4. Wiring

Refer to the installation manual for the outdoor unit also.

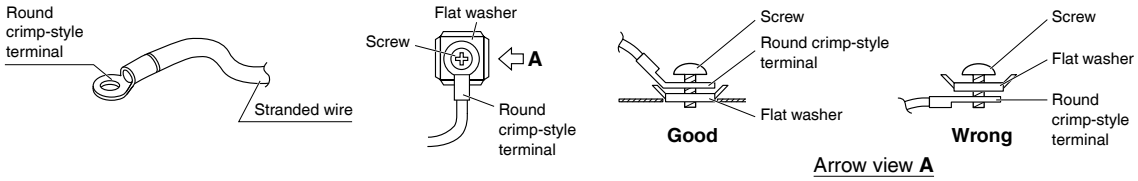
⚠WARNING

- 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

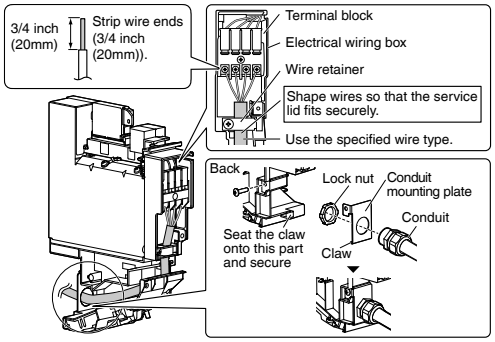
Recommend stranded cable for interunit wiring. Local code always supersedes recommendation.

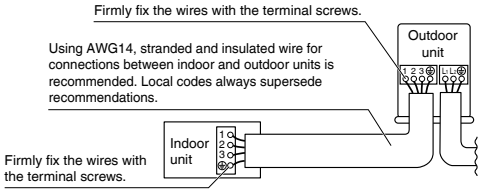
- For stranded wires, make sure to use the round crimp-style terminal for connection to the power supply terminal block. Place the round crimp-style terminals on the wires up to the covered part and secure in place.



- 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.





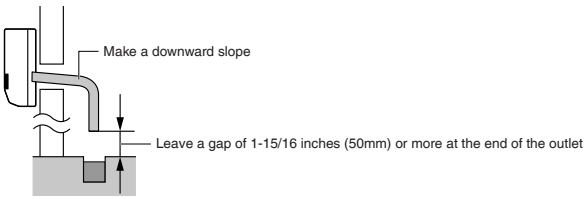
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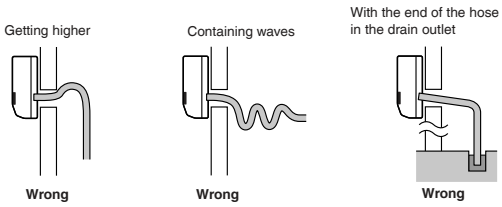
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Indoor Unit Installation

5. Drain piping

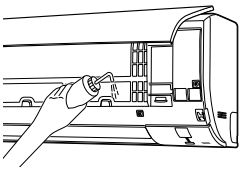
1) Connect the drain hose, as shown below.
   - Avoid placing the end of the drain hose in a drainage location that could cause bad odors or corrosive gas to flow backward into the outlet.
   - The drainage water may change color due to bacteria or other organisms. Place in a location where the flow 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.



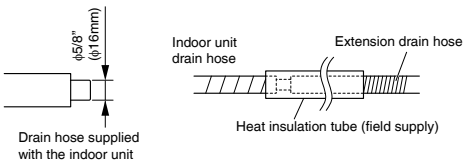


2) Remove the air filters and transfer some water to the indoor heat exchanger by pouring water into the drain pan.

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.



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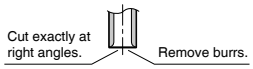
Refrigerant Piping Work

⚠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

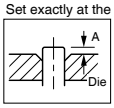
1) Cut the pipe end with a pipe cutter.
2) Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.



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

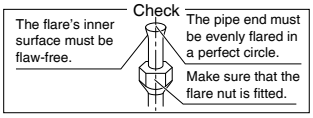
Flaring

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

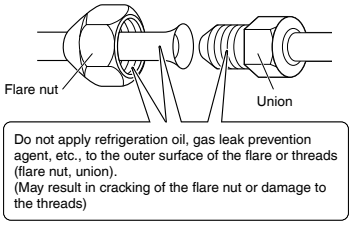


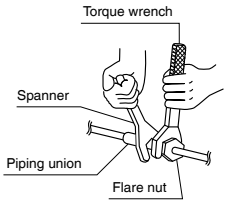
2. Refrigerant piping

⚠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.

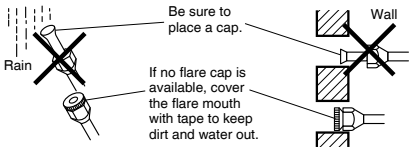




	Piping size	Flare nut tightening torque
Gas side	O.D. 1/2 inch (12.7mm)	36-1/2–44-1/2lbf • ft (49.5-60.3N • m)
	O.D. 5/8 inch (15.9mm)	45-5/8–55-5/8lbf • ft (61.8-75.4N • m)
Liquid side	O.D. 1/4 inch (6.4mm)	10-1/2–12-3/4lbf • ft (14.2-17.2 N • m)

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.

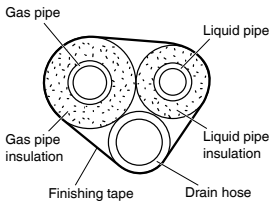


Refrigerant Piping Work

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.

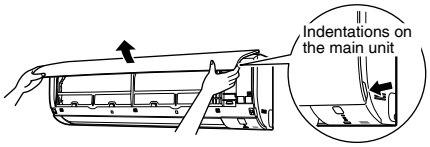
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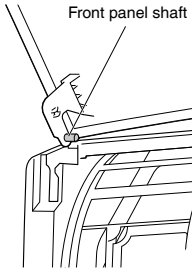
Installation Tips

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.



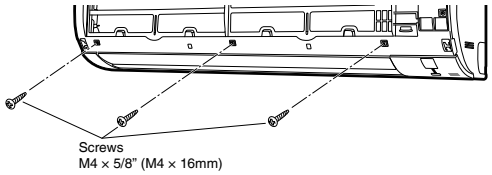
  2) While pushing the left side front panel shaft outward, push up the front panel and remove it. (Remove the right side front panel shaft in the same manner.)
  3) After removing both front panel shafts, pull the front panel toward yourself and remove it.



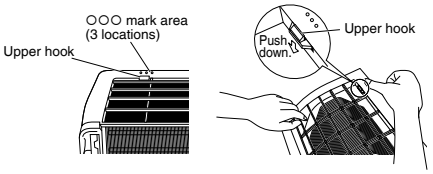
- **Installation method**
  Align the front panel shaft of the front panel with the grooves of grille, and push all the way in, then close slowly.
  Push the center of the lower panel surface firmly to engage the tabs.

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.



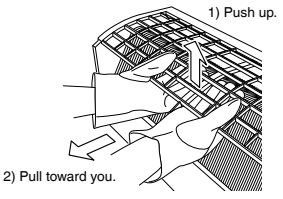
  3) In front of the ○○○ mark on the front grille, there are 3 upper hooks. Lightly pull the front grille toward you with one hand, and push down on the hooks with the fingers of your other hand.



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.



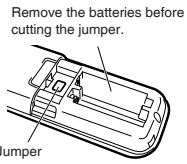
- **Installation method**
  1) Install the front grille and firmly engage the upper hooks (3 locations).
  2) Install 3 screws of the front grille.
  3) Install the air filters and then mount the front panel.

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.

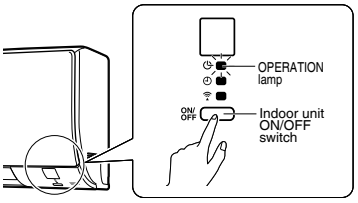
1) Remove the battery cover on the remote controller and cut the address jumper.
2) Press TEMP ▲, TEMP ▼ and OFF at the same time.
3) Press TEMP ▲, then select A, press FAN.
   (The indoor unit OPERATION lamp will blink for about 1 minute.)
4) Press the indoor unit ON/OFF switch while the OPERATION lamp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

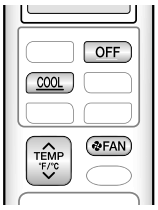
Press the indoor unit ON/OFF switch for at least 5 seconds. (The operation will start.)

