will be copied.
Example: The contents for Monday are copied by pressing **Mode** button after selecting Tuesday.



**6**



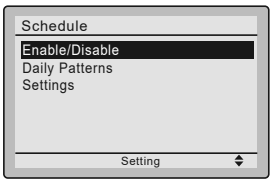

- Press ◀▶ buttons to select **Yes** on the confirmation screen.
  Pressing **Menu/OK** button confirms the settings for each day and takes you back to the basic screen.



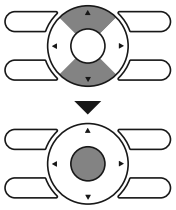
## Enabling or disabling the schedule

### Operation

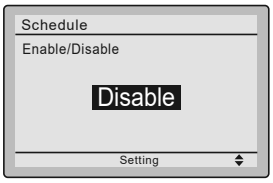
**1**



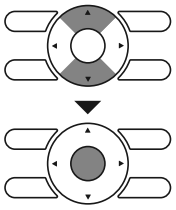

- Display the schedule screen.
  (See page 33.)
- Press ▼▲ buttons to select **Enable / Disable** on the schedule screen.
  Press **Menu/OK** button to display the enable/disable screen.



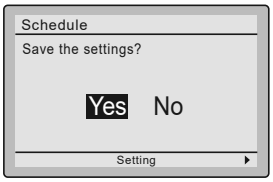
**2**



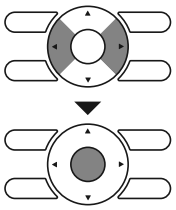

- Press ▼▲ buttons to select **Enable** or **Disable** on the enable/disable screen.
  Press **Menu/OK** button after selecting the item. The confirmation screen is displayed.



**3**




- Press ◀▶ buttons to select **Yes** on the confirmation screen.
  Pressing **Menu/OK** button confirms the enable/disable setting for the schedule and takes you back to the basic screen.



# Menu Options

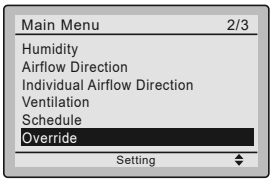
## Override

When the unit is turned on by the On/Off button during except for the occupied period, it will automatically turn off after a time set by the timer to prevent forgetting to turn it off.

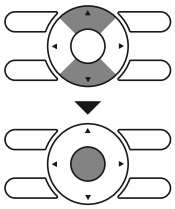
### ■Configuring and Confirming the Override settings

**Operation**

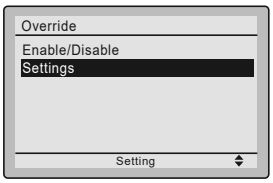
**1**



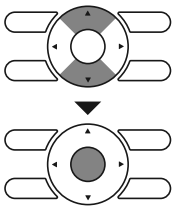

- Display the main menu screen. (See page 23.)
- Press ▼▲ buttons to select the Override on the main menu screen. Press **Menu/OK** button to display the override screen.



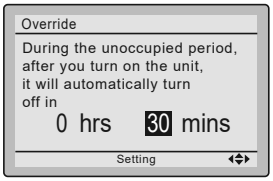
**2**



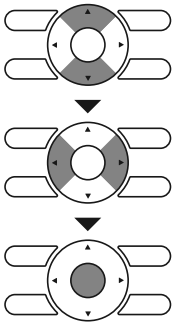

- Press ▼▲ buttons to select Settings on the override screen. Press **Menu/OK** button to display the configuration screen.



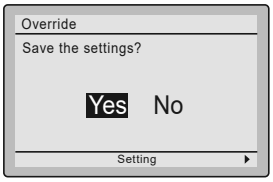
**3**



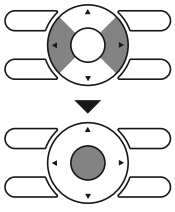

- Use ▼▲ buttons to set the time from operation start until the unit automatically stops.
- Use ◀▶ buttons to select the items of hours and minutes.
- Selections can be made in increments of 10 minutes from 10 minutes to 10 hours.
- Select the desired time and press **Menu/OK** button. The confirmation screen will appear.



**4**



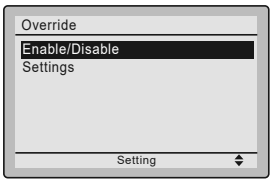

- Press ◀▶ button to select Yes on the confirmation screen. Pressing **Menu/OK** button confirms the override and takes you back to the basic screen.



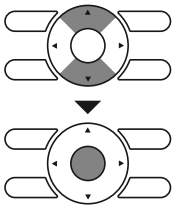
# Enabling or disabling the override

## Operation

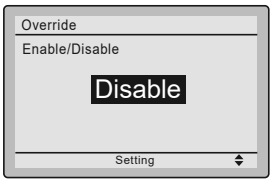
**1**



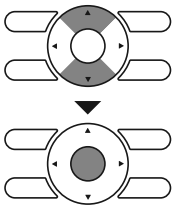

- Navigate to the override screen.
(See page 38.)
- Press ▼▲ buttons to select Enable/Disable on the override screen. Press **Menu/OK** button to display the enable/disable screen.



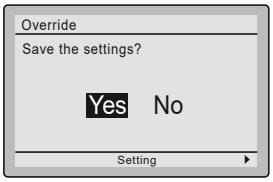
**2**



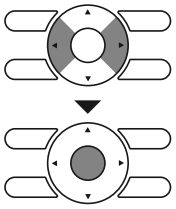

- Press ▼▲ buttons to select Enable or Disable on the enable/disable screen. Press **Menu/OK** button after selecting the item. Then the confirmation screen is displayed.



**3**




- Press ◀▶ button to select Yes on the confirmation screen. Pressing **Menu/OK** button confirms the enable/disable for the override and takes you back to the basic screen.



# Menu Options

## Optimum Start/Stop

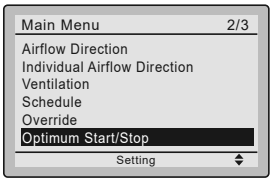
Optimum Start: Unit operation automatically starts before the occupied period to bring the space to desired occupied temperature levels at the beginning of scheduled occupancy.

Optimum Stop: Unit operation automatically slows down before the unoccupied period to bring the space to unoccupied temperature levels at the end of scheduled occupancy.

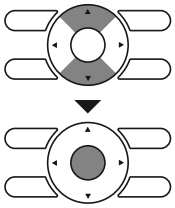
### ■Configuring and Confirming the Optimum Start/Stop settings

**Operation**

**1**

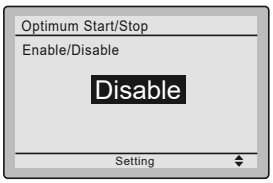



- Display the main menu screen.
  (See page 23.)
- Press ▼▲ buttons to select the Optimum Start/Stop on the main menu screen.
  Press **Menu/OK** button to display the optimum start/stop screen.

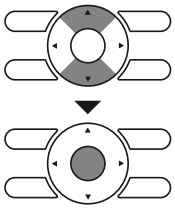


**Note**
The Optimum Start/Stop menu appears when the connected unit supports the Optimum Start/Stop.

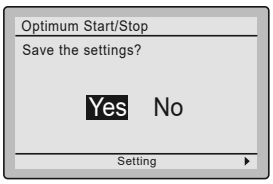
**2**



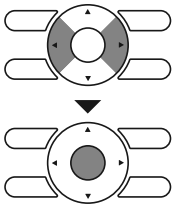

- Press ▼▲ buttons to select from Disable, Start and Stop, Start only, or Stop only.
  Press **Menu/OK** button to display the confirmation screen.



**3**




- Press ◀▶ button to select Yes on the confirmation screen.
  Pressing **Menu/OK** button confirms the settings and takes you back to the basic screen.

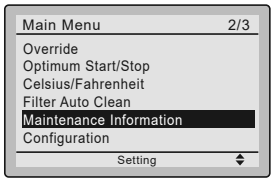


# Maintenance Information

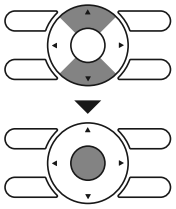
## ■Displaying the service contact and model information

**Operation**

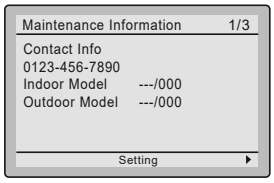
**1**




- Display the main menu screen.
  (See page 23.)
- Press ▼▲ buttons to select Maintenance Information on the main menu screen and press **Menu/OK** button.



**2**

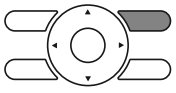



- The phone number for the contact is displayed at the top of the screen.
  (If it has not yet been entered, it will not be displayed.)
- The model information of the indoor and outdoor units (or rooftop units) for your product will be displayed at the middle of the screen.
  (For some models the product code may be displayed. )
- The serial number and detailed model name of the units are displayed on 2nd page and 3rd page.

* If the rooftop unit is connected, only one model name is displayed as a model name, and it does not display on 3rd page.

* The model name will not be displayed if the unit PCB has been replaced.

* The error code history may also be displayed. If the Operation lamp is not flashing, the unit is working properly.
The error code history is no longer displayed if you press **On/Off** button for more than 4 seconds.



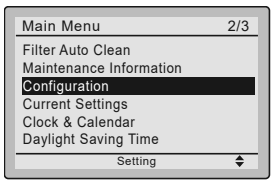
# Menu Options

## Configuration

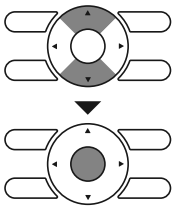
### ■Draft Prevention

**Operation**

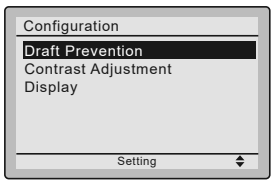
**1**



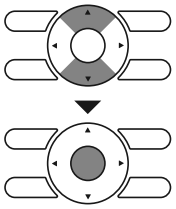

- Display the main menu screen.
  (See page 23.)
- Press ▼▲ buttons to select Configuration and press **Menu/OK** button.



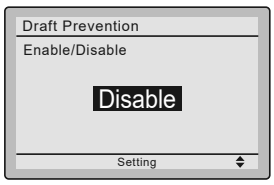
**2**



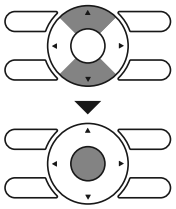

- Press ▼▲ buttons to select Draft Prevention and press **Menu/OK** button.



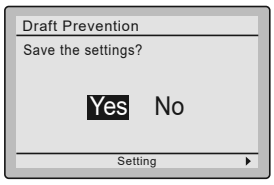
**3**



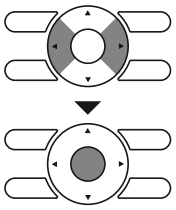

- Press ▼▲ buttons to select Enable or Disable .
- The confirmation screen will appear when **Menu/OK** button is pressed.



**4**



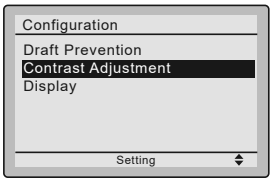

- Press ◀▶ buttons to select Yes .
- Press **Menu/OK** button to confirm the settings and to return to the basic screen.



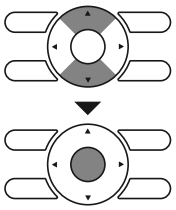
# ■Contrast Adjustment

## Operation

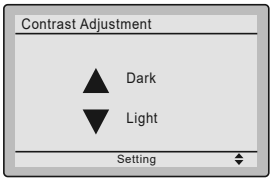
1



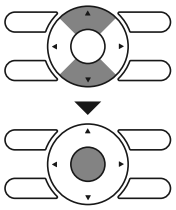

- Navigate to the configuration screen.
(See page 42.)
- Press ▼▲ buttons to select Contrast Adjustment on the configuration screen.
Press **Menu/OK** button to display the contrast adjustment screen.



2




- On the contrast adjustment screen press ▼▲ buttons until you reach the desired contrast.
After setting, press **Menu/OK** button and return to the basic screen.



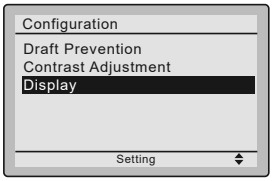
# Menu Options

## ■Display

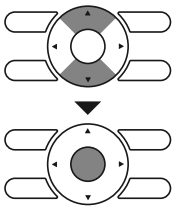
## Display Mode

**Operation**

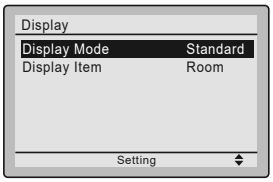
1



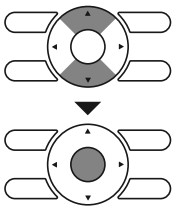

- Navigate to the configuration screen. (See page 42.)
- Press ▼▲ buttons to select Display on the configuration screen. Press **Menu/OK** button to display the display screen.



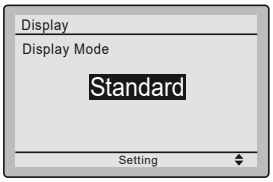
2




- Press ▼▲ buttons to select Display Mode on the display screen. Press **Menu/OK** button to display the display mode screen.

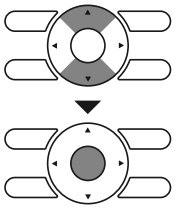


3




- Press ▼▲ buttons to select Standard, Detailed or Simple on the display screen.
- Press **Menu/OK** button to confirm the settings and return to the basic screen.

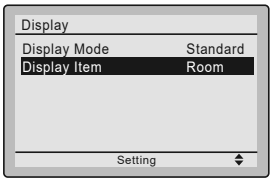
* Refer to **Display Item** to change the selectable display item for Detailed and Simple display modes. (See page 45.)



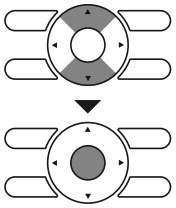
# Display Item

## Operation

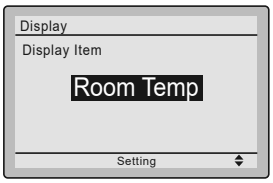
**1**




- Navigate to the display screen.
(See page 44.)
- Press ▼▲ buttons to select **Display Item** on the display screen. Press **Menu/OK** button to display the display item screen.

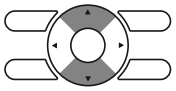


**2**




- Pressing ▼▲ buttons displays the following.

**Room Temp** ◂▸* **System** ◂
▸* **Outside Air Temp** ◂▸ **None** ◂



* Some models may not display these items even if they are selected.

- Be sure to read the following notes regarding display of room temperature and outside air temperature.

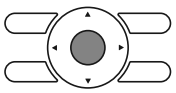
**Room Temp**

..... The temperature at the remote controller.
The temperature that is detected may be affected by the location of the remote controller.

**Outside Air Temp**

..... The temperature that is detected may be affected by factors such as the location of the unit (for example, if it is in direct sunlight) and unit operation during defrosting.

- After setting, press **Menu/OK** button to confirm settings and return to the basic screen.



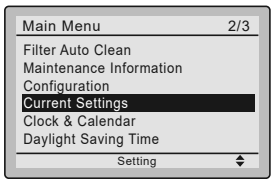
# Menu Options

## Current Settings

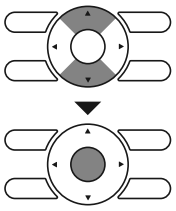
### ■Confirming the current settings

**Operation**

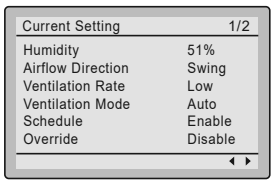
1



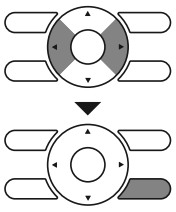

- Display the main menu screen. (See page 23.)
- Press ▼▲ buttons to select Current Settings on the main menu screen and press **Menu/OK** button.



2




- A list showing the current setting status will appear.
  Press ◀▶ buttons to go to the next item.
- Pressing **Cancel** button takes you back to the main menu screen.



Display items

| | |
|---|---|
| Humidity | Display Mode |
| Airflow Direction | Display Item |
| Ventilation Rate | Filter Auto Clean |
| Ventilation Mode | Optimum Start |
| Schedule | Optimum Stop |
| Override | |

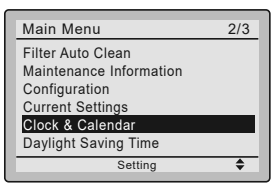
* Display items may differ depending on the model. Only the items that can be set are displayed.

## Clock & Calendar

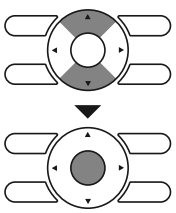
### ■Date & Time

**Operation**

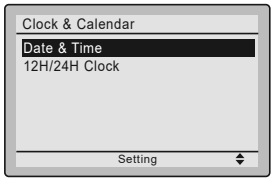
1



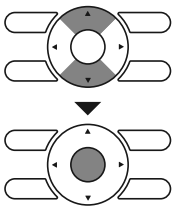

- Display the main menu screen. (See page 23.)
- Press ▼▲ buttons to select Clock & Calendar on the main menu screen.
  Press **Menu/OK** button to display the clock & calendar screen.



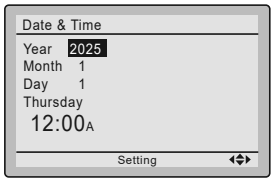
**2**



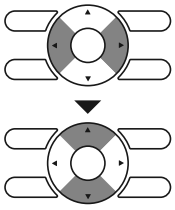

- Press ▼▲ buttons to select **Date & Time** on the clock & calendar screen.
  Press **Menu/OK** button to display the date & time screen.



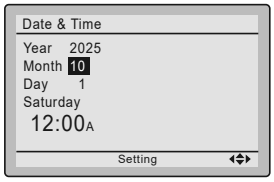
**3**



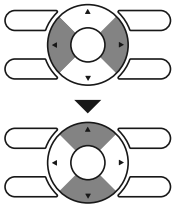

- Select **Year** with ◀▶ buttons.
  Change the year with ▼▲ buttons.
  Holding down the button causes the number to change continuously.



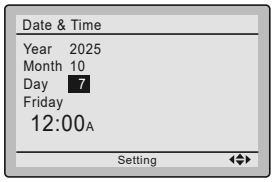
**4**



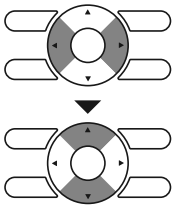

- Select **Month** with ◀▶ buttons.
  Change the month with ▼▲ buttons.
  Holding down the button causes the number to change continuously.



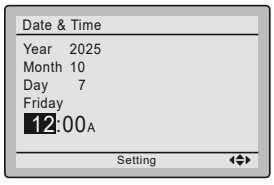
**5**



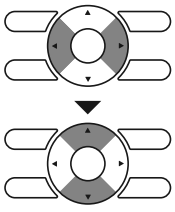

- Select **Day** with ◀▶ buttons.
  Change the day with ▼▲ buttons.
  Holding down the button causes the number to change continuously.
  Days of the week change automatically.



**6**

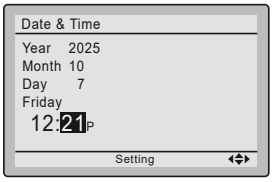



- Select **Hour** with ◀▶ buttons.
  Change the hour with ▼▲ buttons.
  Holding down the button causes the number to change continuously.

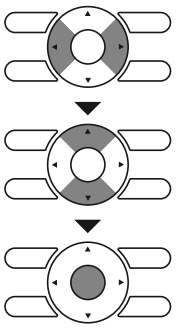


# Menu Options

**7**



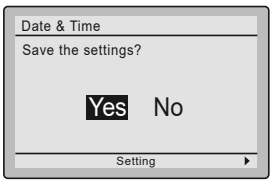

- Select **Minute** with ◀▶ buttons.
  Change the minute with ▼▲ buttons.
  Holding down the button causes the number to change continuously.
- Press **Menu/OK** button.
  The confirmation screen will appear.



Note:

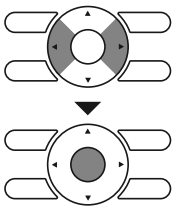
The date can be set between
January 1, 2020 and December 31, 2099.

**8**




- Press ◀▶ button to select Yes on the confirmation screen.
  Press **Menu/OK** button to confirm the clock and return to the basic screen.

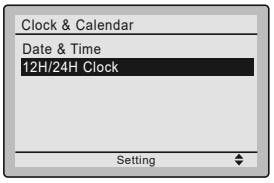
* When setting the schedule, the display returns to the settings screen.



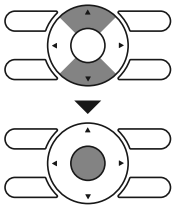
## ■12H/24H CLOCK

**Operation**

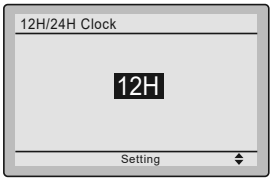
**1**




- Display the clock & calendar screen. (See page 46.)
- Press ▼▲ buttons to select 12H/24H Clock on the clock & calendar screen. The 12H/24H clock screen will appear when **Menu/OK** button is pressed.

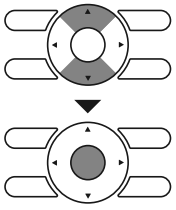


**2**

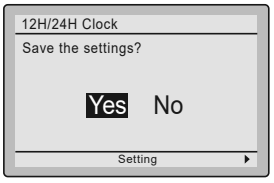



By default, the time display is set to the 12H format.

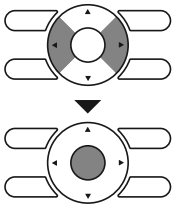
- Press ▼▲ buttons to select 12H 24H on the 12H/24H clock screen.
- The confirmation screen will appear when **Menu/OK** button is pressed.



**3**




- Press ◀▶ buttons to select Yes on the confirmation screen. Pressing **Menu/OK** button confirms the 12H or 24H and takes you back to the basic screen.

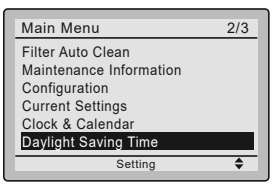


# Daylight Saving Time

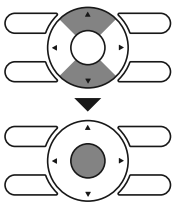
## ■How to display Daylight Saving Time

**Operation**

**1**




- Display the main menu screen. (See page 23.)
- Press ▼▲ buttons to select Daylight Saving Time on the main menu screen. Press **Menu/OK** button to display the daylight saving time screen.

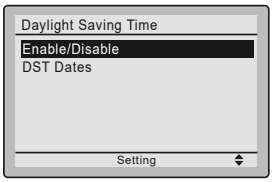


# Menu Options

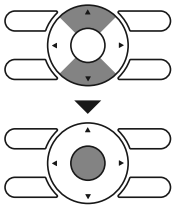
## Enabling or disabling Daylight Saving Time

**Operation**

1



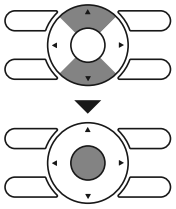

- Display the daylight saving time screen. (See page 49.)
- Press ▼▲ buttons to select Enable/Disable on the daylight saving time screen. Press **Menu/OK** button to display the enable/disable screen.



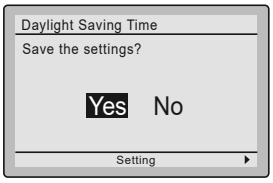
2



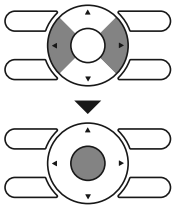

- Press ▼▲ buttons to select Enable or Disable on the enable/disable screen.
- Press **Menu/OK** button to display the setting confirmation screen.



3



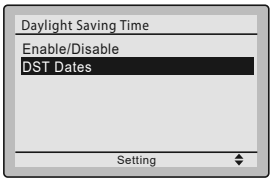

- Press ◀▶ buttons to select Yes on the setting confirmation screen. Pressing **Menu/OK** button confirms the daylight saving time enable/disable setting and takes you back to the basic screen.



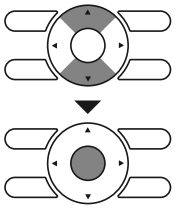
## Setting the date

**Operation**

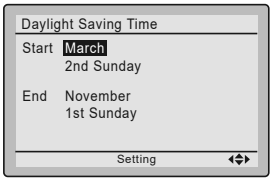
1

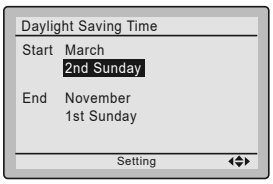



- Display the daylight saving time screen. (See page 49.)
- Press ▼▲ buttons to select DST Dates on the daylight saving time screen. Press **Menu/OK** button to display the duration setting screen.

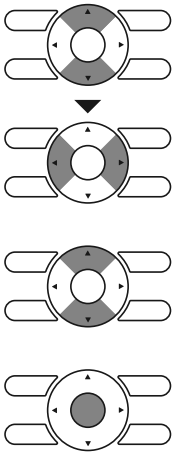


2

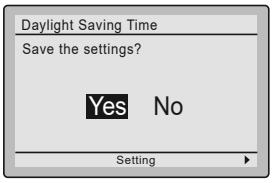


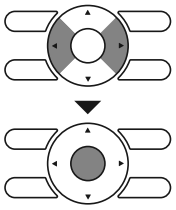

- Press ▼▲ buttons to select the start month and the end month.
- Press ◀▶ buttons to select a week. Press ▼▲ buttons to select the start week and the end week.
- After setting the Start and End dates, press **Menu/OK** button to display the setting confirmation screen.



3




- Press ◀▶ buttons to select Yes on the setting confirmation screen. Pressing **Menu/OK** button confirms the Daylight Saving Time settings and takes you back to the basic screen.



## When Daylight Saving Time is enabled

When the time in the remote controller reaches 2:00 a.m. on the specified start date, the clock is automatically set forward by one hour. When the time in the remote controller reaches 2:00 a.m. on the end date, the clock is automatically set back by one hour.

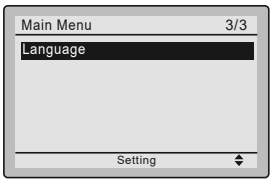
# Menu Options

## Language

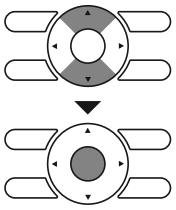
### ■Selectable Languages

**Operation**

1



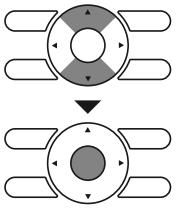

- Display the main menu screen.
(See page 23.)
- Press ▼▲ buttons to select Language on the main menu screen and press **Menu/OK** button.



2




- Press ▼▲ buttons to select the preferred language on the language screen.
**English/Français/Español** are available.
- Press **Menu/OK** button to confirm the settings and return to the basic screen.

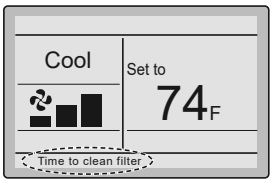


# Maintenance

## Reset Filter Indicator

**Operation**

1




- When it is time to clean or replace the filter, one of the following messages will be displayed on the bottom of the basic screen.

**Time to clean filter**

**Time to clean filter & element**

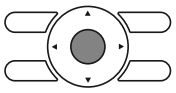
**Time to clean element**

*This is not displayed when Simple display is set.

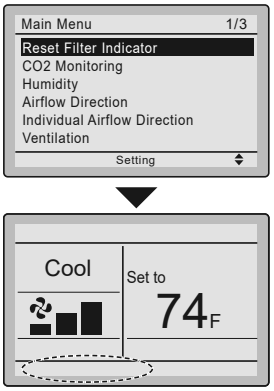
- Wash, clean, or replace the filter or element.
For details, refer to the operation manual supplied with the unit.

**2**

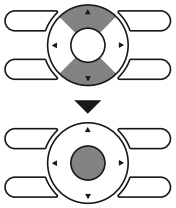
- Reset the filter indicator when the filter or element is cleaned or replaced.
- Press **Menu/OK** button.
  The main menu screen will be displayed.



**3**




- Press ▼▲ buttons to select Reset Filter Indicator on the main menu screen and press **Menu/OK** button.



- The displayed message “Time to clean filter” is no longer displayed on the basic screen when the filter sign is reset.

# Maintaining the Unit and LCD Display

- Wipe the LCD and surface of the remote controller with a dry cloth when they become dirty.
- If the dirt on the surface cannot be removed, soak the cloth in neutral detergent diluted with water, squeeze the cloth tightly, and clean the surface. Wipe the surface with a dry cloth.

**Note**

- Do not use any paint thinner, organic solvent, or strong acid.

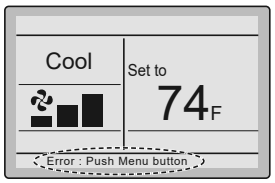
# Reference Information

## Error Code Display

### ■Contact your Daikin dealer in the following cases

**Operation**

1



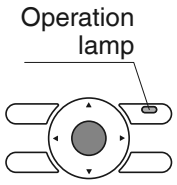

- If an error occurs, either one of the following items will flash in the basic screen.

**Error: Push Menu button**

* The Operation lamp will flash.
* For Simple display, the message is not displayed, and only the Operation lamp flashes.

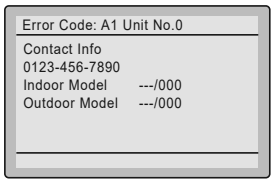
**Warning: Push Menu button**

* The Operation lamp will not flash.
* For Simple display, the message is not displayed, and the Operation lamp does not flash, either.




- Press **Menu/OK** button.
  * If the refrigerant leaks, it will automatically transition to the below screen from the basic screen. However, if the basic screen is not displayed, the transition will not occur automatically.

2




- The error code will flash on the screen for the corresponding unit number.
- The service contact and model name or code are displayed.
- If the refrigerant leaks, it shows “Refrigerant leak detected.” with an error code.
- Notify your Daikin dealer with the Error code and model name or code.

# After-sale Service

## ⚠ Warning

- **Do not relocate or reinstall the remote controller by yourself.**
  Improper installation may result in electric shocks or fire.
  Consult your Daikin dealer.



## ■ Advise your Daikin Dealer of the following items

- Model name
- Date of installation
- Failure conditions: As precise as possible.
- Your address, name, and telephone number

## ■ Repairs after Warranty Period

Consult your Daikin dealer.

## ■ Inquiry about After-sale Service

Contact your Daikin dealer.

## 2.7 <BRCW901A03/08> Wired Remote Controller Cord

### Safety Precautions

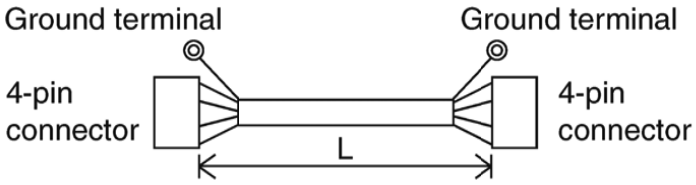
- Turn OFF the controlled equipment when connecting the equipment.
- Hold the plug of the connector when connecting or disconnecting the connector.

### Precautions for Use

- This remote controller cable is of thin-profile BRC944-series remote controller units.
- Be sure to ground both ends of the shield wire.
- Install the controlled equipment after reading through the installation manual of the equipment.

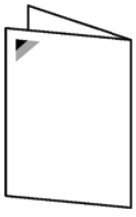
### Complete Parts

- **Remote Controller Cable**

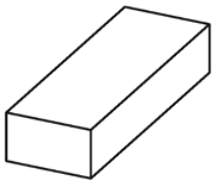



| Parts number | L |
|---|---|
| BRCW901A03 | Approx. 3m |
| BRCW901A08 | Approx. 8m |

- **Installation Manual**



- **Packing Case**



3P201487-1

# 2.8 <KRP413BB1S> Wiring Adaptor

## Safety Precautions

- Read these safety precautions carefully before installing the unit, and be sure to install the unit properly.
- This manual classifies precautions to the user into the following two categories. These warnings and cautions are for your safety. Follow them.

| | |
|---|---|
| ⚠ WARNING | Faulty installation can result in death or serious injury. |
| ⚠ CAUTION | Faulty installation can result in serious injury, damage to property, or other serious consequences. |

- After installation is complete, test the unit to confirm that it is working properly, and instruct the owner its proper use.

### ⚠ WARNING

- Installation should be left to the dealer from whom you purchased the unit, or another qualified professionals.
- Install the unit securely according to the installation manual. Faulty installation may lead to electric shock or fire.
- Be sure to use the supplied or specified parts. Using other parts may lead to electric shock or fire.
- Install the unit securely in a location that will support its weight. If installed in a poor location or improperly installed, the unit may not work as intended.
- For electrical work, follow local electric standards and the installation manual. Faulty installation may lead to fire or electric shock.
- Do not bundle the power cord, or attempt to extend it by splicing it with another cord or by using an extension cord. Do not place any other load on the power circuit used for the unit. Improper wiring may lead to electric shock, heat generation or fire.
- Use dedicated wiring for all electrical connections, and be sure to arrange the wiring so that force applied to the wiring will not damage the terminals. Poor wiring or installation may cause electric shock, heat generation or fire.

### ⚠ CAUTION

- Before installation, unplug the air conditioner to ensure safety. Failure to do so may cause electric shock.
- Static electricity may damage electric components. Before connecting cables and communication lines, and operating the switches, be sure to discharge any electrical charge from your body (by, for example, touching the earth line)
- Do not install the unit in a location where it may be exposed to flammable gases. If gas leaks and build up around the unit, it may catch fire.
- Do not place the wiring close to the power cord, inter-unit cable, or pipes which generate noise. Treat the wiring with care.

## 1. Functions and Features

- On/Off setting
- Switching between Instantaneous Contact/Normal Contact
- Connection with fan coil remote controller
- Automatic reset after power failure
- Output of normal operation signals/malfunction signals

## 2. Field Wiring

For interconnecting wiring, use Daikin KDC100A12 cable (not supplied) or other similar cable. Use a vinyl-covered wire or cable with four conductors each with a thickness of 0.2 to 1.25 mm².

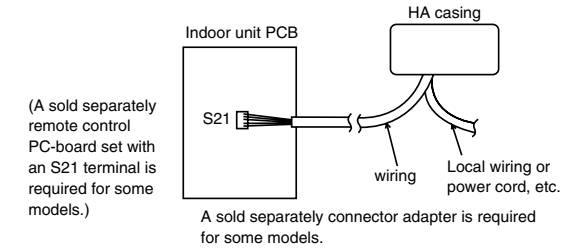
■ **Optional cable KDC100A12 (without connectors)**

Specifications: 0.2 mm² × 4 core (sheathed)
Outer diameter: ϕ5.3
Length: 100 m
Colour: Grey

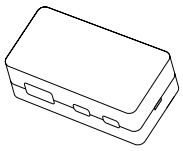
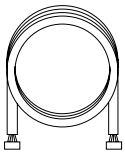
Note : Keep any wiring for the control unit away from the power cord to prevent electrical noise.

## Installation ①

### 1 Installation diagram




### 2 Components

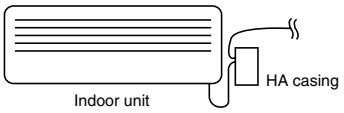
| | |
|---|---|
| ①HA casing ASSY (Remote Control PCB is attached in the HA casing.)  | ②Wiring (approx. 0.8 m) (Cannot be made longer.)  |
| ③Accessories<br>Binding band (6 pcs.)<br>• Screws for attaching to the wall (3 pcs.) | |
| ④Installation manual | |

3P248024-2H

## Installation ②

### Attaching HA Case ASSY

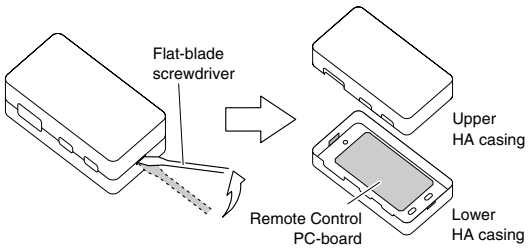
● Use the 3 supplied screws to attach the HA casing ASSY.




Install the HA casing ASSY as close to the indoor unit as possible.

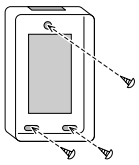
① Removal of upper HA casing

(1) Insert a flat-blade screwdriver into the groove between the upper and lower HA casings.



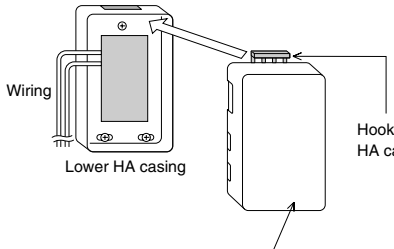

(2) Lift the handle of the screwdriver upward.

② Mount and secure the lower HA casing directly on the wall with the provided screws inserted into the screw holes (a round hole and two ellipse holes) of the casing.



| NOTE | Mount the HA casing in a direction where the wiring through-holes will be hidden in order to prevent infants from putting their fingers into the HA casing and the LED light on the internal PC-board from leaking outside. |
|---|---|

③ After connecting the cables (refer to the following sections), replace the case front. Be careful not to damage the wiring in the case.




Press the lower part of the upper HA casing and press fit it onto the lower HA casing.
Press the upper HA casing precisely until a clicking sound is heard.

## Wiring ①

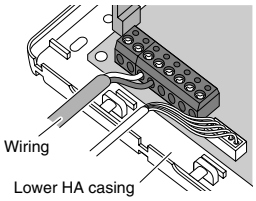
### 1. Wiring

①Connect one end of the wiring to connector S21 of the PCB in the indoor unit.
②Connect the other end of the wiring to connector S6 of the Remote Control PCB.
③Connect field wiring according to the functions assigned to each connection terminal of the Remote Control PCB.
④Secure all wires.

#### 1 Securing wires in the HA casing ASSY

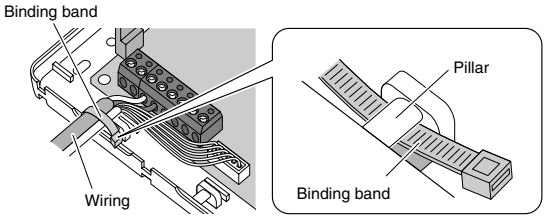
① Connection of wiring

Connect the wiring to the connector terminals.

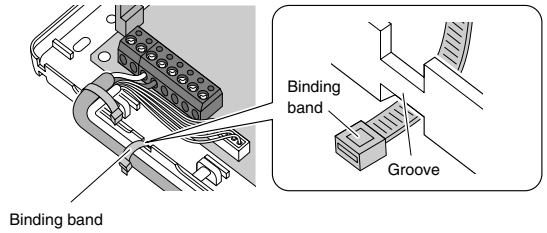



② Fixation of wiring

(1) Insert the provided binding band under the pillar of the HA casing and secure the covers of the wiring with the binding band.



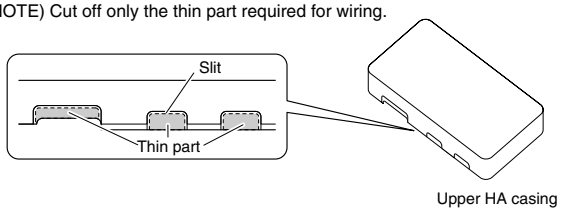

(2) Insert the second binding band into the groove on the side of the HA casing and fix the wiring securely so that the wiring will not be disconnected.




**A large number of wires**

Make a slit with an appropriate tool, such as a cutter knife, on the thin part of the upper HA casing along the frame. Then cut the part with an appropriate tool, such as a pair of nippers.

(NOTE) Cut off only the thin part required for wiring.




#### 2 Securing wires in the indoor unit

● The method for securing wire varies depending on the model of the air conditioner. See your air conditioner installation manual for details.

# Wiring ②

## 2. Automatic Reset After Power Failure

● This PCB stores the following data in the event of a power failure (the storage period is limitless).
①On/Off (see Note 1) ②Operation modes (see Note 2) ③Temperature setting
④Air flow rate ⑤On/Off status of remote controller
(Note 1 When SW1-2 is in Off mode, the unit will not be activated.)
(Note 2 The following settings apply to the models below.)

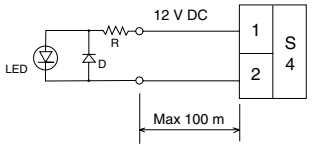
| Mode before the power outage / Room air conditioner | COOLING | HEATING |
|---|---|---|
| Models with Humid heating and Reheating dehumidifying functions. | DRY COOLING | HUMID HEATING |
| Models with Reheating dehumidifying function. | | HEATING |

(Note 3 Not all settings will be saved (e.g., humidity or swing settings will not be saved)).

## 3. Monitor Signal Output (normal operation and malfunction)

● Maximum length of the wiring is 100 m. No external power supply is required.

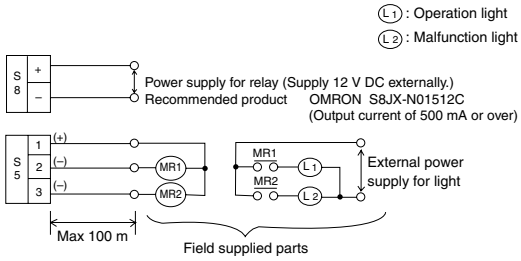
### 1 Monitor signal output for LED




■ **Locally procured parts**

| Item | Manufacturer | Type |
|---|---|---|
| LED | Rohm | SLR-342 |
| D | Rohm | 1SS133 |
| R | | 510 ohm 1/4W |

### 2 Monitor signal output (normal operation and malfunction)using external relay contacts




■ **Field procured parts (Recommended external relay contacts)**

| Manufacturer | Type | Coil rated voltage | Coil resistance |
|---|---|---|---|
| Omron | MY relay | 12 V DC | 160 ohm ± 10% |

## 4. Connection with Remote Controller

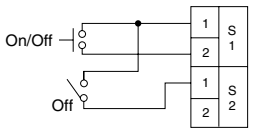
Example connections with three kinds of remote controllers are shown bellow.
Note: These connections cannot be used in combination.

### 1 Remote control with switch (field supply)

● Set SW1-1 to Off and select Operation Mode 1.

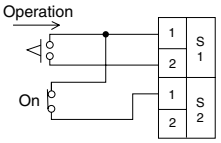



**<Instantaneous Contact>**




● The remote controller most recently used (local or air conditioner) takes precedence.
● Use a remote controller with a pulse width of 100 msec or more.

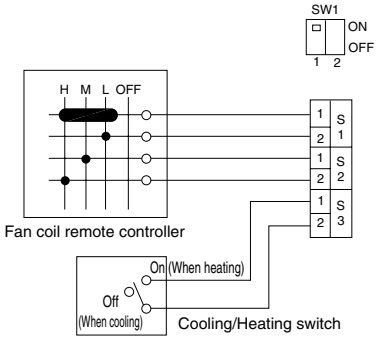
**<Normal Contact>**




● Power On/Off cannot be controlled from the unit's remote controller. (Three beeps for signal reception will be heard continuously when the wireless remote controller is operated.)
● When power is restored after a power failure in this mode, On or Off is determined according to the current settings of the remote controller.

### 2 Fan coil remote controller

● Set SW1-1 to On and select Operation Mode 2.
● Most settings (power On/Off, air flow rate, mode change) cannot be made using the air conditioner's remote controller.
● When power is restored after a power failure in this mode, On or Off is determined according to the current settings of the remote controller.
● When the Cooling/Heating mode is changed, use the air conditioner's remote controller to adjust the temperature.



