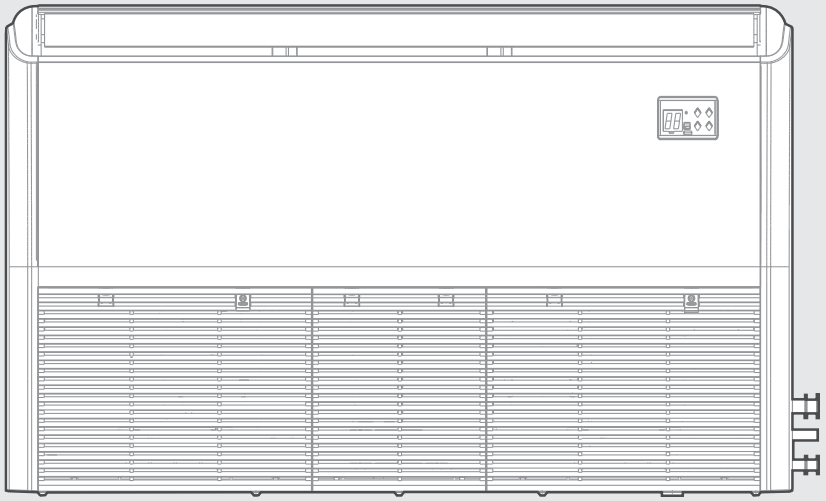


CEILING & FLOOR TYPE AIR CONDITIONER

USER MANUAL

MODEL NUMBER:

MUEU-18HRFNX(GA)
MUE-24HRFNX(GA)
MUE-36HRFNX(GA)
MUE-48HRFNX(GA)
MUE-55HRFNX(GA)

Warning notices: Before using this product, please read this manual carefully and keep it for future reference.
The design and specifications are subject to change without prior notice for product improvement.
Consult with your dealer or manufacturer for details.
The diagram above is just for reference. Please take the appearance of the actual product as the standard.

THANK YOU LETTER

Thank you for choosing Midea! Before using your new Midea product, please read this manual thoroughly to ensure that you know how to operate the features and functions that your new appliance offers in a safe way.

CONTENTS

SAFETY PRECAUTIONS

It’s really important you read Safety Precautions Before Operation and Installation Incorrect installation due to ignoring instructions can cause serious damage or injury. The seriousness of potential damage or injuries is classified as either a WARNING or CAUTION.

Explanation of Symbols

	**Warning of electrical voltage** This symbol indicates that there is a danger to life and health of persons due to voltage.
	**Warning** The signal word indicates a hazard with a medium level of risk which, if not avoided, may result in death or serious injury.
	**Caution** The signal word indicates a hazard with a low degree of risk which, if not avoided, may result in minor or moderate injury.
	**Attention** The signal word indicates important information (e.g. damage to property), but not danger.
	**Observe instructions** This symbol indicates that a service technician should only operate and maintain this appliance in accordance with the operating instructions.

Read these operating instructions carefully and attentively before using/commissioning the unit and keep them in the immediate vicinity of the installation site or unit for later use!

⚠ WARNING

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision(European Union countries).

This appliance is not intended for use by persons(including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

⚠ WARNING FOR PRODUCT USE

- If an abnormal situation arises (like a burning smell), immediately turn off the unit and disconnect the power. Call your dealer for instructions to avoid electric shock, fire or injury.
- Do not insert fingers, rods or other objects into the air inlet or outlet. This may cause injury, since the fan may be rotating at high speeds.
- Do not use flammable sprays such as hair spray, lacquer or paint near the unit. This may cause fire or combustion.
- Do not operate the air conditioner in places near or around combustible gases. Emitted gas may collect around the unit and cause explosion.
- Do not operate your air conditioner in a wet room such as a bathroom or laundry room. Too much exposure to water can cause electrical components to short circuit.
- Do not expose your body directly to cool air for a prolonged period of time.
- Do not allow children to play with the air conditioner. Children must be supervised around the unit at all times.
- If the air conditioner is used together with burners or other heating devices, thoroughly ventilate the room to avoid oxygen deficiency.
- In certain functional environments, such as kitchens, server rooms, etc., the use of specially designed air-conditioning units is highly recommended.