- 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 ↑, 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	

2. Outdoor Unit

2.1 2/3/4MXM, 2MXT, 2MXTH

Contents

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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) 7
How to Use Reducers 8
Outdoor Unit Installation 9
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2. Drain work 9
3. Flaring the pipe end 9
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5. Pressure test and evacuating system 11
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Trial Operation and Testing 19
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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

- 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.

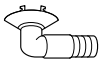
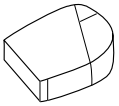
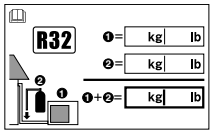
⚠ NOTE

- 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

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.

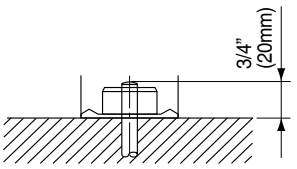
• Construct a large canopy.
• Construct a pedestal.



Install the unit high enough off the ground to prevent burying in snow.

Precautions on Installation

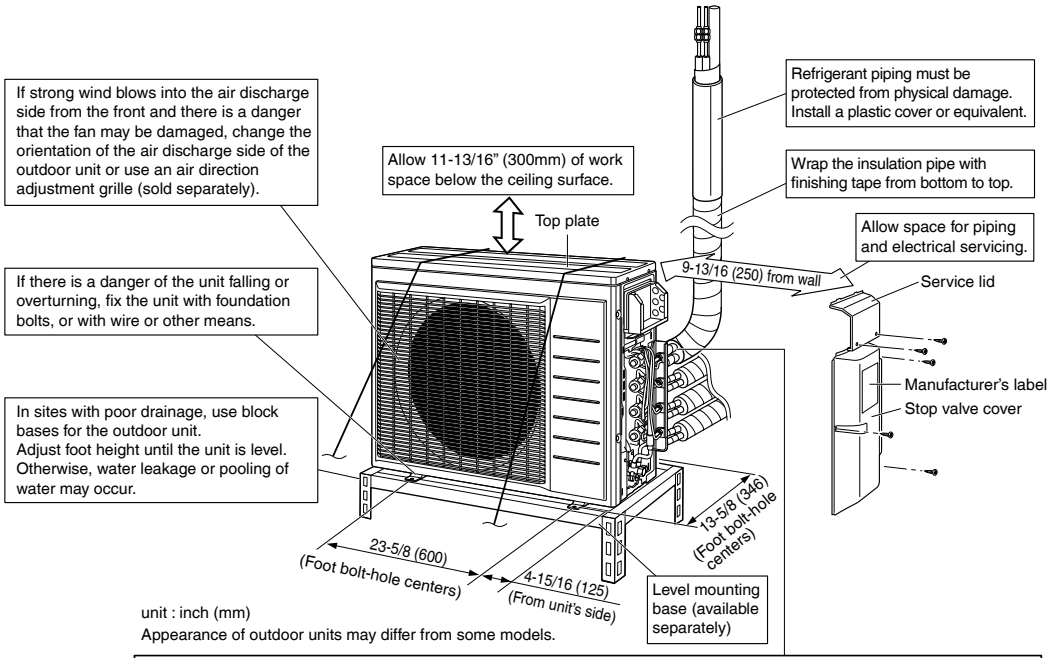
- Check the strength and level of the installation surface so that the unit does not cause any operating vibrations or noise after installation.
- Fix the unit in place securely using foundation bolts, as in the figure. (Prepare 4 sets of 5/16 inch (M8) or 3/8 inch (M10) foundation bolts, nuts and washers; 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

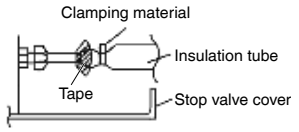
⚠ CAUTION

- 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 10 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.

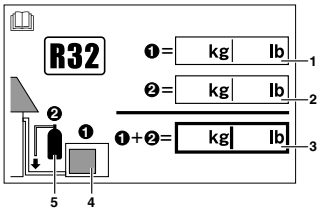
Also insulate the connection on the outdoor unit.



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.

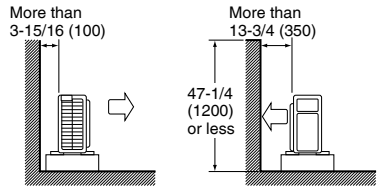


1 factory refrigerant charge of the product: see unit manufacturer's label
2 additional refrigerant amount charged in the field
3 total refrigerant charge
4 outdoor unit
5 refrigerant cylinder and manifold for charging

Installation Space Requirements

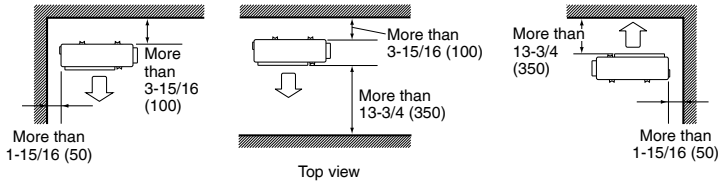
- Position the unit on a horizontal surface. Any tilt in the unit should be 3° or less to the horizontal.
- Where a wall or other obstacle is in the path of the outdoor unit's intake or exhaust airflow, follow the installation space requirements below.
- For any of the below installation patterns, the 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



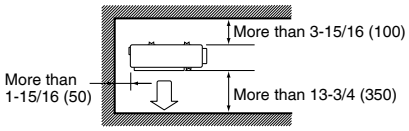
Side view

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)

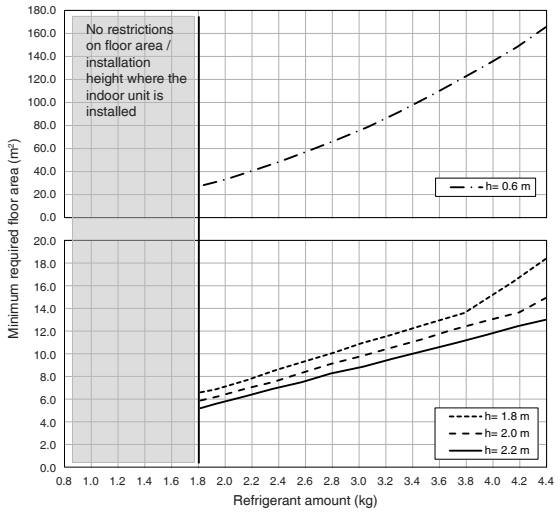
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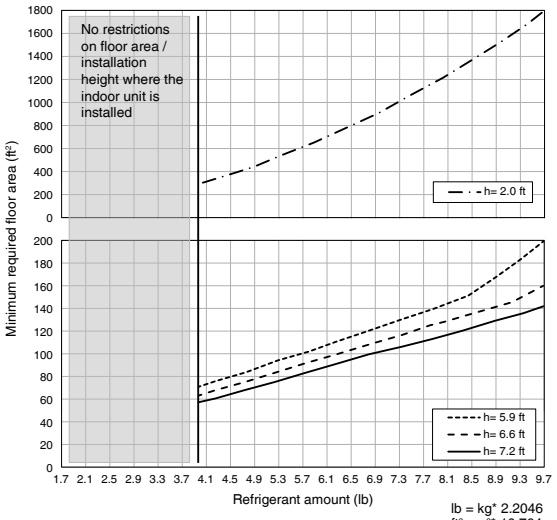
Selecting a Location for Installation of the Indoor Units

- **Minimum required floor area (A_{min})**
  The minimum required floor area of the room where the indoor unit is installed varies depending on the installation height and refrigerant amount.