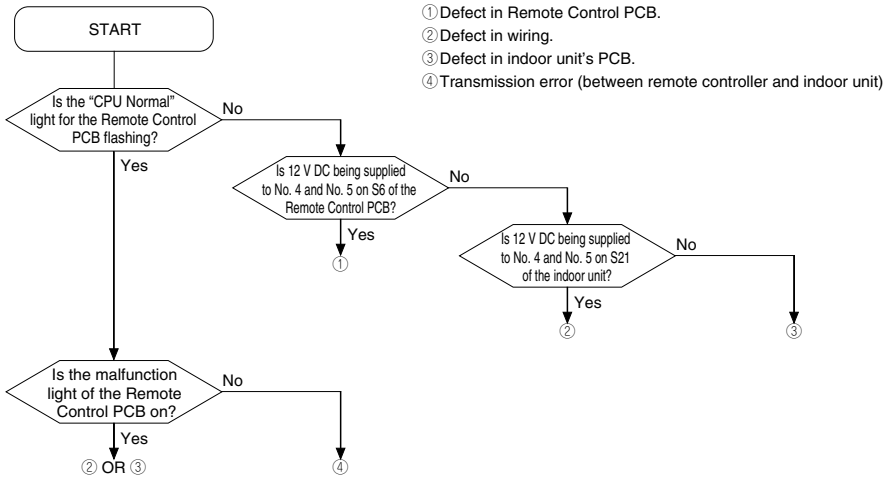

3P248024-2H

# Test Operation and Confirmation

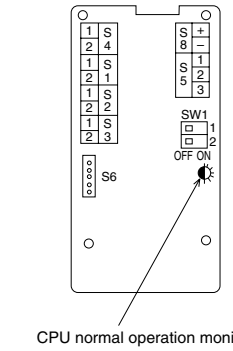
## 1. When the System is Not Working

□ Is the air conditioner working properly?
□ Are the connectors of the wiring properly connected?
□ Are the remote controller and field wiring properly connected?
□ Are all switch settings correct?
□ If there is nothing apparently wrong, conduct a diagnostic check using the following procedure.

**■ Diagnostic check**




## 2. Switch Settings and Connection Terminals




CPU normal operation monitor
(Flashes when the operation is normal)

| | | | | | |
|---|---|---|---|---|---|
| SW1-1 | Selecting the operation mode | OFF | Operation mode 1 (Used with the exception of fan coil remote controller settings) | | |
| | | ON | Operation mode 2 (Used with fan coil remote controller settings) | | |
| SW1-2 | Selecting On/Off when power is restored after a power failure | OFF | Always Off | | |
| | | ON | Off if operation was in Off mode before power failure; On if operation was in On mode before power failure | | |
| S1<br>S2<br>S3 | SW1-1: OFF (Operation mode 1) | | | Instantaneous contact | Normal contact |
| | | S1 (1) - S2 (1) | | OPEN | CLOSE |
| | | S1 (1) - S1 (2) | | Pulse input On/Off switching | OPEN, Not activated |
| | | | | | CLOSE, Activated |
| | | S2 (2), S3 | | Not used | |
| | SW1-1: ON (Operation mode 2) | S1, S2 OPEN | | Not activated | |
| | | S1 (1) - S1 (2) CLOSE | | On, airflow: L tap | |
| | | S1 (1) - S2 (1) CLOSE | | On, airflow: M tap | |
| | | S1 (1) - S2 (2) CLOSE | | On, airflow: H tap | |
| | | S3 (With the remote controller only) | OPEN | Cooling | |
| | | | CLOSE | Heating | |
| S4 | (1) - (2) | Voltage on (12 V DC), normal operation light output | | | |
| S5 | (1) - (2) | Normal operation light output (power for light required) | | | |
| | (1) - (3) | Malfunction light output (power for light required) | | | |
| S6 connector | | Connect with connector S21 on the PCB of the indoor unit | | | |
| S8 | (+) - (–) | Relay 12 V DC power supply terminal (Field supplied parts) | | | |

## 2.9 <DCS302C71> Central Remote Controller (Installation)

Please read these "SAFETY CONSIDERATIONS" carefully before installing air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation.
Please instruct the customer on how to operate the unit and keep it maintained.
Also, inform customers that they should store this installation manual along with the operation manual for future reference.
This air conditioner comes under the term "appliances not accessible to the general public".

Meaning of warning, caution and note symbols.

⚠ **WARNING** ..... Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ **CAUTION** ..... Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be sued to alert against unsafe practices.
⚠ **NOTE** ..... Indication situation that may result in equipment or property-damage-only accidents.

### ⚠WARNING

**Ask your dealer or qualified personnel to carry out installation work. Do not try to install the machine by yourself.**
Improper installation may result in water leakage, electric shocks or fire.

**Perform installation work in accordance with this installation manual.**
Improper installation may result in water leakage, electric shocks or fire.

**Be sure to use only the specified accessories and parts for installation work.**
Failure to use the specified parts may result in water leakage, electric shocks, fire or the unit falling.

**Carry out the specified installation work after taking into account strong winds, typhoons or earthquakes.**
Improper installation work may result in the equipment falling and causing accidents.

**Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations and this installation manual.**
An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.

**Make sure that all wiring is secured, the specified wires and used, and no external forces act on the terminal connections or wires.**
Improper connections or installation may result in fire.

**When wiring the power supply and connecting the remote controller wiring and transmission wiring, position the wires so that the electric parts box lid can be securely fastened.**
Improper positioning of the electric parts box lid may result in electric shocks, fire or the terminals overheating.

**Before touching electrical parts, turn off the unit.**

**Ground the air conditioner. Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire.**
Incomplete grounding may result in electric shocks.

**When installing or relocating the system, be sure to keep the refrigerant circuit free from substances other than the specified refrigerant (R410A), such as air.**

**Do not reconstruct or change the settings of the protection devices.**
If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may result.

**Do not touch the switch with wet fingers.**
Touching a switch with wet fingers can cause electric shock.

**Install an leak circuit breaker, as required.**
If an leak circuit breaker is not installed, electric shock may result.

**Do not install the air conditioner or the remote controller in the following locations:**
(a) where a mineral oil mist or an oil spray or vapor is produced, for example in a kitchen
Plastic parts may deteriorate and fall off or result in water leakage.
(b) where corrosive gas, such as sulfurous acid gas, is produced
Corroding copper pipes or soldered parts may result in refrigerant leakage.
(c) near machinery emitting electromagnetic waves
Electromagnetic waves may disturb the operation of the control system and result in a malfunction of the equipment.
(d) where flammable gases may leak, where there are carbon fiber or ignitable dust suspensions in the air, or where volatile flammables such as thinner or gasoline are handled.
Operating the unit in such conditions may result in fire.

### ⚠CAUTION

**Be very careful about product transportation.**

**Safely dispose of the packing materials.**
Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
Tear apart and throw away plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

**Do not turn off the power immediately after stopping operation.**
Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.

### ⚠NOTE

**Install the indoor and outdoor units, power supply wiring and connecting wires at least 3.5ft. away from televisions or radios in order to prevent image interference or noise.**
(Depending on the radio waves, a distance of 3.5ft. may not be sufficient enough to eliminate the noise.)

**Remote controller (wireless kit) transmitting distance can result shorter than expected in rooms with electronic fluorescent lamps.(inverter or rapid start types)**
Install the indoor unit as far away from fluorescent lamps as possible.

**This unit is a class A product.**
In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

**Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.**

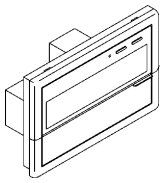
1P124687-1A

# ❶ COMPONENTS

Check the following components are included in this optional accessory before installation.

| | |
|---|---|
| Installation screw (M4 × 16) | 4 |
| Operation manual | 1 |
| Installation manual | 1 |
| Installation table | 1 |

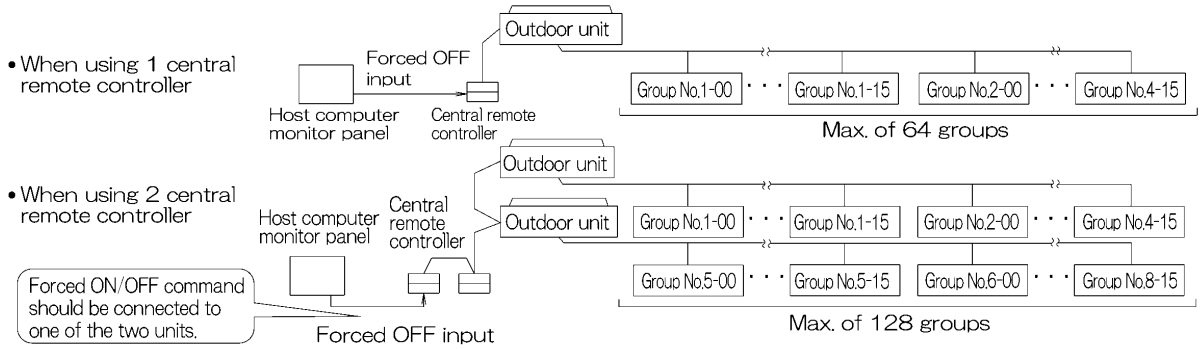
Body



When using this optional accessory an electric parts box of KJB311A is required.
For installation, a steel electric parts box to be embedded is mandatory.

# ❷ SYSTEM CONFIGURATION

With the central remote controller, unified operation/stop is possible with up to a maximum 64 groups of indoor units.
When using 2 central remote controllers, unified operation is possible with up to a maximum 128 groups.
With this optional accessory, setting of control modes including operation, stop, operation controlled by timer, and ON/OFF control possible/impossible by remote controller can be set individually by zones while it enables to control and display the operation state such as set temperature.
It can be connected with the external key system, host computer monitor panel, etc., through forced OFF input (no-voltage normally open contactor).
A zone is a one or more groups together. In general, the same settings are used throughout a zone.



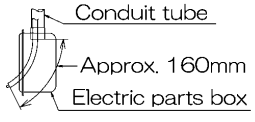

The central remote controller and the separately sold remote control adapter circuit board or group remote control adapter cannot be used together. See the D-BACS design guide for details.

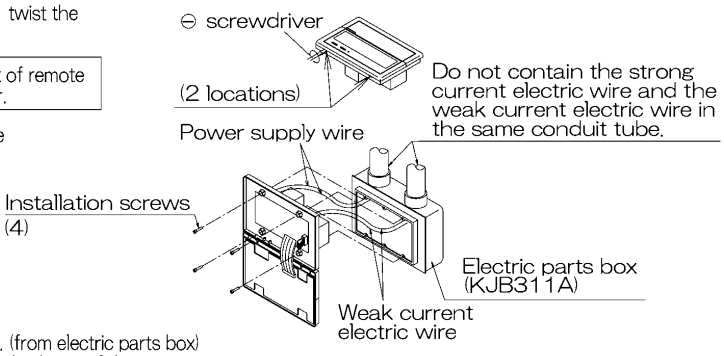
# ❸ INSTALLATION

(1) Open the upper part of remote controller.
Insert a ⊖ screwdriver(2 locations) into the recess between the upper part and the lower part of remote controller and twist the screwdriver lightly.

PC board is attached with both the upper and lower part of remote controller. Do not damage the board with the screwdriver.

(2) Open the upper part of remote controller and install the Electric parts box with the attached installation screws (M4 x 16).




NOTE) Suitable length of the electric wire is about 160mm. (from electric parts box)
If it is difficult to contain a long wiring, strip the sheathed part of the wiring.

1P124687-1A

## ❹ INITIAL SETTING

Setting (1) through (3) are initialized when power is turned ON, therefore complete settings BEFORE activating the power. (The positions of connectors and switches used for settings in this section are shown in Fig. 1.)

(1) Connector for setting master controller (X1A) (Provided with connector at factory set)
- When using only 1 central remote controller, do not disconnect the connector for setting master controller. (Use the unit with the connector in the state in which it was delivered.)
- When using multiple central remote controllers, or using the central remote controller in conjunction with the optional controllers for centralized control, makes settings as indicated in the below table.

| Pattern of connection of optional controllers for centralized control | | | Connector for setting master controller (X1A) Setting, Removed | | |
|---|---|---|---|---|---|
| Central remote controller | Unified ON/OFF controller | Schedule timer | Central remote controller | Unified ON/OFF controller | Schedule timer |
| 1 to 4 | 1 to 16 | 1 | Set one to "Used" and all the rest to "Not used" | Set all to "Not used" | "Not used" |
| | | 1 | | | "Not used" |

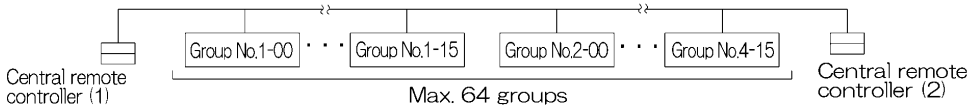
(Remove all the connectors for the central remote controller, the on/off controller, and the schedule timer when using the unit together with the Ve-UP controller, the master station II, the DMS interface, the payment management unit, or the parallel interface station.)

(2) Address setting
Two central remote controllers can be used as shown in ❷ SYSTEM CONFIGURATION, to control anywhere up to a max. 128 groups of indoor units. In this case, group address must be set. This is done with the switch for setting each address (SS3).

| SS3 setting | Indoor unit address |
|---|---|
| SETTING EACH ADDRESS 5-00 ~ 8-15 (1-00 ~ 4-15) | To control indoor units from group Nos. 1-00 through 4-15 |

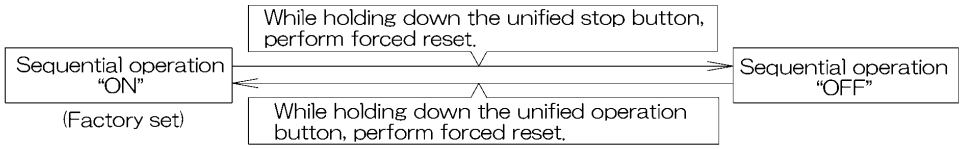
| SS3 setting | Indoor unit address |
|---|---|
| SETTING EACH ADDRESS 5-00 ~ 8-15 (1-00 ~ 4-15) | To control indoor units from group Nos. 5-00 through 8-15 |

(3) MAIN/SUB changeover switch setting
With two central remote controllers, centralized control (indoor units) is possible from different locations. In this kind of set-up, it is necessary to set the MAIN/SUB changeover switch.




One of the two central remote controllers (1) · (2) is set to "MAIN" while the other is set to "SUB".

(4) Setting of the sequential operation function
The central remote controller is equipped with a sequential operation function that sequentially turns indoor units on in 2-second intervals during unified operation. (Sequential operation is factory set to "ON.") To switch sequential operation ON or OFF, set as follows.




NOTE: The sequential operation function is designed to reduce the load on the power supply equipment, but does not guarantee that compressors will not be started simultaneously. You cannot therefore count on a capacity reduction effect by power supply equipment breaker selection.

(5) Forced reset switch
When changing the setting of the connector for setting master controller, etc., you can reset simply by setting it to the reset side once and returning to the normal side, without turning the power OFF.
(For normal operation, set the switch to the normal side.)

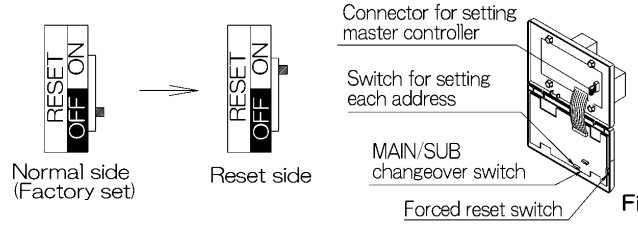
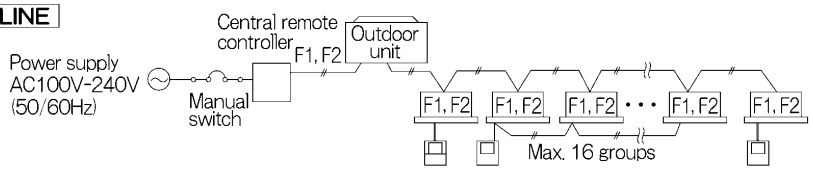



Fig. 1

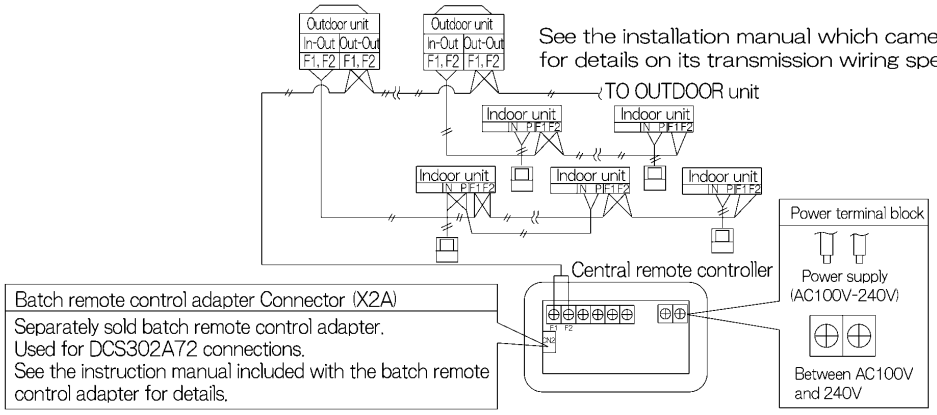
1P124687-1A

# 5 ELECTRIC WIRING

## WIRING OUTLINE




## WIRING TO THE INDOOR UNIT AND OUTDOOR UNIT




See the installation manual which came with the air conditioner for details on its transmission wiring specifications.

Wiring specifications

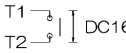
| | |
|---|---|
| Power supply wiring | 2mm² |
| Transmission wiring for control | 0.75 – 1.25 mm² sheathed vinyl cord or cable (balanced type) – maximum length 1000 m (total overall wiring length 2000 m) |
| Manual switch | 10A or 15A |

Wire the indoor units to the outdoor units and between all power, indoor units, and remote controllers. See the instruction manual included with the indoor and outdoor units for details.

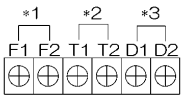
CONTROL TERMINAL STRIP

*1 For connecting Indoor unit (F1, F2)

*2 Forced OFF input (T1, T2)
None of the indoor units connected to the forced OFF input contact (non-voltage contact with minimal current) willoperate when it is shut off.
Use only contactors which guarantee the minimum applicable load DC 16V, 10mA.




NOTE) Use instantanecous contactor of over 200m sec. energizing time, when necessary.




*3 For schedule timer (D1, D2)
Power can be supplied to the schedule timer (DST301B61) separately sold. For details, refer to the installationmanual of the schedule timer.

Wire *2 and *3 only when necessary.

(NOTE)
Do not connect the power supply wiring (100 to 240V) to the control terminal strip. If connected by mistake, it may damage or burn electrical parts of optional controllers for centralized control and indoor unit. It may result in serious danger. Be sure to check wirings before turning the power ON.

## 6 SETTING GROUP NO. FOR CENTRALIZED CONTROL

Set the group number of each group of the indoor unit from the remote controller. (In case of no remote controller, also connect the remote controller and set the group No. Then, remove the remote controller.)

(1) Turn ON the power of the indoor unit and central remote controller.
(Unless the power is ON, no setting can be made.)
Check that the installation and electrical wiring are correct before turning the power supply ON.
(When the power supply is turned ON, all LCD appear once and the unit may not accept the operation for about one minute with the display of "88".)

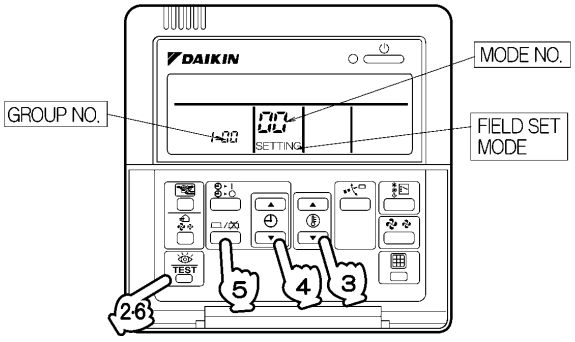
(2) While in the normal mode, hold down the " TEST " button for a minimum of 4 seconds.
The remote controller will enter the FIELD SET MODE.

(3) Select the MODE No. "00" with the " " button.

(4) Use the " " button to select the group No. for each group.
(Group numbers increase in the order of 1-00,1-01,...1-15, 2-00,...8-15.)

(5) Press " " to set the selected group No.

(6) Press " TEST " to return to the NORMAL MODE.




NOTES)
- For simplified remote controller, see the installation table.
- See the instruction manuals which came with the Ventiair and adapters (i.e., multi-purpose adapters) for details on their Group No. settings.

NOTICE Enter the group No. and installation place of the indoor unit into the installation table in the operation manual.
Be sure to keep the operation manual for maintenance.

## 7 TEST OPERATION (Perform a test operation in the individual screen before registering zones.)

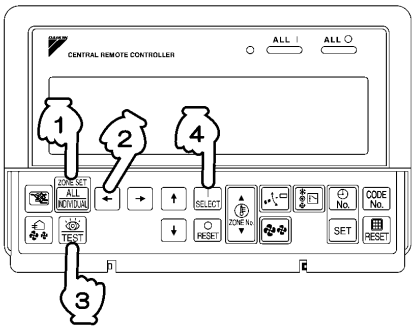
Before starting test operation, check that the power is supplied to the indoor and outdoor units, and central remote controller.

(1) Select the display "INDIVIDUALLY"
Press " " button to display "INDIVIDUALLY"

(2) Select the group to be tested.
Select the group No. with " " " " " " " " button.

(3) Press " TEST " button to select the test operation mode.
" TEST " is displayed.
" HOST " is displayed on the remote controller.

(4) Press " " button within 10 seconds after entering into the test operation mode.
Operation the unit for 30 minutes.
When pressing the " " button, the unit stops operating.
If the operation lamp flashes, it indicates a malfunction.
Call the group of flashing display, confirm malfunction code, and check the source of malfunction.
(The operation manual lists all error codes, so refer to it.)




NOTES
- For test operation, refer to the installation manual of the outdoor unit.
- After turning the power supply ON, if the unit does not accept operation for two minutes or more with the display of "88", check the following points.
  - Check that setting of the connector for setting master controller is correct.
  - Check that the group No. for centralized control has been set.

1P124687-1A

## 2.10 <DCS302C71> Central Remote Controller (Operation)

# BEFORE USE

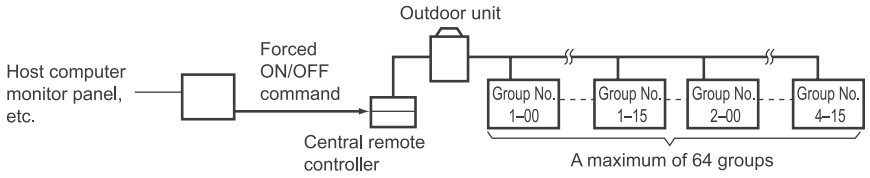
### ■ GENERAL DESCRIPTION OF SYSTEM

This central remote controller can monitor and control up to 64 indoor unit groups.
Using two central remote controllers allows monitoring and controlling of up to 128 indoor unit groups.

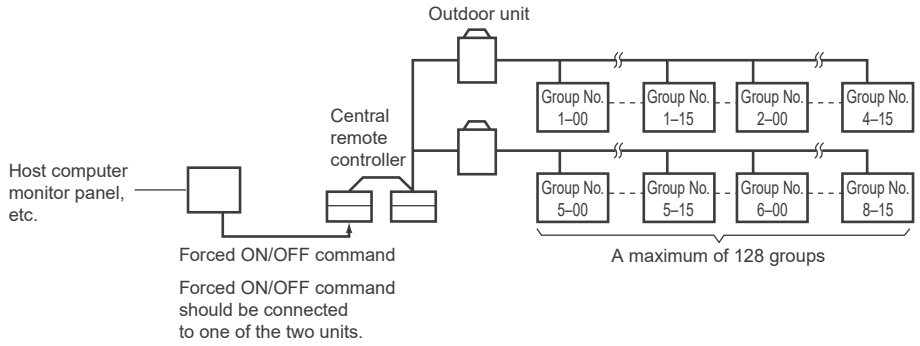
Main Functions

1. Batch starting and stopping of indoor units connected to the central remote controller.
2. Handling of operation settings such as start/stop, timer operation, remote controller prohibition/permission, etc., and operation status settings such as temperature.
3. Operation status monitoring of operation mode, set temperature, etc.
4. Can be connected to an external central monitor panel and key system using the forced stop input (non-voltage a connector).

- When using 1 central remote controller




- When using 2 central remote controllers

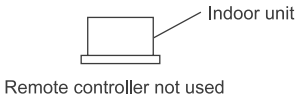



(The central remote controller and the separately sold remote control adapter circuit board or group remote control adapter cannot be used together.)

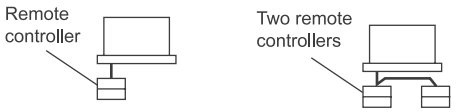
∗ GROUP OF INDOOR UNIT refers to the below.

1. A single indoor unit without remote controller

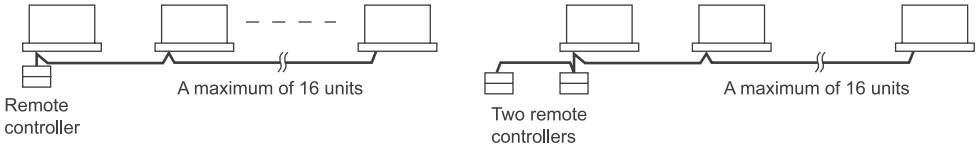
**1.** A single indoor unit without remote controller




**2.** A single indoor unit controlled by one or two remote controllers



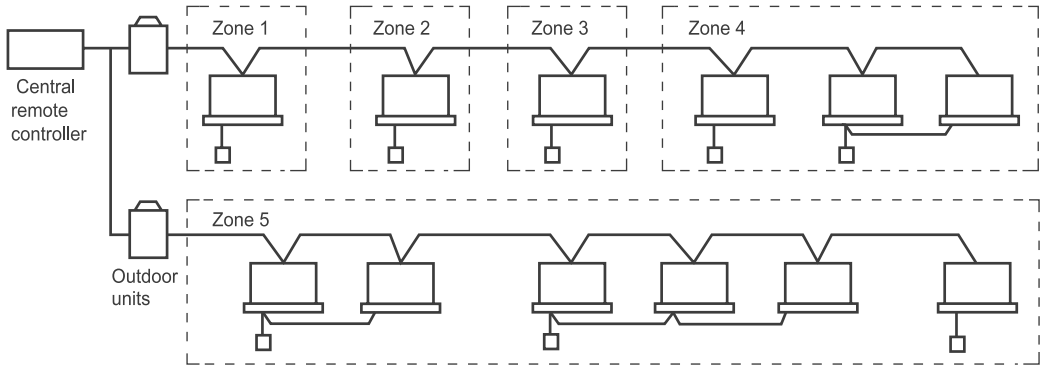

**3.** Maximum of 16 indoor units, group-controlled by one or two remote controllers




1

3P124623-1E

∗ Zone control from the central remote controller
Zone control is available from the central remote controller. With it, it is possible to make unified settings for multiple groups, so setting operations are greatly simplified.




- Any setting you make within a given zone will apply to all groups in the said zone.
- A maximum of 64 zones can be set from a single central remote controller. (Each zone contains a maximum of 64 groups.)
- Zones can be set randomly from the central remote controller.

# SAFETY CONSIDERATIONS

Please read these "SAFETY CONSIDERATIONS" carefully before installing air conditioning equipment and be sure to install it correctly.
After completing the installation, make sure that the unit operates properly during the start-up operation.
Please instruct the customer on how to operate the unit and keep it maintained.
Also, inform customers that they should store this installation manual along with the operation manual for future reference.
This air conditioner comes under the term "appliances not accessible to the general public".

Meaning of danger, warning, caution and note symbols.

⚠ **DANGER** ..... Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING** ....Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** .... Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ **NOTE**..... Indicates situation that may result in equipment or property-damage-only accidents.

**Keep these warning sheets handy so that you can refer to them if needed.**
Also, if this equipment is transferred to a new user, make sure to hand over this operation manual to the new user.

### ⚠ DANGER

- **Any abnormalities in the operation of the air conditioner such as smoke or fire could result in severe injury or death.** Turn off the power and contact your dealer immediately for instructions.
- **Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.**
- **Safely dispose of the packing materials.** Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries. Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death due to suffocation.

### ⚠ WARNING

- **Ask your dealer for installation of the air conditioner.** Incomplete installation performed by yourself may result in a water leakage, electric shock, and fire.
- **Ask your dealer for improvement, repair, and maintenance.** Incomplete improvement, repair, and maintenance may result in a water leakage, electric shock, and fire.
- **Improper installation or attachment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment. Be sure only to use accessories made by Daikin which are specifically designed for use with the equipment and have them installed by a professional.**
- **Ask your dealer to move and reinstall the air conditioner or the remote controller.** Incomplete installation may result in a water leakage, electric shock, and fire.
- **Never let the indoor unit or the remote controller get wet.** It may cause an electric shock or a fire.

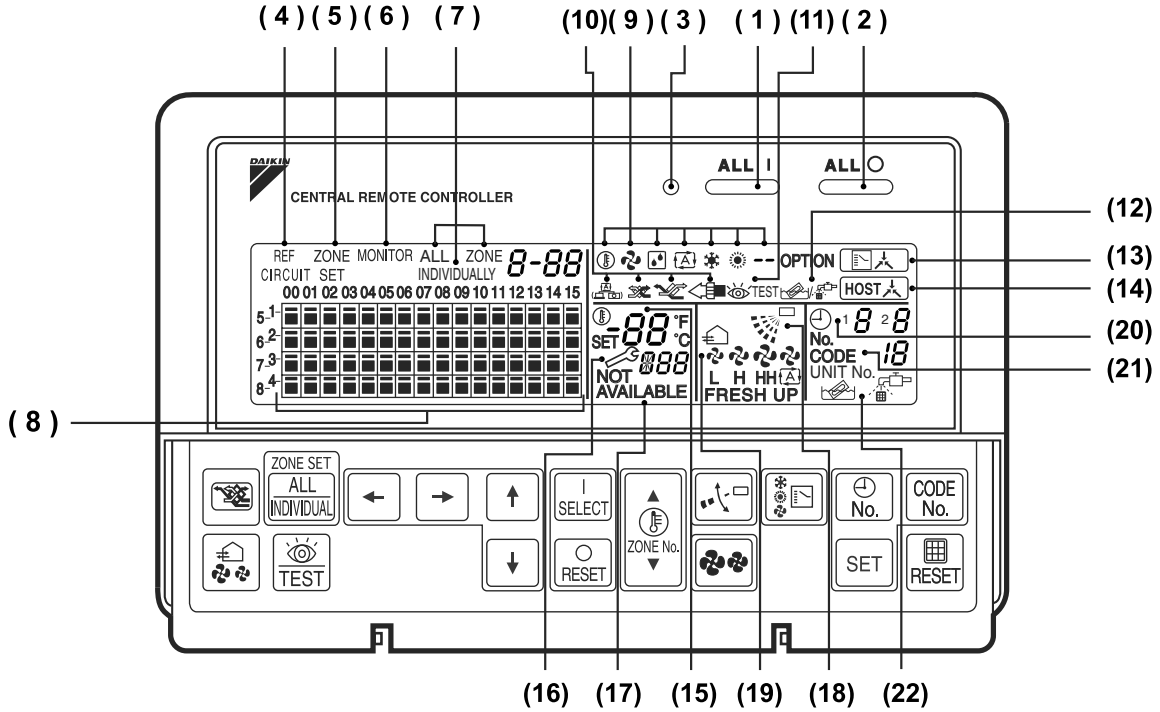



Fig. 1

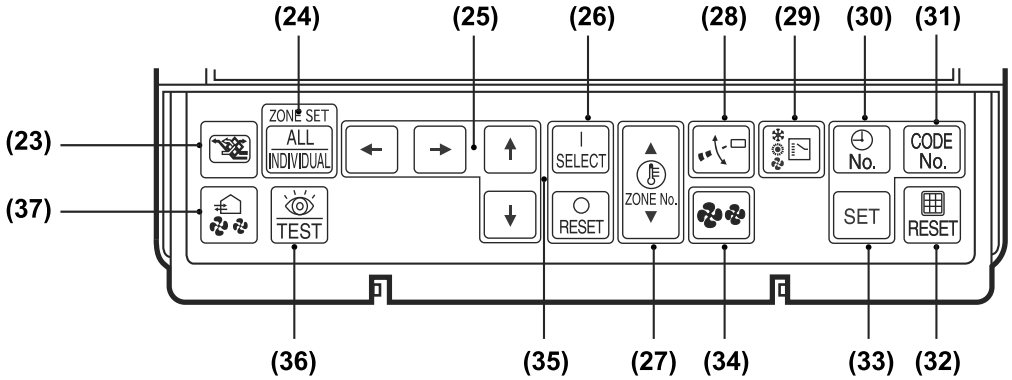



Fig. 2

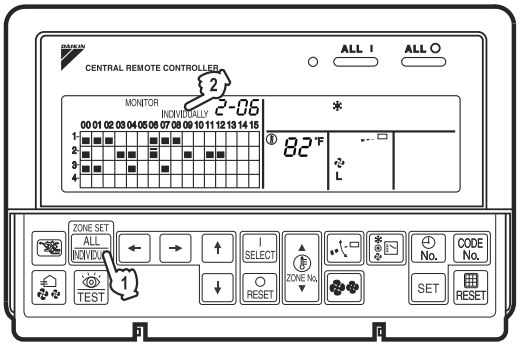



Fig. 3

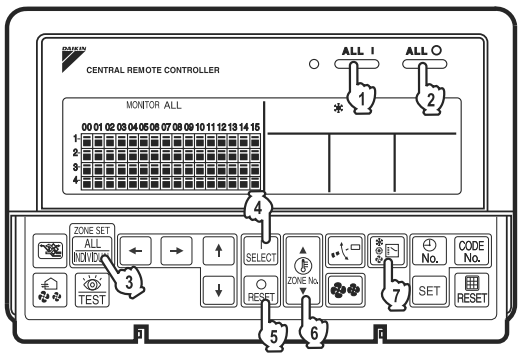



Fig. 4

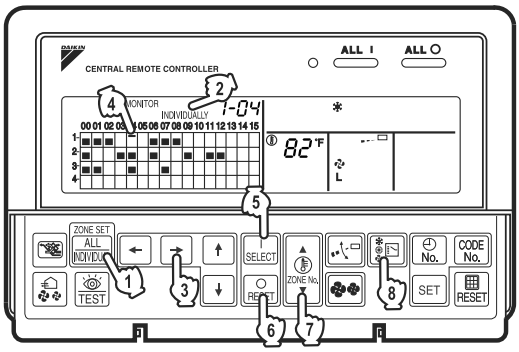



**Fig. 5**

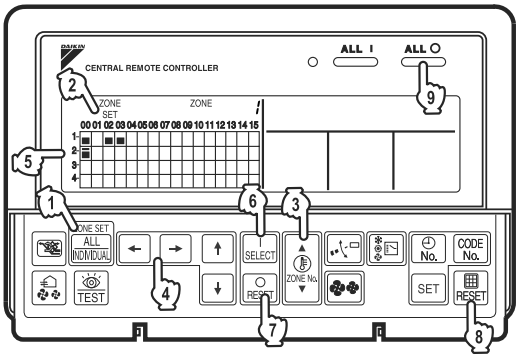



**Fig. 6**

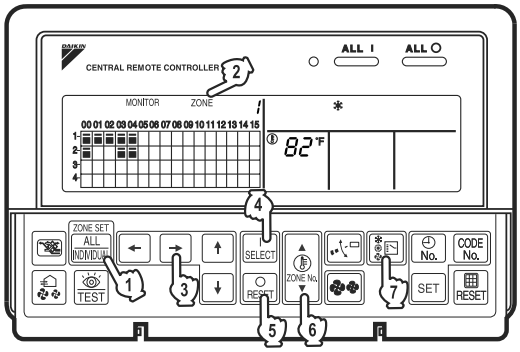



**Fig. 7**

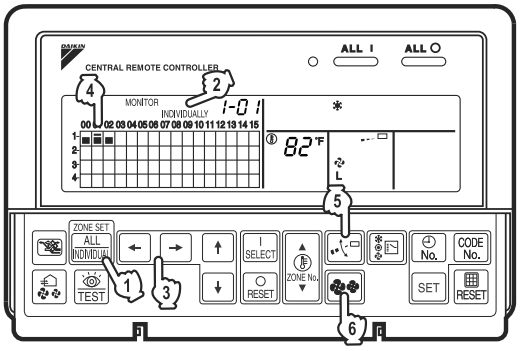



**Fig. 8**

4

- **Never use flammable spray such as hair spray, lacquer or paint near the unit.**
  It may cause a fire.
- **Do not allow children to play on or around the unit as they could be injured.**
- **Never replace a fuse with that of wrong ampere ratings or other wires when a fuse blows out.**
  Use of wire or copper wire may cause the unit to break down or cause a fire.
- **Never inspect or service the unit by yourself.**
  Ask a qualified service person to perform this work.
- **Cut off all electric waves before maintenance.**
- **Do not wash the air conditioner or the remote controller with excessive water.**
  Electric shock or fire may result.
- **Do not touch the switch with wet fingers.**
  Touching a switch with wet fingers can cause electric shock.
- **Never touch the internal parts of the controller.**
  Do not remove the front panel because some parts inside are dangerous to touch. In addition, some parts may be damaged by touching. For checking and adjusting internal parts, contact your dealer.
- **Check the unit stand for damage on a continuous basis, especially if it had been in use for a long time.**
  If left in a damaged condition the unit may fall and cause injury.
- **Placing a flower vase or other containers with water or other liquids on the unit could result in a shock hazard or fire if a spill occurs.**

**⚠ CAUTION**

- **Avoid placing the controller in a spot splashed with water.**
  Water coming inside the machine may cause an electric leak or may damage the internal electronic parts.
- **Do not operate the air conditioner when using a room fumigation - type insecticide.**
  Failure to observe could cause the chemicals to become deposited in the unit, which could endanger the health of those who are hypersensitive to chemicals.
- **Do not turn off the power immediately after stopping operation.**
  Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.
- **The appliance is not intended for use by young children or infirm persons without supervision.**
- **The remote controller should be installed in such a way that children cannot play with it.**

**⚠ NOTE**

- **Never press the button of the remote controller with a hard, pointed object.**
  The remote controller may be damaged.
- **Never pull or twist the electric wire of the remote controller.**
  It may cause the unit to malfunction.
- **Do not place the controller exposed to direct sunlight.**
  The LCD display may get discolored, failing to display the data.
- **Do not wipe the controller operation panel with benzine, thinner, chemical dustcloth, etc.**
  The panel may get discolored or the coating peeled off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. And wipe it with another dry cloth.
- **Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.**

# CONTENTS


**BEFORE USE** ..... 1
GENERAL DESCRIPTION OF SYSTEM ..... 1
**SAFETY CONSIDERATIONS** ..... 2
**FEATURES AND FUNCTIONS** ..... 6
**NAMES AND FUNCTIONS OF THE OPERATING SECTION** ..... 7
**OPERATION** ..... 8
Individual screen, all screen, zone screen ..... 8
Batch operation and stop method ..... 9
Group operation and stop method ..... 9
Registering zones ..... 9
Zone operation and stop method ..... 10
Changing the fan direction and fan strength ..... 11
Changing the ventilation mode and ventilation strength ..... 11
Timer Number Setting ..... 11
Setting the Operation Code ..... 12
**OPERATION MODE** ..... 13
Setting operation mode ..... 16
Group monitoring ..... 16
Error diagnosing function ..... 17
Setting master remote controller ..... 20
Display of time to clean ..... 21
**INSTALLATION TABLE** ..... 22
**OPTIONAL ACCESSORIES** ..... 23
**DOUBLE CENTRAL REMOTE CONTROLLERS** ..... 23
**SPECIFICATIONS** ..... 24
Specifications ..... 24
Outline drawings ..... 24

Fig. 1, 2, 3, 4 ..... 3
Fig. 5, 6, 7, 8 ..... 4
Fig. 9, 10, 11, 12 ..... 25
Fig. 13, 14, 15, 16 ..... 26

# FEATURES AND FUNCTIONS

■ **Operation menu**
This central remote controller can operate and stop machines by either group or zone.
Batch operation and batch stop functions are also available. When used in combination with the schedule timer (optional accessory), timer operation and stop functions are available.

See page 8—12.

■ **Various operation modes.**
You can operate the system from both this unit and the remote controller, so to enable various operation control patterns. Twenty different operation modes are available including five operation patterns:

1. Start/stop: remote controller prohibition, remote controller stop-only permission, central priority, after-press priority, remote controller permission timer
2. Operation modes: remote controller prohibition, remote controller permission
3. Set temperature: remote controller prohibition, remote controller permission

See page 13—15.

■ **Zone control for simpler setting procedures**
You can control a maximum of 64 groups of indoor units by using this central remote controller. You don't have to repeat the same setting operations by group because you can make each of the following settings by zone.
A functions is available for setting all groups in one batch.

- Operation mode
- Control mode
- Setting temperature
- Programming time No. (Used in conjunction with the schedule timer)

See page 8—16.

■ **Monitoring all indoor unit information**
The following information can be displayed by group.

- Operation information such as operation mode, set temperature, etc., for indoor units
- Maintenance information such as cleaning signs for filters or elements
- Error codes and other malfunction diagnosis information

See page 16—21.

■ **Function of refrigerant system display**
This display helps you understand, at a glance, the indoor units sharing the same outdoor unit and the particular indoor unit among them that is set as the master remote controller.

See page 20.

- Room air conditioners and multi-purpose air conditioners may also be connected by using separately-sold adapter boards.
  This may limit functionality, so consult the manuals that come with each adapter board.