⚠ ELECTRICAL WARNINGS

- Only use the specified power cord. If the power cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- The product must be properly grounded at the time of installation, or electrical shock may occur.
- For all electrical work, follow all local and national wiring standards, regulations, and the Installation Manual. Connect cables tightly, and clamp them securely to prevent external forces from damaging the terminal. Improper electrical connections can overheat and cause fire, and may also cause shock. All electrical connections must be made according to the Electrical Connection Diagram located on the panels of the indoor and outdoor units.
- All wiring must be properly arranged to ensure that the control board cover can close properly. If the control board cover is not closed properly, it can lead to corrosion and cause the connection points on the terminal to heat up, catch fire, or cause electrical shock.
- Disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.
- Do not pull power cord to unplug unit. Hold the plug firmly and pull it from the outlet. Pulling directly on the cord can damage it, which can lead to fire or electric shock.
- Do not modify the length of the power supply cord or use an extension cord to power the unit.
- Do not share the electrical outlet with other appliances. Improper or insufficient power supply can cause fire or electrical shock.
- Keep power plug clean. Remove any dust or grime that accumulates on or around the plug. Dirty plugs can cause fire or electric shock.
- If connecting power to fixed wiring, an all-pole disconnection device which has at least 3mm clearances in all poles, and have a leakage current that may exceed 10mA, the residual current device(RCD) having a rated residual operating current not exceeding 30mA, and disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.

TAKE NOTE OF FUSE SPECIFICATIONS

The air conditioner's circuit board (PCB) is designed with a fuse to provide overcurrent protection. The specifications of the fuse are printed on the circuit board, such as:
T5A/250VAC, T10A/250VAC, T20A/250VAC, T30A/250VAC etc.
NOTE: For the units with R32 or R290 refrigerant , only the blast-proof ceramic fuse can be used.

⚠ WARNINGS FOR PRODUCT INSTALLATION

- Installation must be performed by an authorized dealer or specialist. Defective installation can cause water leakage, electrical shock, or fire.
- Installation must be performed according to the installation instructions. **(In North America, installation must be performed in accordance with the requirement of NEC and CEC by authorized personnel only).** Improper installation can cause water leakage, electrical shock, or fire.
- Contact an authorized service technician for repair or maintenance of this unit. This appliance shall be installed in accordance with national wiring regulations.
- Only use the included accessories, parts, and specified parts for installation. Using non-standard parts can cause water leakage, electrical shock, fire, and can cause the unit to fail.
- Install the unit in a firm location that can support the unit's weight. If the chosen location cannot support the unit's weight, or the installation is not done properly, the unit may drop and cause serious injury and damage.
- Install drainage piping according to the instructions in this manual. Improper drainage may cause water damage to your home and property.
- For units that have an auxiliary electric heater, do not install the unit within 1 meter (3 feet) of any combustible materials.
- Do not install the unit in a location that may be exposed to combustible gas leaks. If combustible gas accumulates around the unit, it may cause fire.
- Do not turn on the power until all work has been completed.
- When moving or relocating the air conditioner, consult experienced service technicians for disconnection and reinstallation of the unit.
- How to install the appliance to its support, please read the information for details in "indoor unit installation" and "outdoor unit installation" sections .

⚠ CAUTION

- Turn off the air conditioner and disconnect the power if you are not going to use it for a long time.
- Turn off and unplug the unit during storms.
- Make sure that water condensation can drain unhindered from the unit.
- Do not operate the air conditioner with wet hands. This may cause electric shock.
- Do not use device for any other purpose than its intended use.
- Do not climb onto or place objects on top of the outdoor unit.
- Do not allow the air conditioner to operate for long periods of time with doors or windows open, or if the humidity is very high.

CLEANING AND MAINTENANCE WARNINGS

- Turn off the device and disconnect the power before cleaning. Failure to do so can cause electrical shock.
- Do not clean the air conditioner with excessive amounts of water.
- Do not clean the air conditioner with combustible cleaning agents. Combustible cleaning agents can cause fire or deformation.

Note about Fluorinated Gasses(Not applicable to the unit using R290 Refrigerant)

- This air-conditioning unit contains fluorinated greenhouse gasses. For specific information on the type of gas and the amount, please refer to the relevant label on the unit itself or the "Owner's Manual - Product Fiche " in the packaging of the outdoor unit. (European Union products only).
- Installation, service, maintenance and repair of this unit must be performed by a certified technician.
- Product uninstallation and recycling must be performed by a certified technician.
- For equipment that contains fluorinated greenhouse gases in quantities of 5 tonnes of CO2 equivalent or more, but of less than 50 tonnes of CO2 equivalent, If the system has a leak-detection system installed, it must be checked for leaks at least every 24 months.
- When the unit is checked for leaks, proper record-keeping of all checks is strongly recommended.