Refrigerant amount (kg) \ Indoor unit installation height (m)	h (m)					
	0.6	1.8	2.0	2.2	2.4	2.6
< 1.84	No restriction					
1.9	31.0	6.9	6.2	5.6	5.2	4.8
2.0	34.3	7.3	6.5	5.9	5.4	5.0
2.1	37.8	7.6	6.9	6.2	5.7	5.3
2.2	41.5	8.0	7.2	6.5	6.0	5.5
2.3	45.4	8.4	7.5	6.8	6.3	5.8
2.4	49.4	8.7	7.8	7.1	6.5	6.0
2.5	53.6	9.1	8.2	7.4	6.8	6.3
2.6	58.0	9.4	8.5	7.7	7.1	6.5
2.7	62.6	9.8	8.8	8.0	7.4	6.8
2.8	67.3	10.2	9.2	8.3	7.6	7.0
2.9	72.2	10.5	9.5	8.6	7.9	7.3
3.0	77.2	10.9	9.8	8.9	8.2	7.5
3.1	82.5	11.3	10.1	9.2	8.4	7.8
3.2	87.9	11.6	10.5	9.5	8.7	8.0
3.3	93.4	12.0	10.8	9.8	9.0	8.3
3.4	99.2	12.3	11.1	10.1	9.3	8.5
3.5	105.1	12.7	11.4	10.4	9.5	8.8
3.6	111.2	13.1	11.8	10.7	9.8	9.0
3.7	117.5	13.4	12.1	11.0	10.1	9.3
3.8	123.9	13.8	12.4	11.3	10.3	9.6
3.9	130.5	14.5	12.7	11.6	10.6	9.8
4.0	137.3	15.3	13.1	11.9	10.9	10.1
4.1	144.2	16.0	13.4	12.2	11.2	10.3
4.2	151.4	16.8	13.7	12.5	11.4	10.6
4.3	158.7	17.6	14.3	12.8	11.7	10.8
4.4	166.1	18.5	15.0	13.1	12.0	11.1

Refrigerant amount (lb) \ Indoor unit installation height (ft)	h (ft)					
	2.0	5.9	6.6	7.2	7.9	8.5
< 4.05	No restriction					
4.2	333	74	67	61	56	51
4.4	369	78	70	64	59	54
4.6	407	82	74	67	62	57
4.9	447	86	77	70	64	60
5.1	489	90	81	74	67	62
5.3	532	94	84	77	70	65
5.5	577	98	88	80	73	68
5.7	624	102	91	83	76	70
6.0	673	106	95	86	79	73
6.2	724	109	98	90	82	76
6.4	777	113	102	93	85	78
6.6	831	117	106	96	88	81
6.8	888	121	109	99	91	84
7.1	946	125	113	102	94	87
7.3	1006	129	116	106	97	89
7.5	1068	133	120	109	100	92
7.7	1131	137	123	112	103	95
7.9	1197	141	127	115	106	97
8.2	1264	145	130	118	108	100
8.4	1334	149	134	122	111	103
8.6	1405	156	137	125	114	106
8.8	1478	164	141	128	117	108
9.0	1553	173	144	131	120	111
9.3	1629	181	148	134	123	114
9.5	1708	190	154	138	126	116
9.7	1788	199	161	141	129	119





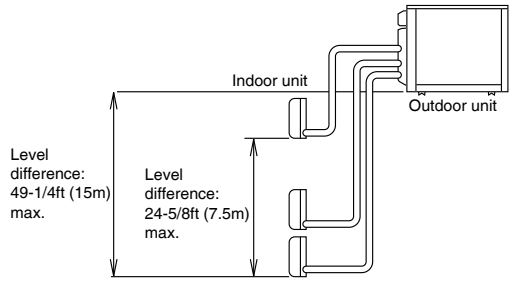
lb = kg* 2.2046
ft²= m²* 10.764

6

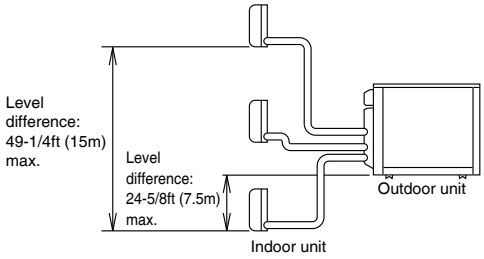
Selecting a Location for Installation of the Indoor Units

- 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.)

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

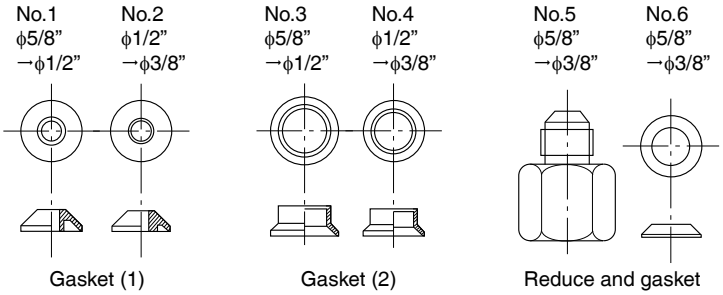
The line set piping size is determined by the size of the indoor unit fittings.
Reducers are used at the outdoor unit to accommodate the correct gas line pipe size.

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.

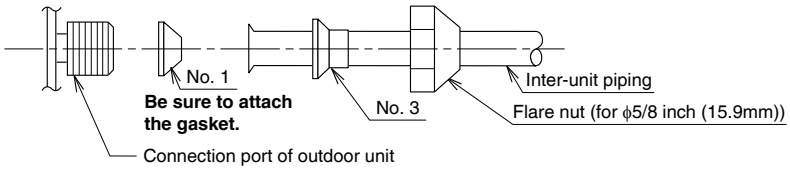
Refer to **“How to Use Reducers”** on page 8 for information on reducer numbers and their shapes.

How to Use Reducers

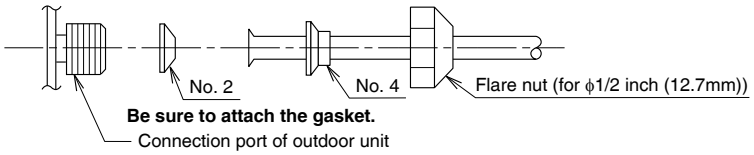


• Use the reducers supplied with the unit as described below.

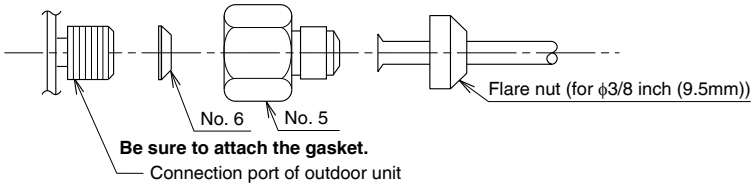
(1) Connecting a pipe of ϕ1/2 inch (12.7mm) to a gas pipe connection port for ϕ5/8 inch (15.9mm) :



(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)

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.

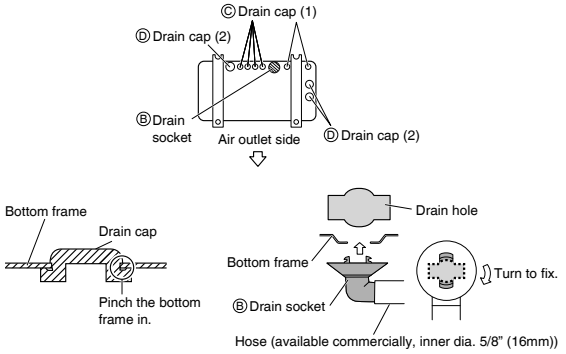
2. Drain work

⚠ 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

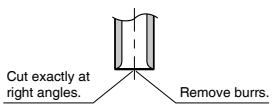
⚠ WARNING

- 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.

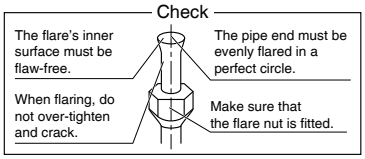
⚠ CAUTION

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.

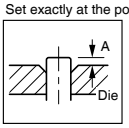


Check



Flaring

Set exactly at the position shown below.



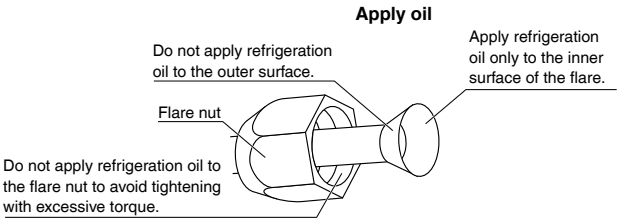
	Flare tool for R32 or R410A	Conventional flare tool	
	Clutch-type	Clutch-type (Rigid-type)	Wing-nut type (Imperial-type)
A	0-0.020 inch (0-0.5mm)	0.039-0.059 inch (1.0-1.5mm)	0.059-0.079 inch (1.5-2.0mm)

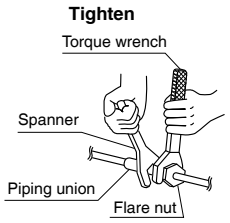
4. Refrigerant piping

⚠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.)
- To prevent gas leakage, apply refrigeration oil only to the inner surface of the flare. (Use refrigeration oil for R32 or R410A.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and 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.