# NAMES AND FUNCTIONS OF THE OPERATING SECTION (Fig. 1, 2)

| | |
|---|---|
| 1 | **UNIFIED OPERATION BUTTON** |
| | Press to operate all indoor units. |
| 2 | **UNIFIED STOP BUTTON** |
| | Press to stop all indoor units. |
| 3 | **OPERATION LAMP (RED)** |
| | Lit white any of the indoor units under control is in operation. |
| 4 | **“ REF CIRCUIT ” DISPLAY (REFRIGERANT SYSTEM DISPLAY)** |
| | This indication in the square is lit while the refrigerant system is being displayed. |
| 5 | **“ ZONE SET ” DISPLAY (ZONE SETTING)** |
| | The lamp is lit while setting zones. |
| 6 | **“ MONITOR ” DISPLAY (OPERATION MONITOR)** |
| | The lamp is lit while operation is being monitored. |
| 7 | **“ ALL ” “ ZONE ” “ INDIVIDUALLY ” DISPLAY** |
| | The status displays indicates either batch functions or which zone or individual unit (or group) are being used. |
| 8 | **OPERATION MONITOR** |
| | Each square displays the state corresponding to each group. |
| 9 | **“” “” “” “” “” “” “ – – ” DISPLAY (OPERATION MODE)** |
| | Displays operating state. |
| 10 | **“” “” “” “” DISPLAY (VENTILATION CLEANING DISPLAY)** |
| | This is displayed when a Ventiair total enthalpy heat exchanger unit or other such unit is connected. |
| 11 | **“ TEST ” DISPLAY (INSPECTION/TEST)** |
| | Pressing the maintenance/test run button (for service) displays this. This button should not normally be used. |
| 12 | **“” DISPLAY (TIME TO CLEAN)** |
| | It lights up when any individual unit (group) has reached the time for the filter or element to be cleaned. |
| 13 | **“” DISPLAY (COOLING/HEATING SELECTION PRIVILEGE NOT SHOWN)** |
| | For zones or individual units (groups) for which this is displayed, cooling and heating cannot be selected. |
| 14 | **“ HOST ” DISPLAY (UNDER HOST COMPUTER INTEGRATED CONTROL)** |
| | While this display is lit up, no settings can be made. It lights up when the upper central machines are present on the same air conditioning network. |
| 15 | **“ SET 88 °F ” DISPLAY (PRESET TEMPERATURE)** |
| | Displays the preset temperature. |
| 16 | **“ U4 ” DISPLAY (MALFUNCTION CODE)** |
| | This displays (flashes) the content of errors when an error failure has occurred. In maintenance mode, it displays the latest error content. |
| 17 | **“NOT AVAILABLE” DISPLAY (NO FUNCTION DISPLAY)** |
| | If a function is not available in the indoor unit even if the button is pressed, “NOT AVAILABLE” is may be displayed for a few seconds. |
| 18 | **“” DISPLAY (FAN DIRECTION SWING DISPLAY)** |
| | This displays whether the fan direction is fixed or set to swing. |
| 19 | **“” “L” “H” “HH” “” “FRESH UP” DISPLAY (VENTILATION STRENGTH/SET FAN STRENGTH DISPLAY)** |
| | This displays the set fan strength. |
| 20 | **“ No. ” DISPLAY (TIME NO.)** |
| | Displays the operation timer No. when used in conjunction with the schedule timer. |

| | |
|---|---|
| 21 | **“CODE UNIT No. 18” DISPLAY (OPERATION CODE AND UNIT NUMBER DISPLAY)** |
| | The method of operation (remote controller prohibited, central operation priority after-press operation priority, etc.) is displayed by the corresponding code.<br>This displays the numbers of any indoor units which have stopped due to an error. |
| 22 | **“” “” DISPLAY (TIME TO CLEAN AIR CLEANER ELEMENT/ TIME TO CLEAN AIR FILTER)** |
| | Displayed to notify the user it is time to clean the air filter or air cleaner element of the group displayed. |
| 23 | **VENTILATION MODE BUTTON** |
| | This is pressed to switch the ventilation mode of the total enthalpy heat exchanger. |
| 24 | **ALL/INDIVIDUAL BUTTON** |
| | Pressing this button scrolls through the “all screen”, “zone screen”, and “individual screen”. |
| 25 | **ARROW KEY BUTTON** |
| | This button is pressed when calling an individual indoor unit or a zone. |
| 26 | **ON/OFF BUTTON** |
| | Starts and stops ALL, ZONE, and INDIVIDUAL units. |
| 27 | **TEMPERATURE ADJUSTMENT BUTTON (ZONE NUMBER BUTTON)** |
| | This button is pressed when setting the temperature. Select the zone number if any zones have been registered. |
| 28 | **FAN DIRECTION ADJUSTMENT BUTTON** |
| | This button is pressed when setting the fan direction to “fixed” or “swing”. |
| 29 | **OPERATION MODE SELECTOR BUTTON** |
| | This sets the operation mode. The dry setting cannot be done. |
| 30 | **TIME NO. BUTTON** |
| | Selects time No. (Use in conjunction with the schedule timer only). |
| 31 | **CONTROL MODE BUTTON** |
| | Selects control mode. |
| 32 | **FILTER SIGN RESET BUTTON** |
| | This button is pressed to erase the “clean filter” display after cleaning or replacement. |
| 33 | **SET BUTTON** |
| | Sets control mode and time No. |
| 34 | **FAN STRENGTH ADJUSTMENT BUTTON** |
| | Pressing this button scrolls through “weak”, “strong”, and “fast”. |
| 35 | **ZONE SETTING BUTTON** |
| | Zone registration mode can be turned on and off by pressing the start and stop buttons simultaneously for at least four seconds. |
| 36 | **INSPECTION/TEST RUN BUTTON (FOR SERVICE)** |
| | Pressing this button scrolls through “inspection”, “test run”, and “system display”.<br>This button is not normally used. |
| 37 | **VENTILATION STRENGTH ADJUSTMENT BUTTON** |
| | This button is pressed to switch the ventilation strength (“fresh up”) of the total enthalpy heat exchanger. |

(Notes)
1. Please note that all the displays in the figure appear for explanation purposes or when the cover is open.
2. If the unit is used in conjunction with other optional central controllers, the OPERATION LAMP of the unit that is not under operation control may light up and go out a few minutes behind schedule. This shows that the signal is being exchanged, and does not indicate any failure.

# OPERATION

## ■ Individual screen, all screen, zone screen (Fig. 3)

This controller can perform operations in the individual screen, all screen, or zone screen.

- Individual screen — The individual screen is used when performing group operations.
- All screen — The all screen is used when performing operations for all units at once.
- Zone screen — The zone screen is used when performing zone operations.

**1. ☞1 Select the screen by pressing the “ALL/INDIVIDUAL” button.**

☞2 Every time the “ALL/INDIVIDUAL” button is pressed, the selection scrolls through INDIVIDUAL → ALL → ZONE.
If nothing is done in the all or zone screens for one minute, it automatically goes to the individual screen.

- If the zone number in the zone screen is displayed as "---," this indicates that no units are registered in a zone.
  Please perform zone registration before proceeding in the zone screen. (See page 9)

## ■ Batch operation and stop method (Fig. 4)

This is for operating or stopping all connected units at once.

**A. What to do when operating or stopping all connected units at once.**

**1. Press either ☞ "ALL |" or ☞ "ALL ○".**

- Operation can be performed from the individual screen, the all screen, or the zone screen.
- The "TEMPERATURE ADJUSTMENT" and "OPERATION MODE SELECTOR" buttons cannot be used.
  To set the temperature and operation mode, use B. batch operation.

**B. Batch Operation**

**1. ☞ Press the "ALL/INDIVIDUAL button" to enter the all screen.**

The " ▭ " display lights up on all registered units.

**2. ☞ Press the "SELECT" button.**

The " ■ " display lights up on all connected units.

**☞ Press the "RESET" button.**

The " ■ " display goes off on all connected units.
Operation and stop in the batch screen are done the same as with the batch operation and batch stop buttons.

**3. ☞ Press the "TEMPERATURE ADJUSTMENT" button.**

The temperature rises 1° every time the (▲) button is pressed.
The temperature drops 1° every time the (▼) button is pressed.

Set to " -- " when you do not wish to use batch setting for the temperature setting.
Setting to 1° above or below the temperature setting range displays " -- ".

**4. ☞ Call up the desired mode by pressing the "OPERATION MODE SELECTOR" button.**

Set to " -- " when you do not wish to use batch setting for the operation setting.

## ■ Group operation and stop method (Fig. 5)

This is for operating or stopping connected units in groups.

**[Group operation]**

**1. Press the ☞ "ALL/INDIVIDUAL button" to enter the ☞ individual screen.**

The unit will enter the individual screen automatically if nothing is done for one minute.

**2. ☞ Using the arrow keys, ☞ move the " ▭ " to select the units to operate or stop.**

Keeping the button pressed down will move it rapidly.

The " ▭ " in this screen has selected unit 1-04.

**3. ☞ Press the "SELECT" button.**

The " ■ " display lights up in the group.

**☞ Press the "RESET" button.**

The " ■ " display goes off in the group.

**4. ☞ Press the "TEMPERATURE ADJUSTMENT" button.**

The temperature rises 1° every time the (▲) button is pressed.
The temperature drops 1° every time the (▼) button is pressed.
Temperature adjustment cannot be done if the selected group's air conditioners are in fan mode.

**5. ☞ Call up the desired mode by pressing the "OPERATION MODE SELECTOR" button.**

## ■ Registering zones (Fig. 6)

It is possible to set multiple groups as one zone and control each zone separately.
No zones are registered when the unit is shipped from the factory.
Zone registration can be done in the individual screen, all screen, or zone screen.

**[Registration]**

**1. ☞ Pressing the "ALL/INDIVIDUAL" button for four seconds. ☞ Displays ZONE SET.**

Zone Number 1 will be displayed, and if there are any groups already registered in the displayed zone, a " ■ " will light up on the operation monitor.

**2. ☞Select the Zone Number to be registered using the "ZONE NUMBER" button.**
Keeping the button pressed down will move it rapidly.

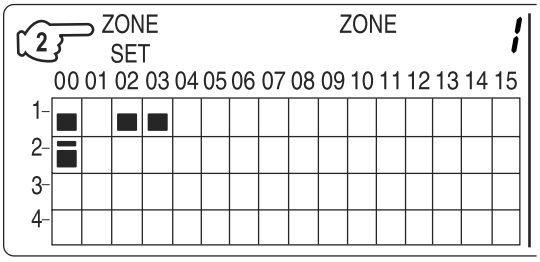
**3. ☞" ▭ " to the group you wish to ☞register using the arrow keys.**
Keeping the button pressed down will move it rapidly.

**4. ☞Press the "SELECT" button to register that group to the zone.**

The " ▣ " display lights up on all the selected units.

**☞Pressing the "RESET" button removes the group from that zone, and " ▣ " goes off.**

Repeat steps 3 and 4 until all the units you wish to register to the zone have been added.




**In this example, a screen is shown with units 1-00, 1-02, 1-03, and 2-00 registered to Zone Number 1.**

**5. Repeat steps 2 to 4 to register to the next zone.**

**6. Once zone registration is complete, ☞press the "ALL/INDIVIDUAL" button to turn off "ZONE SET" display and return to the individual screen.**
The display returns to the normal screen if nothing is done for one minute when in zone registration mode.

(NOTE)
- It is impossible to register one group to several different zones.
  If this is done, the last zone registered to will be valid.

**[Batch deletion of zone registration]**

**1. ☞Pressing the " ALL ○ " for at least four seconds while ☞pressing the "FILTER SIGN RESET" button when ☞"ZONE SET" is displayed will delete all zone registrations.**
The zone registrations for all units will be lost.

## ■ Zone operation and stop method (Fig. 7)

This is for operating or stopping connected units in zones.

**[Zone operation]**

**1. ☞Press the "ALL/INDIVIDUAL button" to enter the zone screen.**

**2. ☞Using the arrow keys, select the zone number to operate or stop.**

Pressing [←] and [↓] reduces the zone number while [→] and [↑] raise the number.
Keeping the button pressed down will move it rapidly.
- If the zone number is displayed as "---," this indicates that no units are registered in a zone. Please perform zone registration before using a zone. (See page 9)

**3. ☞Press the "SELECT" button.**

The " ▣ " display lights up in the group.

**☞Press the "RESET" button.**

The " ▣ " display goes off in the group.

**4. ☞Press the "TEMPERATURE ADJUSTMENT" button.**
The temperature rises 1° every time the (▲) button is pressed.
The temperature drops 1° every time the (▼) button is pressed.

Set to " -- " when you do not wish to use zone setting for the temperature setting.
Setting to 1° above or below the temperature setting range displays " -- ".

**5. ☞Call up the desired mode by pressing the "OPERATION MODE SELECTOR" button.**

Set to " -- " when you do not wish to use zone setting for the operation mode.

## ■ Changing the fan direction and fan strength (Fig. 8)

This changes the fan direction and strength settings in the air conditioner.
Changing the fan direction and strength is done in the individual screen.

**[Registration]**

1. **Press the "ALL/INDIVIDUAL button" to enter the individual screen.**
   The unit will enter the individual screen automatically if nothing is done for one minute.
2. **Using the arrow keys, move the " " to select the units to fan direction adjustment or fan strength adjustment.**
   Keeping the button pressed down will move it rapidly.
3. **Press the "FAN DIRECTION ADJUSTMENT" button.**
   This sets "fixed" or "swing" for the fan direction.
   **Press the "FAN STRENGTH ADJUSTMENT" button.**
   Pressing this button scrolls through " L ", " H ", and " HH ".
   Depending on the indoor unit, only " L " and " H " may be available.

The functions included in the indoor units may vary.
Pressing a button for a function which is not available will cause "NOT AVAILABLE" to be displayed.

## ■ Changing the ventilation mode and ventilation strength (Fig. 9)

This changes the ventilation mode and strength settings in the total enthalpy heat exchanger.
Changing the ventilation mode and strength is done in the individual screen.

**[Registration]**

1. **Press the "ALL/INDIVIDUAL button" to enter the individual screen.**
   The unit will enter the individual screen automatically if nothing is done for one minute.
2. **Using the arrow keys, move the " " to select the units to ventilation mode or ventilation strength adjustment.**
   Keeping the button pressed down will move it rapidly.
3. **Press the "VENTILATION MODE" button.**
   It will scroll through " " → " " → " " → " ".
   **Press the "VENTILATION STRENGTH ADJUSTMENT" button.**
   It will scroll through " L " → " H " → " L FRESH UP " → " H FRESH UP " → " L ".
   The fresh up function may not be available depending on the connected unit model.

The functions included in the indoor units may vary.
Pressing a button for a function which is not available will cause "NOT AVAILABLE" to be displayed.

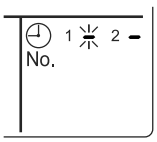
- **Ventilation Mode and Amount**
  If these are changed using the remote controller depending on the unit model, they cannot be displayed on the central remote controller.
  To monitor the ventilation mode and amount, check the values on the remote controller.

## ■ Timer Number Setting (Fig. 10)

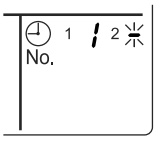
**(Only when used with the schedule timer)**
Using this together with the schedule timer makes it possible to set on and off times four times a day.

**[Registration]**

1. **Pressing the "TIMER NO." button causes the number set for timer number 1 to blink.**
   If no timer setting has been made " - " will be displayed.
   Select the desired timer number by pressing the "TIMER NO." button.

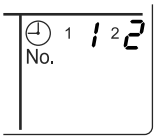



2. **Once the desired timer number is displayed, press the "SET" button.**
   Press the "SET" button within 10 seconds after the timer number is displayed.
   The display will return to how it was after 10 seconds.
   The display for timer number 1 will stop blinking and then timer number 2 will start blinking.



**3. ☞(1) Select the desired timer number by pressing the "TIMER NO." button.**

Once the desired timer number is displayed, ☞(2) press the "SET" button.
The display for timer number 2 will stop blinking.




The " No. " display will disappear after 3 seconds.

Select " – " in the timer number when you do not wish to set a timer number.
It is possible to set only one timer number.
(The times for turning the unit(s) on and off twice a day can be set with a single timer number.)

- **Timer Number Setting**
  Group control: select the unit in the individual screen and set the timer number.
  Batch control: set the timer numbers for all connected units.
  Zone control: set the timer numbers for all zone-registered units.
  Call up the zones which you wish to set in the zone screen and set the timer numbers.
- **Since the timer number will be set to after-press priority, the timer number in the last screen set will be valid for the connected units.**

  Example 1
  Setting timer number 1 for unit 1-00 to "1" and timer number 2 to "2" in the individual screen and then setting timer number 1 to "3" and timer number 2 to "4" in the batch screen causes the timer numbers for all units to be set, so timer number 1 for unit 1-00 will be "3" and timer number 2 will be "4".

  Example 2
  To prevent leaving units on, timer number 1 is set to "5" in the batch screen.
  Setting timer number 1 in zone number 1 to " – " in the zone screen after that will change the timer number for zone number 1, so the setting to prevent leaving the units on will be lost for zone number 1 only.

  If a timer number is set incorrectly by accident, redo the setting in the desired screen.
- **What happens when the timer number on time and off time are set to the same time**

  When the on time and off time are set to the same time for the same timer number, operation does not change.
  When the on time and off time are set to the same time for different timer numbers, the off time is given priority.

When using timer operation, make sure the times do not overlap when setting the program of the schedule timer.

## ■ Setting the Operation Code (Fig. 11)

**[Registration]**

**1. ☞(1) Pressing the "CONTROL MODE" button causes the currently set operation code to blink.**
Call up the desired code number by pressing the ☞(1) "CONTROL MODE" button.
Scroll through the code numbers.

**2. ☞(2) Once the code number is displayed, press the "SET" button.**
The display will stop blinking.
The operation code display will disappear after 3 seconds.

**[The Operation Code Setting]**

Group control: select the unit in the individual screen and set the operation code.
Batch control: set the operation code for all connected units.
Zone control: set the operation code for all zone-registered units.
Call up the zones which you wish to set in the zone screen and set the operation code.

Since the operation code will be set for after-press priority, setting the operation code in the zone and individual screens after setting the operation code in the batch screen, will cause the operation codes set afterwards to be valid.

# OPERATION MODE

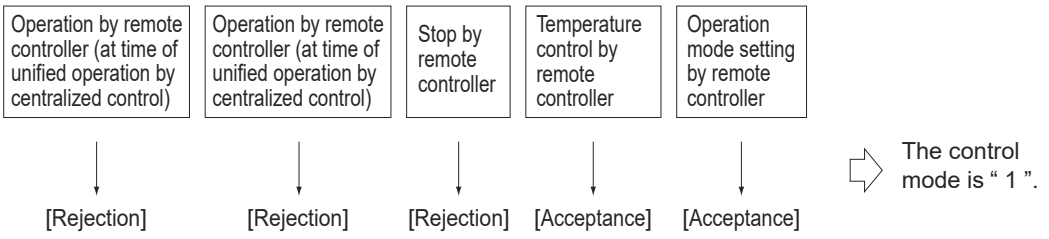
The following five operation control modes can be selected along with the temperature setting and operation mode by remote controller, for a total of twenty different modes. These twenty modes are set and displayed with control modes of 0 to 19. (For further details, see **EXAMPLE OF OPERATION SCHEDULE** on the next page.)

- ON/OFF control impossible by remote controller..... Use this mode when operating and stopping from the central remote controller only. (ON/OFF control by the remote controller is disabled.)
- Only OFF control possible by remote controller ..... Use this mode when executing the operation only by the central remote controller, and executing only the stop by remote controller.
- Centralized ..... Use this mode when executing the operation only by the central remote controller, and executing start/stop freely by remote controller during the preset hours.
- Individual ..... Use this mode when executing start/stop both by central remote controller and remote controller.
- Timer operation possible by remote controller..... Use this mode when executing start/stop by remote controller during the preset hours, and not starting operation by the central remote controller at the programmed time of system start.

### [HOW TO SELECT THE CONTROL MODE]

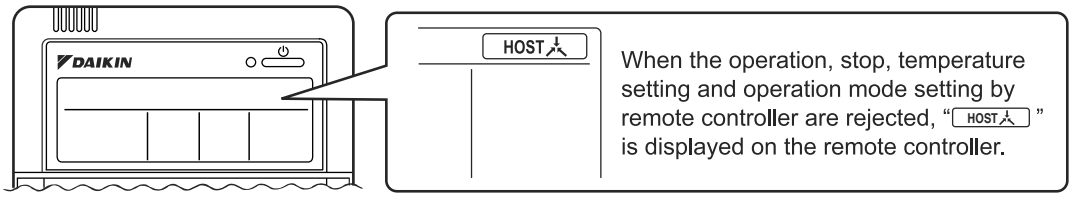
- Select whether to accept or to reject the operation from the remote controller regarding the operation, stop, temperature setting and operation mode setting, respectively, and determine the particular control mode from the rightmost column of the table below.

  Example



| Operation mode | Control by remote controller | | | | | Control mode |
|---|---|---|---|---|---|---|
| | Operation | | Stop | Temperature control | Operation mode setting | |
| | Unified operation, individual operation by central remote controller, or operation controlled by timer | Unified stop, individual stop by central remote controller, or timer stop | | | | |
| ON/OFF control impossible by remote controller | Rejection (Example) | Rejection (Example) | Rejection (Example) | Rejection | Acceptance | 0 |
| | | | | | Rejection | 10 |
| | | | | Acceptance (Example) | Acceptance (Example) | 1 (Example) |
| | | | | | Rejection | 11 |
| Only OFF control possible by remote controller | | | Acceptance | Rejection | Acceptance | 2 |
| | | | | | Rejection | 12 |
| | | | | Acceptance | Acceptance | 3 |
| | | | | | Rejection | 13 |
| Centralized | Acceptance | | | Rejection | Acceptance | 4 |
| | | | | | Rejection | 14 |
| | | | | Acceptance | Acceptance | 5 |
| | | | | | Rejection | 15 |
| Individual | | Acceptance | | Rejection | Acceptance | 6 |
| | | | | | Rejection | 16 |
| | | | | Acceptance | Acceptance | 7 |
| | | | | | Rejection | 17 |
| Timer operation possible by remote controller | Acceptance (During timer at ON position only) | Rejection (During timer at OFF position) | | Rejection | Acceptance | 8 |
| | | | | | Rejection | 18 |
| | | | | Acceptance | Acceptance | 9 |
| | | | | | Rejection | 19 |

Note) Do not select the timer operation possible without the remote controller. In this case, timer operation is disabled.

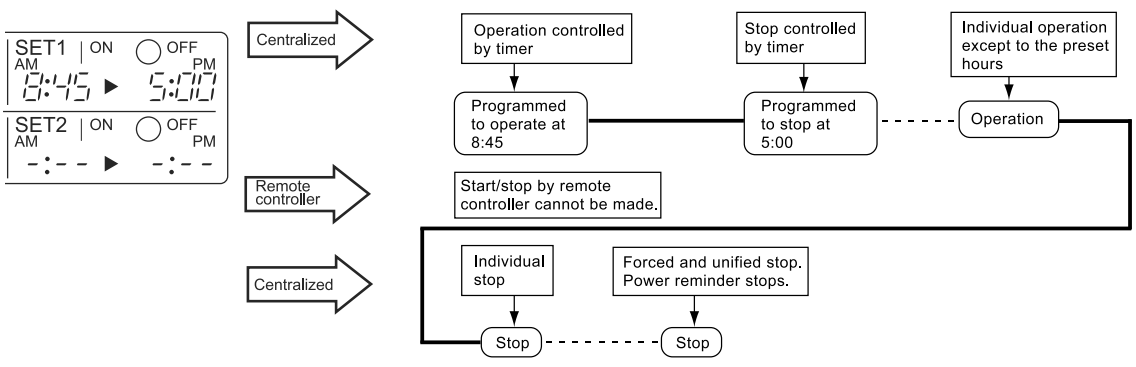



## EXAMPLE OF OPERATION SCHEDULE

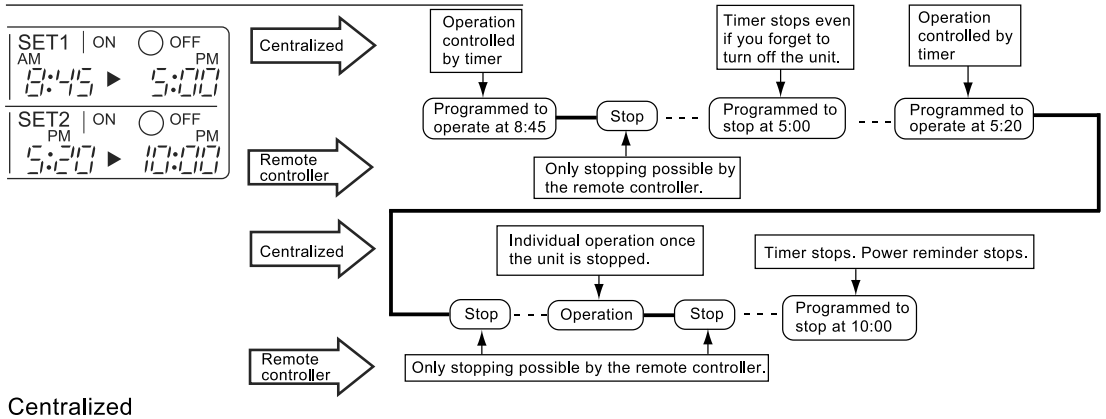
Operation schedule is possible only in conjunction with the schedule timer (optional accessory).

**Liquid crystal display of schedule timer**

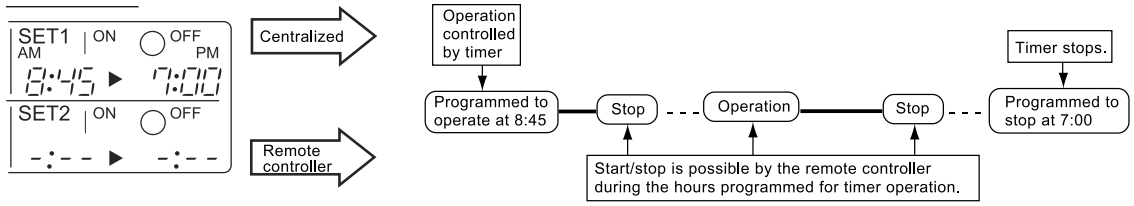
ON/OFF control impossible by remote controller



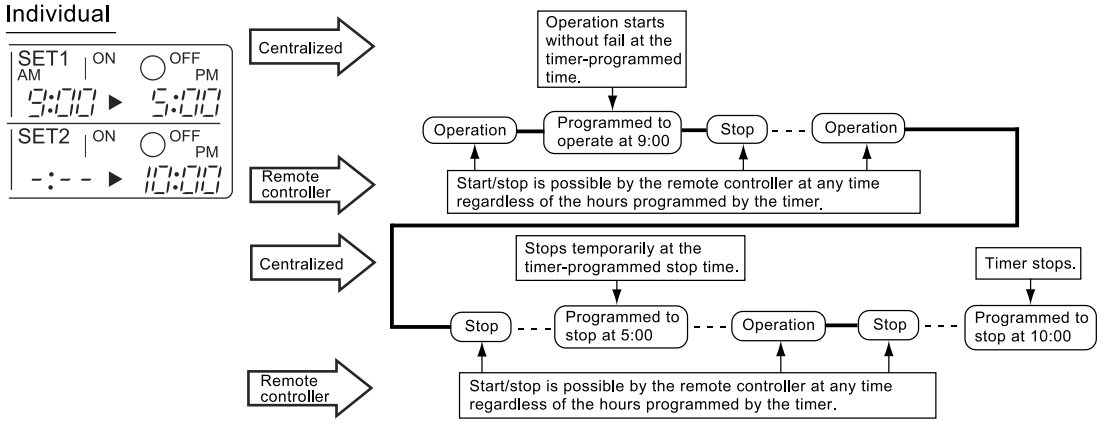
## Only OFF control possible by remote controller



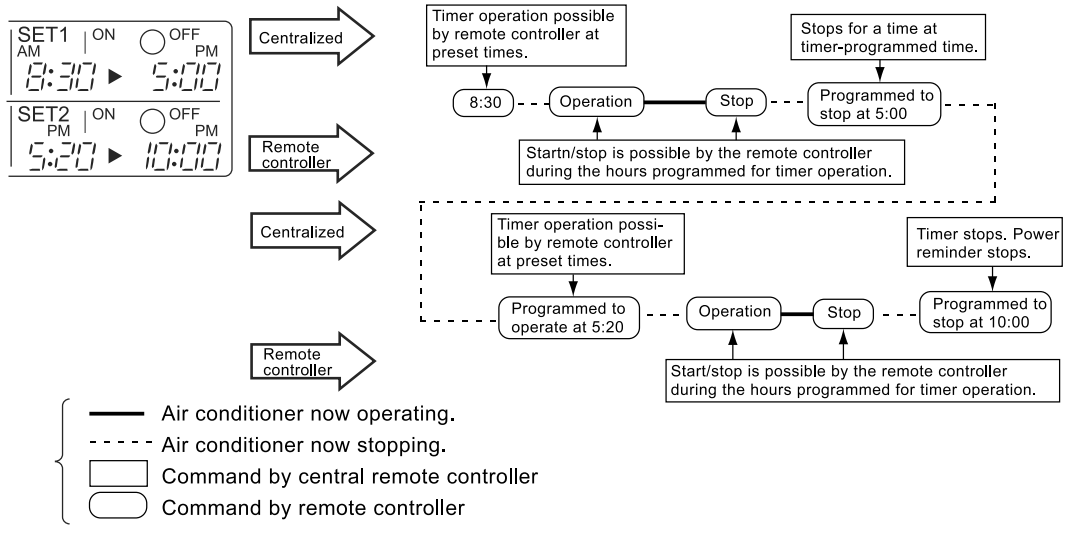

## Centralized




## Individual




## Timer operation possible by remote controller




Air conditioner now operating.
Air conditioner now stopping.
Command by central remote controller
Command by remote controller

## ■ Setting operation mode (Fig. 12)

**[Registration]**

**1. ☞ Press the OPERATION MODE SELECTOR BUTTON. Each time you press this button, the display rotates as shown on the below list.**

- **List of operations which can be set**
  In the below list, " ○ " refers to the acceptable setting, while " × " refers to the not acceptable setting.

| Display | **A**: Zones and groups with no " " display. Setting | Contents of setting |
|---|---|---|
| | × | |
| | ○ | Can be set in individual zones or groups |
| | ○ ∗1 | Can be set in individual zones or groups |
| | ○ | Can be set in individual zones or groups |
| | ○ | Can be set in individual zones or groups |
| or or | ○ ∗1 | Can be set in individual zones or groups ∗3 |
| | ○ ∗1 | Can be set in individual zones or groups |
| | ○ | Select this display if you don't wish to set by zone. |

| Display | **B**: Zones and groups with a " " display. Setting | Contents of setting |
|---|---|---|
| | ○ | To be set by zone ∗2 |
| | ○ | Can be set in individual zones or groups |
| | × | |
| | × | The displays are shown by group ∗4 |
| | × | The displays are shown by group ∗4 |
| or or | ○ ∗1 | Can be set in individual zones or groups ∗3 |
| | ○ ∗1 | Can be set in individual zones or groups |
| | ○ | Select this display if you don't wish to set by zone. |

∗1: Setting may not be acceptable depending on the type of indoor unit with which this unit is connected.
∗2: In zone control, the units run in temperature adjustment mode (heating or cooling) for the outdoor system for the groups registered to those zones. Heating or cooling selection is not available.
∗3: or or
Changing the ventilation mode cannot be done in the zone screen. Changing the ventilation mode should be done in the individual screen.
∗4: In group control, the units run in temperature adjustment mode (heating or cooling) for the group outdoor system. Heating or cooling selection is not available.

- **The Zone consists of the following two cases.**

**A. Zone without display" "**
The group with master remote controller setting exists in this zone.
Setting the master remote controller enables cool/heat selection.
Operations other than cool/heat operations can also be set for some operations. For further details, see the list on the left.

**B. Zone with display" "**
No group with master remote controller setting exists in this zone.
The cool/heat selection is not available because the master remote controller has not been set.
Some operations other than cool/heat operations can be set. For further details, see the list in the left.

See page 20 if the display" " is flashing.

- Fan operation can be performed for each zone using the central remote controller even if there is no cooling/heating selection right during cooling or heating. Also, if a Ventiair is connected in the zone, ventilation and ventilation cleaning operation is possible. See the included operating manuals for details.
- When the indoor unit is in heat operation, change the setting to FAN operation through the central remote controller; then, you can switch the fan speed to the extremely low fan speed. Warm air may blow if any other indoor unit belonging to the same system is in heat operation.
- The indoor fan stops during defrost/hot start.
- DRY cannot be set from the central remote controller.

## ■ Group monitoring (Fig. 13)

Utilize the group monitor function in each of the following cases:
1. Check the malfunction code. (See the next page.)
2. Check the group that requires cleaning of the air filter and air cleaner element. (See page 21.)
3. Change the setting of the master remote controller. (See page 20.)
4. Check the group(s) sharing the same outdoor unit. Or, check the particular group(s) with the master remote controller setting. (See page 20.)
5. Check the conditions of other individual groups.

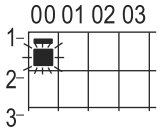
**When in zone screen**
The zone screen will revert to the individual screen automatically if nothing is done in it for one minute.

**[Registration]**

1. **☞① Press the "ALL/INDIVIDUAL" button to switch to the ☞② "INDIVIDUAL" screen.**
2. **☞③ Using the arrow key, ☞④ move the "▭" to select the unit to be monitored.**
   Keeping the button pressed down will move it rapidly.
   ☞④ The "▭" lights up and the status of that unit is displayed in the LCD. The cursor in the screen Fig. 13 has selected unit 2-06.

## ■ Error diagnosing function (Fig. 14)

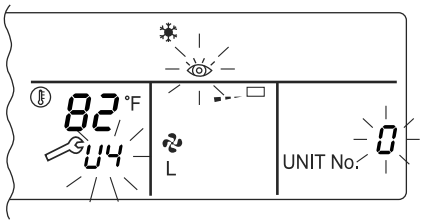
This central remote controller is provided with a diagnosing function, for when an indoor unit stops due to malfunction. In case of actuation of a safety device, disconnection in transmission wiring for control or failure of some parts, the operation lamp, inspection display and unit No. start to flash; then, the malfunction code is displayed. Check the contents of the display, and contact your DAIKIN dealer because the above signs can give you the idea on the trouble area.




The display "▬" flashes under the group No. where the indoor unit that has stopped due to malfunction.

**[Registration]**

1. **☞① Press the ARROW KEY BUTTON to call up the group that has stopped due to malfunction.**
   ☞② The unit No. ☞③ the malfunction code is flashing because of an error failure.




| Operation lamp | Maintenance display | Unit No. | Malfunction code | Error content |
|---|---|---|---|---|
| ☼ | ● | ◑ | **64** | Indoor air thermistor error |
| ☼ | ● | ◑ | **65** | Outdoor air thermistor error |
| ☼ | ● | ◑ | **68** | HVU error (Ventiair dust-collecting unit) |
| ☼ | ● | ◑ | **6A** | Dumper system error |
| ◑ | ◑ | ◑ | 6A | Dumper system error + Thermistor error |
| ☼ | ● | ◑ | **6F** | Simple remote controller error |
| ☼ | ● | ◑ | **6H** | Door switch (Ventiair dust-collecting unit), relay harness fault (Ventiair dust-collecting/humidifier unit) |
| ◑ | ◑ | ◑ | 94 | Ventiair internal transmission error (between total enthalpy – fan unit) |
| ◑ | ◑ | ◑ | A0 | Indoor unit · external safety device error |
| ◑ | ◑ | ◑ | A1 | Indoor unit · BEV unit (Sky-Air connection unit) PC board assembly fault |
| ☼ | ● | ◑ | **A1** | Indoor unit · PC board assembly fault |
| ◑ | ◑ | ◑ | A3 | Indoor unit · Drain level error (33H) |
| ◑ | ◑ | ◑ | A6 | Indoor unit · Fan motor (51F) lock, overload |
| ☼ | ● | ◑ | **A7** | Indoor unit · Fan direction adjustment motor (MA) error |
| ◑ | ◑ | ◑ | A9 | Indoor unit · BEV unit, electric expansion valve motor (20E) error |
| ☼ | ● | ◑ | **AF** | Indoor unit · Malfunctioning drain |
| ☼ | ● | ◑ | **AH** | Indoor unit · Dust-collector error |
| ◑ | ◑ | ◑ | AJ | Indoor unit · Insufficient capacity setting, address setting fault |

| | | | | |
|---|---|---|---|---|
| ◑ | ◑ | ◑ | C4 | Indoor unit · Liquid piping thermistor (Th2) Error (faulty connection, cut wire, short circuit, fault) |
| ◑ | ◑ | ◑ | C5 | Indoor unit · BEV unit, gas piping thermistor (Th3) Error (faulty connection, cut wire, short circuit, fault) |
| ◑ | ◑ | ◑ | C9 | Indoor unit · Intake air thermistor (Th1) Error (faulty connection, cut wire, short circuit, fault) |
| ◑ | ◑ | ◑ | CA | Indoor unit · Outlet air thermistor (Th4) Error (faulty connection, cut wire, short circuit, fault) |
| ☼ | ● | ☼ | **CJ** | Indoor unit · remote controller sensor error |
| ◑ | ◑ | ◑ | E0 | Outdoor unit · Safety device operation |
| ◑ | ◑ | ◑ | E1 | Outdoor unit · PC board assembly fault |
| ☼ | ● | ◑ | **E1** | Outdoor unit · PC board assembly fault |
| ◑ | ◑ | ◑ | E3 | Outdoor unit · High-pressure switch fault |
| ◑ | ◑ | ◑ | E4 | Outdoor unit · Low-pressure switch fault |
| ◑ | ◑ | ◑ | E9 | Outdoor unit · Electric expansion valve motor (20E) error |
| ☼ | ● | ◑ | **EC** | Heat source unit · Intake water temperature inter-lock operation (fan operation) |
| ◑ | ◑ | ◑ | EF | Outdoor unit · Ice thermal storage unit error |
| ◑ | ◑ | ◑ | F3 | Outdoor unit · Discharge piping temperature error |
| ☼ | ● | ◑ | **H3** | Outdoor unit · High-pressure switch operation |
| ◑ | ◑ | ◑ | H4 | Outdoor unit · Low-pressure switch operation |
| ◑ | ◑ | ◑ | H9 | Outdoor unit · Outdoor air thermistor (Th1) Error (faulty connection, cut wire, short circuit, fault) |
| ☼ | ● | ◑ | **H9** | Outdoor unit · Outdoor air thermistor (Th1) Error (faulty connection, cut wire, short circuit, fault) |
| ☼ | ● | ◑ | **HC** | Outdoor unit · Water temperature sensor system error |
| ☼ | ● | ◑ | **HF** | Ice thermal storage unit error, ice thermal storage controller error, error in outdoor unit during ice thermal storage operation |
| ◑ | ◑ | ◑ | HJ | Outdoor unit · water system fault |
| ◑ | ◑ | ◑ | J1 | Outdoor unit · pressure sensor error |
| ◑ | ◑ | ◑ | J3 | Outdoor unit · Discharge piping thermistor (Th3) Error (faulty connection, cut wire, short circuit, fault) |
| ☼ | ● | ◑ | **J3** | Outdoor unit · Discharge piping thermistor (Th3) Error (faulty connection, cut wire, short circuit, fault) |
| ◑ | ◑ | ◑ | J5 | Outdoor unit · Intake piping thermistor (Th4) Error (faulty connection, cut wire, short circuit, fault) |
| ◑ | ◑ | ◑ | J6 | Outdoor unit · Heat exchange thermistor (Th2) error |
| ☼ | ● | ◑ | **J6** | Outdoor unit · Heat exchange thermistor (Th2) error Error (faulty connection, cut wire, short circuit, fault) |
| ◑ | ◑ | ◑ | J7 | Outdoor unit · Header thermistor (Th6) error |
| ◑ | ◑ | ◑ | JA | Outdoor unit · Discharge piping pressure sensor error |
| ◑ | ◑ | ◑ | JC | Outdoor unit · Intake piping pressure sensor error |
| ◑ | ◑ | ◑ | JF | Outdoor unit · Oil temperature sensor (Th5) system error |
| ☼ | ● | ◑ | **JH** | Outdoor unit · Oil temperature sensor (Th5) system error |
| ◑ | ◑ | ◑ | L0 | Outdoor unit · Inverter system fault |
| ◑ | ◑ | ◑ | L4 | Outdoor unit · Inverter cooler fault |
| ◑ | ◑ | ◑ | L5 | Outdoor unit · Ground circuit for compressor motor, short circuit, or power unit short circuit |

| | | | | |
|---|---|---|---|---|
| ◑ | ◑ | ◑ | L6 | Outdoor unit · Ground circuit for compressor motor, short circuit |
| ☼ | ◑ | ◑ | L8 | Outdoor unit · Compressor overload, compressor motor wire disconnection |
| ◑ | ◑ | ◑ | L9 | Outdoor unit · Compressor lock |
| ◑ | ◑ | ◑ | LA | Outdoor unit · Power unit error |
| ◑ | ◑ | ◑ | LC | Outdoor unit · Transmission error between inverter and outdoor control unit |
| ☼ or ● | ◑ | ◑ | M1 | Central controller: PC board fault |
| ☼ or ● | ◑ | ◑ | M8 | Transmission error between central controllers |
| ☼ or ● | ◑ | ◑ | MA | Central controller: Incorrect combination |
| ☼ or ● | ◑ | ◑ | MC | Central controller: Address setting fault |
| ◑ | ● | ◑ | **P0** | Insufficient gas (thermal storage) |
| ◑ | ◑ | ◑ | P1 | Outdoor unit · Power voltage imbalance, phase loss |
| ◑ | ◑ | ◑ | P4 | Outdoor unit · Power unit temperature sensor error |
| ☼ | ● | ◑ | **U0** | Pressure drop due to insufficient refrigerant, electric expansion valve fault, etc. |
| ◑ | ◑ | ◑ | U1 | Reversed or lost phase |
| ◑ | ◑ | ◑ | U2 | Power voltage error, momentary electrical stoppage |
| ◑ | ◑ | ◑ | U4 | Transmission error between indoor unit/BEV unit and outdoor/BS unit, Transmission error between outdoor unit and BS unit |
| ◑ | ◑ | ◑ | U5 | Transmission error between remote controller and indoor control unit |
| ● | ☼ | ● | U5 | Remote controller board fault or remote controller setting fault |
| ◑ | ◑ | ◑ | U6 | Transmission error between indoor units |
| ◑ | ◑ | ◑ | U7 | Transmission error between outdoor units<br>Transmission error between outdoor unit and ice thermal storage unit |
| ☼ | ● | ◑ | **U7** | Transmission error between outdoor units (cooling/heating batch, low-noise operation) |
| ◑ | ◑ | ● | U8 | Transmission error between master remote controller and slave remote controller (slave remote controller error)<br>Incorrect combination of indoor unit and remote controller within a single system (model) |
| ◑ | ◑ | ◑ | U9 | Transmission error between indoor unit/BEV unit and outdoor unit within a single system<br>Transmission error between BS unit and indoor unit/BEV unit and outdoor unit within a single system |
| ◑ | ◑ | ◑ | UA | Incorrect combination of indoor, BS, and outdoor units within a single system (model, number of units, etc.)<br>Incorrect combination of indoor unit and remote controller (remote controller in question) BS unit connection position fault |
| ☼ | ● | ☼ | **UC** | Central control group numbers overlap |
| ◑ | ◑ | ◑ | UE | Transmission error between indoor unit and central controller |
| ◑ | ◑ | ◑ | UF | Unset system, incorrect settings between BEV unit and indoor unit |
| ◑ | ◑ | ◑ | UH | System fault |

▬ error codes (in outline font) do not display “maintenance” and the system will run, but please check the content of the display and contact your dealer.

## ■ Setting master remote controller (Fig. 15)

You must set the master remote controller of the operation mode for one of the indoor units, if two or more such indoor units with the remote controller are connected with the outdoor unit where the operation modes such as cool/heat operation and FAN operation can be set by remote controller and central remote controller.

### 1. Preparations

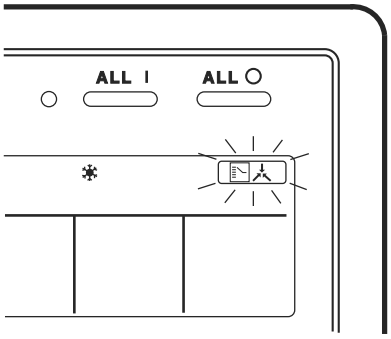
**When you want to fix settings**

- **Check the particular group with the master remote controller setting for the refrigerant system you wish to reset. (See the below.)**
- **Call up the group without the display "[ ] " (See page 16.)**

  **☞1 Hold the OPERATION MODE SELECTOR BUTTON down for about four seconds while the above group is being called up.**

  **The display "[ ] " flashes on the liquid crystal display of the remote controller for all the groups sharing the same outdoor unit or BS unit.**

  When you turn on the power switch for the first time, the display" [ ] " flashes.




### 2. Setting selection right

**Pall up the desired group to set the master remote controller, and ☞1 press the OPERATION MODE SELECTOR BUTTON. The master remote controller is set for this group, and the display "[ ] " goes out. The display "[ ] " appears for the other groups.**

Setting is finished now.

**When switching operation**

**● In case of operation switch**

**Call up the zone including the group with the setting of master remote controller.**

**(Zone without the display "[ ] ")**

**☞1 Press the OPERATION MODE SELECTOR BUTTON several times, and switch to the desired operation mode.**

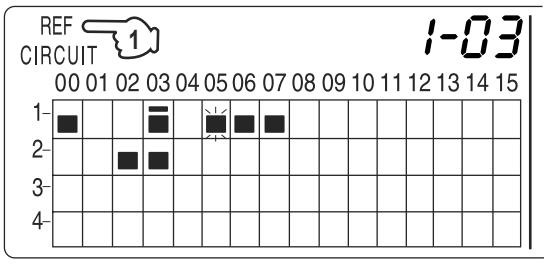
**Each time you press it, the display is switched to " " " " " " and " " in sequence.**

**NOTE**

- However, the displays " [A] " " " and "VENTILATION MODE" may apper in some zones, depending on the type on indoor unit with which they are connected.
  (VENTILATION MODE)
  or or

**[System Display]**

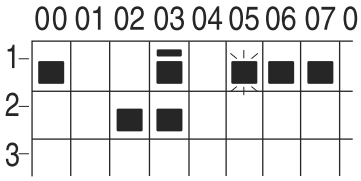
1. Test run mode is necessary to display the system display.
2. In order to turn on test run mode, select the appropriate air conditioner on the individual screen with the cursor and then set its operation mode to either cooling or heating. (It makes no difference if the air conditioner is running or not running while this operator is being performed.)
3. Press the "inspection/test run" button twice to put it into test run mode.
4. Pressing the "inspection/test run" button for four or more seconds in test run mode will display ☞1 the "REF CIRCUIT."



Call the unit whose system you wish to look up using the arrow keys.

The " ■ " on all groups in the same system as the displayed group will light up.

Of those, the " ■ " display in all groups which have cooling/heating selection privilege will blink.




**In this example, individual units 1-00, 1-03, 1-05, 1-06, 1-07, 2-02, and 2-03 are in the same system, and 1-05 has the cooling/heating selection privilege.**

To look up other systems, call up all the units you wish to look up using the arrow keys.

Pressing the inspection/test run button one more time gets rid of the system display and ends it.

The unit will enter the individual screen automatically if nothing is done for one minute in the system display screen.

This function may not be available for all connected outdoor units, in which case "REF CIRCUIT" will blink. It will also not be correctly displayed if DIII-NET extension ADP is used.

## ■ Display of time to clean (Fig. 16)

This central remote controller displays the time to clean the air filter or air cleaner element for each group or any given group by utilizing two types of signs. The display " " tells the time to clean the air filter or the air cleaner element of some group.

### If a cleaning sign is displayed

A filter or element in some group is ready to be cleaned.

**1. ☞ Press the ARROW KEY BUTTON, and search the groups displaying " " or " " (The group may be plural.)**

**Clean or change the air filter or air cleaner element.**

For further details, see the operation manual attached to each indoor unit. (Clean or change the air filter or air cleaner element of all the groups displaying " " or " ".)

**2. ☞ Press the FILTER SIGN RESET BUTTON, and the display " " disappears. (Including all the groups where the air filter has been cleaned.)**

**NOTE**

Be sure to check the display ☞ " " has disappeared at this point. The appearance of the above display is a sign that the air filter or air cleaner element of some group still needs cleaning.

# INSTALLATION TABLE

When installing the equipment, mark the zone No. of each group and installation location in the below table.

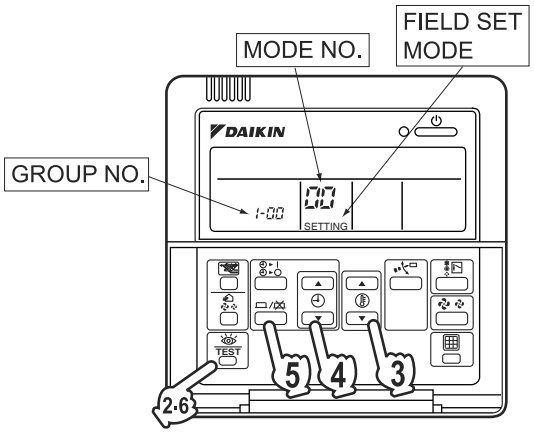
**Setting group No.**
(Setting is not possible unless power is activated to both the central remote controller and indoor unit.)

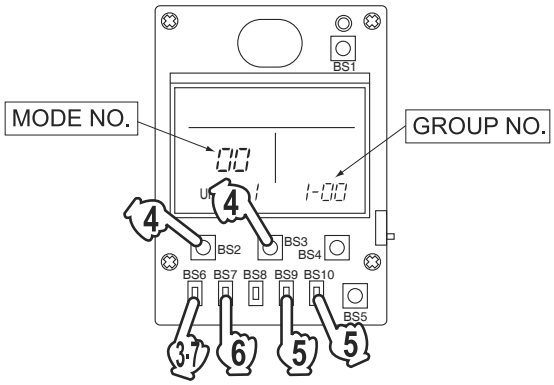
**Operated by remote controller**

1. Activate power to both the central remote controller and indoor unit.
2. While in the normal mode, hold down the "TEST" button for a minimum of 4 seconds. The unified ON/OFF controller will enter the FIELD SET MODE.
3. Select the MODE No. "00" with the "" button.
4. Use the "" button to select the group No. for each group. (Group No. increases in the order of 1-00, 1-01 ... 1-15, 2-00, ... 8-15.)
5. Press "" to set the selected group No.
6. Press "TEST" to return to the NORMAL MODE.

**Operated by simplified remote controller**

1. Activate power to both the central remote controller and indoor unit.
2. Remove the upper part of the remote controller.
3. Press the BS6 BUTTON (field set) on the PC board. The controller will enter the FIELD SET MODE.
4. Select the MODE No. "00" with the BS2 BUTTON and BS3 BUTTON (temperature setting).
5. Use the BS9 BUTTON (set A) and BS10 BUTTON (set B) to select the group No. for each group. (Group No. increases in the order of 1-00, 1-01 ... 1-15, 2-00, ... 8-15.)
6. Press BS7 BUTTON (set/cancel) to set the selected group No.
7. Press BS6 BUTTON (field set) to return to the NORMAL MODE.

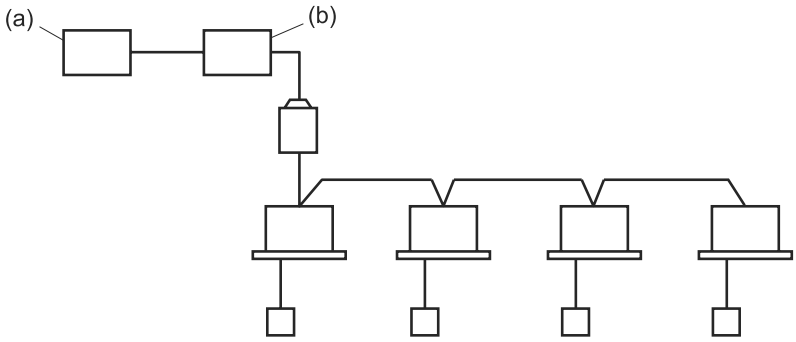



| Zone No. | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Group No. | –00 | –01 | –02 | –03 | –04 | –05 | –06 | –07 | –08 | –09 | –10 | –11 | –12 | –13 | –14 | –15 |
| Indoor unit Quantity of units Controlled by | | | | | | | | | | | | | | | | |
| Location | | | | | | | | | | | | | | | | |
| Zone No. | | | | | | | | | | | | | | | | |
| Group No. | –00 | –01 | –02 | –03 | –04 | –05 | –06 | –07 | –08 | –09 | –10 | –11 | –12 | –13 | –14 | –15 |
| Indoor unit Quantity of units Controlled by | | | | | | | | | | | | | | | | |
| Location | | | | | | | | | | | | | | | | |

| Zone No. | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Group No. | –00 | –01 | –02 | –03 | –04 | –05 | –06 | –07 | –08 | –09 | –10 | –11 | –12 | –13 | –14 | –15 |
| Indoor unit Quantity of units Controlled by | | | | | | | | | | | | | | | | |
| Location | | | | | | | | | | | | | | | | |
| Zone No. | | | | | | | | | | | | | | | | |
| Group No. | –00 | –01 | –02 | –03 | –04 | –05 | –06 | –07 | –08 | –09 | –10 | –11 | –12 | –13 | –14 | –15 |
| Indoor unit Quantity of units Controlled by | | | | | | | | | | | | | | | | |
| Location | | | | | | | | | | | | | | | | |

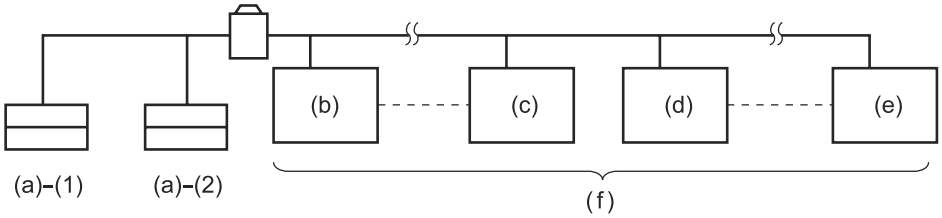
## OPTIONAL ACCESSORIES




You can perform the normal operation, take off the malfunction contact point and unified start/stop by contact point, all by connecting this unit with the unification adaptor for computerized control. For further details, ask your DAIKIN dealer.

(a) Unification adaptor for computerized control (b) Central remote controller

## DOUBLE CENTRAL REMOTE CONTROLLERS




With two central remote controllers, centralized control (indoor units) is possible from different locations.

(a) Central remote controller (b) Group No. 1 – 00 (c) Group No. 1 – 15 (d) Group No. 2 – 00
(e) Group No. 4 – 15 (f) A maximum of 64 groups

Note)

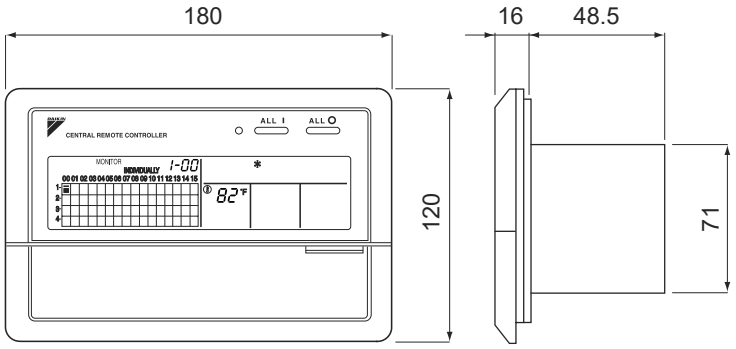
- For control alignment and settings for double central remote controllers, contact your dealer.

# SPECIFICATIONS

## ■ Specifications

| | |
|---|---|
| Power supply | 1 ~ 50/60Hz, 100V – 240V |
| Power consumption | Max. 8W |
| Forced ON/OFF input | Continuous “a” contact<br>Contact current: approximately 10mA |
| Size | 180 (W) × 120 (H) × 64.5 (D) |
| Weight | 420g |

## ■ Outline drawings




When using this unit an electric parts box of KJB311A is required.
For installation, a steel electric parts box to be embedded is mandatory.

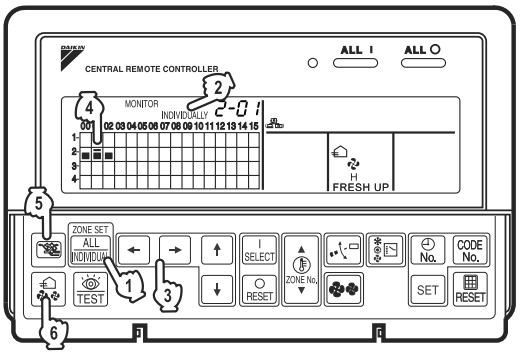



**Fig. 9**

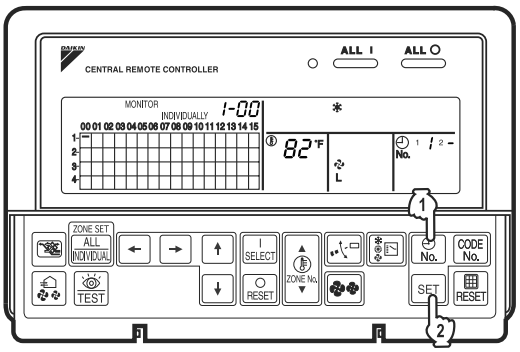



**Fig. 10**

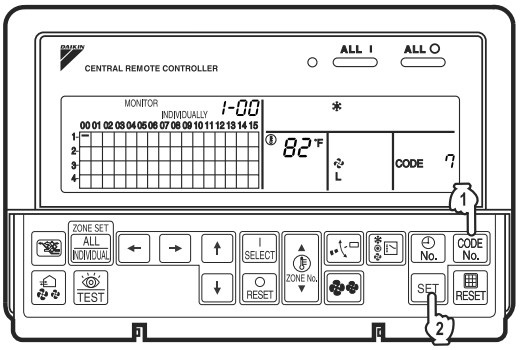



**Fig. 11**

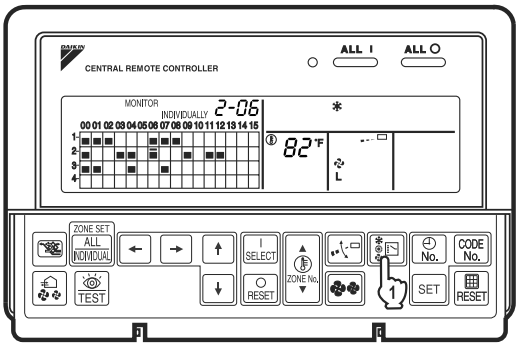



**Fig. 12**

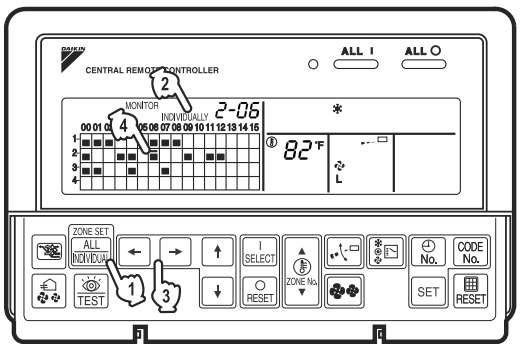



**Fig. 13**

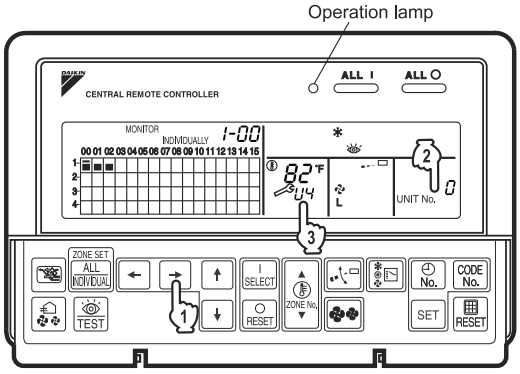



**Fig. 14**

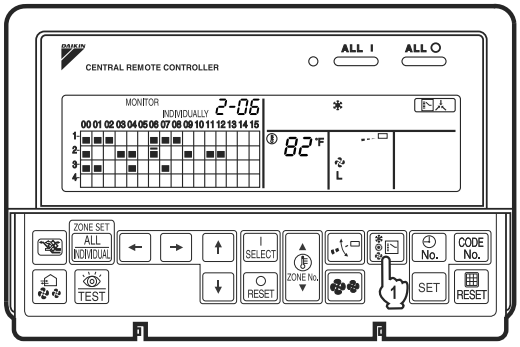



**Fig. 15**

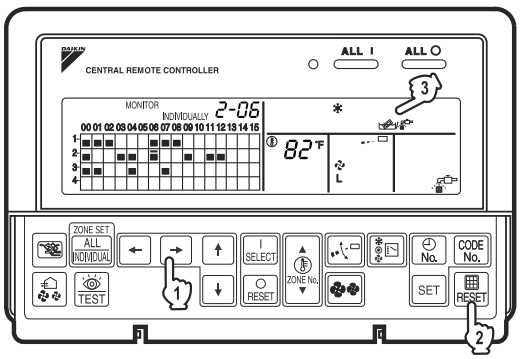



**Fig. 16**

# 2.11 <DCS301C71> Unified ON/OFF Controller (Installation)

Please read these "SAFETY CONSIDERATIONS" carefully before installing air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation.
Please instruct the customer on how to operate the unit and keep it maintained.
Also, inform customers that they should store this installation manual along with the operation manual for future reference.
This air conditioner comes under the term "appliances not accessible to the general public".

Meaning of warning, caution and note symbols.

⚠ **WARNING**.... Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ **CAUTION**..... Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be sued to alert against unsafe practices.
⚠ **NOTE**..... Indication situation that may result in equipment or property-damage-only accidents.

## ⚠ WARNING

**Ask your dealer or qualified personnel to carry out installation work. Do not try to install the machine by yourself.**
Improper installation may result in water leakage, electric shocks or fire.

**Perform installation work in accordance with this installation manual.**
Improper installation may result in water leakage, electric shocks or fire.

**Be sure to use only the specified accessories and parts for installation work.**
Failure to use the specified parts may result in water leakage, electric shocks, fire or the unit falling.

**Carry out the specified installation work after taking into account strong winds, typhoons or earthquakes.**
Improper installation work may result in the equipment falling and causing accidents.

**Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations and this installation manual.**
An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.

**Make sure that all wiring is secured, the specified wires and used, and no external forces act on the terminal connections or wires.**
Improper connections or installation may result in fire.

**When wiring the power supply and connecting the remote controller wiring and transmission wiring, position the wires so that the electric parts box lid can be securely fastened.**
Improper positioning of the electric parts box lid may result in electric shocks, fire or the terminals overheating.

**Before touching electrical parts, turn off the unit.**

**Ground the air conditioner. Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire.**
Incomplete grounding may result in electric shocks.

**When installing or relocating the system, be sure to keep the refrigerant circuit free from substances other than the specified refrigerant (R410A), such as air.**

**Do not reconstruct or change the settings of the protection devices.**
If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may result.

**Do not touch the switch with wet fingers.**
Touching a switch with wet fingers can cause electric shock.

**Install an leak circuit breaker, as required.**
If an leak circuit breaker is not installed, electric shock may result.

**Do not install the air conditioner or the remote controller in the following locations:**
(a) where a mineral oil mist or an oil spray or vapor is produced, for example in a kitchen
Plastic parts may deteriorate and fall off or result in water leakage.
(b) where corrosive gas, such as sulfurous acid gas, is produced
Corroding copper pipes or soldered parts may result in refrigerant leakage.
(c) near machinery emitting electromagnetic waves
Electromagnetic waves may disturb the operation of the control system and result in a malfunction of the equipment.
(d) where flammable gases may leak, where there are carbon fiber or ignitable dust suspensions in the air, or where volatile flammables such as thinner or gasoline are handled.
Operating the unit in such conditions may result in fire.

## ⚠ CAUTION

**Be very careful about product transportation.**

**Safely dispose of the packing materials.**
Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
Tear apart and throw away plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

**Do not turn off the power immediately after stopping operation.**
Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.

## ⚠ NOTE

**Install the indoor and outdoor units, power supply wiring and connecting wires at least 3.5ft. away from televisions or radios in order to prevent image interference or noise.**
(Depending on the radio waves, a distance of 3.5ft. may not be sufficient enough to eliminate the noise.)

**Remote controller (wireless kit) transmitting distance can result shorter than expected in rooms with electronic fluorescent lamps. (inverter or rapid start types)**
Install the indoor unit as far away from fluorescent lamps as possible.

**This unit is a class A product.**
In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

**Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.**

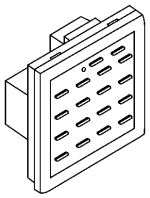
1P126474-1B

## 1 COMPONENTS

Check the following components are included in this optional accessory before installation.

| | |
|---|---|
| Installation screw (M4 x 16) | 2 |
| Operation manual | 1 |
| Installation manual | 4 |
| Installation table | 4 |
| Switch display sticker | 1 |

Body

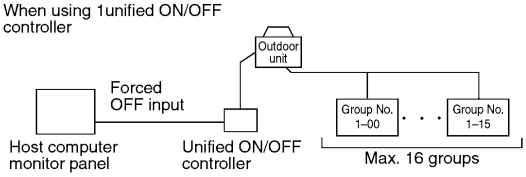


When using this optional accessory an electric parts box of KJB212A is required.
For installation, a steel electric parts box to be embedded is mondatory.

## 2 SYSTEM CONFIGURATION

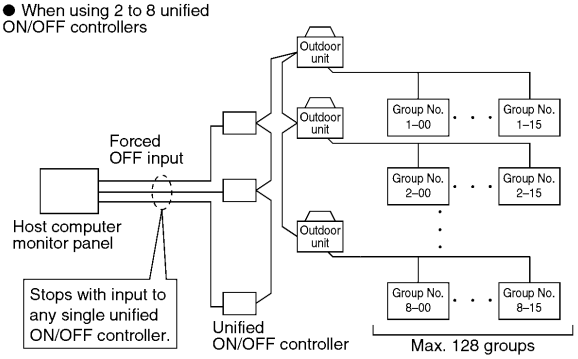
This unified ON/OFF controller enables individual and unified operation/stop for a maximum of 16 groups of indoor units.
With 2 to 8 unified ON/OFF controllers, individual and unified control is possible with up to a maximum 128 groups of indoor units.

● When using 1unified ON/OFF controller




(This optional accessory can not be used in conjunction with wiring adapter for electrical appendices (optional accessory).)

● When using 2 to 8 unified ON/OFF controllers

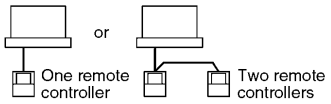



The goups of indoor units are as follows:

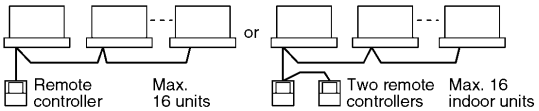
1 One indoor unit without remote controller




2 One indoor unit controlled by one or two remote controllers




3 A maximum of 16 indoor units controlled in groups by one or two remote controllers



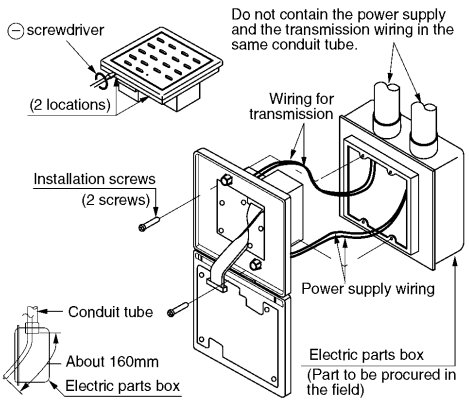

## 3 INSTALLATION

1 Open the upper part of remote controller.
Insert a ⊖ screwdriver (2 locations) into the recess between the upper part and the lower part of remote controller and twist the screwdriver lightly.

PC board is attached with both the upper and lower part of remote controller.
Do not damage the board with the screwdriver.

2 Open the upper part of remote controller and install the electric parts box (part to be procured in the field) with the attached installation screws (M4 x 16).

NOTE) Suitable length of the electric wire is about 160mm from the inlet of the electric parts box. If it is difficult to contain a long wiring, strip the sheathed part of the wiring.




1P126474-1B

## 4 INITIAL SETTING

Setting ① through ③ are initialized when power is turned ON, therefore complete settings BEFORE activating the power.

1 Connector for setting master controller (X1A) (Provided with connector at factory set)
- When using 1 unified ON/OFF controller, do not disconnect the connector for setting master controller. (Use the unit with the connector in the state in which it was delivered.)
- When using multiple unified ON/OFF controllers, or using the unified ON/OFF controller in conjunction with other optional controllers for centralized control, makes settings as indicated in the right table.

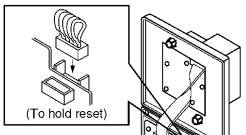
| Pattern of connection of optional controllers for centralized control | | | Connector for setting master controller (X1A) Settings | | |
|---|---|---|---|---|---|
| Unified ON/OFF controller | Central remote controller | Schedule timer | Unified ON/OFF controller | Central remote controller | Schedule timer |
| 1 to 16 | | | Set one to "Used" and all the rest to "Not used". | | |
| | 1 to 4 | | Set all to "Not used". | (Note) | |
| | | 1 | Set one to "Used" and all the rest to "Not used". | | "Not used" |
| | 1 to 4 | 1 | Set all to "Not used". | (Note) | "Not used" |

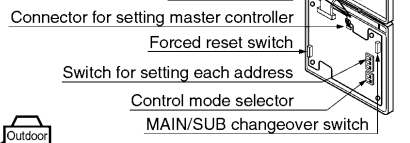
(Note) For instructions on how to set the connector for setting master controller on the central remote controller, see the installation manual provided with the central remote controller.

2 Switch for setting each address (DS1)
These switches are used to set group control address.
Groups Nos. 1–00 through 1–15 are grouped in the same control group when the unit is shipped from the factory.

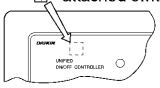
| Each Address | 1-00 ~ 1-15 | 2-00 ~ 2-15 | 3-00 ~ 3-15 | 4-00 ~ 4-15 | 5-00 ~ 5-15 | 6-00 ~ 6-15 | 7-00 ~ 7-15 | 8-00 ~ 8-15 |
|---|---|---|---|---|---|---|---|---|
| DS1 setting | DS1 ON 1 2 3 Set each address (Factory setting) | DS1 ON 1 2 3 Set each address | DS1 ON 1 2 3 Set each address | DS1 ON 1 2 3 Set each address | DS1 ON 1 2 3 Set each address | DS1 ON 1 2 3 Set each address | DS1 ON 1 2 3 Set each address | DS1 ON 1 2 3 Set each address |

NOTE) ■ indicates the position of switches.

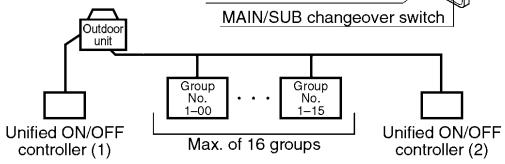



After setting, attach the number seal applicable to respective control range of the attached switch display sticker, as shown in the diagram below.

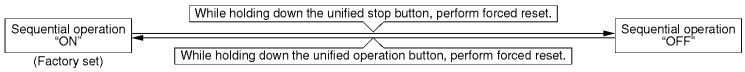



(Example)
In the case of 1-00 to 1-15, attach 1 .




3 MAIN/SUB changeover switch setting
With two unified ON/OFF controllers, centralized control (indoor units) is possible from different locations. In this kind of set-up, it is necessary to set the MAIN/SUB changeover switch.
One of the two unified ON/OFF controllers (1)·(2) is set to "MAIN" while the other is set to "SUB".

4 Setting of the sequential operation function
The unified ON/OFF controller is equipped with a sequential operation function that sequentially turns indoor units on in 2-second intervals during unified operation. (Sequential operation is factory set to "ON.")
To switch sequential operation ON or OFF, set as follows.



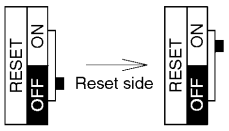

NOTE: The sequential operation function is designed to reduce the load on the power supply equipment, but does not guarantee that compressors will not be started simultaneously. You cannot therefore count on a capacity reduction effect by power supply equipment breaker selection.

5 Control mode selector (DS2)
The following four patterns of control mode can be set.

| Control mode | Individual | Centralized | Timer operation possible by remote controller | ON/OFF control impossible by remote controller |
|---|---|---|---|---|
| Content | Operation/stop is controlled by both unified ON/OFF controller and remote controller. | After operated by unified ON/OFF controller, operation/stop is freely controlled by remote controller until stopped by unified ON/OFF controller. | When used in conjunction with schedule timer, operation/stop is controlled freely by remote controller during the set time but operation is not available when schedule timer is ON. | Operation/stop is controlled by unified ON/OFF controller only. (This unit can not be operated/stopped by remote controller.) |
| DS2 setting | (Factory set) DS2 ON 1 2 CONTROL MODE | DS2 ON 1 2 CONTROL MODE | DS2 ON 1 2 CONTROL MODE | DS2 ON 1 2 CONTROL MODE |

NOTES) • ■ indicates the position of switches.
- Set control mode before turning power supply ON.
- When used in conjunction with central remote controller, the control modes of the central remote controller has the priority.

6 Forced reset switch (SS1)
When changing the setting of the connector for setting master controller, etc., you can reset simply by setting it to the reset side once and returning to the normal side, without turning the power OFF.
(For normal operation, set the switch to the normal side.)



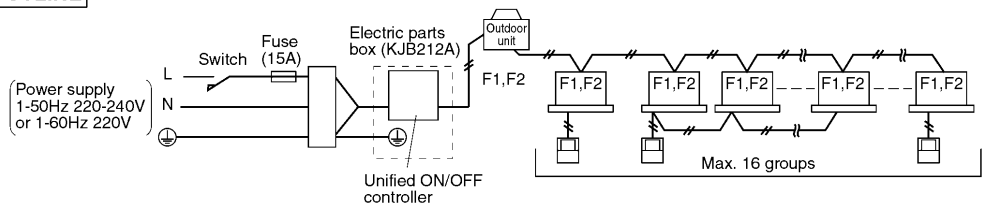

1P126474-1B

# 5 ELECTRIC WIRING

## GENERAL INSTRUCTIONS

- All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
- Use copper conductors only.
- All field wiring and components must be provided by licensed electrician.
- Unit shall be grounded in compliance with the applicable local and national codes.
- Fit the power supply wiring with a fuse and a switch.
- After wiring work, check power to the equipment shuts OFF when switch is shut OFF.

## WIRING OUTLINE



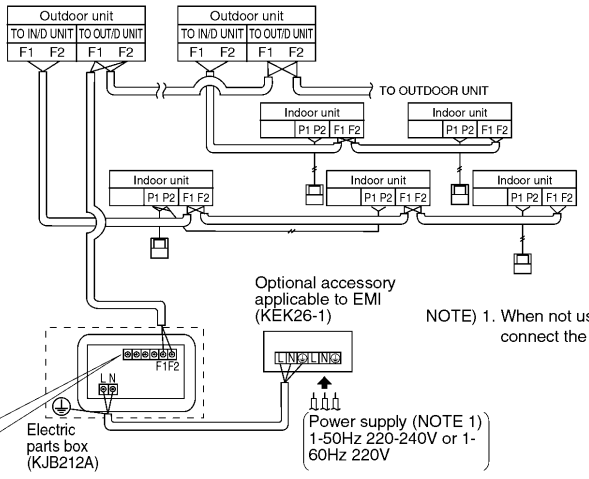

**Wiring specification**

| | Type | Size |
|---|---|---|
| Power supply wiring | H05VV-U3G | (NOTE 1) |
| Transmission wiring | Sheathed wire (2 wire) (NOTE 2) | 0.75 – 1.25mm$^2$ |

NOTES) 1. The size of power supply wiring must comply with the applicable national and local codes.
2. Allowable length of transmission wiring is as follows.
Max. 1000m (Total wiring length: 2000m)

Connect the wiring between indoor and outdoor units, indoor/outdoor units and power supply, and indoor units and remote controllers.
For details, refer to the installation manuals of indoor and outdoor units.

## WIRING TO THE INDOOR UNIT AND OUTDOOR UNIT

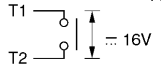



NOTE) 1. When not using the optional accessory applicable to EMI (KEK26-1), connect the power supply wiring directly to the unified ON/OFF controller.

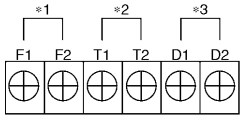
CONTROL TERMINAL STRIP

∗1 For connecting indoor unit (F1, F2)

∗2 Forced OFF input (T1, T2)
While the forced OFF input (no voltage contactor, for micro current) is ON (energized), all the connected indoor units are stopped and can not be operated.
Use only contactors which guarantee the minimum applicable load ⎓ 16V, 10mA.




NOTE) Use instantaneous contactor of over 200msec. energizing time, when necessary.




∗3 For schedule timer (D1, D2)
Power can be supplied to the schedule timer (DST301B51•61 optional accessory). For details, refer to the installation manual of the schedule timer.
Wire ∗2 and ∗3 only when necessary.

(NOTE)
Do not connect the power supply wiring (220 to 240V) to the control terminal strip. If connected by mistake, it may damage or burn electrical parts of optional controllers for centralized control and indoor unit. It may result in serious danger. Be sure to check wirings before turning the power ON.

## 6 SETTING GROUP NO. FOR CENTRALIZED CONTROL

Set the group number of each group of the indoor unit from the remote controller. (In case of no remote controller, also connect the remote controller and set the group No. Then, remove the remote controller.)

1 Turn ON the power of the indoor unit and unified ON/OFF controller. (Unless the power is ON, no setting can be made.)
Check that the installation and electrical wiring are correct before turning the power supply ON.
When the power supply is turned ON, all LCD appear once and the unit may not accept the operation for about one minute with the display of " " flashing (an interval of ON, ON, and OFF).

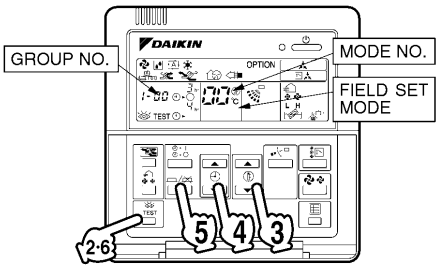
2 While in the normal mode, hold down the " TEST " button for a minimum of 4 seconds.
The remote controller will enter the FIELD SET MODE.

3 Select the MODE No. " 00 " with the " " button.

4 Use the " " button to select the group No. for each group.
(Group numbers increase in the order of 1-00, 1-01, ... 1-15, 2-00, ... 8-15.)

5 Press " " to set the selected group No.

6 Press " TEST " to return to the NORMAL MODE.




NOTES) • For simplified remote controller, see the installation table.
• For setting group No. of HRV and wiring adaptor for other air conditioners, etc., refer to the instruction manual attached.

NOTICE Enter the group No. and installation place of the indoor unit into the attached installation table.
Be sure to keep the installation table with the operation manual for maintenance.

## 7 CONFIRMING OPERATION

Before starting test operation, supply power to the indoor units, outdoor units, and unified ON/OFF controller and press the ON/OFF BUTTON.
If the operation lamp flashes, it indicates a malfunction in the indoor unit of the applicable group.
If the display of " " flashes, it indicates a malfunction in the optional controllers for centralized control. Check for such malfunctions.

NOTES ∘ For test operation of indoor and outdoor units, refer to the installation manual attached with the outdoor unit.
∘ After turning the power supply ON, if the unit does not accept operation for two minutes or more with the display of " " flashing, check the following points.
• Check that setting of the connector for setting master controller is correct.
• Check that the group No. for centralized control has been set.

1P126474-1B

# 2.12 <DCS301C71> Unified ON/OFF Controller (Operation)

Please read these “SAFETY CONSIDERATIONS” carefully before installing air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation.
Please instruct the customer on how to operate the unit and keep it maintained.
Also, inform customers that they should store this installation manual along with the operation manual for future reference.
This air conditioner comes under the term “appliances not accessible to the general public”

Meaning of warning, caution and note symbols.

⚠ **WARNING** ..... Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ **CAUTION** ..... Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be sued to alert against unsafe practices.
⚠ **NOTE** ..... Indication situation that may result in equipment or property-damage-only accidents.

**Keep these warning sheets handy so that you can refer to them if needed.**
Also, if this equipment is transferred to a new user, make sure to hand over this operation manual to the new user.

## ⚠ WARNING

**In order to avoid electric shock, fire or injury, or if you detect any abnormality such as smell of fire, turn off power and call your dealer for instructions.**

**Ask your dealer for installation of the air conditioner.**
Incomplete installation performed by yourself may result in a water leakage, electric shock, and fire.

**Ask your dealer for improvement, repair, and maintenance.**
Incomplete improvement, repair, and maintenance may result in a water leakage, electric shock, and fire.

**Improper installation or attachment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment.**
**Be sure only to use accessories made by Daikin which are specifically designed for use with the equipment and have them installed by a professional.**

**Ask your dealer to move and reinstall the air conditioner or the remote controller.**
Incomplete installation may result in a water leakage, electric shock, and fire.

**Never let the indoor unit or the remote controller get wet.**
It may cause an electric shock or a fire.

**Never use flammable spray such as hair spray, lacquer or paint near the unit.**
It may cause a fire.

**Never replace a fuse with that of wrong ampere ratings or other wires when a fuse blows out.**
Use of wire or copper wire may cause the unit to break down or cause a fire.

**Never inspect or service the unit by yourself.**
Ask a qualified service person to perform this work.

**Cut off all electric waves before maintenance.**

**Do not wash the air conditioner or the remote controller with excessive water.**
Electric shock or fire may result.

**Do not install the air conditioner or the remote controller at any place where flammable gas may leak out.**
If the gas leaks out and stays around the air conditioner, a fire may break out.

**Do not touch the switch with wet fingers.**
Touching a switch with wet fingers can cause electric shock.

## ⚠ CAUTION

**After a long use, check the unit stand and fitting for damage.**
If they are left in a damaged condition, the unit may fall and result in injury.

**Do not allow a child to mount on the unit or avoid placing any object on it.**
Falling or tumbling may result in injury.

**Do not let children play on and around the unit.**
If they touch the unit carelessly, it may result in injury.

**Do not place a flower vase and anything containing water.**
Water may enter the unit, causing an electric shock or fire.

**Never touch the internal parts of the controller.**
Do not remove the front panel. Some parts inside are dangerous to touch, and a machine trouble may happen.
For checking and adjusting the internal parts, contact your dealer.

**Avoid placing the controller in a spot splashed with water.**
Water coming inside the machine may cause an electric leak or may damage the internal electronic parts.

**Do not operate the air conditioner when using a room fumigation - type insecticide.**
Failure to observe could cause the chemicals to become deposited in the unit, which could endanger the health of those who are hypersensitive to chemicals.

**Safely dispose of the packing materials.**
Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
Tear apart and throw away plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

**Do not turn off the power immediately after stopping operation.**
Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.

**The appliance is not intended for use by young children or infirm persons without supervision.**

**The remote controller should be installed in such away that children cannot play with it.**

## ⚠ NOTE

**Never press the button of the remote controller with a hard, pointed object.**
The remote controller may be damaged.

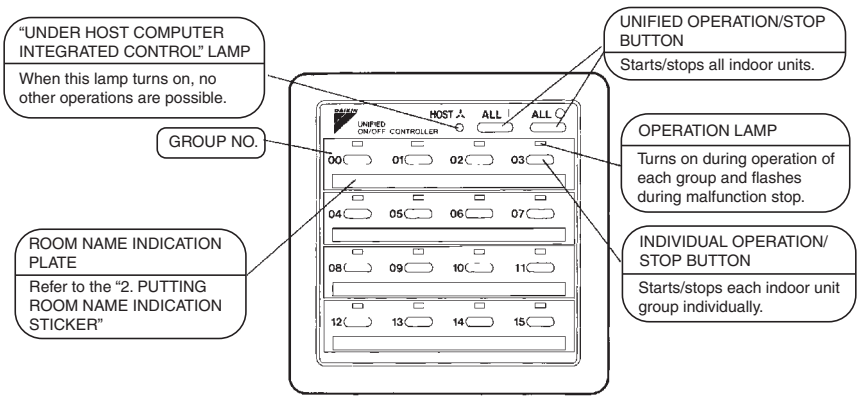
**Never pull or twist the electric wire of the remote controller.**
It may cause the unit to malfunction.

**Do not place the controller exposed to direct sunlight.**
The LCD display may get discolored, failing to display the data.

**Do not wipe the controller operation panel with benzine, thinner, chemical dustcloth, etc.**
The panel may get discolored or the coating peeled off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. And wipe it with another dry cloth.

**Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.**

## 1 NAMES AND FUNCTIONS



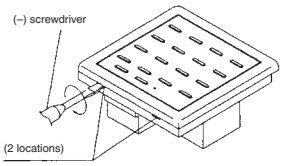

〈〈**NOTE**〉〉

- When using unified ON/OFF controller with other optional controllers for centralized control, "OPERATION LAMP" of the equipment which is not operated may turn on or off after several minutes.
  This state occurs due to signal communications and is not a failure.
- Do not open the upper part of remote controller except when rewriting the indication sticker or selecting control modes.

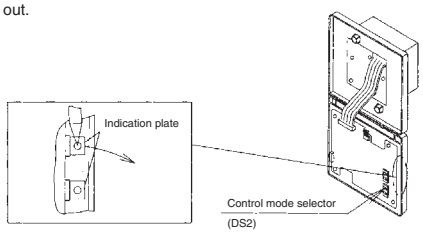
## 2 PUTTING ROOM NAME INDICATION STICKER

① Open the upper part of remote controller.
Insert a (–) screwdriver into the recess between the upper and lower part of remote controller (at 2 locations) and twist the screwdriver lightly.

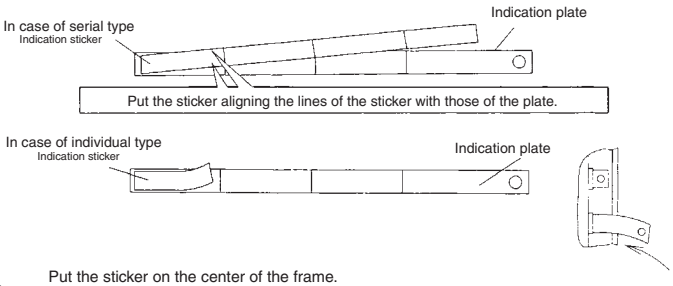
PC board is attached both the upper and lower part of remote controller.
Do not damage the board with the screwdriver.




② Pull out the room name indication plate.
Insert the point of a mechanical pencil etc, into the hole of the indication sticker to pull it out.




③ Put the attached indication sticker on the room name indication plate.



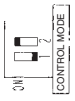

Put the sticker on the center of the frame.
Write the room name in the frame of the sticker with a ball point pen or a felt-tip pen (oil-base).

④ Reinstall the plate as it were, with checking the correct direction.

⑤ Close the upper part of remote controller.

## 3 SELECTING CONTROL MODES

The following four patterns of control mode can be set.

| Control mode | Individual | Centralized | Timer operation possible by remote controller | ON/OFF control impossible by remote controller |
|---|---|---|---|---|
| Content | Operation/stop is controlled by both unified ON/OFF controller and remote controller. | After operated by unified ON/OFF controller,operation/stop is freely controlled by remote controller until stopped by unified ON/OFF controller. | When used in conjunction with schedule timer, operation/stop is controlled freely by remote controller during the set time but operation is not available when schedule timer is ON. | Operation/stop is controlled by unified ON/OFF controller only. Indoor units can not be operated/ stopped by remote controller. |
| DS2 setting |  |  |  |  |



NOTE: • ■ indicates the position of switches.
• Set control modes before turning power supply on.
• When used in conjunction with central remote controller, the control modes of the central remote controller has the priority.