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

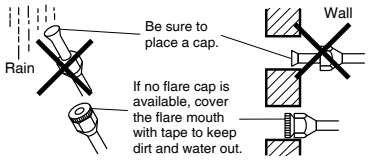
Width across flats	
3/4 inch (19mm)	7/8 inch (22mm)
12-5/8 – 15-3/8lbf • ft (17.0-20.9N • m)	16 – 20-1/4lbf • ft (21.6-27.4N • m)

Service port cap

8 – 10-7/8lbf • ft (10.7-14.7N • m)

Cautions on pipe handling

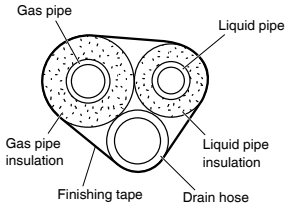
- Protect the open end of the pipe from dust and moisture.
- All pipe bends should be as gentle as possible. Use a pipe bender for bending.



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.

Outdoor Unit Installation

5. Pressure test and evacuating system

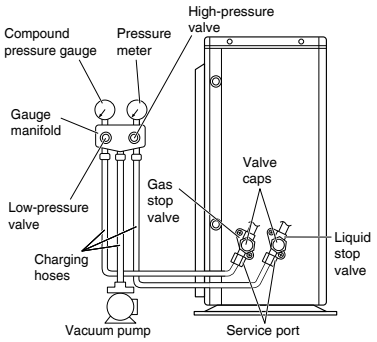
⚠ WARNING

- 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

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 10 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.**

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)

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Wiring

⚠ WARNING

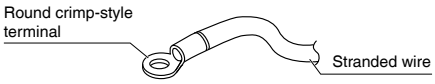
- **RISK OF ELECTRIC SHOCK CAUSE INJURY OR DEATH.**
  System contains oversize protective earthing (grounding) terminal which shall be properly connected.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting 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.

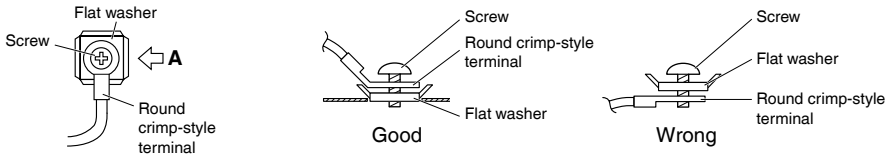
⚠ CAUTION

Precautions to be taken for power supply wiring

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

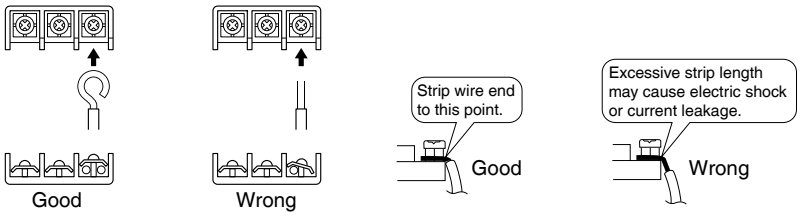
- For stranded wires, make sure to use the round crimp-style terminal for connection to the power supply terminal block. Place the round crimp-style terminals on the wires up to the covered part and secure in place.





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.



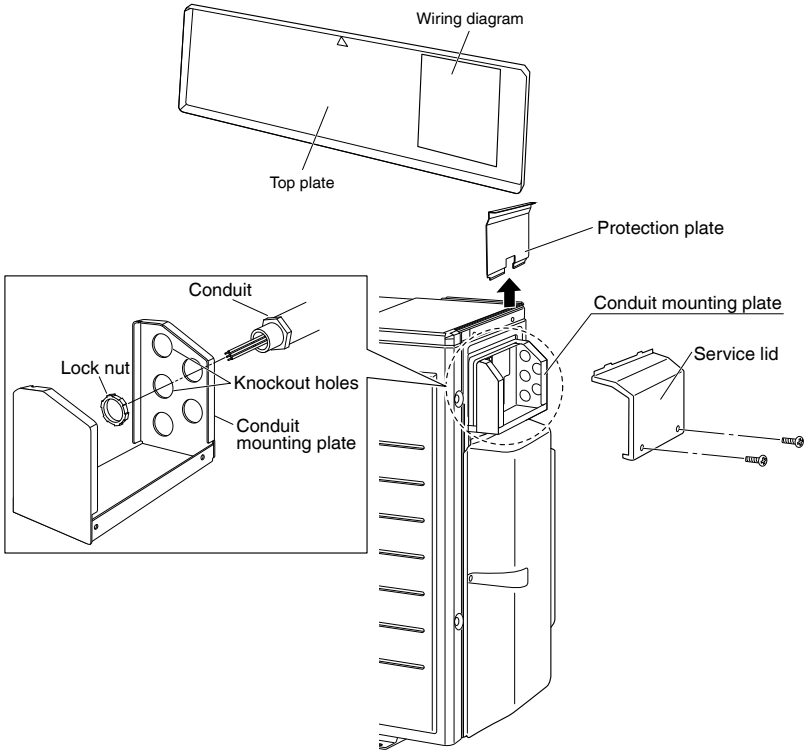
Stripping wire at terminal block

[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.



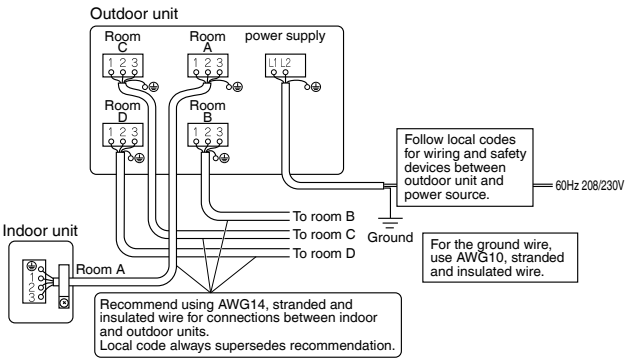
14

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Wiring

[Wiring procedure]

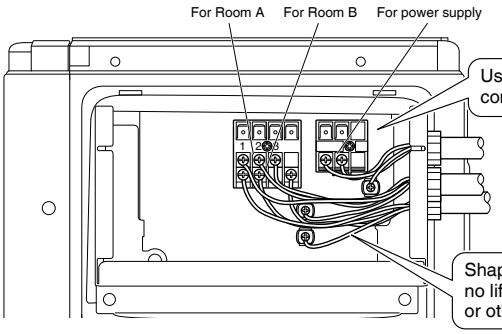
1) Strip the insulation from the wire (3/4inch (20mm)).
2) Connect the inter-unit wires between the indoor and outdoor units **so that the terminal numbers match.** Tighten the terminal screws securely. It is recommended that a slot-head screwdriver be used to tighten the screws.
3) **Be sure to match 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.



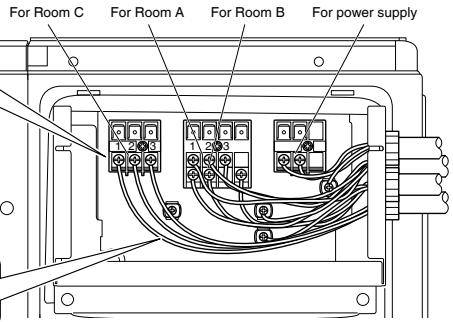
Note

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

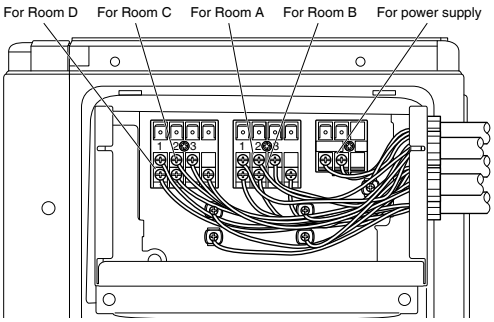
• 2MXM, 2MXT models



• 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.