## 4 DISPLAY OF MALFUNCTION

Flashing of lamps indicates malfunctions. Contact your Daikin dealer.
When turning power supply on, all lamps may light and UNDER HOST COMPUTER INTEGRATED CONTROL lamp may flash and not accept the operation for about on minute. These conditions are not malfunctions.

| States of lamps | Contents of malfunctions |
|---|---|
| Flashing of operation lamp | Indicates malfunctions in the indoor unit in the group where the operation lamp is flashing. |
| Flashing of UNDER HOST COMPUTER INTEGRATED CONTROL lamp | Indicates malfunctions in optional controllers for centralized control. |

2P126475-1

## 2.13 <DST301BA61> Schedule Timer Controller (Installation)

Please read these "SAFETY CONSIDERATIONS" carefully before installing air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation. Please instruct the customer on how to operate the unit and keep it maintained.
Also, inform customers that they should store this installation manual along with the operation manual for future reference.
This air conditioner comes under the term "appliances not accessible to the general public".

Meaning of warning, caution and note symbols.

⚠ **WARNING** .....Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ **CAUTION** .....Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
⚠ **NOTE** ..... Indication situation that may result in equipment or property-damage-only accidents.

### ⚠ WARNING

**Ask your dealer or qualified personnel to carry out installation work. Do not try to install the machine by yourself.**
Improper installation may result in water leakage, electric shocks or fire.

**Perform installation work in accordance with this installation manual.**
Improper installation may result in water leakage, electric shocks or fire.

**Be sure to use only the specified accessories and parts for installation work.**
Failure to use the specified parts may result in water leakage, electric shocks, fire or the unit falling.

**Carry out the specified installation work after taking into account strong winds, typhoons or earthquakes.**
Improper installation work may result in the equipment falling and causing accidents.

**Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations and this installation manual.**
An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.

**Make sure that all wiring is secured, the specified wires and used, and no external forces act on the terminal connections or wires.**
Improper connections or installation may result in fire.

**When wiring the power supply and connecting the remote controller wiring and transmission wiring, position the wires so that the electric parts box lid can be securely fastened.**
Improper positioning of the electric parts box lid may result in electric shocks, fire or the terminals overheating.

**Before touching electrical parts, turn off the unit.**

**Ground the air conditioner. Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire.**
Incomplete grounding may result in electric shocks.

**When installing or relocating the system, be sure to keep the refrigerant circuit free from substances other than the specified refrigerant (R410A), such as air.**

**Do not reconstruct or change the settings of the protection devices.**
If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may result.

**Do not touch the switch with wet fingers.**
Touching a switch with wet fingers can cause electric shock.

**Install an earth leak circuit breaker, as required.**
If an earth leak circuit breaker is not installed, electric shock may result.

**Do not install the air conditioner or the remote controller in the following locations:**
(a) where a mineral oil mist or an oil spray or vapor is produced, for example in a kitchen
Plastic parts may deteriorate and fall off or result in water leakage.
(b) where corrosive gas, such as sulfurous acid gas, is produced
Corroding copper pipes or soldered parts may result in refrigerant leakage.
(c) near machinery emitting electromagnetic waves
Electromagnetic waves may disturb the operation of the control system and result in a malfunction of the equipment.
(d) where flammable gases may leak, where there are carbon fiber or ignitable dust suspensions in the air, or where volatile flammables such as thinner or gasoline are handled.
Operating the unit in such conditions may result in fire.

**CISPR 22 Class A Warning.**
This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

3P162015-1A

## ⚠ CAUTION

**Be very careful about product transportation.**

**Safely dispose of the packing materials.**
Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
Tear apart and throw away plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

**Do not turn off the power immediately after stopping operation.**
Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.

## ⚠ NOTE

**Install the indoor and outdoor units, power supply wiring and connecting wires at least 3.5ft. away from televisions or radios in order to prevent image interference or noise.**
(Depending on the radio waves, a distance of 3.5ft. may not be sufficient enough to eliminate the noise.)

**Remote controller (wireless kit) transmitting distance can result shorter than expected in rooms with electronic fluorescent lamps. (inverter or rapid start types)**
Install the indoor unit as far away from fluorescent lamps as possible.

**This unit is a class A product.**
In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

**Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.**

# 1 ACCESSORIES

Check the following accessories are included in the kit before installation.

| | | | |
|---|---|---|---|
| Body | 1 | Installation screws (M4 × 16) | 2 |
| Operation manual | 1 | Attached electric wire (for individual use) | 1 |
| Installation manual* | 4 | Crimp style terminal (for individual use) | 2 |

For Installation, a electrical box to be embedded is necessary (part to be procured in the field/with covers).

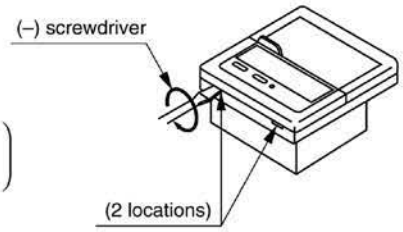
* DST301BA61 includes only one installation manual.

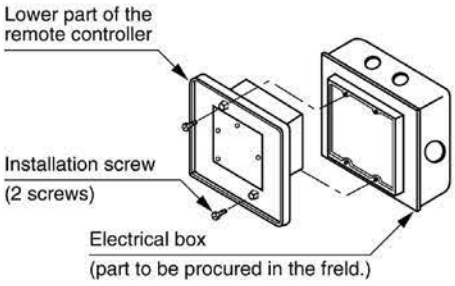
# 2 INSTALLATION AND INITIAL SETTING

**1. Remove the upper part of the remote controller.**

- Insert a (–) screwdriver (2 locations) into the recess between the upper part and the lower part of the remote controller and twist the screwdriver lightly.

  (The PC board is attached with the upper part of the remote controller. Do not damage electric parts with a screwdriver, etc.)




- Attach the lower part to the electrical box (part to be procured in the field) with the provided installation screws.

  (Select a flat face as a installation place. Do not tighten the installation screws excessively not to damage the lower part of the remote controller.)

  For part to be procured in the field electrical box, use KJB212AA (optional accessory).

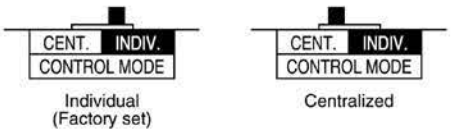
**2. Initial setting**

① Setting connector for individual use (X1A) (Factory set : OFF) (Set for individual use only)

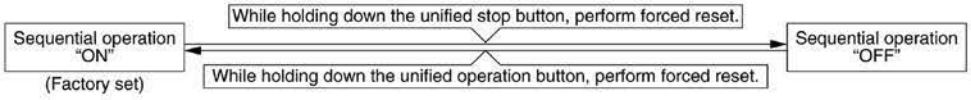
- For individual use of schedule timer
  Insert the connector attached with the body case on the PC board.
- For combined use with other optional controllers for centralized control
  Do not change the factory setting.

② Control mode selector (SS2) (Set for individual use only)
By changing the switch, setting mode of individual and centralized operation is available.

Note) When used with other optional controllers, control mode of central remote controller and unified ON/OFF controller have the priority.

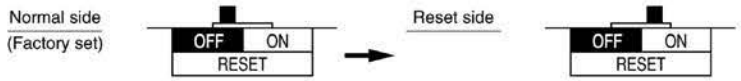


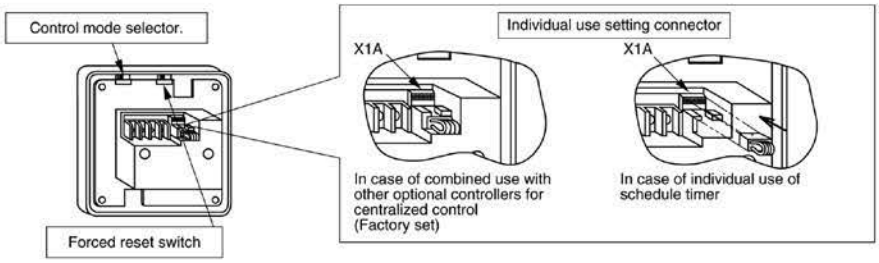

③ Setting of the sequential operation function
The schedule timer is equipped with a sequential operation function that sequentially turns indoor units on in 2-second intervals during unified operation.
(Sequential operation is factory set to "ON.")
To switch sequential operation ON or OFF, set as follows.



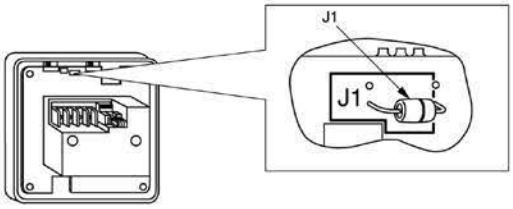

Note) The sequential operation function is designed to reduce the load on the power supply equipment, but does not quarantee that compressors will not be started simultaneously. You cannot therefore count on a capacity reduction effect by power supply equipment breaker selection.

④ Forced reset switch (SS1)
When changing the setting of the connector for individual use, etc., the switch can be reset simply by setting it to the reset side once and returning to the normal side. This procedure enables to reset without turning off the power. (Set the normal side at normal operation.)



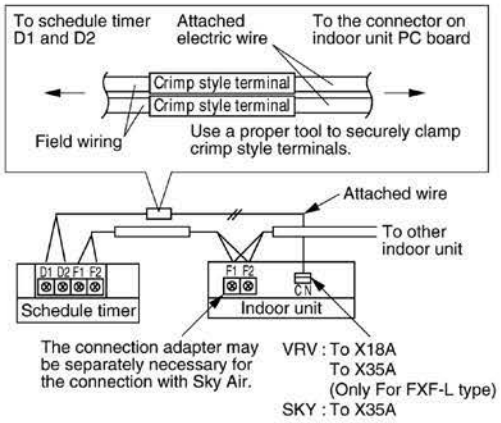




⑤ Setting for special function
When you want to have a programmed operation of a part of indoor units by using only schedule timer, cut off JP1 and supply the power again.
You can have a programmed operation of the indoor units set the address for central control by local remote controller.



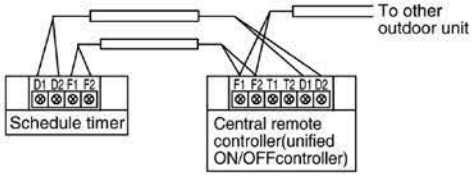

**3. Transmission wiring**

- In case of individual use of schedule timer
  Connect terminals of the schedule timer (F1. F2) with terminals of the indoor unit (F1. F2). Connect terminals of the schedule timer (D1. D2) and the connector on the indoor unit PC board, using the attached electric wire and crimp style terminals.
  Prevent the connection part of crimp style terminal from getting out of the electric parts box of indoor unit.
- In case of combined use with other optional controllers for centralized control
  Connect terminals of the schedule timer (F1, F2, D1, D2) and the terminals of the central remote controller (or unified ON/OFF controller).



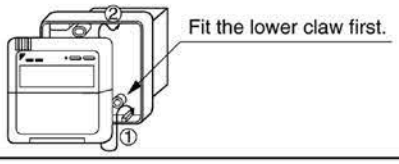

**Wiring specifications**

| | F1, F2 | D1, D2 |
|---|---|---|
| Wiring | Sheathed wire (2-wire) | Sheathed wire (2-wire) |
| Gauge | 0.75 ~ 1.25mm² | 0.75 ~ 1.25mm² |
| Length | Max. 1000m | Max. 150m |




**NOTES:**
1. Electrical box and transmission wiring are not attached.
2. Do not touch the PC board with your hand.
3. Keep transmission wiring at least 50 mm away from power supply wiring to avoid malfunctions.

**4. Install the upper part of the remote controller as before.**




3P162015-1A

## 3 SETTING GROUP NO. FOR CENTRALIZED CONTROL

Set the group number of each group of the indoor unit from the remote controller. (In case of no remote controller, also connect the remote controller and set the group No. Then, remove the remote controller.)

(1) Turn ON the power of the indoor unit and SCHEDULE TIMER.
(Unless the power is ON, no setting can be made.)
Check that the installation and electrical wiring are correct before turning the power supply ON.
(When the power supply is turned ON, all LCD appear once and the unit may not accept the operation for about one minute with the display of "88".)

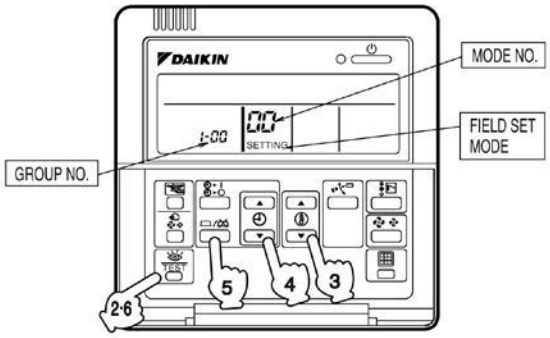
(2) While in the normal mode, hold down the " " button for a minimum of 4 seconds.
The remote controller will enter the FIELD SET MODE.

(3) Select the MODE No. "00" with the " " button.

(4) Use the " " button to select the group No. for each group.
(Group numbers increase in the order of 1-00,1-01,···1-15, 2-00,···8-15.)

(5) Press " " to set the selected group No.

(6) Press " " to return to the NORMAL MODE.




NOTES)
- In case of individual use of schedule timer
  Group number setting is not necessary. It is automatically set when turning power supply ON.
- See the instruction manuals which came with the Ventiair and adapters (i.e., multi-purpose adapters) for details on their Group No. settings.

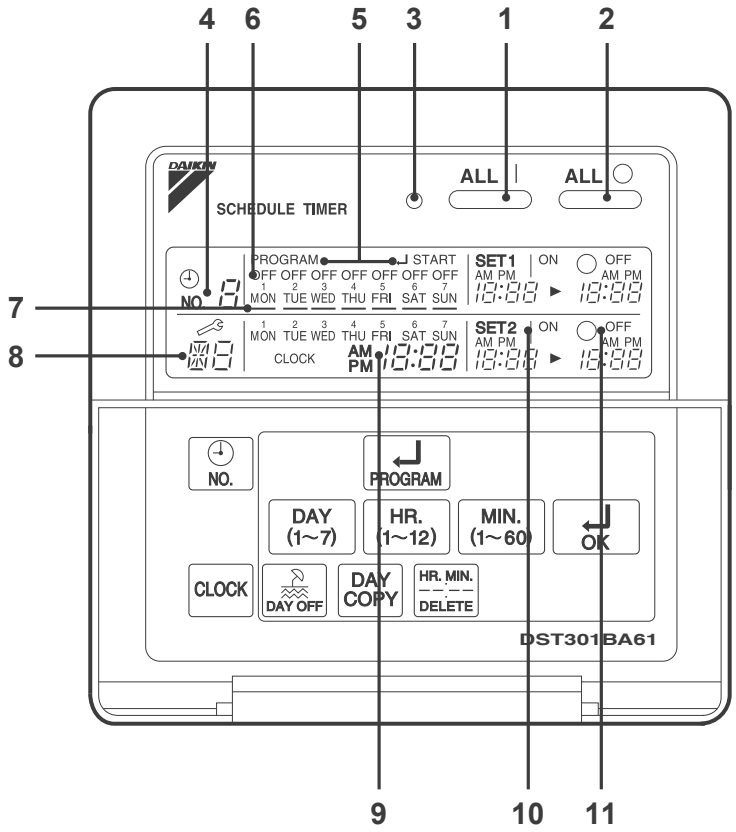
NOTICE Be sure to keep the operation manual for maintenance.

## 4 TEST OPERATION

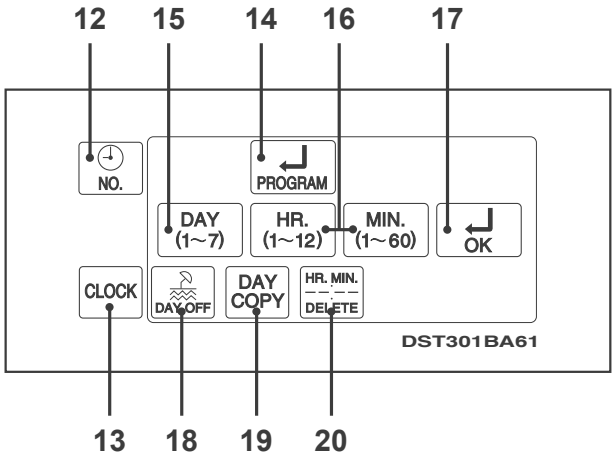
Refer to the installation manual attached to the outdoor unit.

In case the schedule timer is used individually and the wiring is changed after the system has been operated, reset the power after energizing for more than five minutes.
It may not be possible to control the unit from the schedule timer.

## 2.14 <DST301BA61> Schedule Timer Controller (Operation)

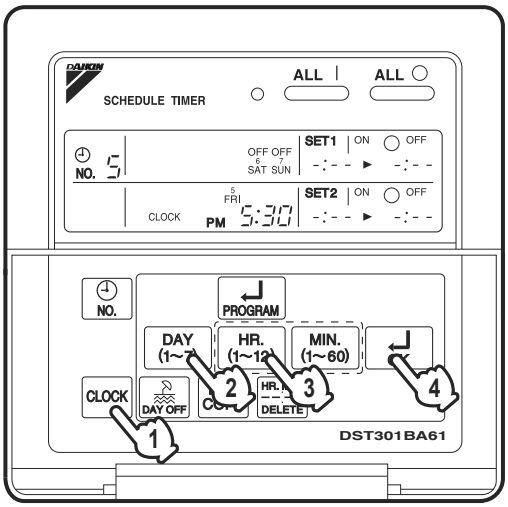



### 1

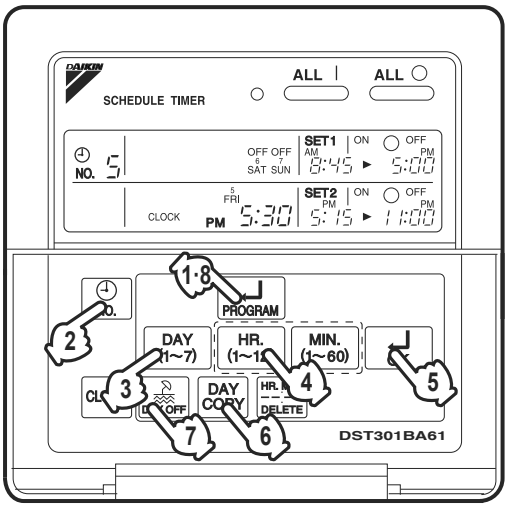



### 2

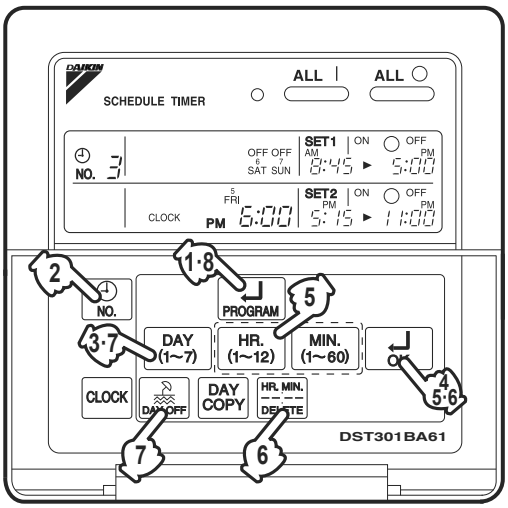
[1]



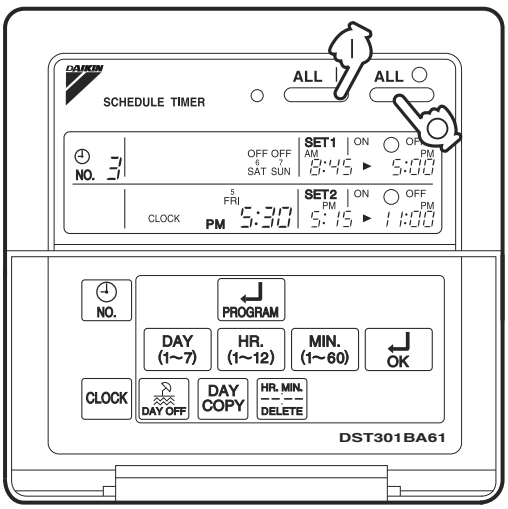

3



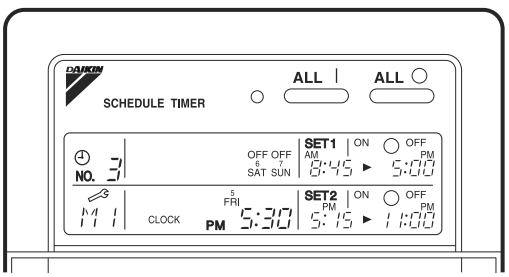

4




5




6




7

[2]

3P124623-5C

# SAFETY CONSIDER-ATIONS

Please read these " SAFETY CONSIDER-ATIONS " carefully before installing air conditioning equipment and be sure to install it correctly.
After completing the installation, make sure that the unit operates properly during the start-up operation.
Please instruct the customer on how to operate the unit and keep it maintained.
Also, inform customers that they should store this installation manual along with the operation manual for future reference.
This air conditioner comes under the term " appliances not accessible to the general public ".

Meaning of warning, caution and note symbols.

⚠ **WARNING**..... Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION**..... Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ **NOTE** ..... Indicates situation that may result in equipment or property-damage-only accidents.

**Keep these warning sheets handy so that you can refer to them if needed.**
Also, if this equipment is transferred to a new user, make sure to hand over this operation manual to the new user.

## ⚠ WARNING

**In order to avoid electric shock, fire or injury, or if you detect any abnormality such as smell of fire, turn off power and call your dealer for instructions.**

**Ask your dealer for installation of the air conditioner.**
Incomplete installation performed by yourself may result in a water leakage, electric shock, and fire.

**Ask your dealer for improvement, repair, and maintenance.**
Incomplete improvement, repair, and maintenance may result in a water leakage, electric shock, and fire.

**Improper installation or attachment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment. Be sure only to use accessories made by Daikin which are specifically designed for use with the equipment and have them installed by a professional.**

**Ask your dealer to move and reinstall the air conditioner or the remote controller.**
Incomplete installation may result in a water leakage, electric shock, and fire.

**Never let the indoor unit or the remote controller get wet.**
It may cause an electric shock or a fire.

**Never use flammable spray such as hair spray, lacquer or paint near the unit.**
It may cause a fire.

**Never replace a fuse with that of wrong ampere ratings or other wires when a fuse blows out.**
Use of wire or copper wire may cause the unit to break down or cause a fire.

**Never inspect or service the unit by yourself.**
Ask a qualified service person to perform this work.

**Cut off all electric waves before maintenance.**

**Do not wash the air conditioner or the remote controller with excessive water.**
Electric shock or fire may result.

**Do not install the air conditioner or the remote controller at any place where flammable gas may leak out.**
If the gas leaks out and stays around the air conditioner, a fire may break out.

**Do not touch the switch with wet fingers.**
Touching a switch with wet fingers can cause electric shock.

**CISPR 22 Class A Warning:**
This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

## ⚠ CAUTION

**After a long use, check the unit stand and fitting for damage.**
If they are left in a damaged condition, the unit may fall and result in injury.

**Do not allow a child to mount on the unit or avoid placing any object on it.**
Falling or tumbling may result in injury.

**Do not let children play on and around the unit.**
If they touch the unit carelessly, it may result in injury.

**Do not place a flower vase and anything containing water.**
Water may enter the unit, causing an electric shock or fire.

**Never touch the internal parts of the controller.**
Do not remove the front panel. Some parts inside are dangerous to touch, and a machine trouble may happen.
For checking and adjusting the internal parts, contact your dealer.

**Avoid placing the controller in a spot splashed with water.**
Water coming inside the machine may cause an electric leak or may damage the internal electronic parts.

**Do not operate the air conditioner when using a room fumigation - type insecticide.**
Failure to observe could cause the chemicals to become deposited in the unit, which could endanger the health of those who are hypersensitive to chemicals.

**Safely dispose of the packing materials.**
Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
Tear apart and throw away plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

**Do not turn off the power immediately after stopping operation.**
Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.

**The appliance is not intended for use by young children or infirm persons without supervision.**

**The remote controller should be installed in such away that children cannot play with it.**

## ⚠ NOTE

**Never press the button of the remote controller with a hard, pointed object.**
The remote controller may be damaged.

**Never pull or twist the electric wire of the remote controller.**
It may cause the unit to malfunction.

**Do not place the controller exposed to direct sunlight.**
The LCD display may get discolored, failing to display the data.

**Do not wipe the controller operation panel with benzine, thinner, chemical dustcloth, etc.**
The panel may get discolored or the coating peeled off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. And wipe it with another dry cloth.

**Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.**

# CONTENTS

SAFETY CONSIDERATIONS.....1
FEATURES AND FUNCTIONS.....3
NAMES AND FUNCTIONS OF OPERATING SECTION.....4
OPERATION.....5
Setting present time.....5
Setting no. of programmed time.....6
Change and cancellation of no. of programmed time.....7
Manual operation.....9
Operation control code.....9
Error diagnosing function.....9
QUESTION AND ANSWER.....10
SPECIFICATIONS.....12
Specifications.....12
Outline drawings.....12

# FEATURES AND FUNCTIONS

■ **Operation controlled by programmed time**
Operating time and stopping time can be set to the minute by each day of the week. The operating and stopping patterns can also be set in schedule according to the time slot given twice a day in tune with the uses.

See page 5—9.

■ **Unified Operation/Stop**
By using this schedule timer, the unified operation/stop of the indoor unit can be executed manually regardless of the No. of programmed time in operation.

See page 9.

- **When used in conjunction with central remote controller (Optional Accessory)**
  The operation controlled by programmed time can be set for up to eight different patterns (timer No. 1 – 8). Each schedule pattern can be also selected.

# NAMES AND FUNCTIONS OF OPERATING SECTION (Fig. 1, 2)

| | |
|---|---|
| 1 | **UNIFIED OPERATION BUTTON “ ALL ”** |
| | Press this button to perform the unified operation regardless of the No. of programmed time. |
| 2 | **UNIFIED STOP BUTTON “ ALL ”** |
| | Press this button to perform the unified stop regardless of the No. of programmed time. |
| 3 | **OPERATION LAMP (RED)** |
| | The light turns on during the operation of the indoor unit. |
| 4 | **DISPLAY “ NO. 8 ” (TIME NO.)** |
| | Displays the time No. only when used in conjunction with the central remote controller. |
| 5 | **DISPLAY “PROGRAM ↵ START.” (PROGRAMMING START)** |
| | The light turns on when the timer is programmed. |
| 6 | **DISPLAY “ OFF ” (HOLIDAY SETTING)** |
| | Lights above the day of the week set as holiday. The operation controlled by timer is not available on that day. |
| 7 | **DISPLAY “ — ” (SETTING OF DAYS OF A WEEK)** |
| | Flashes below the day of the week programmed. |
| 8 | **DISPLAY “ ” (MALFUNCTION CODE)** |
| | Displays the contents of malfunction during the stop due to malfunction. |

| | |
|---|---|
| 9 | **DISPLAY “ 1 MON 2 TUE 3 WED 4 THU 5 FRI 6 SAT 7 SUN CLOCK AM PM 18:88 ” (PRESENT TIME)** |
| | Displays the present day of the week and time. |
| 10 | **DISPLAY “ AM PM 18:88 ON ” (PROGRAMMED TIME OF SYSTEM START)** |
| | Displays the time programmed to start. |
| 11 | **DISPLAY “ OFF AM PM 18:88 ” (PROGRAMMED TIME OF SYSTEM OFF)** |
| | Displays the time programmed to stop. |
| 12 | **TIME NO. BUTTON “ NO. ”** |
| | See page 5–9. |
| 13 | **CLOCK ADJUSTING BUTTON “ CLOCK ”** |
| | Press this button to set the present time. |
| 14 | **PROGRAMMING START BUTTON “ ↵ PROGRAM ”** |
| | Press this button to set or check the No. of programmed time. Press it again after you are through with the program. |
| 15 | **BUTTON FOR SELECTING DAYS OF A WEEK “ DAY (1~7) ”** |
| | Press this button to select the day of the week. |
| 16 | **HOUR/MINUTE BUTTON “ HR. (1~12) MIN. (1~60) ”** |
| | Press this button to adjust the present time and the programmed time. |

| | |
|---|---|
| 17 | **TIMER ON BUTTON “ OK ”** |
| | Press this button to set the present time and the programmed time. |
| 18 | **HOLIDAY SETTING BUTTON “ DAY OFF ”** |
| | Press this button to set holidays. |
| 19 | **BUTTON FOR COPYING PROGRAM OF PREVIOUS DAY “ DAY COPY ”** |
| | Use this button to set the No. of programmed time same as that of the previous day. |
| 20 | **PROGRAM CANCELING BUTTON “ HR. MIN. DELETE ”** |
| | Use this button to set the programmed time to cancel. The display shows “ – ; – – ”. |
| (Note) 1. Please note that all the displays in the figure appear for explanation purpose or when the cover is open. | |

# OPERATION

## ■ Setting present time (Fig. 3)

**(Example) In case of setting Friday, 5:30 p.m.**

**1. ① Press the CLOCK ADJUSTING BUTTON. The present time display flashes.**

(NOTE)
- The present time needs adjusting in case of turning power supply on for the first time or the occurrence of power failure over the period of 48 hours or more.




**2. ② Press the BUTTON FOR SELECTING DAYS OF A WEEK. Each time the button is pressed, the day display shifts to the right.**

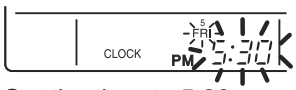
(NOTE)
- The display “ MON ” follows the display “ SUN. ”




Set the day to Friday.

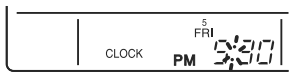
**3. ③ Set the time with the HOUR/MINUTE BUTTON. Each time the HOUR/MINUTE BUTTON is pressed, the display is put forward minute by minute and hour by hour. When the button is kept pressed, the display is put forward continuously.**

(NOTES)
- After becoming “ AM 11:00 ”, when the button is pressed, the display becomes “ PM 0:00 ”.
- After becoming “ 59 ” (minute), when the button is pressed, the display becomes “ 00 ” (minute).




Set the time to 5:30 p.m.

**4. ④ Press the TIMER ON BUTTON the moment the time signal of TV, radio, telephone, etc. is heard. The mark “ : ” flashes, and the clock starts.**




Press the TIMER ON BUTTON in tune with the time signal at 5:30 p.m.

(NOTES)
- The clock used is of 12-hour type.
- When you turn power supply on, the system may display “ 88 ” for about one minute and not start to operate after all the liquid crystal displays appear at a time.
- If the CLOCK ADJUSTING BUTTON is pressed by mistake, press it again to return to the original state. As the clock does not stop, the time indicated by the clock is kept correct. In case of power failure within 48 hours, the clock keeps operating by utilizing the built-in battery.

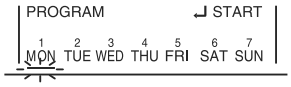
## ■ Setting no. of programmed time (Fig. 4)

**(Example)** **Time No. 5 (to be programmed only when used in conjunction with the central remote controller)**

**Monday to Friday:**
Operating from 8:45 a.m. till 5:00 p.m.
Operating from 5:15 p.m. till 11:00 p.m.

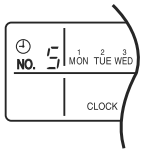
**Saturday and Sunday:**
Setting the whole day stop operation (application for holidays) controlled by programmed time.

**1. ☞1 Press the PROGRAMMING START BUTTON. Programming is available.**
**The display " PROGRAM ↵ START " appears, and the display of days of a week flashes.**

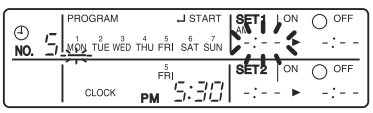



**2. ☞2 Press the TIME No. BUTTON, and select the desired number.**
(NOTE)
• Unless used in conjunction with the central remote controller, The TIME No. is not displayed and can not be selected.

Select the TIME No. 5.



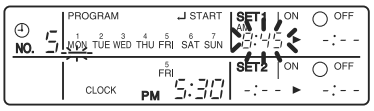

**3. ☞3 Press the BUTTON FOR SELECTING DAYS OF A WEEK, and set the proper day of the week. Each time you press it, the flashing display of days of a week shifts to the right.**




Set to Monday.

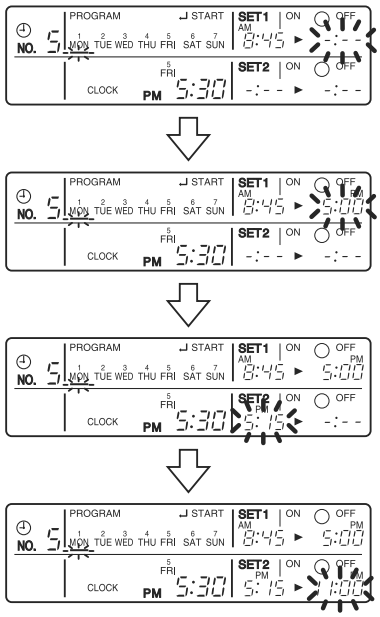
### (1) Setting programmed time

**4. ☞4 Set the programmed time of system start 1 by using the HOUR/ MINUTE BUTTON. Each time the HOUR/MINUTE BUTTON is pressed, the display is put forward minute by minute and hour by hour. When the button is kept pressed, the display is put forward continuously.**




Set the "PROGRAMMED TIME OF SYSTEM START 1" at 8:45 a.m.

**5. ☞5 Press the TIMER ON BUTTON, and set the programmed time of system start 1. Each time you press it, the next area to be set flashes.**
(NOTE)
• Set the other programmed time in the same procedure.



### (2) Set the next day of the week.

Set the day of the week to Tuesday, and copy the program of the previous day (Monday). In the same procedure, set the day of the week to Wednesday through Friday in sequence.

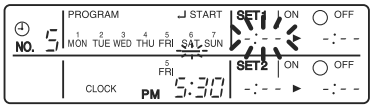
**6. ☞6 Press the BUTTON FOR SELECTING DAYS OF A WEEK and set the following day. Press the BUTTON FOR COPYING PROGRAM OF PREVIOUS DAY. The same program as that of the immediately preceding day of the week is set.**

(NOTE)

- Repeat each procedure 3 – 5 in the above when not copying the contents of the previous day.

### (3) Holiday setting

**7. ☞7 Press the BUTTON FOR SELECTING DAYS OF A WEEK and set one or more days of the week as holiday. Press the HOLIDAY SETTING BUTTON, and the display " OFF " is displayed at the top of the day of the week. If you press it again, the display returns to the original state.**

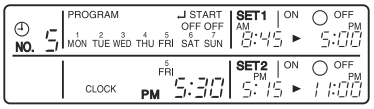



Set Saturday and Sunday as holidays.

**8. ☞8 Press the PROGRAMMING START BUTTON, and finish the program setting.**

(NOTES)

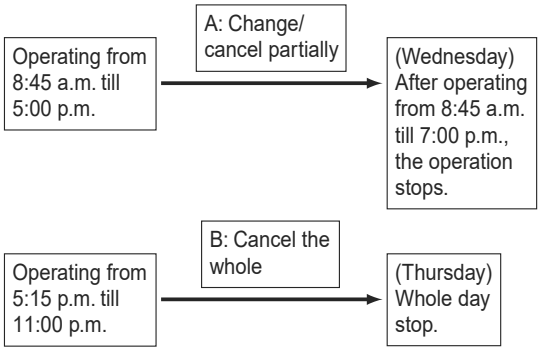
- Unless the button is pressed within 20 minutes, the display will automatically revert back to the original state. In this case, setting contents up to the point where the TIMER ON BUTTON (or HOLIDAY SETTING BUTTON or BUTTON FOR COPYING PROGRAM OF PREVIOUS DAY) is pressed will only take effect.
- The display " PROGRAM ↵START " and the display of days of a week " — " disappears.
- The flashing display goes off, and the No. of programmed time of the present day is displayed. Then the operation controlled by timer starts.
- The operation controlled by timer is executed even while the program is being set.




This is the end of the setting example.

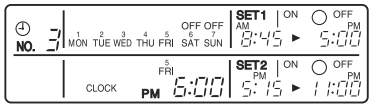
## ■ Change and cancellation of no. of programmed time (Fig. 5)

**(Example) Time No. 3 (to be set only when used in conjunction with the central remote controller)**



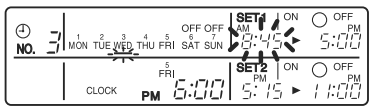

**1. ☞1 Press the PROGRAMMING START BUTTON. The program setting is ready. The display " PROGRAM ↵START " appears, and the display of days of a week flashes.**

**2. ☞2 Press the TIME No. BUTTON, and select the desired No.**




Select the time No. 3.

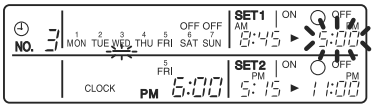
**3. ☞3 Press the BUTTON FOR SELECTING DAYS OF A WEEK, and set the day of the week to be changed. The set No. of programmed time of the day of the week is displayed.**



Set the day to Wednesday.

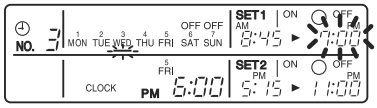
**A. Change/cancel partially**

**4. ☞4 Press the TIMER ON BUTTON and change, and the display of programmed time flashes. Each time you press it, the next area to be set flashes.**



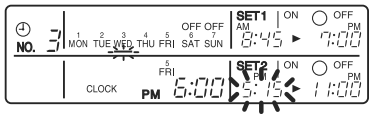
Shift to the display “PROGRAMMED TIME OF SYSTEM OFF 1”.

**5. ☞5 Press the HOUR/MINUTE BUTTON and change the programmed time. Press the TIMER ON BUTTON, and finalize the setting of change.**

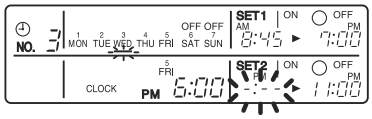


Change the “PROGRAMMED TIME OF SYSTEM OFF 1” to 7:00 p.m.

**6. ☞6 Press the PROGRAM CANCELING BUTTON, and cancel the programmed time. If you press it again, display returns to the original state. Press the TIMER ON BUTTON to finalize the cancellation.**



Shift to the “PROGRAMMED TIME OF SYSTEM START 2”.

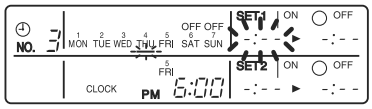


Set the “PROGRAMMED TIME OF SYSTEM START 2” to program cancellation.

In the same procedure, cancel the programmed time of system off 2.

**B. Cancel the whole**

**7. ☞7 Press the BUTTON FOR SELECTING DAYS OF A WEEK, and shift to the day of the week to be canceled. Then, press the HOLIDAY SETTING BUTTON, the display “ OFF ” appears at the top of the particular day of the week. The programmed time is canceled. If you press the button again, the display returns to the original state.**



Shift the day of the week to Thursday to set as a holiday.

**8. ☞ Press the PROGRAMMING START BUTTON. The program setting is now finished.**

(NOTES)
- Unless the button is pressed within 20 minutes, the display will automatically revert back to the original state. In this case, setting contents to the point where the TIMER ON BUTTON (or HOLIDAY SETTING BUTTON or BUTTON FOR COPYING PROGRAM OF PREVIOUS DAY) is pressed will only take effect.
- To continue the change/cancellation, do not press the PROGRAMMING START BUTTON until all change/cancellation are completed.
- The operation controlled by timer is executed even while the program is being set.

## ■ Manual operation (Fig. 6)

This schedule timer enables the operation/stop by pressing the UNIFIED OPERATION/STOP BUTTON in addition to the operation controlled by timer (operation/stop according to the programmed time) at any time.

**1. ☞ Press the UNIFIED OPERATION BUTTON, and the OPERATION LAMP turns on.**

**2. ☞ Press the UNIFIED STOP BUTTON, and the OPERATION LAMP is turned off.**

(NOTES)
- The operation automatically stops according to the programmed time of system off even during the manual operation. In the meantime, the operation starts automatically according to the programmed time of system start even during the stop of operation.
- If the unit is used in conjunction with other optional controllers for centralized control, the OPERATION LAMP of the unit that is not under operation control may be turned on or off a few minutes behind schedule. This shows that the signal is being exchanged, and does not indicate any failure.

| Operation lamp | |
|---|---|
| ○ Turn on: | The light turns on when any of the indoor units is in operation whether the operation is controlled by timer or by hand. |
| ● Turn off: | The light turns off when all the indoor units stop. |

## ■ Operation control code

Two different types of operation control codes can be selected when this kit is used independently (when not used in conjunction with the central remote controller, unified ON/OFF controller, etc.).

### Individual

In case where the operation/stop is controlled by both schedule timer and remote controller.

### Centralized

The operation is controlled by the schedule timer alone, and the operation/stop is controlled freely with the remote controller during the programmed time.

(NOTES)
- For current settings, contact your DAIKIN dealer.
- To change settings, contact your DAIKIN dealer.
  Do not change settings yourself.

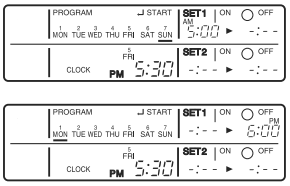
## ■ Error diagnosing function (Fig. 7)

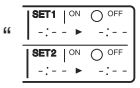
This schedule timer is provided with the malfunction diagnosing function. The malfunction code flashes if there occurs any malfunction in communication, etc. between and among the optional controllers for centralized control. In addition, the operation lamp also flashes if there occurs any malfunction in communication with the indoor unit. Check the contents of the display and contact your DAIKIN dealer because the signals give you the idea of the trouble area.

| Operation lamp | Malfunction code | Contents of malfunction |
|---|---|---|
| Turn off | M1 | Failure of PC board of schedule timer.<br>**Fixes**<br>The following causes are possible. Check each one.<br>**1.** PC board problems |
| Turn on or off | M8 | Malfunction of transmission between each optional controllers for centralized control.<br>**Fixes**<br>Check all central devices which are connected (e.g., power supply, transmission wiring, etc.). |
| Turn on or off | MA | Improper combination of optional controllers for centralized control.<br>**Fixes**<br>The following causes are possible. Check each one.<br>**1.** Are all central devices combined correctly?<br>**2.** Is the master central connector attached to two or more central devices?<br>**3.** Are there 128 or more indoor units connected? |
| Turn on or off | MC | Address failure of schedule timer.<br>**Fixes**<br>The following causes are possible. Check each one.<br>**1.** Do the control range addresses in the central remote controller overlap?<br>**2.** Do the control range addresses in the on/off controller overlap?<br>**3.** Are there 2 or more schedule timers connected? |
| Flash | UE | Malfunction of transmission between indoor unit and optional controllers for centralized control.<br>**Fixes**<br>Inspect all indoor units which are displaying an error (e.g., power supply, transmission wiring, etc.). |
| Flash | — | Malfunction in indoor unit (Refer to the malfunction codes of the indoor remote controller, while also read the " CAUTION FOR SERVICING " attached to the indoor unit.) |

# QUESTION AND ANSWER

| Question | Answer |
|---|---|
| It is possible to make settings twice a day, but is it possible to make only the " off " setting? (To avoid forgetting to turn the unit off.) | Yes. Press the PROGRAM CANCELING BUTTON in the " AM PM ON 10:00 " section in order to set it to " **OFF** ". |

| | |
|---|---|
| Is it possible to set times which straddle days? | Yes, it is possible.<br>Example:<br>Start operation at 5:00 a.m. on Sunday<br>Stop operation at 6:00 p.m. on Monday<br>  <br> |
| The unit does not turn on even though the set “ on ” time has come.<br>(When using the schedule timer alone) | The following causes are possible.<br>**1.** Are the “ on ” time and the “ off ” time set to the same time? |
| The unit does not turn on even though the set “ on ” time has come.<br>(When using the unit with a central remote controller) | The following causes are possible. Check each one.<br>**1.** Was the timer number set with the central remote controller?<br>Was an incorrect timer number set?<br>**2.** Is another timer no. set with the central remote controller set for “ off ” at the same time?<br>**3.** Is the operation code set to “ remote control permission timer ” using the central remote controller or the on/off controller? |
| The unit operates even though that day is set as a holiday.<br>(When using the unit with a central remote controller) | The following causes are possible.<br>**1.** Is another timer number set with the central remote controller set for “ on ” at the same time?<br>(If two timer numbers are set, make sure that the settings for holidays and working days do not overlap between the different timer numbers.) |

| | |
|---|---|
| The TIME NO. is not displayed. | The following causes are possible.<br>**1.** The TIME NO. is not displayed when using the schedule timer alone.<br>(It can be set if using the central remote controller at the same time.) |
| The display remains<br>“  ”<br>even though I push the HOUR/MINUTE BUTTON in the timer program settings. | The following causes are possible.<br>**1.** Is the day set to a holiday? |
| I cannot set “ central management priority ” or “ after-push priority ” with the schedule timer. | The following causes are possible.<br>**1.** Is a central remote controller or on/off controller also installed?<br>* **The priority order of the operation codes depends on the central devices which are installed.**<br>The below operation codes are set.<br>• Schedule timer<br>Central remote controller is used as well<br>Operation code of the central remote controller<br>• Schedule timer<br>On/off controller is used as well<br>Operation code of the on/off controller<br>• Schedule timer<br>Central remote controller<br>On/off controller is used as well<br>Operation code of the central remote controller |

## 2.15 <KRP1C76/77> Wire Renovated Adaptor (Installation)

# Wiring Adaptor PCB Installation Manual

KRP1C76・77

**Accessories**

Check if the following accessories are included in the kit.

| Name | Adaptor PCB | Harness | PCB support | Clamp | Installation manual |
|---|---|---|---|---|---|
| Shape |  |  |  |  |  |
| Quantity | 1 | 1 | 4 | 3 | 1 |

**Note**

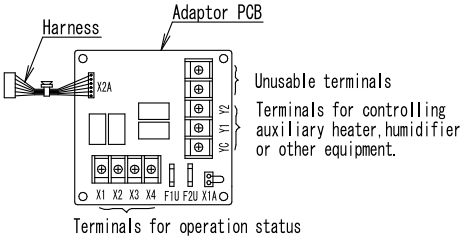
- Kits vary according to applicable models.
- A special adaptor plate or installation box for adaptor PCB is required for the following models.

FXFQ~AA, FCQ~AA ・・・KRP1H98A
FXFQ~AA, FCQ~AA(Self-cleaning filter panel) ・・・KRP1J98A
FXZQ~TB, FFA~A ・・・KRP1BB101
FXSQ~TB, FXMQ~TB, FBQ~TB, CDMA~A, FDMA~A ・・・KRP4A98

**<Caution>**

- All wiring must be performed by an authorized electrician. Improper installation may result in water leakage, electric shock or fire.
- For electric wiring work, refer to "Wiring diagram" attached to the control box cover of indoor unit and this manual. Improper installation may result in water leakage, electric shock or fire.
- All wiring must be worked after shutting down power supply. Touching the live part may result in electric shock.
- All field supplied parts and materials and electric works must conform to local codes.
- A circuit breaker capable of shutting down power supply to the entire system must be installed.
- When wiring, use the specified wires to make secure connections, and securely fasten the wires to the terminal connections so that no external force is applied to the wires. Incomplete connection or fixing may result in electric shock, heat generation or fire.
- When wiring, position the wires so that the control box cover can be securely fastened. Improper positioning of the control box cover may result in electric shock or fire.

## ❶ Names of parts

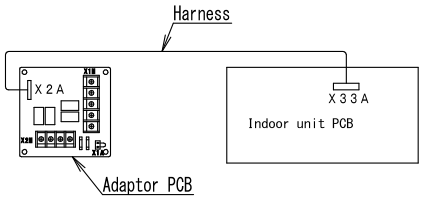



## ❷ Electric wiring

- Refer to the wiring diagram attached to the indoor unit and the installation manual included in Installation box for adaptor PCB or Adaptor plate for detailed information such as wiring routing and treatment before attempting to wire.

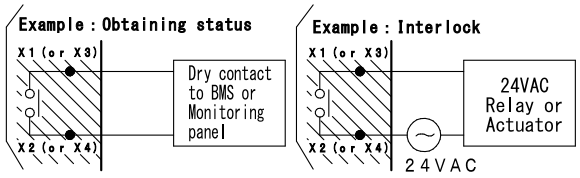
**〔Make sure wires to units do not pass over this adaptor PCB when wiring.〕**

- Wire the adaptor PCB to the indoor unit as shown below.



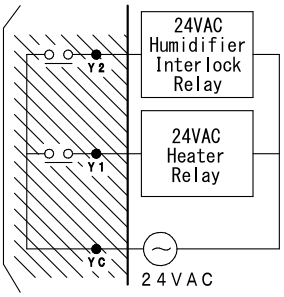

① Thermo-ON and Fan ON status

- Thermo-ON status
  Contact terminals X1 and X2 close while the indoor unit is Thermo-ON (call for cooling or heating).
- Fan ON status
  Contact terminals X3 and X4 close when indoor unit fan is ON.




② Interlocking Humidifier and Heater

- Humidifier output(Y2-YC)
  - Energized while heating Thermo-ON (call for heating).
- Heater output(Y1-YC)
  - Auxiliary heater output with heat pump heating
  - Primary heater output when heat pump lockout enabled.

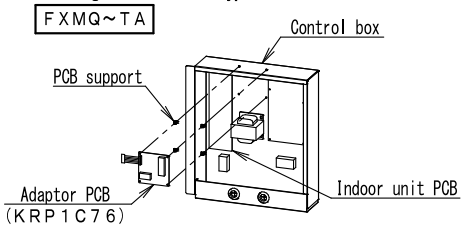



## ❸ Installation

- Installation differs according to models as shown below.
- Install according to the installation manual included in Installation box for adaptor PCB or Adaptor plate.
- Do not bundle low and high voltage wires together.
- Bundle any excess wires with the attached clamps so as to keep loose wires off the indoor unit PCB.

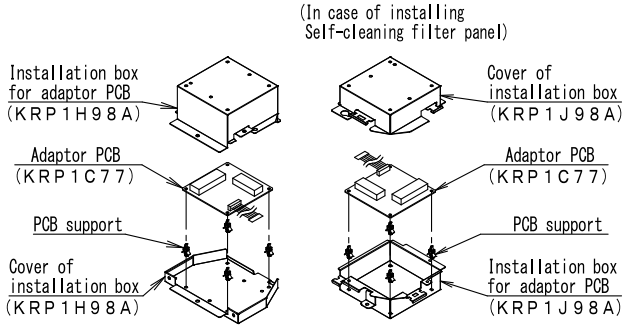
**<Ceiling mounted duct type>**

FXMQ~TA



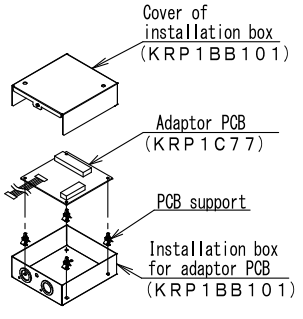

**<Ceiling mounted cassette type>**

FXFQ~AA FCQ~AA



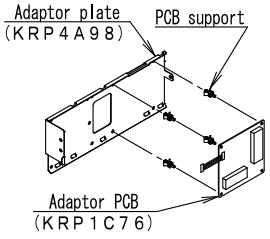

**<Ceiling mounted cassette type(2×2)>**

FXZQ~TB FFA~A




**<Ceiling mounted duct type>**

FXSQ~TB FXMQ~TB FBQ~TB CDMA~A FDMA~A




2P731137－1 A

2P731137-1A

## 2.16 <KRP4A74> Group Control Adaptor (Installation)

DAIKIN VRV HEAT PUMP

Wiring Adaptor for Electrical Appendices (Group Control Adaptor)

Installation Manual KRP4A71 • 72 • 73 • 74

Accessories Check if the following accessories are included in the kit.

| Adaptor | Relay harness |
|---|---|
| ×1 | (1) ×1 each |
| | (2) |

| | |
|---|---|
| PCB support | ×4 |
| Clamp | ×3 |
| Installation manual | ×1 |

Notes
- Kits vary according to applicable models.
- A special adaptor fixing plate and box are required for the following models.

FXAQ..... KRP4A93
FXFQ • FCQ..... KRP1H98
FXHQ • FHQ..... KRP1C93
FXDQ • FXZQ • FXTQ • FTQ • FFA..... KRP1B101
FXMQ～P • FBQ..... KRP4A96

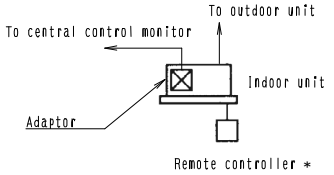
### 1 System outline

This kit enables remote control (ON/OFF control, temperature setting, operation display, error display) and can be used with the following systems though it cannot be used in conjunction with other optional controllers for centralized control.

1. Individual control (Each indoor unit is controlled individually.)

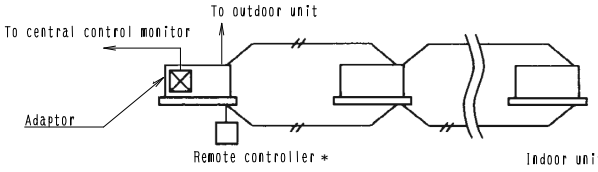
This system requires the following parts.
- Adaptor..... KRP4A71 • 72 • 73 • 74 Any one kit
- Remote controller..... *
  (For operation control)

(Ex.)When individually controlling 8 FXSQ12MVJU units
KRP4A71×8 kits
BRC1E71×8 kits




2. Group control (Multiple indoor units are controlled as a group.)

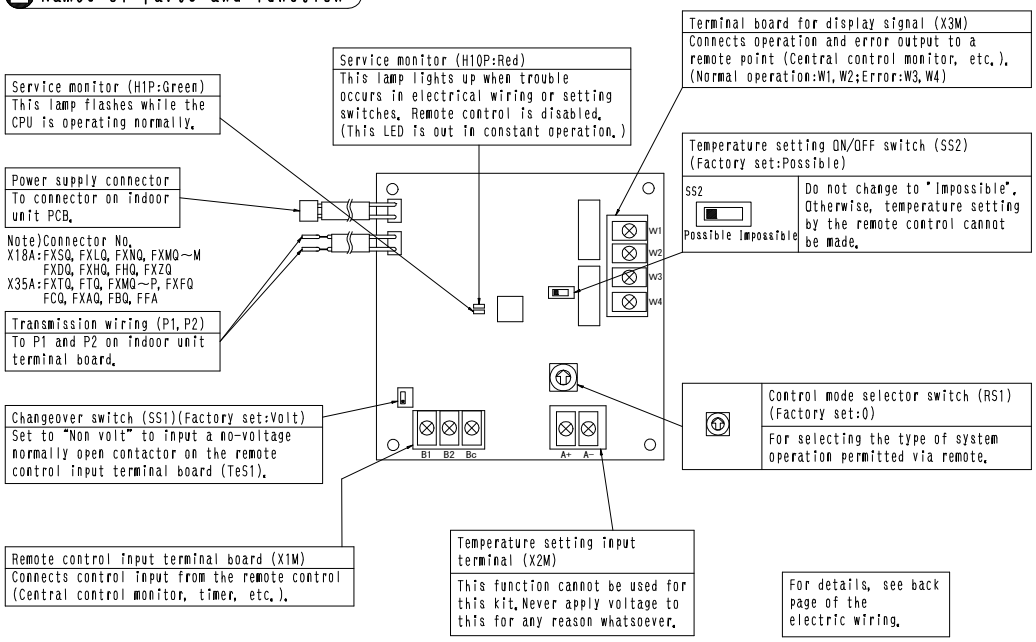
This system requires the following parts.
- Adaptor..... KRP4A71 • 72 • 73 • 74 Any one kit
- Remote controller..... *
  (For operation control)




Indoor unit max. 16 units

*:Please prepare a remote controller compatible with the indoor unit to which the adaptor will be connected.

### 2 Names of parts and function

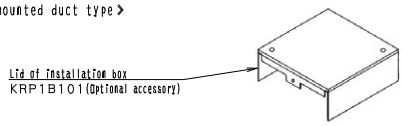



1P161220-1C

## ❸Installation

《Ceiling-mounted duct type》

FXDQ
FXZQ

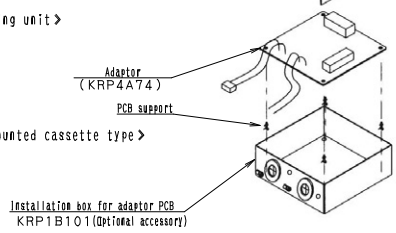



《Air handling unit》

FXTQ
FTQ

《Ceiling-mounted cassette type》

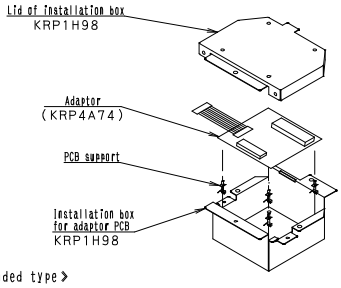
FFA




Note: Installation box for adaptor PCB is required to install the adaptor.

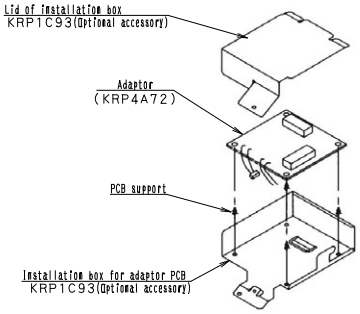
《Ceiling-mounted cassette type》

FXFQ (Fit the edge of the adaptor PCB into the grooves on the adaptor box.)
FCQ




《Ceiling-suspended type》

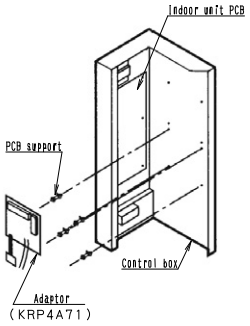
FXHQ
FHQ




Note: Installation box for adaptor PCB is required to install the adaptor.

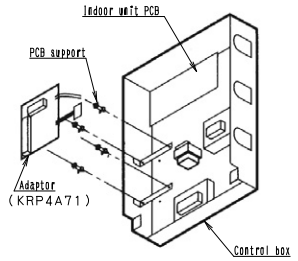
《Floor-standing type》

FXLQ
FXNQ



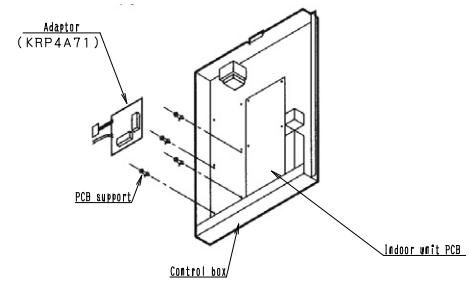

《Ceiling-mounted built-in type》

FXSQ



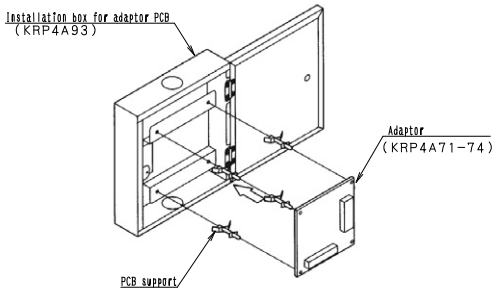

《Ceiling-mounted duct type》

FXMQ~M



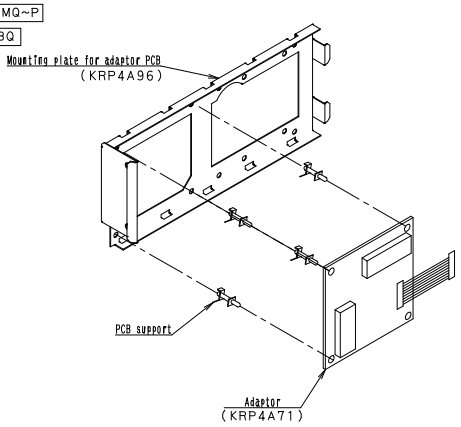

《Wall-mounted type》

FXAQ




《Ceiling-mounted duct type》

FXMQ~P
FBQ




1P161220-1C

# 2.17 <KRP928BB2S> Interface Adaptor for DIII-NET

## Safety Precautions

- Read these Safety Precautions carefully to ensure correct installation.
  This manual classifies precautions into WARNING and CAUTION.

⚠ **WARNING :** Failure to follow WARNING is very likely to result in such grave consequences as death or serious injury.

⚠ **CAUTION :** Failure to follow CAUTION may result in serious injury or property damage, and in certain circumstances, may result in a grave consequence.

Be sure to follow all the precautions below ; they are all important for ensuring safety.

**⚠ WARNING**

- **Installation should be left to the dealer or another qualified professional.**
  Improper installation by yourself may cause malfunction, electrical shock, or fire.
- **Install the set according to the instructions given in this manual.**
  Incomplete or improper installation may cause malfunction, electrical shock, or fire.
- **Be sure to use the standard attachments or the genuine parts.**
  Use of other parts may cause malfunction, electrical shock, or fire.
- **Disconnect power to the connected equipment before starting installation.**
  Failure to do so may cause malfunction, electrical shock, or fire.
- **A ground fault circuit interrupter / an earth leakage circuit breaker should be installed.**
  If the breaker is not installed, electrical shock may occur.

**⚠ CAUTION**

- **Do not install the set in a location where there is danger of exposure to inflammable gas.**
  Gas accumulated around the unit at the worst may cause fire.
- **To prevent damage due to electrostatic discharge, touch your hand to a nearby metal object (doorknob, aluminum sash, etc.) to discharge static electricity from your body before touching this kit.**
  Static electricity can damage this kit.
- **Lay this cable separately from other power cables to avoid external electrical noises.**

- After installation is complete, test the operation of the PCB set to check for problems, and explain how to use the set to the end-user.

## 1.Overview, Features and Compatible Models

This kit is the interface required when connecting the central controller and a Room Air Conditioner. Use of the central controller makes it possible to perform the following monitoring and operations. It is compatible with room air conditioners which have an HA connector S21.

1. Run / stop for the central controller and wired remote controller, operating mode selection, and temperature can be set.
2. The operating status, any errors, and the content of those errors can be monitored from the central controller and wired remote controller.
3. Run / stop for the central controller and wireless remote controller, operating mode selection, and the temperature setting can be limited by the central controller.
4. Zone control can be performed from the central controller.
5. The unit can remember the operating status of the air conditioner before a power outage and then start operating in the same status when the power comes back on.
6. Card keys, operating control panels, and other constant / instantaneous connection-compatible equipment can be connected.
7. The Operating / error signals can be read.
8. The indoor temperature can be monitored from the iTM / iTC.

Precaution
1. When reading the Operating / error signals, a separate external power source (12 V DC) is needed.
2. A separate timer power source (16 V DC) is needed when using the schedule timer independently, and not in conjunction with other central controllers.
3. The range of temperatures that can be set from the central controller is 18°C to 32°C in cooling and 14°C to 28°C in heating.
4. Fan operation cannot be selected from the central controller or wired remote controller.
5. Group control (i.e., control of multiple indoor units with a single remote controller) is not available.
6. Monitoring is not available of the thermo status, compressor operating status, indoor fan operating status, electric heater, or humidifier operating status.
7. Forced thermo off, filter sign display and reset, fan direction and speed settings, air conditioning fee management, energy savings instructions, low-noise instructions, and demand instructions cannot be made.
8. Since a stop due to a momentary power failure cannot be detected, automatic operating start may not be possible.

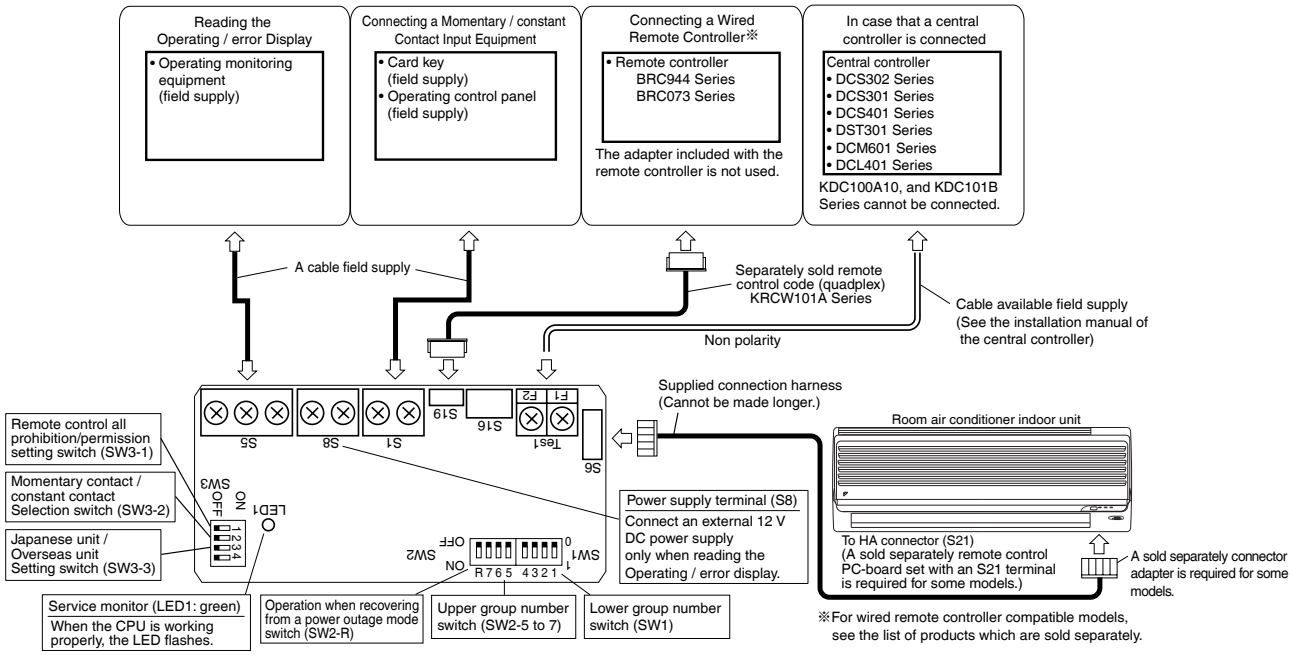
## 2.Component Parts

This kit includes the following components. Check to ensure that none of these are missing.

| Parts | Q'ty | Parts | Q'ty |
|---|---|---|---|
| Kit assy<br>PCB is in the housing.  | 1 | Connection harness (about 1.6m) | 1 |
| | | Mounting screws | 3 |
| | | Binding band | 6 |
| | | Installation manual | 2 |
| | | Seal | 2 |

## 3.Names of Parts and Electric Wiring

**<Wiring procedure>**




3P248024-1L

## 4.Switch Settings

**NOTE** Turn the power on after all the switches have been set. Settings made while the power is on are invalid.

Open the Kit's case and set the switches on the circuit board.

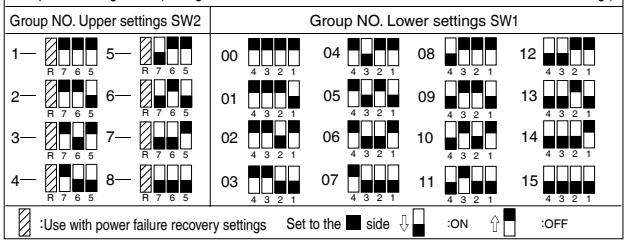
(1) For Overseas / Japanese unit setting (SW3-3)
Room air conditioners, different methods are used for setting the temperature in automatic mode, so this switch needs to be set.

| Destination | SW3-3 setting | What Happens |
|---|---|---|
| Japan | OFF (Factory setting) | • "Automatic" operation is not available from the central controller. When using "automatic" operation using the wireless remote controller, the central controller displays automatic cooling (heating) and 25°C. Even if the temperature is changed, it will return to 25°C after a while. |
| Overseas | ON | • "Automatic" operation is available from the central controller. |

(2) Group number settings (SW1 and SW2-5 to SW2-7)
Set these when using the central controller. (Set to the ■side.) Do not set more than one unit to the same number.
Use SW2-R for (3) Settings when recovering from a power outage.

However, these settings do not need to be made when using the schedule timer independently.
(The settings are needed when used in conjunction with another DCS Series central controller.)
In this case, the schedule timer performs an auto address after the power is turned on, so new group numbers are automatically set. Settings made using the switches will be overwritten.

Group NO. Settings table (Enlarged section SW1 and SW2 in "3. Names of Parts and Electrical Wiring")




NOTE also that a separate timer power source is needed when using the schedule timer independently.
Power source specs:16 V DC, +10%, -15%, 200mA.

(3) Settings when recovering from a power outage (SW2-R)
This selects whether to restart operation when the power comes back on after a power outage occurred during operation. This setting is given priority in cases where the indoor unit has an auto start ON / OFF jumper. Note also that regardless of whether switch SW2-R is on or off, the operating mode (NOTE), set temperature, fan direction and speed settings, and remote control prohibitio n status are stored.

| SW2-R setting | What Happens |
|---|---|
| OFF (Factory setting) | Stops after recovering from a power outage |
| ON | Stops if the unit was stopped before the power outage and runs if it was running. |

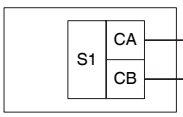
(NOTE) The following settings apply to the models below.

| Mode before the power outage / Room air conditioner | COOLING | HEATING |
|---|---|---|
| Models with humid heating and dehumidifying functions. | DRY COOLING | HUMID HEATING |
| Models with dehumidifying function. | | HEATING |

(4) Contact input function settings (SW3-1 to SW3-2)
When using contact input (S1), choose one of the following functions.

| S1 operating mode | SW3-1 setting | SW3-2 setting | What Happens | Control mode |
|---|---|---|---|---|
| Instantaneous contact input (factory setting) | OFF | OFF | The operating status of the air conditioner is reversed by an instantaneous input of 100 msec or more. | Last command priority |
| Constant contact input | | ON | Contact - Open to close: air condition runs. Close to open: air conditioner is stopped (NOTE 1). | ON / OFF control is rejected (operate / stop / timer prohibition) (NOTE 2). |
| Remote control all prohibition/permission input | ON | Invalid | Contact - Open to close: air condition stops. Close to open: no change in operating status. | All remote controller actions are prohibited when the contact is closed. (NOTE 3) |

NOTE1: Since central controller uses last command priority, the contact status and operating status of the air conditioner might not match sometimes.
Example: If the unit is run from the central controller while the air conditioner is stopped with an open contact, the contact will be open and the unit will be running.
NOTE2: Operating mode and fan direction and speed settings can be changed.
NOTE3: If the contact is closed while the ON timer is set, as the power ON timer function is still operating, the operation starts at the time specified by the timer. To prevent operation of the power ON timer, use of the 〈KRP413BB1S〉 remote control PC-board set is recommended. However, note that it cannot be used in tandem with the central controller.
If this product is connected to an air conditioner manufactured in or after 2011, when the contact is closed, the power ON timer may be cancelled depending on the combination with the model.




Run / stop Input
Contact specs
No-voltage minute electric current contact
(Minimum applicable load 12 V DC, 1mA or lower)
Total wire length max: 100m

## 5.Control Codes

When using a central remote controller, the operating codes can be used to limit operation from wireless remote controllers. Three beeps for signal reception will be heard continuously when the wireless remote controller is operated while in central control.
○ : permitted; × : prohibited

| S1 operating mode | Control mode | Control code | Operations from the remote controller: "Run" control from the central controller: Run / timer | Stop | Operating mode temperature | Fan direction and fan speed | "Stop" control from the central controller: Run / timer | Stop | Operating mode temperature | Fan direction and fan speed | Operations from central controller and contact input |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Instantaneous contact mode | ON / OFF control is rejected | 0,1,3 | × | × | ○ | ○ | × | × | ○ | ○ | ○ |
| | | 10,11 | × | × | × | | × | × | × | | |
| | Only OFF control is accepted | 2<br>12–19 | × | ○ | × | | × | ○ | × | | |
| | Central priority | 4 | ○ | ○ | ○ | | × | ○ | × | | |
| | | 5 | ○ | ○ | ○ | | × | × | ○ | | |
| | Last command priority | 6,7 | ○ | ○ | ○ | | ○ | ○ | ○ | | |
| | Timer operation is accepted by remote controller | 8 | ○* | ○* | ○* | | × | ○ | × | | |
| | | 9 | ○* | ○* | ○* | | × | × | ○ | | |
| Constant contact mode | | 2,10-19 | × | × | × | | × | × | × | | |
| | | 0,1,3,5-7 | | | ○ | | | | ○ | | |
| | | 4 | | | ○ | | | | × | | |
| | | 8 | | | ○* | | | | × | | |
| | | 9 | | | ○* | | | | ○ | | |
| All remote controller actions are prohibited | | | × | × | × | × | × | × | × | × | |

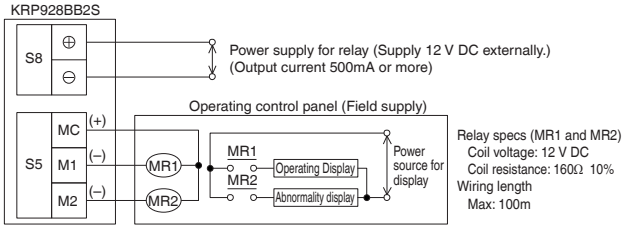
*Only during timer operation

The remote controller permission / prohibition settings using the iTM / iTC are as follows.
○ : permitted; × : prohibited

| S1 pin operating mode | iTM / iTC settings: Start / stop | Change operating mode | Change set temperature | Operations from the remote controller: Run / timer | Stop | Operating mode temperature | Fan direction and fan speed | Operations from central controller and contact input |
|---|---|---|---|---|---|---|---|---|
| Instantaneous contact mode • Constant contact mode | ON / OFF control is rejected | permitted | permitted/prohibited | × | × | ○ | ○ | ○ |
| | | prohibited | permitted/prohibited | × | × | × | | |
| Instantaneous contact mode | Only OFF control is accepted | permitted | permitted | × | × | ○ | | |
| | | | prohibited | × | ○ | × | | |
| | | prohibited | permitted/prohibited | | | | | |
| Constant contact mode | | permitted | permitted | × | × | ○ | | |
| | | | prohibited | × | × | × | | |
| | | prohibited | permitted/prohibited | | | | | |
| Instantaneous contact mode | Last command priority | permitted | permitted/prohibited | ○ | ○ | ○ | | |
| | | prohibited | permitted/prohibited | × | ○ | × | | |
| Constant contact mode | | permitted | permitted/prohibited | × | × | ○ | | |
| | | prohibited | permitted/prohibited | × | × | × | | |
| All remote controller actions are prohibited | Does not affect settings | | | × | × | × | × | |

## 6.Read Operating / Error Display Signal

The Operating / error signals can be read from the contact output (S5).
Output specs
M1: Turn MR 1 ON when the air conditioner is running.
M2: Turn MR 2 when a communication error has occurred between the KRP928BB2S and the air conditioner, or MR 1 is ON and the unit has stopped after an error. MR 2 is not turned ON during a warning.




## 7.Combining Equipment

The central controller can be combined with the following devices.

| | Central Remote Controller | ON / OFF controller | Schedule timer | D-BIPS | Contact input | Wired Remote Controller | Wireless Remote Controller |
|---|---|---|---|---|---|---|---|
| Central Remote Controller | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ON / OFF controller | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Schedule timer | ○ | ○ | × | × | ○ | ○ | ○ |
| D-BIPS | ○ | ○ | × | × | ○ | ○ | ○ |
| Contact input | ○ | ○ | ○ | ○ | × | ○ | ○ |
| Wired Remote Controller | ○ | ○ | ○ | ○ | ○ | × | × |
| Wireless Remote Controller | ○ | ○ | ○ | ○ | ○ | × | ○ |

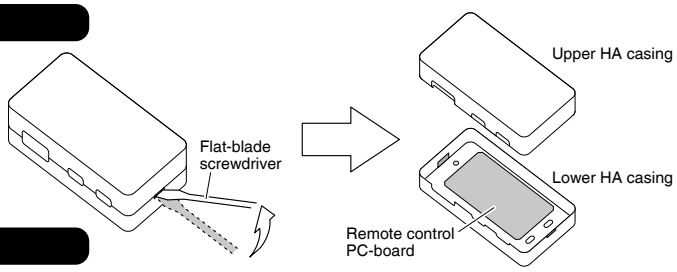
3P248024-1L

| ⚠ WARNING | • Do not install the unit in a location where it may be exposed to water.<br>• Install the unit indoors. |
|---|---|

## 1. Removal of upper HA casing

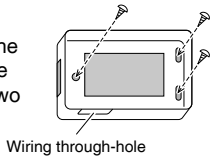
① Insert a flat-blade screwdriver into the groove between the upper and lower casings.

② Lift the handle of the screwdriver upward.




## 2. Securing of lower HA casing

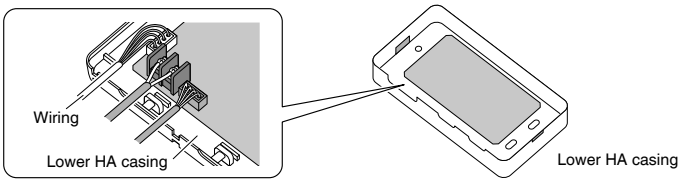
Mount and secure the lower HA casing directly on the wall with the provided screws inserted into the screw holes (a round hole and two ellipse holes) of the casing.




| NOTE | Mount so that the wiring through-hole faces downward.<br>If water droplets, dirt, dust, etc., get inside, smoke, fire, or malfunctioning may result. |
|---|---|

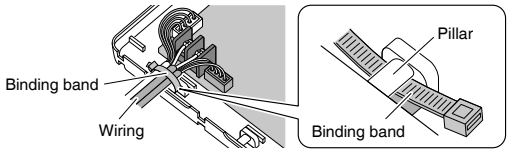
## 3. Connection of wiring

Connect the wiring to the connector terminals.

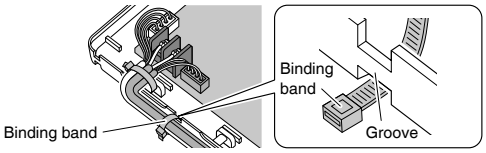



## 4. Fixation of wiring

① Insert the provided binding band under the pillar of the HA casing and secure the covers of the wiring with the binding band.



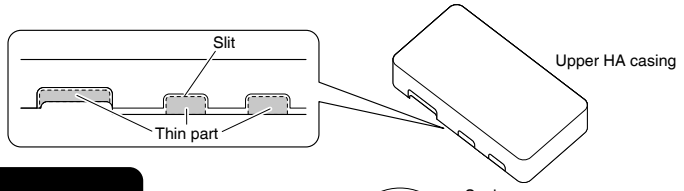

② Insert the second binding band into the groove on the side of the HA casing and fix the wiring securely so that the wiring will not be disconnected.




**A large number of wires**

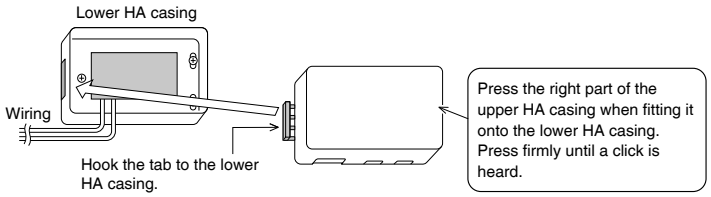
Make a slit with an appropriate tool, such as a cutter knife, on the thin part of the upper HA casing along the frame. Then cut the part with an appropriate tool, such as a pair of nippers.

(NOTE) Cut off only the thin part required for wiring.

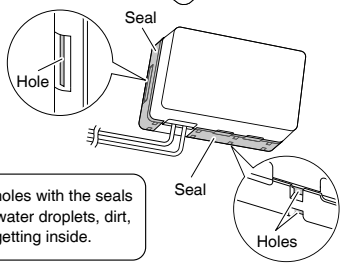



## 5. Finishing

Mount the upper HA casing to the original position.




Press the right part of the upper HA casing when fitting it onto the lower HA casing. Press firmly until a click is heard.




Cover the holes with the seals to prevent water droplets, dirt, dust, etc., getting inside.

| Information | **When the contact input device (such as card keys) and central controller are used in tandem:**<br>Even when the operating mode of the S1 pin is set to prohibit all remote controller actions, run/stop operation from the central controller is possible. The operation also starts when the power ON timer of the indoor unit is up while all remote controller actions are prohibited.(*) In this case, stop the operation from the central controller. For the compatible models of the ⟨KRC944 series⟩ remote controller, the operation can be prohibited by using the remote controller in tandem with the central controller.<br>*If this product is connected to an air conditioner manufactured in or after 2011, when the contact is closed, the power ON timer may be cancelled depending on the combination with the model. |
|---|---|

3P248024-3L

## 2.18 <KRCS01-6B> Remote Sensor (Installation)

**DAIKIN Air Conditioners** — **Remote Sensor** — **Installation Manual**

KRCS01-6B

Be sure to read this installation manual before conducting the installation of this product. Installation must be conducted according to this manual.

3P528641-1C

**IMPORTANT** **Caution** **Local setting for case of Skyair**

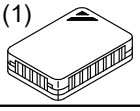
- Case of installing to Skyair, make sure the set to local settings after mounted remote sensor.
  Depending on the model, it may not be necessary to change the settings.

| | | Default | | Changed |
|---|---|---|---|---|
| Mode No. | FIRST CODE No. | SECOND CODE No. | | SECOND CODE No. |
| 15 (25) | 10 | 02 | ▶ | 01 |
| 15 (25) | 10 | 01 | ▶ | no need |
| 15 (25) | 10 | -- | ▶ | no need |

Setting detail be refer to ❸ Local setting .

- Make sure the no errors be sure to operation test after local setting.
  Notes) If you install remote sensor on model that has comfortable eco-dry control function or dehumidification cooling function by humidity detection, these functions will not work.

**Accessories description** Check it the following accessories are attached to this product.

| Name | Sensor box | Extension cable (2-core, 12m) | Clamp | Mounting screw (M4×16) | Other |
|---|---|---|---|---|---|
| Quantity | 1 pc. | 1 pc. | 2 pcs. | 2 pcs. | 1 pc. |
| Shape | (1)  | (2)  | (3)  | (4)  | ・Installation manual |

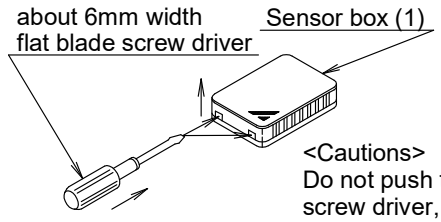
### ❶ Mounting the Sensor box

(1) Selection of mounting location.
Sensor box (1) have thermistor for temperature detection built-in.
Select the mounting location taking the following cautions into account.

1. Where the average temperature of an air conditioned room can be detected.
2. Where it is not exposed to the direct sunlight.
3. Where it is not influenced by other heat sources.
4. Where it is not exposed to the direct discharge air from the air conditioner.
5. Where it is not exposed to the outdoor air infiltrated into the room by opening the door.

(2) Mounting

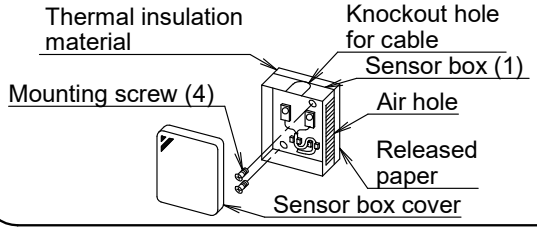
- Remove the cover of the sensor box (1).

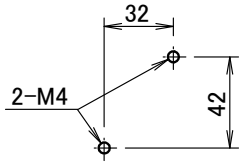



Insert a flat blade screw driver into the sensor box (1) concave part (2 locations). Remove the cover pushing up the hook to the cover of the sensor box (1).

<Cautions>
Do not push the nail powerfully with a narrow flat blade screw driver, because you may break off the hook.

1 When mounting on the wall



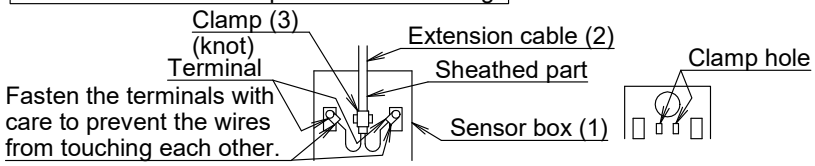

Wall surface mounting holes
(unit : mm)

Figure 1

3P528641-1C

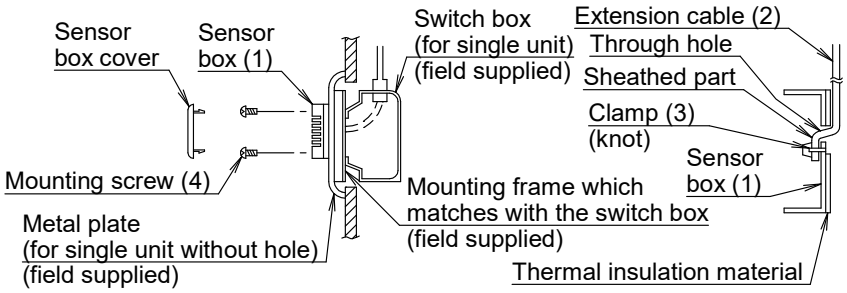
- Break open the knockout hole in the sensor box (1) with a nipper or a similar tool. Pass the extension cable (2) through the hole and fasten the wires to the terminals with screws.
- To avoid tensile force on the terminals, pass the attached clamp (3) through the holes shown in the below right figure and tighten the extension cable (2) with the attached clamp (3) at the sheathed part.
  (The knot must come to the box inside.)

Please cut excess clamp for base after fixing.




- Screw the sensor box (1) to the wall surface with mounting screw (4) (M4×16, 2 places).
  Wall surface mounting holes dimension refer to (Figure 1).
  If the sensor box cannot be screwed to wall surface, tear off the released paper and mount it on the wall surface.

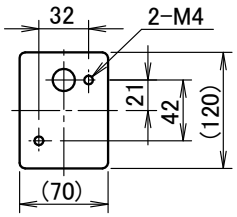
2 For embedded wiring




- Pass the extension cable (2) through the sensor box (1) cable hole and carry out the wiring.
- Pass the attached clamp (3) through the clamp holes and tighten the extension cable (2) at the sheathed part as shown in the upper right figure.