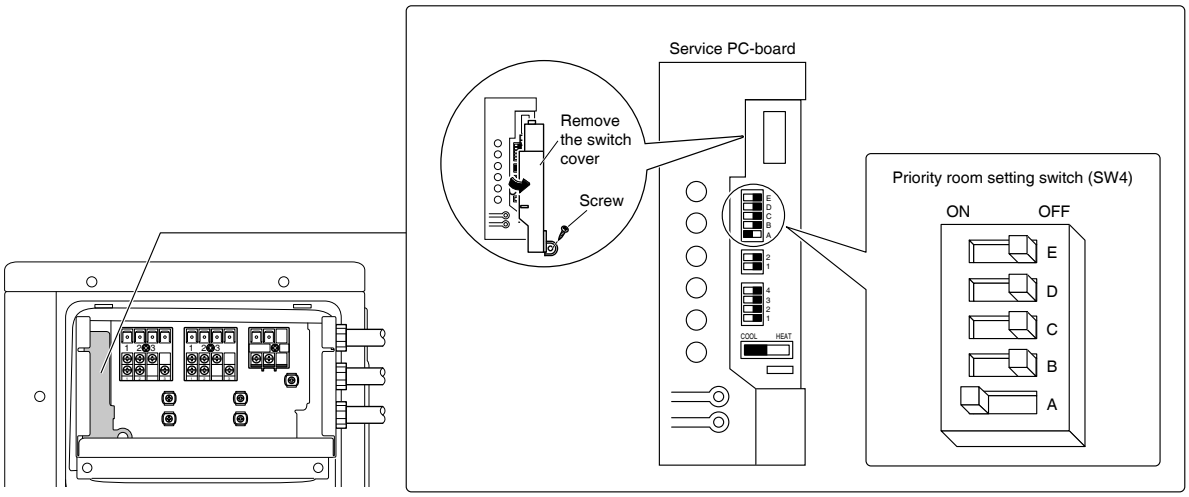
3) Quiet operation priority

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



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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.

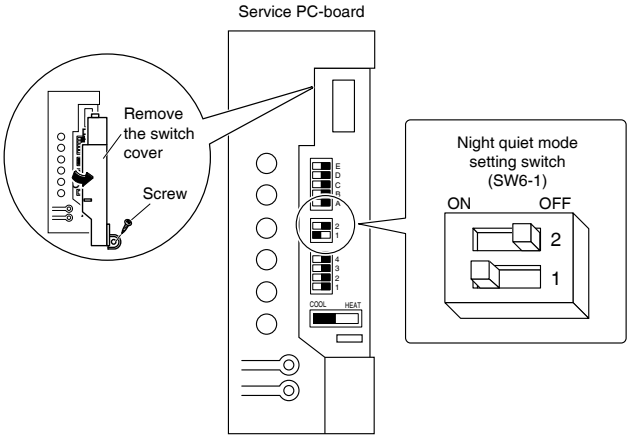
About night quiet mode

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.

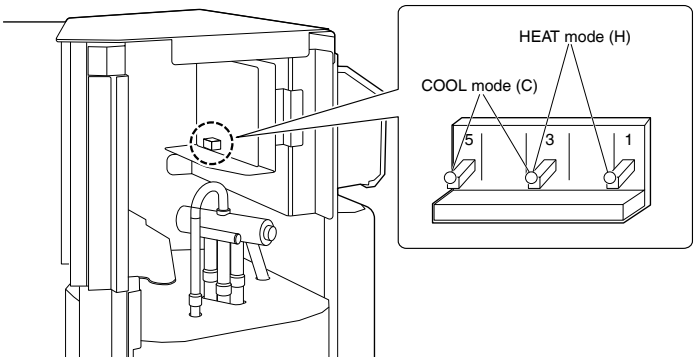
Setting procedure

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.



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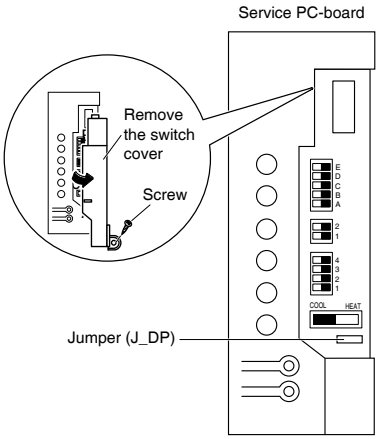
3P740830-1B

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.



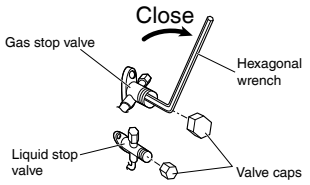
Pump Down Operation

⚠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.

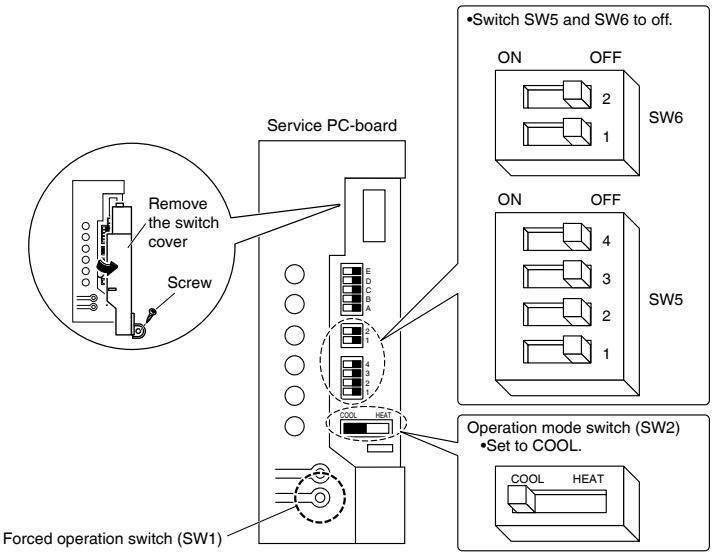
1) Remove the valve caps from liquid stop valve and gas stop valve.
2) Begin forced cooling operation.
3) After 3 to 5 minutes, close the liquid stop valve with a hexagonal wrench.
4) After 3 to 4 minutes, close the gas stop valve and stop forced cooling operation.
5) Attach the valve caps once procedures 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).



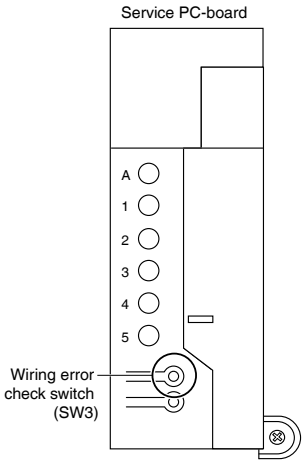
Trial Operation and Testing

- 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.

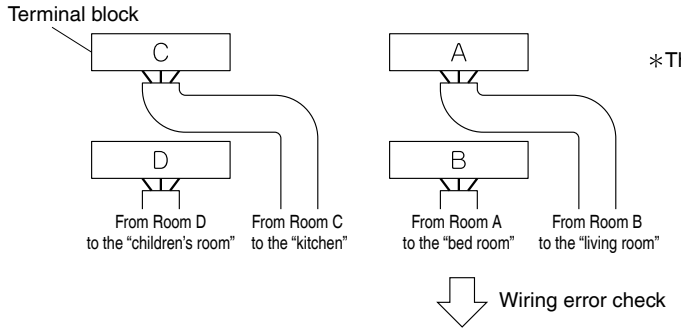


The service monitor LEDs indicate whether or not correction is possible, as shown in the table below. For details on how to read the LED display, refer to the collective indications label on the reverse side of the top plate or the service manual.

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.

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.)