Please cut excess clamp for base after fixing.

- Tap M4 screw holes in the metal plate (field supplied) as shown in the right drawing and mount the switch box on the metal plate. Refer to (Figure 2).

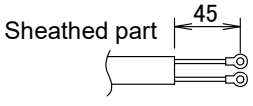



Holes to be tapped in the metal plate on site (unit: mm)

(Figure 2)

<Cautions>

- When wiring the extension cable (2), the air holes of sensor box (1) will not be blocked.
- When the extension cable is longer than necessary, cut it to the appropriate length, peel the insulation, attach the ring type crimp style terminal for M3 (field supplied) and carry out the wiring. The length of insulation to be peeled off is as shown below.
  (Work carefully so that the connector side may not be cut.)




## 2 Wiring method

Connect the extension cable (2) connector side to the indoor unit PCB (printed circuit board) For connection to the indoor unit, follow the procedure shown below.

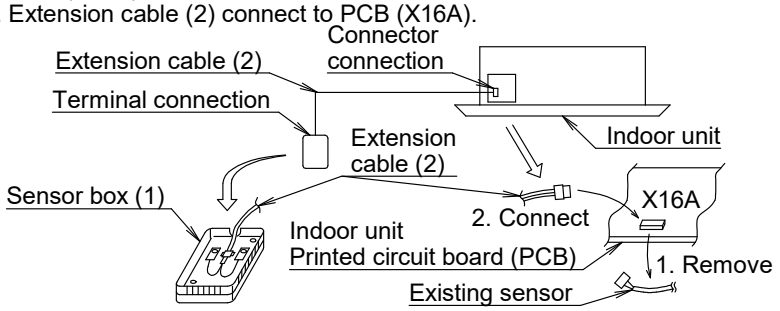
**⚠Caution**

1. Make sure to turn off the power supply before starting the wiring work and do not turn on until all the work is completed.
   Read also the installation manual and the wiring diagram of the indoor unit when carrying out the work.

2. When wiring the extension cable (2), do not pass where the extension cable (2) may be affected by the power line or noise.
3. Make sure to securely connect the connectors.
   Defective connection may result in incorrect detection of room temperature or malfunction.
4. Do not splice wires.
5. Lay and clamp the extension cable (2) inside the indoor unit switch box just like the low voltage line (cord for remote controller).
   And do not pass where the extension cable inside the indoor unit switch box may be affected by the power line (cord for the indoor unit and the other electric line).

<Procedure>

1. When wiring to the indoor unit PCB, remove the existing sensor from PCB (X16A).
2. Extension cable (2) connect to PCB (X16A).




3. Lay and clamp the extension cable (2) inside the indoor unit switch box just like the low voltage wire (remote controller wiring).
   When doing this work, keep a certain distance between the high voltage wiring and the low voltage wiring to avoid error of sensor.
   Provide protection of the existing cable for sensor without touching indoor unit PCB.
4. Fit the sensor box cover into the sensor box (1).

## 3 Local setting

- Case of installing to Skyair, make sure the set to local settings after mounted remote sensor.
  Depending on the model, it may not be necessary to change the settings.
- Make sure the completing all work of indoor and outdoor unit.
- Make sure the closing switch box cover of indoor unit, casing for outdoor unit and cover for piping.

**⚠Set the local setting by remote controller after turn on.**

- Local setting set by changing three of “Mode No.”, “FIRST CODE No.”, “SECOND CODE No.”.
- Setting procedure and operating method refer to installing manual attach to remote controller.

Notes) “Mode No.” setting be done to group together.
Case of each indoor units setting or setting confirmation, set to number in ( ) of “Mode No.”.

| | | Default | | Changed |
|---|---|---|---|---|
| Mode No.(Notes) | FIRST CODE No. | SECOND CODE No. | | SECOND CODE No. |
| 15 (25) | 10 | 02 | ▶ | 01 |
| 15 (25) | 10 | 01 | ▶ | no need |
| 15 (25) | 10 | -- | ▶ | no need |

- After changed to settings, Turn off and turn on again.

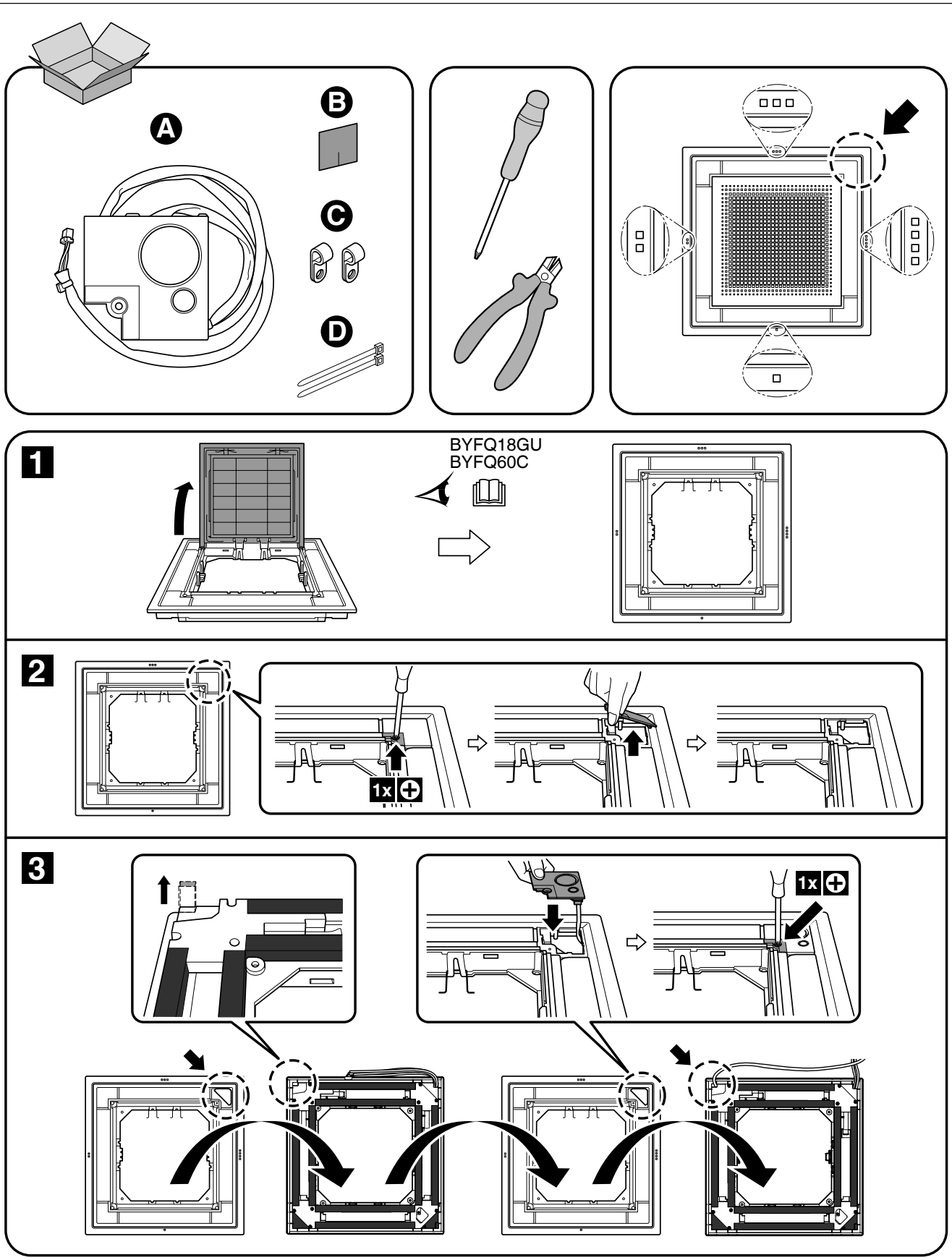
## 4 Operation test after mounting the sensor

After the sensor is installed and the wiring is completed, conduct cooling and heating operation in order to make sure of detecting temperature accurately (not to be uncooled or unheated).

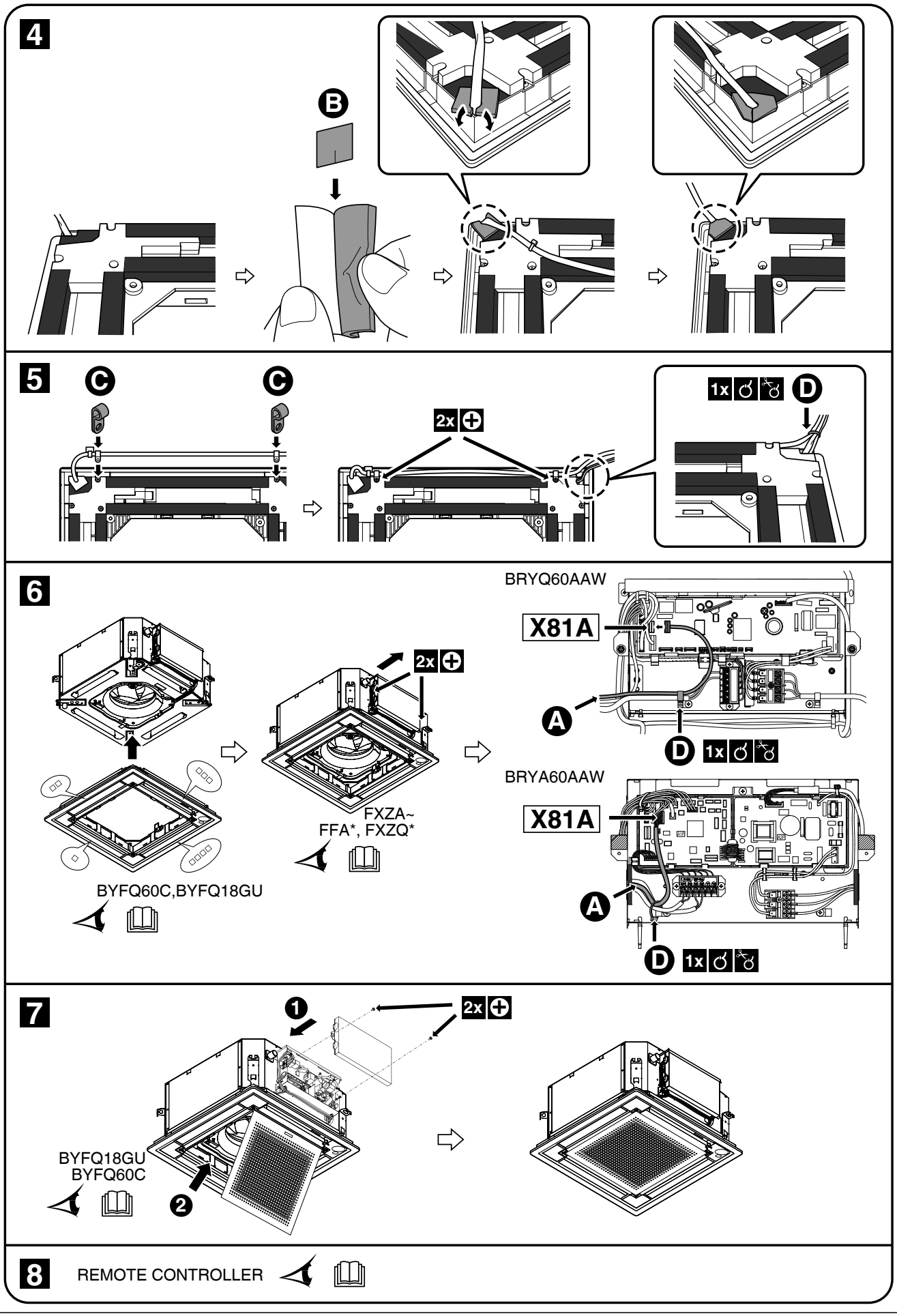
3P528641-1C

# 3. Indoor Unit

## 3.1 <BRYQ60AAW> Sensor Kit

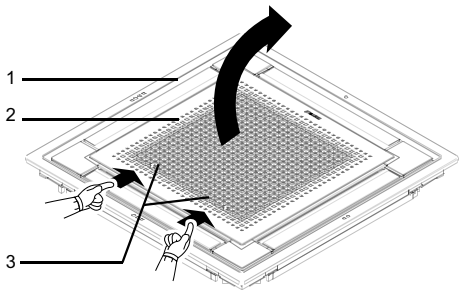



3P609715-1E

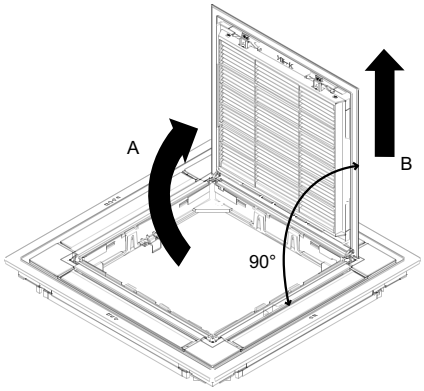

4
B
5
C
C
2x
1x
D
6
BRYQ60AAW
X81A
A
D
1x
2x
BRYA60AAW
X81A
A
D
1x
FXZA~
FFA*, FXZQ*
BYFQ60C,BYFQ18GU
7
1
2x
2
BYFQ18GU
BYFQ60C
8
REMOTE CONTROLLER

3P609715-1E

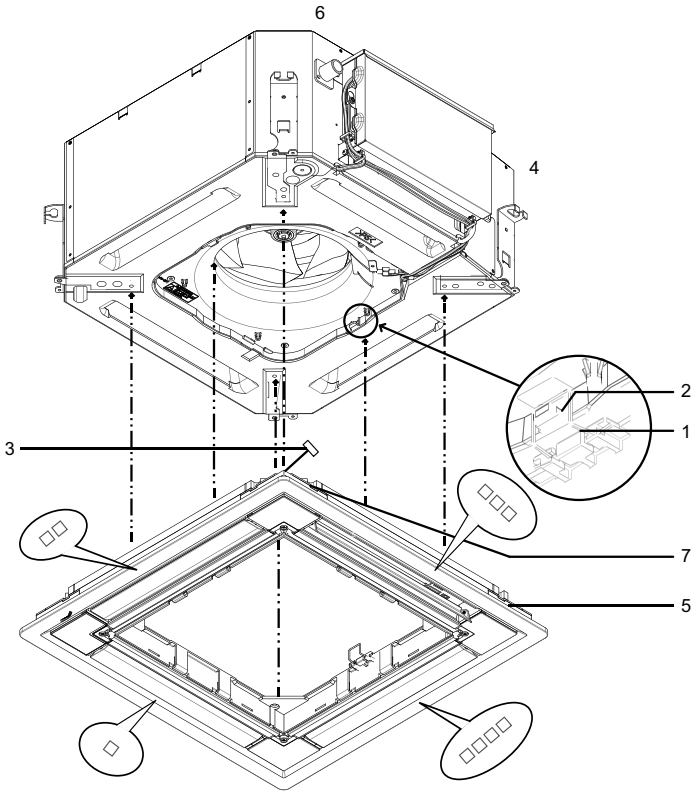
## 3.2 <BYFQ60C3W2W> Decoration Panel



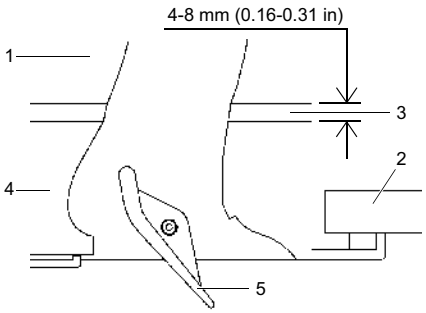

1



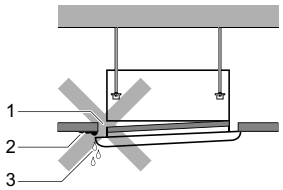

2



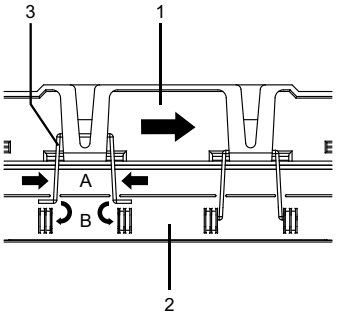

3



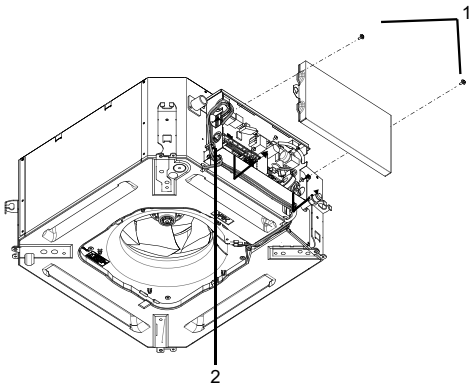

4

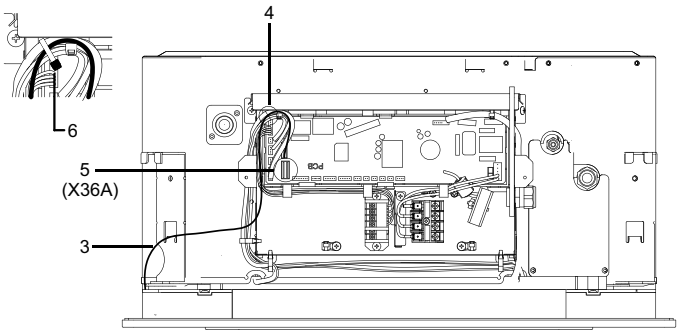



5




7




6

4P340850-1D

The English text is the original instruction. Other languages are translations of the original instructions.

Read this manual attentively before installation. Do not throw it away. Keep it in your files for future reference.

Improper installation or attachment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment. Be sure only to use accessories made by Daikin that are specifically designed for the use with the equipment and have them installed by a professional.

If unsure of installation procedures or use, always contact your dealer for advice and information.

## Before installation

- Leave the unit inside its packaging until you reach the installation site.

**Rotary fan**



Cut off the main power before opening the grille.

- Refer to the installation manual of the indoor unit for items not described in this manual.

NOTE **To the installer**

Be sure to instruct the customer how to properly operate the system showing him or her the operation manual of the indoor unit.

### Accessories

| | |
|---|---|
| Installation manual |  |
| Screws (4x) |  |
| Grille hinge (2x) |  |

## Preparation before installation

For this unit, you are able to select air flow directions. To discharge air in 2 or 3 directions, it is necessary to purchase the optional blocking pad kit for sealing air discharge outlets.

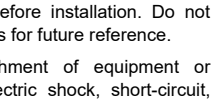
### Handling of the decoration panel

To prevent any damage to the decoration panel, take care of the following:

- Never place the decoration panel facing down.
- Never let the decoration panel lean against a wall.
- Never place the decoration panel on a sharp or projecting object.
- Never touch or put pressure on the swing flap in order to prevent malfunction of the swing flap.

### Preparing the decoration panel for installation

**1** Remove the suction grille from the decoration panel.



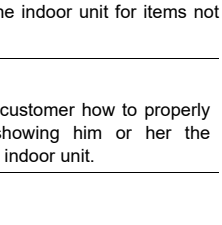
**1** Decoration panel
**2** Suction grille
**3** Lever

- Remove the transporting tape from the decoration panel suction grille and flaps.
- Push the suction grille lever (3) inward and open the suction grille (2). (See figure 1)
- Detach the suction grille from the decoration panel by lifting the suction grille up approximately 90 degrees (A) until the position is reached on which removal of the suction grille is possible (B). (See figure 2)

## Installation of the decoration panel to the indoor unit

Refer to the installation manual of the indoor unit for details on installing the indoor unit.

**1** Install the decoration panel (See figure 3)



**1** Temporary latch
**2** Hook
**3** Swing flap motor lead wire
**4** Piping area
**5** Piping side mark
**6** Drain area
**7** Drain side mark

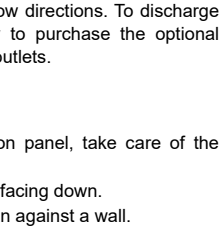
**1** Hold the decoration panel against the indoor unit by matching the piping side and drain side marks on the decoration panel with the position of the piping area and drain area of the indoor unit.

**2** Turn 2 panel temporary latches up into the hooks of the indoor unit so the decoration panel is temporarily fixed to the indoor unit. (See figure 3)

**3** Make sure that the swing flap motor lead wire isn't caught between the decoration panel and the indoor unit.

**4** Attach 4 supplied screws and check whether the decoration panel is properly aligned with the indoor unit and ceiling.

**5** Tighten all 4 screws until the thickness between of the sealing material between the decoration panel and the indoor unit reduces to 4-8 mm. (See figure 4)



**1** Indoor unit
**2** Ceiling
**3** Sealing material
**4** Decoration panel
**5** Air outlet

**Precautions**

- Improper tightening of the screws - (See figure 5) - may cause air to leak into the unit and between the ceiling and the decoration panel (1), resulting in formation of contamination (2) and dew (3).
- If there is a gap remaining between the ceiling and the decoration panel after tightening the screws, re-adjust the indoor unit body height. The indoor unit must be kept leveled and the drain piping kept unaffected.

**2** Wiring of the decoration panel (See figure 6)

Make sure to turn off the power supply before wiring!

**1** Screws (2)
**2** Switch box
**3** Swing flap motor lead wire
**4** Swing flap motor lead wire fixed by tie wrap to the rest of the wires (See detail in figure 6)
**5** Connector of the indoor unit PCB (X36A)
**6** Tie wrap

**1** Remove the electric components box lid. Loosen 2 screws and slide the electric components box lid in the direction of the arrows.

**2** Securely connect the connector of swing flap motor lead wire installed on the decoration panel. Attach the swing flap motor lead wire to the rest of the wires firmly by tie wrap (from indoor unit accessory set). (See figure 6)

**3** Replace the electric components box lid reversing the procedure to remove it.

Make sure that the swing flap motor lead wire is not caught between the indoor unit and the decoration panel and inbetween the electric component box lid.

## Installation of the suction grille to decoration panel

Install the suction grille (See figure 7)

**1** Decoration panel
**2** Suction grille
**3** Suction grille hinge (attached to decoration panel)

**1** Remove the transportation tape which is securing 2 suction grille hinges in place.

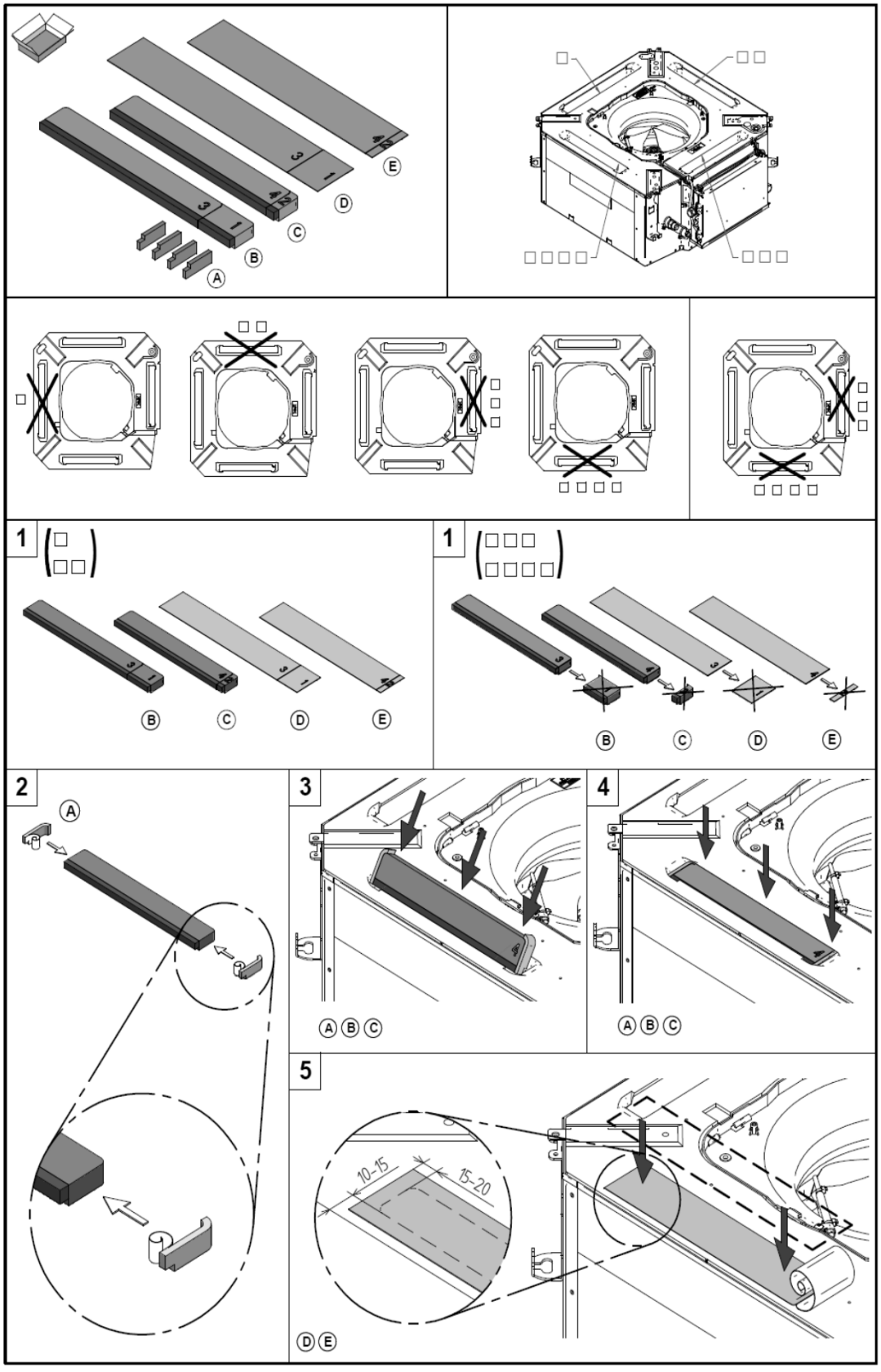
**2** Attach the suction grille to hinges by pressing the hinge and inserting both ends of hinge to holes on the suction grille. (See figure 7)

**3** Make sure that the suction grille is attached to the decoration panel properly by 2 hinges.

**4** Close the suction grille by reversing the procedure shown in "Preparing the decoration panel for installation" on page 1.

- The suction grille may be installed in 4 directions by simply turning it 90 degrees.
- Change the direction when adjusting the direction of the suction grille of multiple units or to comply with the demands of the customer.

## 3.3 <BDBHQ44C60> Sealing Member




4P343356-1A

- The 3 different kinds of setting such as "Mode number", "First code number" and "Second code number" must be made by the remote controller.
- The setting and operation procedure are written in the installation manual provided with the remote controller.
- Do not perform settings that are not listed in the table.

Setting according to number of air outlets used
Set the "Second code number". It is shown in the table below depending on the number of air outlet used.

| Setting | Mode number (Note) | First code number | Second code number |
|---|---|---|---|
| 4-way flow | 13(23) | 1 | 01 |
| 3-way flow | | | 02 |
| 2-way flow | | | 03 |

4P343356-1A

## 3.4 <KDDQ44XA60> Fresh Air Intake Kit

Remarks :

1. This kit can be installed to the Ceiling mounted cassette type (Multi-flow).
2. When installing this kit, duct (Nominal dia. : ϕ100) is required on site.

- In case that metal duct is penetrated through wooden walls, make sure the duct and the wall electrically insulated.
- Install the duct inclined downwardly to outdoor so that the rain may not get into the duct. (Inclination 1/100 to 1/50)
- To avoid birds, small animals or insects getting inside the duct, make sure to install net where it contacts the outside air.

Contents

Prior to installation, make sure you have the complete kit of parts.

| Name | ① Duct flange | ② Screws | ③ Insulation for duct flange | ④ Insulation for opening of unit | ⑤ Installation manual |
|---|---|---|---|---|---|
| Q'ty | 1 piece | 4 pieces | 1 piece | 1 piece | 1 piece |
| Shape |  |  M4×12 |  |  |  |

Necessary tools

Philips head screw driver, nipper, cutter etc.

### 1 Installation procedures of duct flange

1. Cut off the knockout hole on the side plate. (Fig.1)

The knockout hole is opposite to ref. pipe.

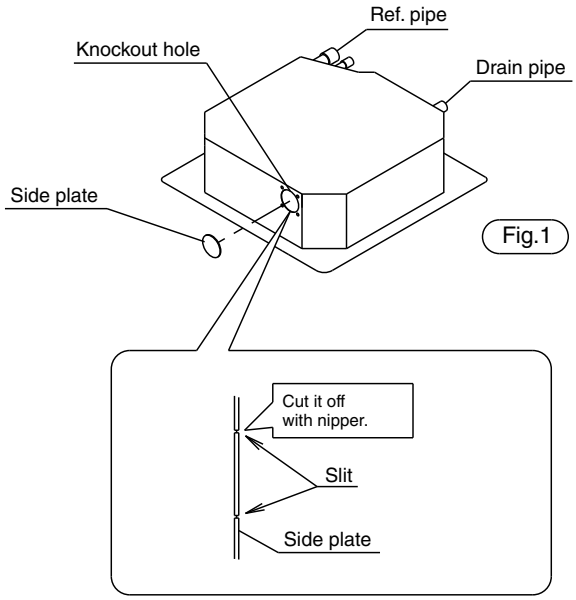



Fig.1

2P108307-1B

2. Adhere the insulation ④ for opening of unit to the opening. (Fig. 2)

Put the insulation ④ to be suitable for the hole of the insulation ④ and hole of the indoor unit.
However, put the insulation ④ so as not to conceal the screw hole of the indoor unit.

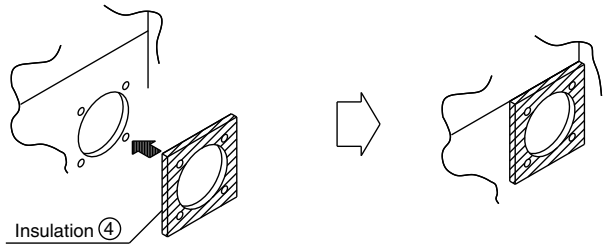



Fig. 2

3. Install the duct flange ① with screws ②(M4×12, 4 screws) to the opening and adhere the insulation ③(Fig. 3)

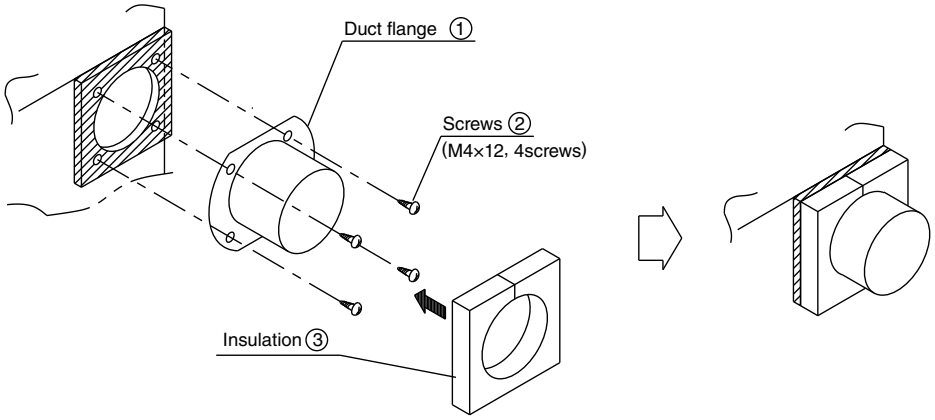



Fig. 3

## ❷ Installation procedures of duct <Nominal diameter of duct : f100>

1. Connect the duct to the duct flange. (Flange fits inside the duct.) (Fig. 4)
2. After connection, wrap vinyl tape (field supply) around the duct connection to prevent air leak.

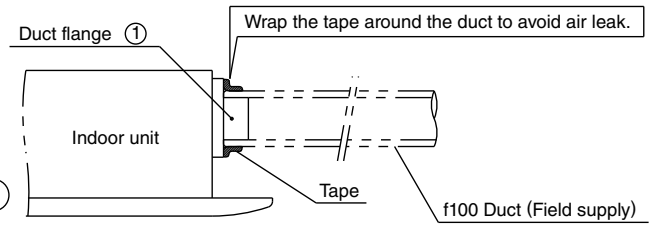
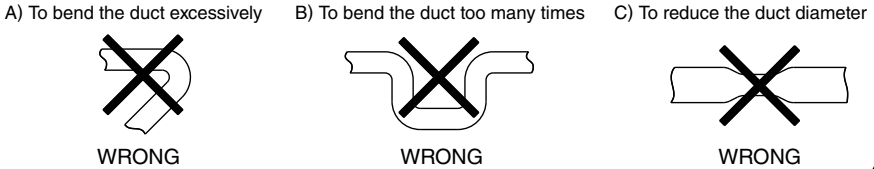



Fig. 4

Precaution

· All ducts must be completely insulated.
· Do not do the followings when installing duct.

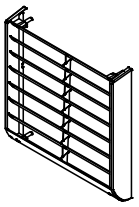
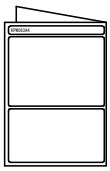


# 4. Outdoor Unit

## 4.1 <KPW063B4> Air Direction Adjustment Grille

**Component parts** Be sure to check that the following parts are included before installation.

Component parts

| Name | ① Air direction adjustment grille | ② Screw | ③ Spacer | ④ Installation Manual |
|---|---|---|---|---|
| Illustration |  |  |  |  |
| Quantity | 1 pcs. | 4 pcs. | 4 pcs. | 1 sheet(this sheet) |

**Selection of installation site**

Install only on an outdoor unit in a location that satisfies the following conditions:

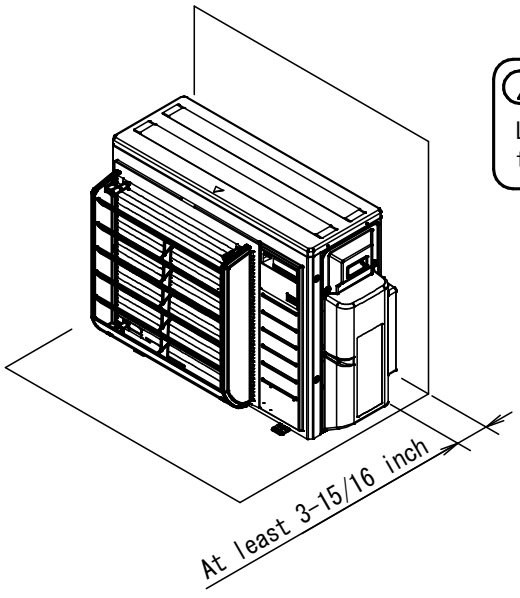
- ●When installing the outdoor unit near the neighbouring house.
- ●Where you wish to change the exhaust airflow direction because the outdoorunit has been installed facing a road, so that passing people are not exposed to its exhaust air
- ●When changing the airflow direction to prevent exhaust blowing directly onto passersby or garden plants.

**Cautions for usage**

●Be sure to perform the following as installation precautions to ensure correct and safe use of he air direction adjustment grille.

1. Install the product so that it is situated high enough to allow access to the outdoor unit for maintenance purposes.
2. When installing the product in a location in which it may be exposed to strong winds, install a rollover prevention bracket (sold separately) at the same time.
3. Tighten screws securely. Failure to do so may result in vibration.

**1 Verifying the amount of space required for installation**




**⚠ Caution**

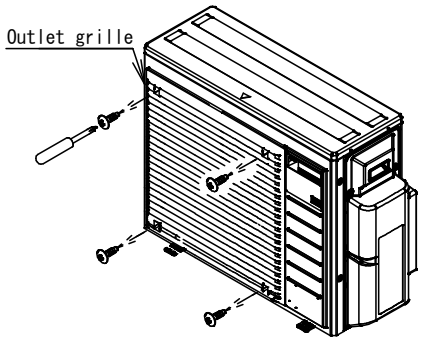
Leave at least 3-15/16 inch between the rear of the outdoor unit and any obstructions(walls, etc.).

3P534932-1D

## ❷ Installation of air direction adjustment grille

**⚠ Caution**

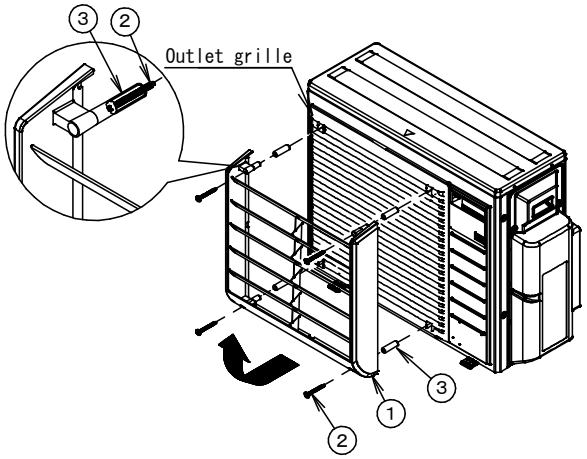
Install the air direction adjustment grille on top of the outlet grille.
Be sure to install the outlet grille as installing only the air direction adjustment grille would allow a person to reach his or her hand into the outdoor unit far enough to come into contact with the rotating fan.



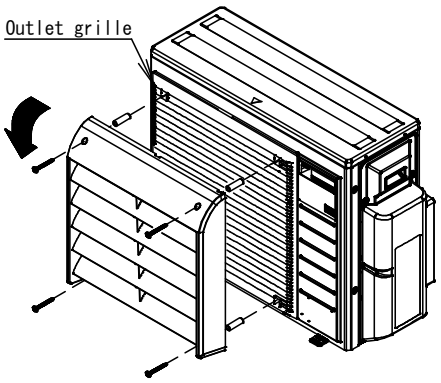

(1) Remove the 4 outlet grille fixing screws.
(2) Referring to the following illustration, attach the outlet grille and air direction adjustment grille, taking care to align them with the air outlet direction.

● Attach the air direction adjustment grille on top of the outlet grille using the same screws.

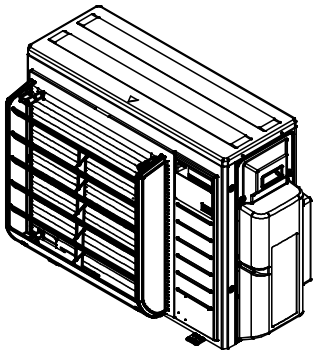
Upward facing




Downward facing




Appearance of the air direction adjustment grille after installation (when installed with the louvers facing up)



3P534932-1D

### 4.2 <KPW082A41> Air Direction Adjustment Grille

# Safety Considerations

Give this installation manual to the user when installation is completed.

- Read these **Safety Considerations** carefully to ensure correct installation.
- Meaning of **WARNING** and **CAUTION** symbols:

⚠ **WARNING:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
It may also be used to alert against unsafe practices.

**⚠ WARNING**

- Only qualified personnel must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in electric shock, fire, or equipment damage.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in electric shock, fire, the product falling, or equipment damage.

**⚠ CAUTION**

- Wear protective gloves at the time of installation.
  Touching the suction mouth or aluminum fins of the outdoor unit may result in injury.

# Accessories

| | | | | | |
|---|---|---|---|---|---|
| Ⓐ Air direction adjustment grille |  | 1 | Ⓑ Spacer |  | 4 |
| Ⓒ Washer |  | 4 | Ⓓ Screw M5 × 1-3/16” (M5 × 30mm) |  | 4 |
| Ⓔ Installation manual |  | 1 | | | |

# Tools Required for Installation

- Phillips screwdriver

3P542603-1

# Installation Procedure

## ⚠ WARNING

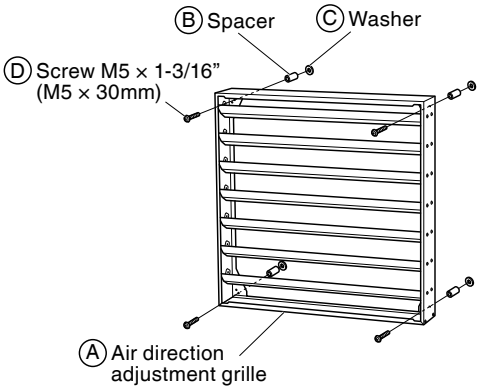
• Be sure to check that the power supply of the product is turned off.

**Use when the outdoor unit is installed in a location which meets any of the following conditions.**

• When installing near the border to a neighbor's house.
• If exhaust blows directly on passers-by because outdoor unit is installed facing a road.
• Changing the fan direction of the outdoor unit to prevent it blowing directly on shrubbery, etc.

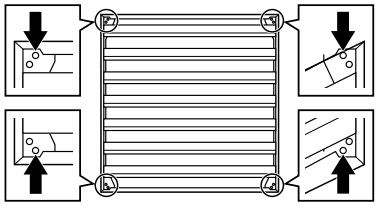
### 1. Temporarily assemble the air direction adjustment grille.

1) Attach the Ⓑ spacers and Ⓒ washers to the Ⓐ air direction adjustment grille, then fix with the Ⓓ screws (4 locations).
   • Depending on the installation, 4 outlet directions are possible (up, down, left and right). Refer to the illustration for screw fixing locations.

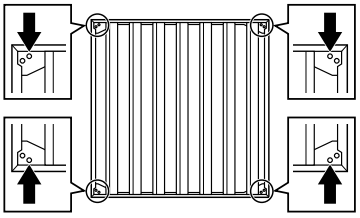



**Screw fixing position**

• In the case of up or down outlet

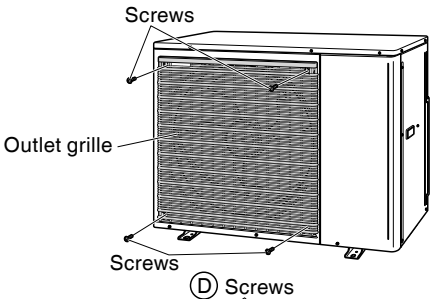


• In the case of left or right outlet

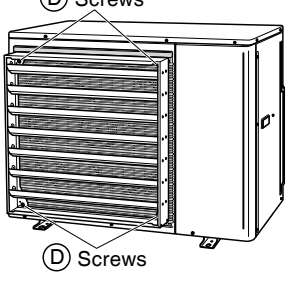


### 2. Attach the Ⓐ air direction adjustment grille to the outdoor unit.

1) Remove the outlet grille screws from the outdoor unit (4 locations).
   • Do not detach the outlet grille.
   • Be careful not to drop the outlet grille.



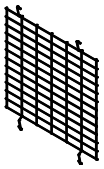
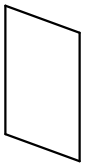

2) Attach the Ⓐ air direction adjustment grille which was temporarily assembled in **step 1**, then tighten and secure with the Ⓓ screws (4 locations).




3P542603-1

## 4.3 <KKG063A44> Back Protection Wire Net

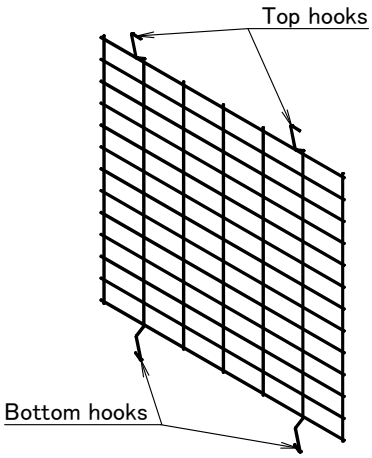
### Component parts

| Name | ① Protection net | ②Installation manual |
|---|---|---|
| Shape |  |  |
| Q'ty | 1pc. | 1sheet (this sheet) |

### Caution

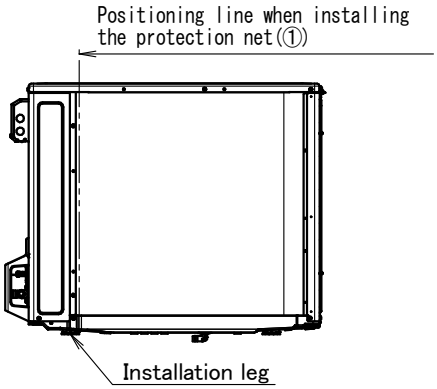
Be sure to wear protection gloves when performing installation work as the fins on the heat exchanger may cause injury.