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....84
2. Operation Manual....85
2.1 CTXV07, FTXV09/12....85
2.2 FTXV15/18/24....118

1. Operation Manual List

Model	Operation Manual	Reference Page	Wireless R/C	Wired R/C
CTXV07AVJU9	3P741457-1E	85	ARC480A83	(BRC073A6), (BRC944B2) (Option)
FTXV09AVJU9				
FTXV12AVJU9				
FTXV15AVJU9	3P741457-2E	118		
FTXV18AVJU9				
FTXV24AVJU9				

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

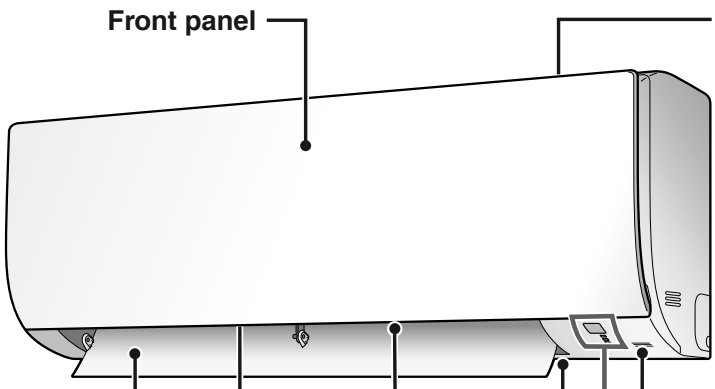
- Never press the button of the remote controller with a hard, pointed object. The remote controller may be damaged.
- Never pull or twist the electric wire of the remote controller. It may cause the unit to malfunction.
- Do not place appliances that produce open flames in places that are exposed to 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



Flap (horizontal blade)
▶Page 13

Louvers (vertical blades)
- The louvers are inside of the air outlet. ▶Page 13

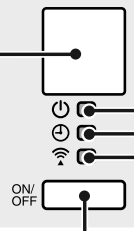
Model name

Indoor temperature and humidity sensor
- Sense air temperature and humidity around the 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

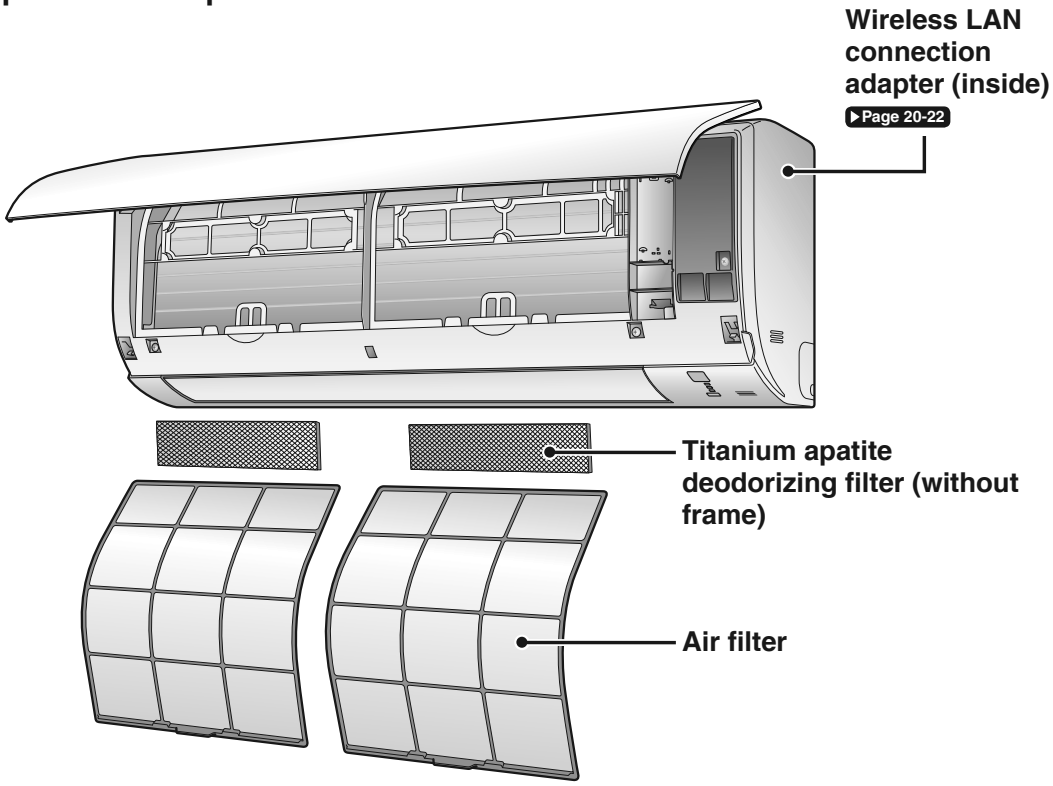
Wireless LAN connection adapter lamp (Orange)
▶Page 8, 21, 22

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

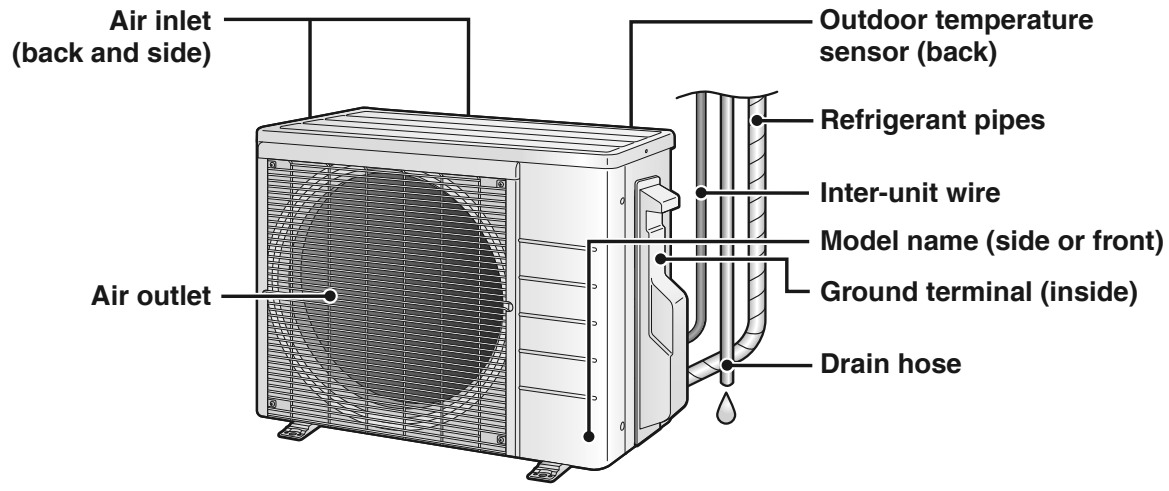
- This switch can be used when the remote controller is missing or out of batteries.

■ Open the front panel



Outdoor Unit

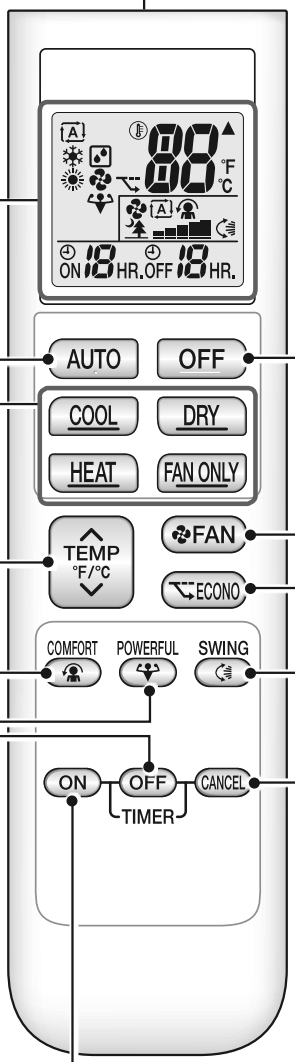
• The appearance of the outdoor unit may differ between different models.



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

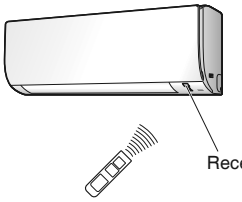
COMFORT button
- COMFORT AIRFLOW operation. ▶Page 14

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

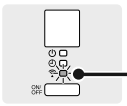
- **Wireless LAN sends and receives data using radio waves so there is a risk of transmitted data being subject to eavesdropping and illegal access. When using wireless LAN, manage the SSID/KEY of the wireless LAN connection adapter, the SSID/KEY of the wireless router, and the app login information 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

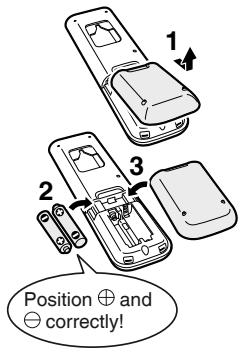
Preparation Before Operation

⚠ CAUTION

Incorrect handling of batteries can result in injury from battery leakage, rupturing or heating, or lead to equipment failure.

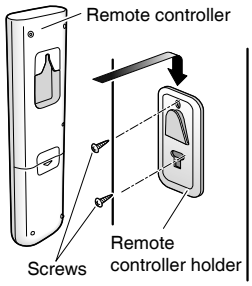
Please observe the following precautions and use safely.

- 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.



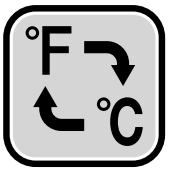
To insert the batteries

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.

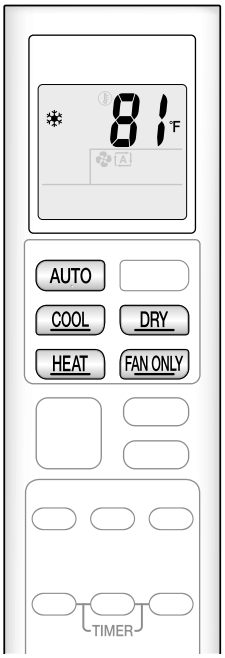
Notes on remote controller

- 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.

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 .

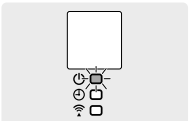
FAN ONLY operation



• 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.

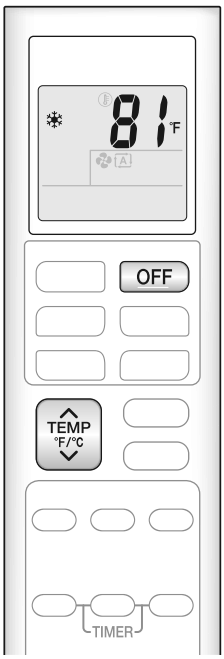
• The system automatically reselects setting at a regular interval to bring the indoor temperature to the user-setting level.

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 v 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

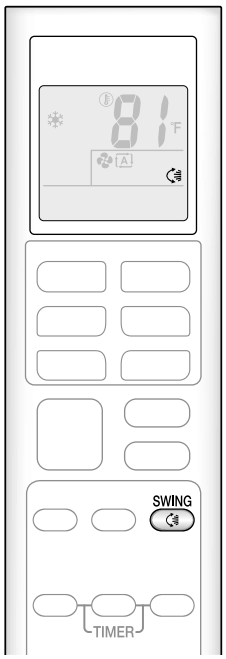
- At smaller airflow rates, the cooling (heating) effect is also smaller.

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.

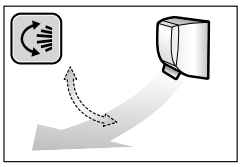
⚠ CAUTION

- 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

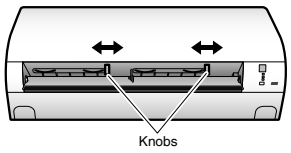
- This function is effective while the flap is in auto swing mode.

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).

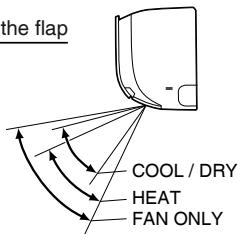


NOTE

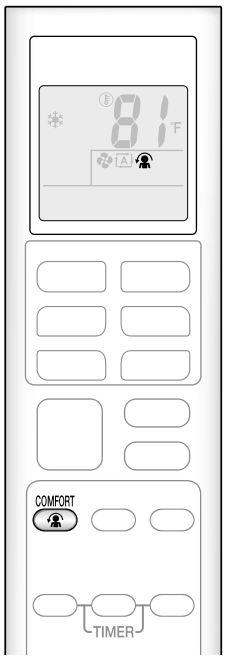
Notes on airflow direction setting

- 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.

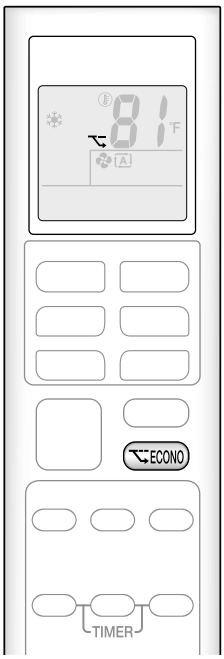
To cancel POWERFUL operation

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.

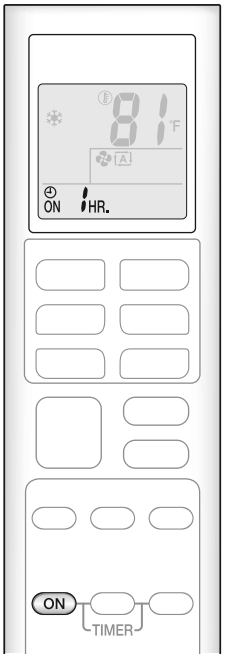
Notes on ECONO operation
- This operation is performed with lower power and therefore may not provide a sufficient cooling (heating) effect.
- Pressing OFF causes the settings to be canceled, and " " disappears from the LCD.
- If the power consumption level is already low, switching to ECONO operation 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

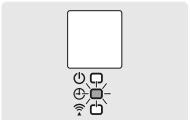


Timer functions are useful for automatically switching the air conditioner on or off in the morning or at night. You can also use the ON TIMER and OFF TIMER together.

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

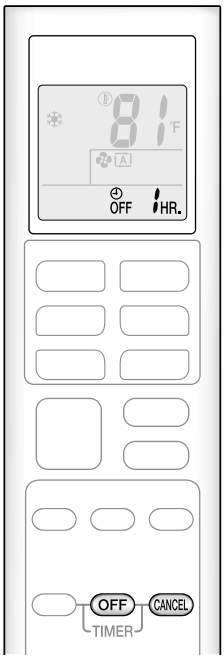
NOTE

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

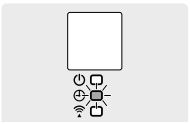
ON/OFF TIMER Operation



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

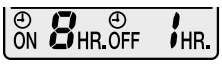
To cancel ON/OFF TIMER operation

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.



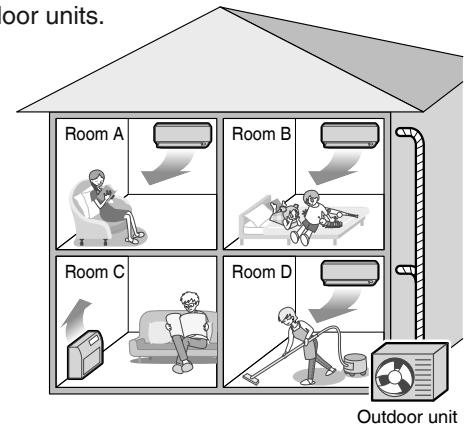
When setting while the unit is stopped
- Starts the unit 2 hours later and stops it 3 hours after that.

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.

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

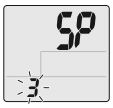
- The actual application screen layout and content may differ from what is shown. The layout and content of the application screen is subject to change without notice.

Connect the air conditioner to your home network.

1. While operation is stopped, press POWERFUL and hold the button for 5 seconds.

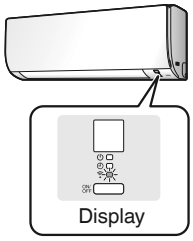
2. Press TEMP or TEMP and select menu number 3.

- "SP" appears on the LCD.
- "3" blinks.





3. Press POWERFUL to connect to the access point.



The wireless LAN connection adapter lamp blinks quickly.

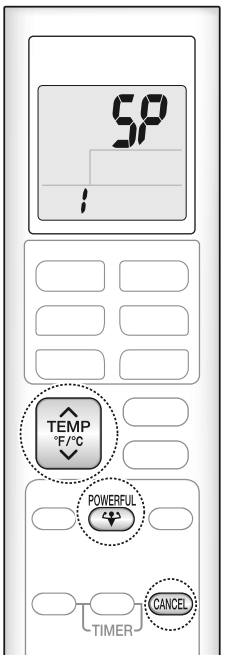
4. Press CANCEL to return to the default screen.
No more settings need to be carried out from the remote controller.

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 There is a possibility of equipment failure 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.**

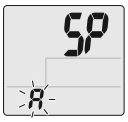
To reset the connection setting to the factory default

- 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.