### Part names




### 1 Verify the location at which the protection net(①)is to be installed.

Attach the protection net(①)so that the vertical grating is aligned with the edge of the installation leg on the right side of the outdoor unit.

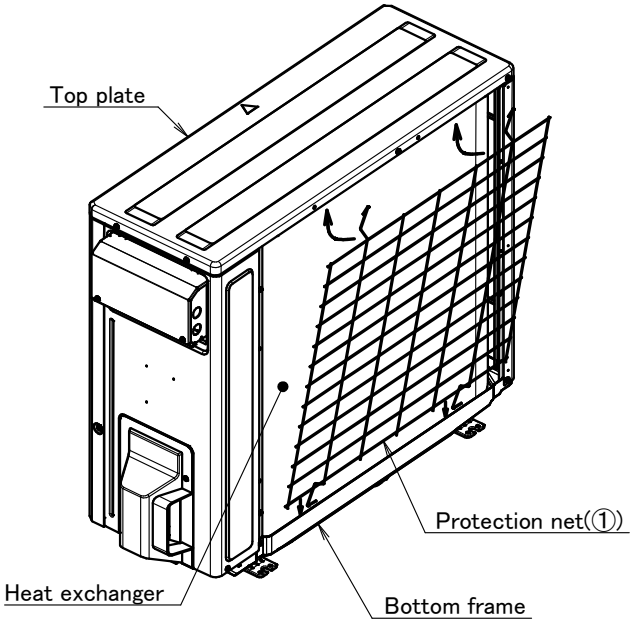



### 2 Attach the protection net(①)

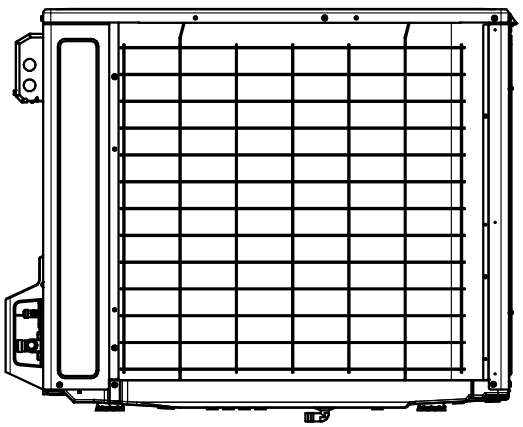
Orient the protection net(①)so that top and bottom hooks are facing the heat exchanger and insert the two bottom hooks between the heat exchanger and the bottom frame.

Insert the two top hooks between the heat exchanger and the top panel while flexing the protection net(①).

※ Be careful not to damage the heat exchanger's cooling tubes.




### 3 Appearance of the protection net(①) following installation



2P751692-1

### 4.4 <KKG082A41> Back Protection Wire Net

# Safety Considerations

Give this installation manual to the user when installation is completed.

- Read these **Safety Considerations** carefully to ensure correct installation.
- Meaning of **WARNING** and **CAUTION** symbols:

⚠ **WARNING:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
It may also be used to alert against unsafe practices.

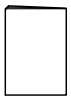
**⚠ WARNING**

- Only qualified personnel must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in electric shock, fire, or equipment damage.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in electric shock, fire, the product falling, or equipment damage.

**⚠ CAUTION**

- Wear protective gloves at the time of installation.
  Touching the suction mouth or aluminum fins of the outdoor unit may result in injury.

# Accessories

| | | | | |
|---|---|---|---|---|
| Ⓐ Protection net |  | 1 | Ⓑ Screw M5 × 1/2” (M5 × 12mm)  | 6 |
| Ⓒ Installation manual |  | 1 | | |

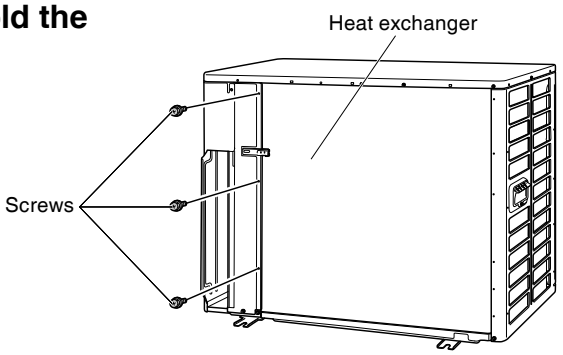
# Tools Required for Installation

- Phillips screwdriver

3P542599-1

# Installation Procedure

**1. Remove the 3 screws that hold the heat exchanger.**

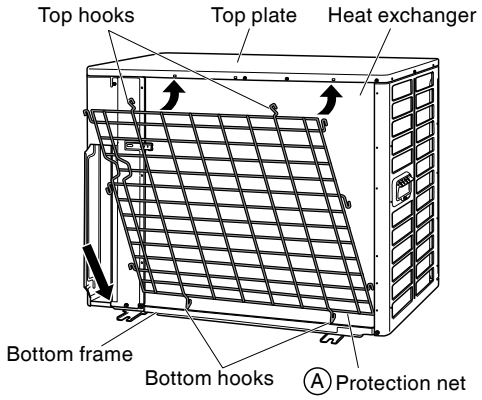



**2. Attach the Ⓐ protection net.**

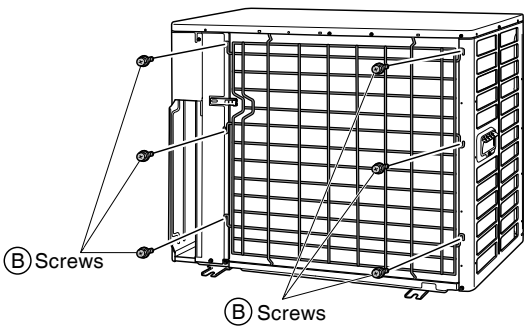
Orient the Ⓐ protection net so that the top and bottom hooks are facing the heat exchanger and insert the 2 bottom hooks between the heat exchanger and the bottom frame.

Insert the 2 top hooks between the heat exchanger and the top plate while flexing the Ⓐ protection net.

- Be careful not to damage the heat exchanger's cooling tubes.




**3. Secure the Ⓐ protection net with the Ⓑ screws (6 locations).**




3P542599-1

### 4.5 <BKP082A41> Drain Plug

# Safety Considerations

Give this installation manual to the user when installation is completed.

- Read these **Safety Considerations** carefully to ensure correct installation.
- Meaning of **WARNING** and **CAUTION** symbols:

⚠ **WARNING:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
It may also be used to alert against unsafe practices.

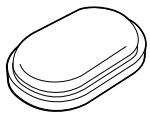
**⚠ WARNING**

- Only qualified personnel must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in electric shock, fire, or equipment damage.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in electric shock, fire, the product falling, or equipment damage.

**⚠ CAUTION**

- Wear protective gloves at the time of installation.
Touching the suction mouth or aluminum fins of the outdoor unit may result in injury.

# Accessories

| | | | | | |
|---|---|---|---|---|---|
| Ⓐ Drain plug |  | 9 | Ⓑ Drain socket |  | 1 |
| Ⓒ Drain socket cap |  | 1 | Ⓓ Installation manual |  | 1 |

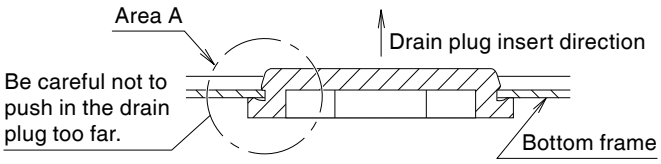
3P542604-1

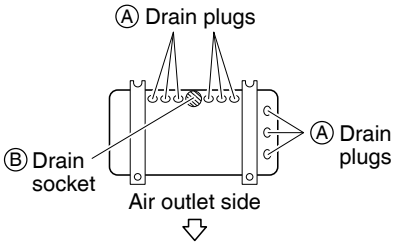
# Installation Procedure

- If the outdoor unit drain hole is hidden by an installation platform or the surface of the floor, create a space of 3-15/16 inch (100mm) or more under the legs of the outdoor unit.
- Do not use in cold areas, because in severe cold, the drain water may freeze inside the bottom frame of the outdoor unit and drainage may become difficult.
- If there is any debris or dirt adhered to the areas around the attachment locations, wipe it away with a cloth. If debris or dirt is adhered, water leakage may result.

## 1. Attach the Ⓐ drain plugs (9 pieces).

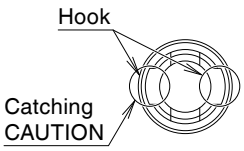
1) Insert the Ⓐ drain plug into the bottom frame until it is flush with the bottom frame around the entire circumference, as shown in area A.



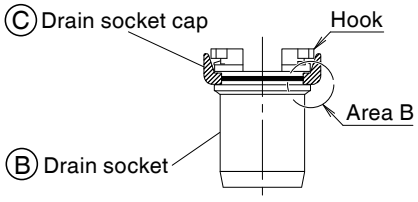



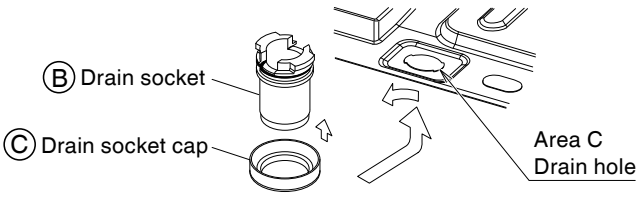

## 2. Attach the Ⓑ drain socket.

1) Attach the Ⓒ drain socket cap to the Ⓑ drain socket.
   - Make sure the Ⓒ drain socket cap is inserted firmly above area B. If not inserted, water leakage may result.
   - Make sure the Ⓒ drain socket cap is not caught on the hooks or other places.




2) Insert into area C, the bottom frame drain hole of the outdoor unit, and turn about 40° to the right.




## 3. Using clamp metal (field supply) connect drain hose (field supply: inner diameter 1 inch (25mm)) to the Ⓑ drain socket.

- Ensure there are no bends in the hose if it is too long or hangs down.

## 4. After installation, make sure the Ⓐ drain plugs and the Ⓑ drain socket of the outdoor unit are securely inserted and there is no leakage.

## 4.6 <KEH064A41> Drain Pan Heater

# Safety Considerations

Give this installation manual to the user when installation is completed.

- Read these **Safety Considerations** carefully to ensure correct installation.
- After completing the installation, make sure that the unit operates properly during the startup operation.
- All phases of the field-installation, including, but not limited to, electrical, piping, and safety, must be done in accordance with manufacturer's instructions and must comply with national, state, provincial, and local codes.
- This product is a heater designed to melt snow that is blown into the product from the outside to prevent the drain pan of the outdoor unit from freezing.
- Install the product with a snow-break hood on a high stand if this product is used in heavy snow areas.
- Meaning of **DANGER, WARNING** and **CAUTION** symbols:

⚠ **DANGER** : Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING** : Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** : Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

### ⚠ DANGER

- Do not touch the heater unit without wearing gloves. The temperature of the heater unit will become high when the heater is turned on. Touching the heater unit with bare hands will result in burns or injury.

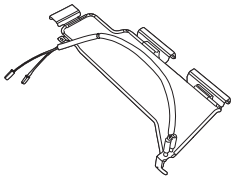
### ⚠ WARNING

- Only qualified personnel must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in electric shock, fire, or equipment damage.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in electric shock, fire, the product falling, or equipment damage.
- Before touching electrical parts, turn off the unit.
- Use specified wires. Connect and fix the wires so that the wires will not put improper force on the terminal junctions. Wires connected or fixed improperly could result in terminal overheating, an electric shock, or fire.

### ⚠ CAUTION

- Wear protective gloves at the time of installation. Touching the suction mouth or aluminum fin of the outdoor unit may result in injury.
- Do not install the product in places where there is danger of exposure to inflammable gas leakage. If the gas leaks and builds up around the unit, it may catch fire.
- Do not grab the top plate of the outdoor unit carelessly when removing the top plate. The sharp edge of the top plate may cause injury.

# Accessories

| | | | | |
|---|---|---|---|---|
| Ⓐ Drain pan heater |  | 1 | Ⓑ Screw M4 × 5/16" (M4 × 8mm) | 3 |
| | | | Ⓒ Installation Manual | 1 |
| | | | Ⓓ Information label | 1 |

3P760961-1

# Tools Required for Installation

• Phillips screwdriver • Nippers

# Installation Procedure (1)

**⚠ WARNING**

• Be sure to check that the power supply of the product is turned off.

Some stages in the installation procedure differ by model of outdoor unit. Refer to the instructions for the relevant model.

**Type A models** : RX

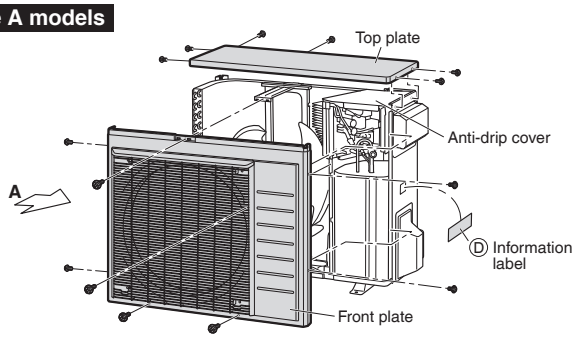
**Type B models** : 2/3/4MX

## 1. Remove each component of the outdoor unit.

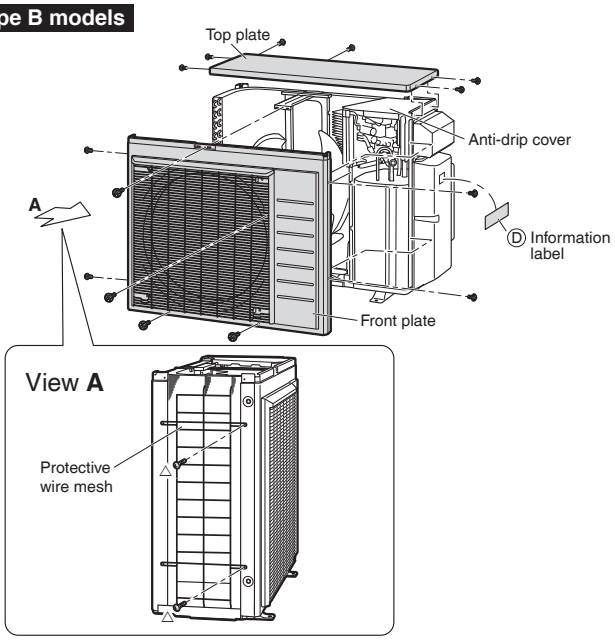
1) Remove the top plate.
2) Remove the screws from the protective wire mesh if one is fitted. (2 screws)
3) Remove the front plate.
4) Remove the anti-drip cover.
5) Affix the Ⓓ information label near the manufacturer's label.

• Screw types for each component are indicated as below.
No icon: Hexagon tapping screw
△ : Truss head tapping screw

**For type A models**

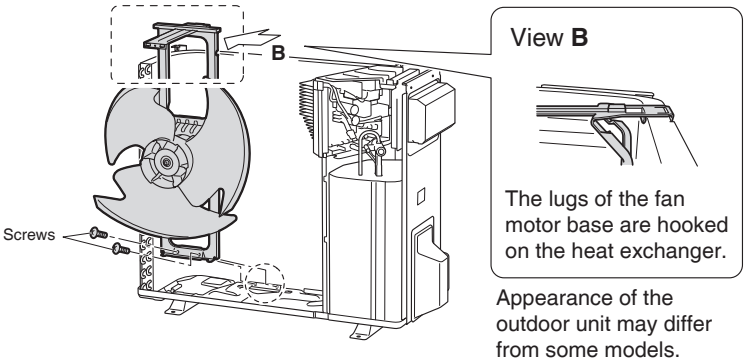



**For type B models**




## 2. Remove the fan motor base.

1) Remove the fixing screws at the lower section of the fan motor base. (2 screws)
2) Remove the fan motor base together with the propeller fan and ensure that stress is not placed on the propeller fan when placing them aside.
   • Do not remove the fan motor harness.
   • Ensure that the fan motor harness does not come into contact with the edges of the heat exchanger or other components.



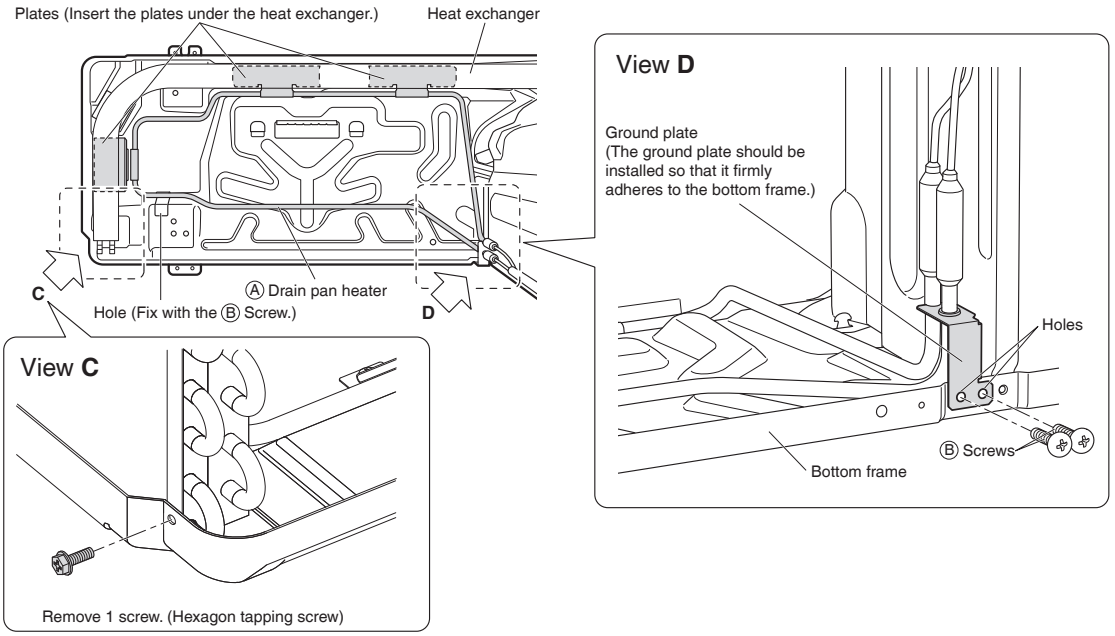

Appearance of the outdoor unit may differ from some models.

3P760961-1

# Installation Procedure (2)

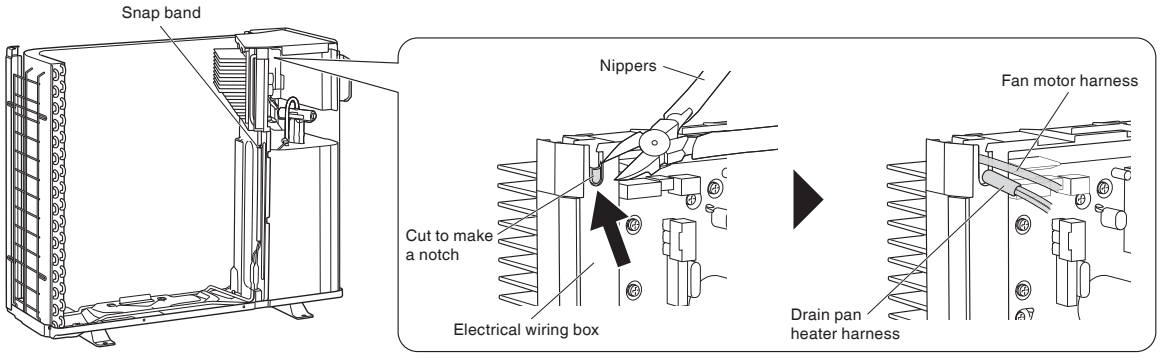
### 3. Install the Ⓐ drain pan heater.

1) Remove 1 screw from the bottom frame so that the plates of the Ⓐ drain pan heater can be inserted under the heat exchanger with ease.
2) Lift up the heat exchanger, and insert the plates of the Ⓐ drain pan heater under the heat exchanger.
   • The ground plate of the Ⓐ drain pan heater should be installed so that it firmly adheres to the bottom frame.
   • Install the Ⓐ drain pan heater in a position where it does not come into contact with the fan motor base.
3) Fix the Ⓐ drain pan heater with the Ⓑ screws.
4) Reattach the screw that was removed from the bottom frame.




### 4. Route the harnesses.

1) Trim the electrical wiring box with nippers at the locations shown in the figures.
2) Insert the drain pan heater harness into the space that was trimmed.
3) Secure the drain pan heater harness snap band in the hole in the partition plate.
4) Install the fan motor base.
   • Be careful not to confuse screw types. Refer to **"Installation Procedure (1)"**.

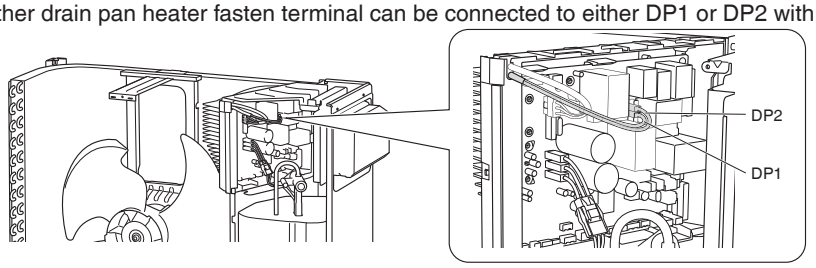



3P760961-1

# Installation Procedure (3)

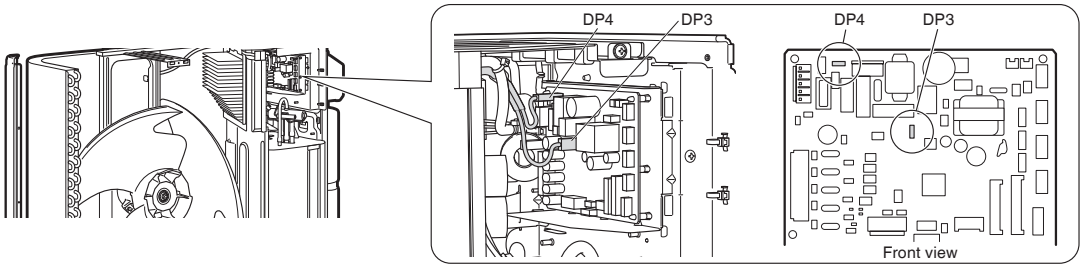
**For type A models**

5) Connect the fasten terminals to DP1 and DP2 on the PC-board.
- Either drain pan heater fasten terminal can be connected to either DP1 or DP2 with no problem.




**For type B models**

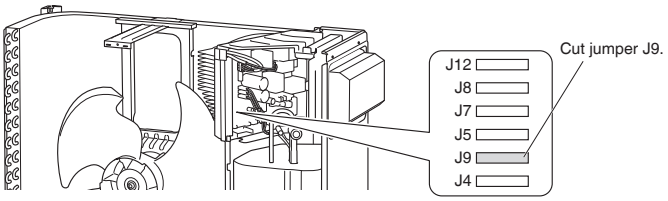
5) Connect the fasten terminals to DP3 and DP4 on the PC-board.
- Either drain pan heater fasten terminal can be connected to either DP3 or DP4 with no problem.




## 5. Cut the jumper.

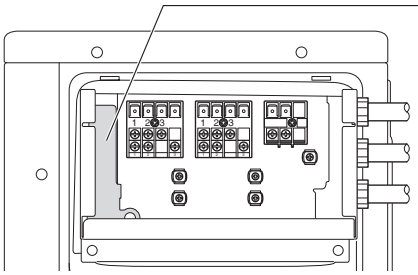
**For type A models**

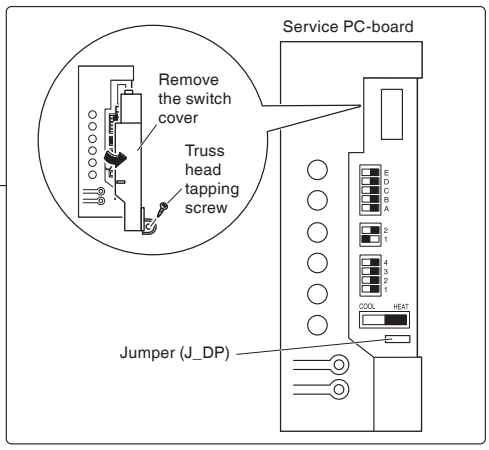
- Using a tool such as nippers, cut the jumper (J9) of the PCB inside.




**For type B models**

- Using a tool such as nippers, cut the jumper (J_DP) on the service PC-board.
- Using the removed truss head tapping screw, reattach the switch cover.





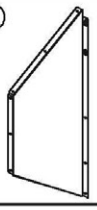
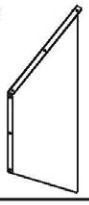
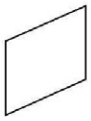

## 6. Install each component to the original position.

- Be careful not to confuse screw types. Refer to "**Installation Procedure (1)** ".

3P760961-1

## 4.7 <KPS063A41> Snow Hood (Side)

**Parts** Before assembling the product, verify that all of the following parts have been included:

| Name | Side plate (right) | Side plate (left) | Top plate | Front plate | Screws | Installation Manual |
|---|---|---|---|---|---|---|
| Illustration | ①  | ②  | ③  | ④  | ⑤  (uantity to use 14) | ⑥  |
| Quantity | 1 | 1 | 1 | 1 | 16 | 1 (this document) |

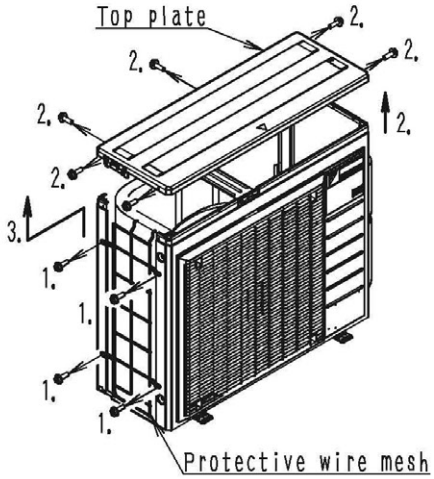
**⚠Caution** Read these safety considerations for installation carefully before installing the product.

●Be sure to observe the following installation precautions to ensure that the product can be used safely:
1. Install the product so that it is situated high enough to allow access to the outdoor unit for maintenance.
2. Installing the product in a location in which it may be exposed to strong winds, secure the outdoor unit with wire or other means.
3. Choose a location where the operating sound will not cause a nuisance to the neighbors of the user.
4. Tighten screws securely. Failure to do so may result in vibration.

**⚠Caution • • • •**
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practises.

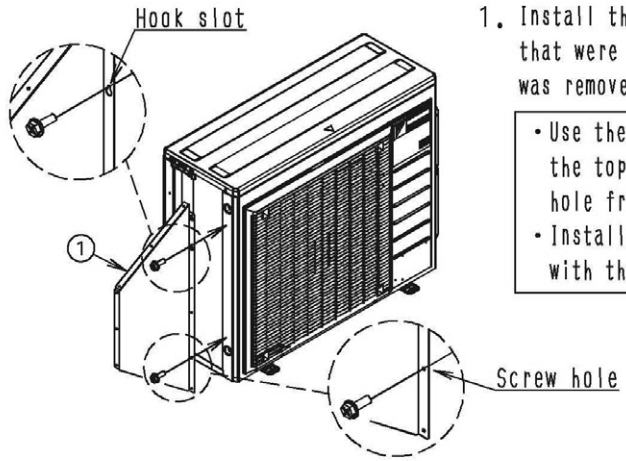
### ① Installing the snow hood (intake side plate)

1 Remove the protective wire mesh




1. Remove the 2 screws that hold the protective wire mesh.
2. Remove the 6 screws that hold the top plate and remove the top plate.
3. Remove the protective wire mesh, being careful of the part that is attached to the heat exchanger.
4. Attach the top plate removed in step 2 using the 6 screws removed in step 2.

2 Attach the side plate (right) ①

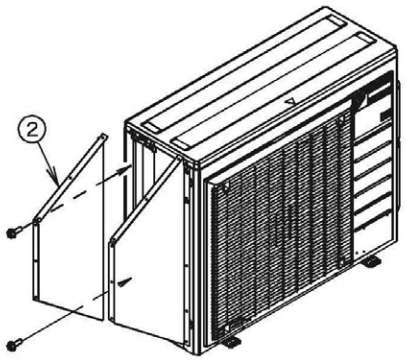



1. Install the side plate (right) ① with the 2 screws that were used in the protective wire mesh that was removed in step 1 .

- Use the second hook slot from the top and the 2 screw hole from the bottom.
- Installation is easiest if you start with the hook slot.

3P436071-1

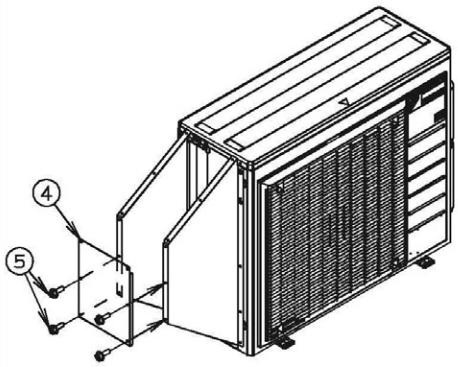
3 Attach the side plate (left) ②.




1. Install the side plate (left) ② with the 2 screws that were used in the protective wire mesh that was removed in step 1 .

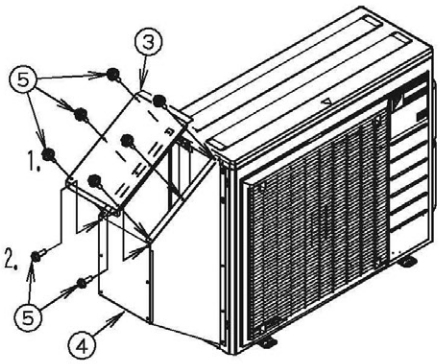
- Use the second hook slot from the top and the 2 screw hole from the bottom.
- Installation is easiest if you start with the hook slot.

4 Attach the front plate ④.



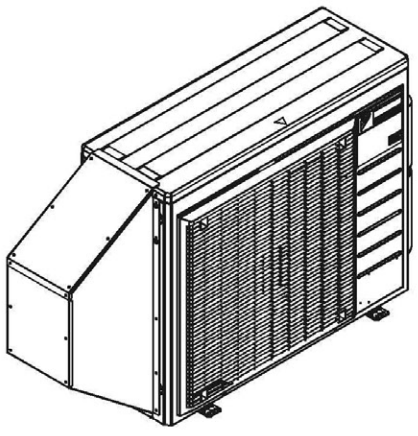

1. Temporarily secure the front plate ④ in place with the 4 screws ⑤.

5 Attach the top plate ③.




1. Attach the top plate ③ with the 6 screws ⑤.
2. Temporarily secure the top plate ③ and the front plate ④ to the side plate (right) ① and the side plate (left) ② with the 2 screws ⑤.
3. Tighten the 12 screws ⑤ that you used to temporarily secure parts in steps 4 and 5 .

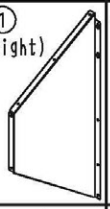
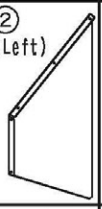
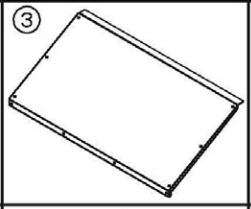
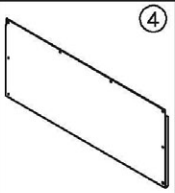
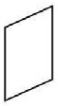
## ❷ Appearance of the snow hood (intake side plate) after installation



3P436071-1

## 4.8 <KPS063A44> Snow Hood (Rear)

**Parts** Before assembling the product, verify that all of the following parts have been included:

| Name | Side plate | Side plate | Top plate | Front plate | Screws | Piercing screw | Installation Manual |
|---|---|---|---|---|---|---|---|
| Illustration | ① (Right)  | ② (Left)  | ③  | ④  | ⑤  | ⑥  | ⑦  |
| Quantity | 1 | 1 | 1 | 1 | 14 | 3 | 1 (this document) |

**⚠ Caution** Read these safety considerations for installation carefully before installing the product.

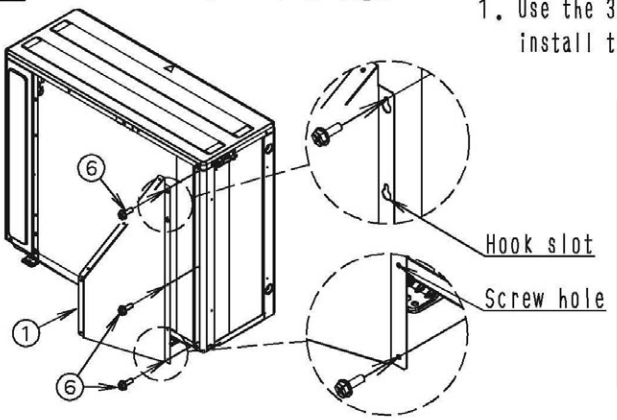
●Be sure to observe the following installation precautions to ensure that the product can be used safely:
1. Install the product so that it is situated high enough to allow access to the outdoor unit for maintenance.
2. Installing the product in a location in which it may be exposed to strong winds, secure the outdoor unit with wire or other means.
3. Choose a location where the operating sound will not cause a nuisance to the neighbors of the user.
4. Tighten screws securely. Failure to do so may result in vibration.

**⚠ Caution • • • •**
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practises.

### 1 Installing the snow hood (intake rear plate)

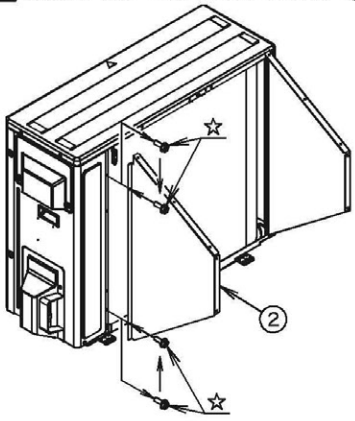
**1 Attach the side plate (right) ①.**

1. Use the 3 piercing screws ⑥ included in the kit to install the side plate (right) ①.




- For the hook slot, use the first hook slot from the top.
- For the screw hole, use the first screw hole from the bottom.
- Installation is easiest if you start with the hook slot.
- Align the screw installation position with the dowel hole.

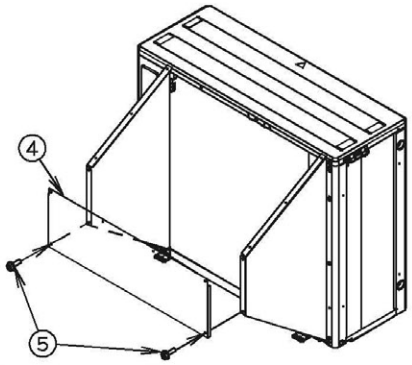
**2 Attach the side plate (left) ②**




1. Remove the 2 screws (☆) that hold the heat exchanger.
2. Install the side plate (left) ② using the 2 screws removed in step 1.

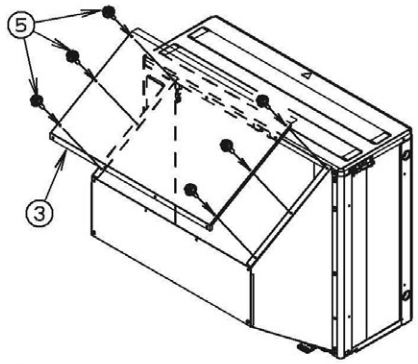
3P436072-1

**3 Attach the front plate ④**



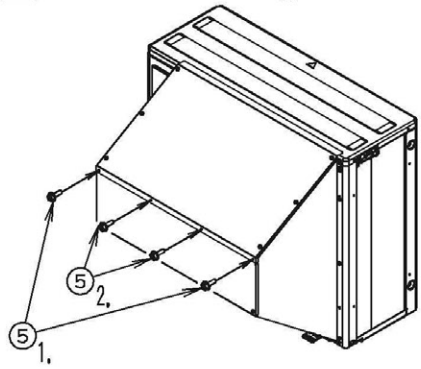

1. Temporarily secure the front plate ④in place with the 2 screws ⑤included in the kit.

**4 Attach the top plate ③**



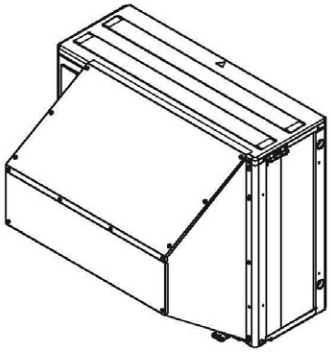

1. Temporarily secure the top plate ③in place with the 6 screws ⑤included in the kit.

**5 Attach the top plate ③**




1. Temporarily secure the top plate ③ and front plate ④ to the side plate (right) ① and side plate (left) ② with the 2 screws ⑤included in the kit.
2. Temporarily secure the top plate ③to the front plate ④with the 2 screws ⑤included in the kit.
3. Tighten the 12 screws that you used to temporarily secure parts in steps 3), 4), and 5).

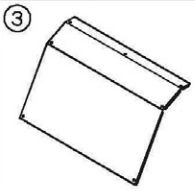
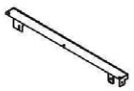
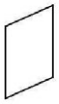
**❷ Appearance of the snow hood (intake rear plate) after installation**



3P436072-1

## 4.9 <KPS063A47> Snow Hood (Discharge)

**Parts** Before assembling the product, verify that all of the following parts have been included:

| Name | Side plate | Side plate | Top plate | Installation plate | Screws | Piercing screw | Installation Manual |
|---|---|---|---|---|---|---|---|
| Illustration | ① (Right)  | ② (Left)  | ③  | ④  | ⑤  | ⑥  | ⑦  |
| Quantity | 1 | 1 | 1 | 1 | 8 | 3 | 1 (this document) |

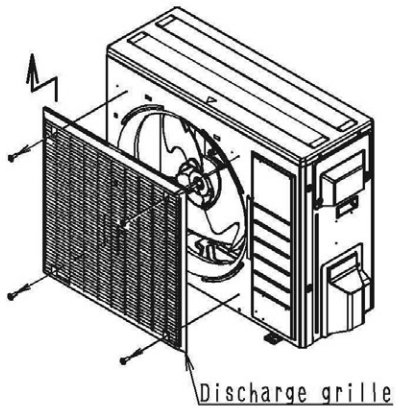
**⚠Caution** Read these safety considerations for installation carefully before installing the product.

- Be sure to observe the following installation precautions to ensure that the product can be used safely:
1. Install the product so that it is situated high enough to allow access to the outdoor unit for maintenance.
2. Installing the product in a location in which it may be exposed to strong winds, secure the outdoor unit with wire or other means.
3. Choose a location where the operating sound will not cause a nuisance to the neighbors of the user.
4. Tighten screws securely. Failure to do so may result in vibration.

**⚠Caution • • • •**
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practises.

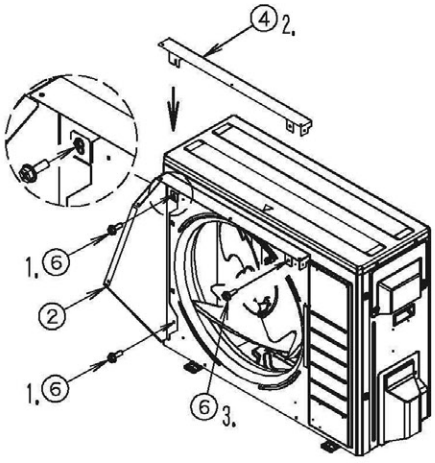
### ① Installing the snow hood (outlet)

**1 Remove the discharge grille.**




1. Remove the 4 screws that hold the discharge grille. (The discharge grille is held with the 4 screws and 2 hooks.)

**2 Attach the side plate (left) ② and installation plate ④.**



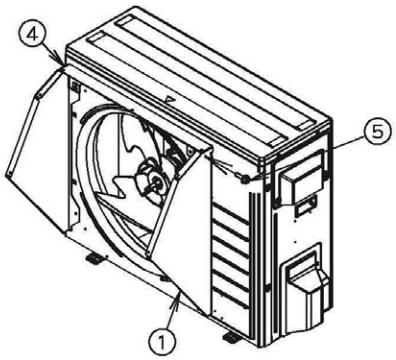

1. Temporarily secure the side plate (left) ② in place with the 2 piercing screw ⑥ included in the kit.

- Installation is easiest if you start with the hook slot.
- Align the screw installation position with the dowel hole.

2. Jointly tighten the installation plate ④ with the 1 piercing screw ⑥ temporarily secured in step 1.
3. Install the right side of the installation plate ④ with the 1 piercing screw ⑥.

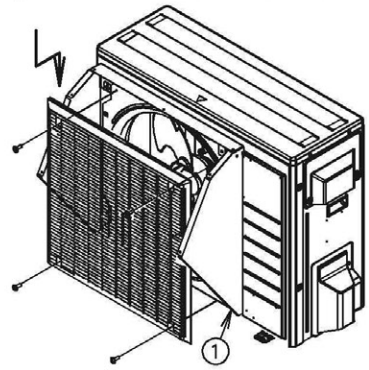
3P436073-1

**3 Attach the installation plate④.**



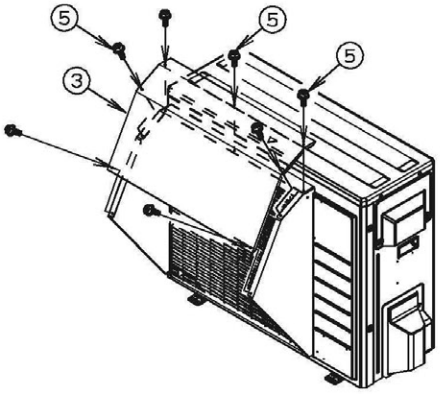

1. Install the side plate (right) ① and installation plate ④ with the 1 screws ⑤ included in the kit.

**4 Attach the discharge grille.**



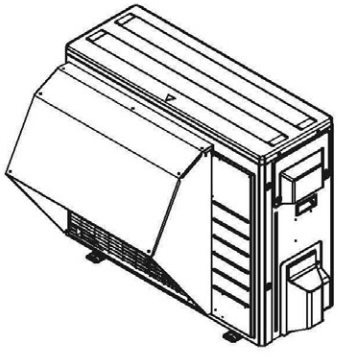

1. When installing the discharge grille removed in [1], jointly tighten the side plate (right) ① with the 2 screws securing the discharge grille. (Secure the discharge grille with the 4 screws and 2 hooks.)

**5 Attach the top plate③.**




1. Install the top plate ③ with the 7 screws ⑤ included in the kit.

## ❷ Appearance of the snow hood (outlet) after installation



3P436073-1

**Warning**

- Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorized parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the user's manual carefully before using this product. The user's manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any inquiries, please contact your local importer, distributor and/or retailer.

## Cautions on product corrosion

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.

- Specifications, designs and other content appearing in this brochure are current as of June 2026 but subject to change without notice.

©All rights reserved

AK