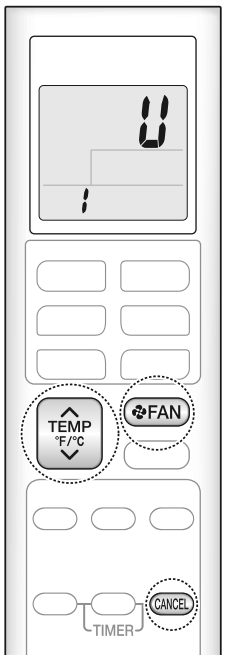
3. **Press POWERFUL and hold the button for 2 seconds to confirm selected setting.**

- The wireless LAN connection adapter lamp blinks for 1 second.

4. **Press CANCEL to return to the default screen.**

Making Changes to Default Settings

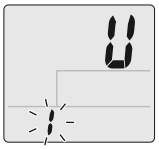
Brightness of Indoor Unit LED Lamps



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.

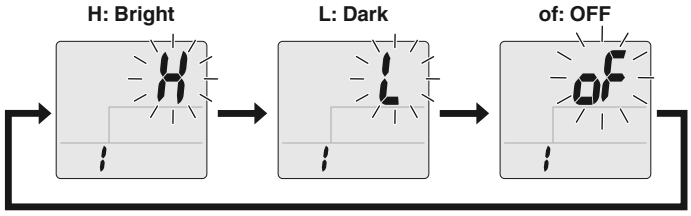


- "U" appears on the LCD.
- "1" blinks.

3. Press FAN.

4. Press TEMP °F/°C or TEMP °F/°C and select setting option.

- The setting option will blink.



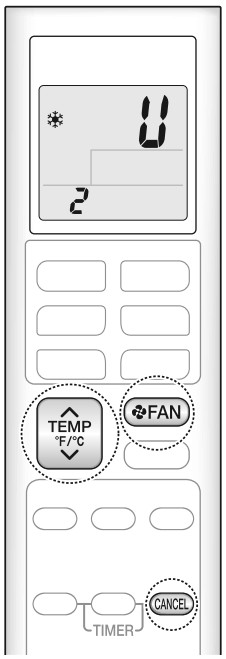
5. Press FAN.

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)

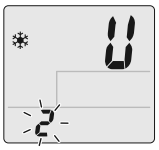
Airflow Setting When Indoor Unit Reaches Setpoint



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.

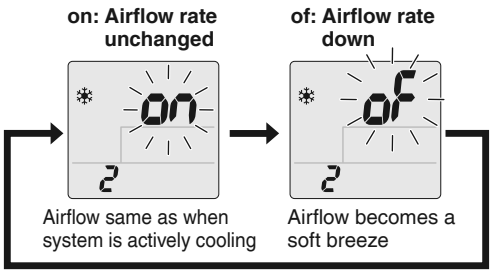


- "U" appears on the LCD.
- "2" blinks.

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

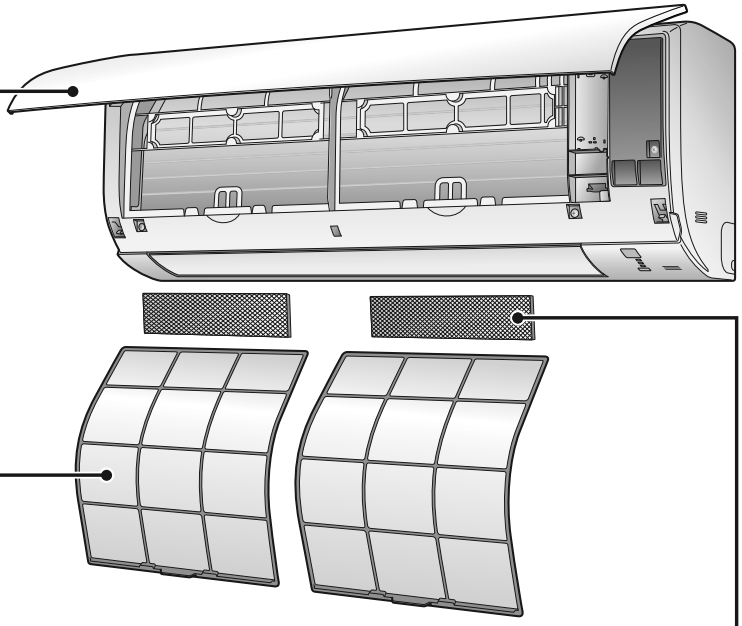
Care and Cleaning

⚠ 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

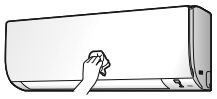
Cleaning parts



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

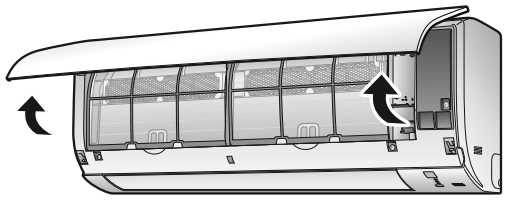


3P741457-1E

■ Air filter

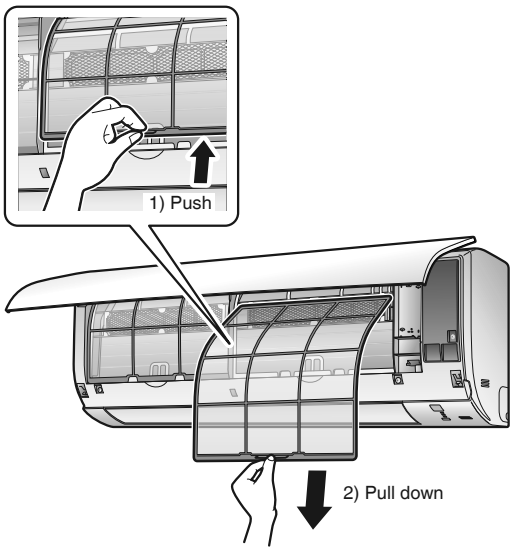
1. Open the front panel.

• Hold the front panel by the sides and open it.



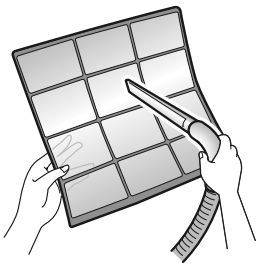
2. Pull out the air filters.

• Push the filter tab at the center of each air filter a little upwards, then pull it down.



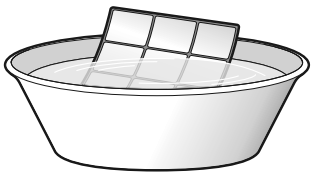
3. Wash the air filters with water or clean them with vacuum cleaner.

• It is recommended to clean the air filters every 2 weeks.



If the dust does not come off easily

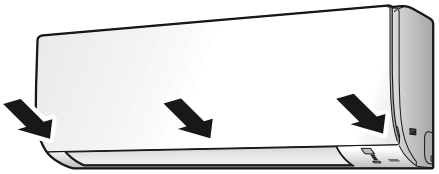
• Wash the air filters with neutral detergent thinned with lukewarm water, then dry them up in the shade.



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

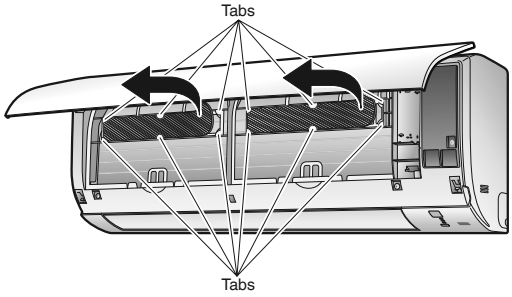
Care and Cleaning

■ 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.

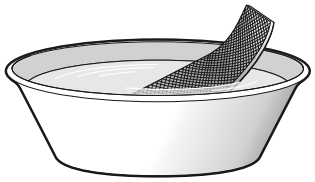
• Remove the filters from the tabs.



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.

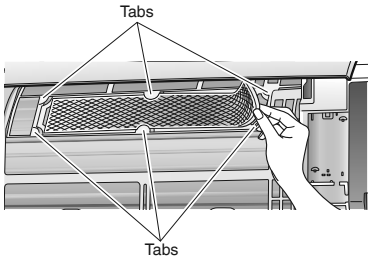


3-2 After washing, shake off remaining water and let them dry in the shade.

• 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.

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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.