⚠ WARNING FOR USING R32/R290 REFRIGERANT

- When flammable refrigerant are employed, appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specifiec for operation.
  For R32 frigerant models:
  Appliance shall be installed, operated and stored in a room with a floor area larger than X m^2 .
  Appliance shall not be installed in an unvertilated space, if that space is smaller than X m^2 (Please see the following form).

Model (Btu/h)	Amount of refrigerant to be charged (kg)	maximum installation height (m)	Minimum room area (m^2)
<30000	<2.048	1.8m	4
<30000	<2.048	0.6m	35
30000-48000	2.048-3.0	1.8m	8
30000-48000	2.048-3.0	0.6m	80
>48000	>3.0	1.8m	9
>48000	>3.0	0.6m	80

- Reusable mechanical connectors and flared joints are not allowed indoors. (**EN** Standard Requirements).
- Mechanical connectors used indoors shall have a rate of not more than 3g/year at 25% of the maximum allowable pressure. When mechanical connectors are reused indoors, sealing parts shall be renewed. When flared joints are reused indoors, the flare part shall be re-fabricated. (**UL** Standard Requirements)
- When mechanical connectors are reused indoors, sealing parts shall be renewed. When flared joints are reused indoors, the flare part shall be re-fabricated. (**IEC** Standard Requirements)
- Mechanical connectors used indoors shall comply with ISO 14903.

SPECIFICATIONS

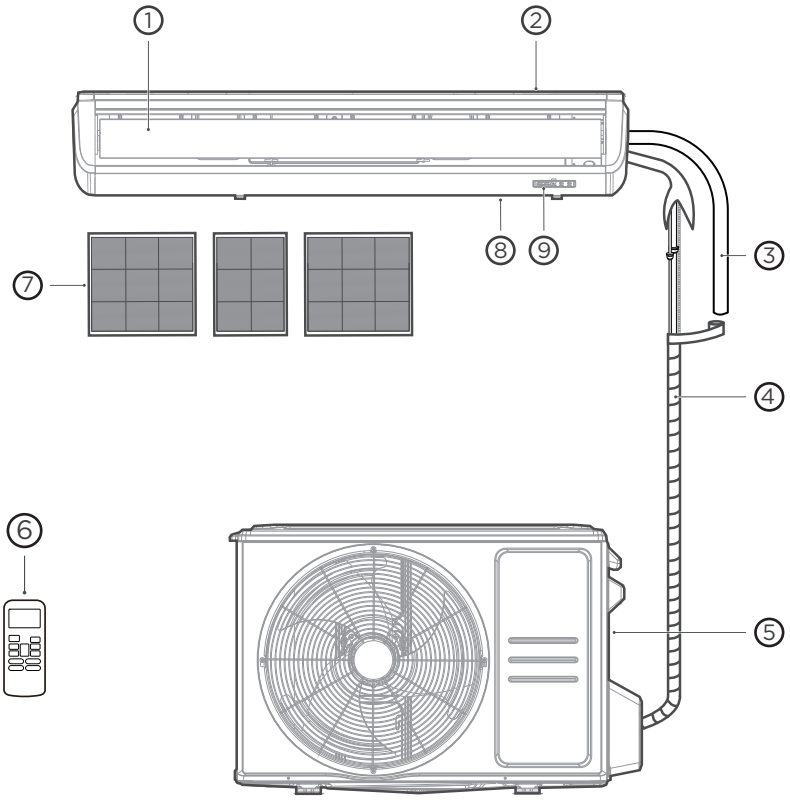
Product Model	MUEU-18HRFNX(GA) MOX330U-18HFN8-Q(GA)	MUE-24HRFNX(GA) MOX430U-24HFN8-Q(GA)	MUE-36HRFNX(GA) MOD30U-36HFN8-Q(GA)
Power source	220-240V~ 50Hz, 1Ph		
Cooling capacity	18000Btu/h	24000Btu/h	36000Btu/h
Heating capacity	19000Btu/h	26000Btu/h	40000Btu/h
Rated current	13.5A	19.0A	22.5A
Rated power input	2950W	3700W	5000W
Outdoor unit resistance class	IP24		

Product Model	MUE-36HRFNX(GA) MOD30U-36HFN8-R(GA)	MUE-48HRFNX(GA) MOE30U-48HFN8-R(GA)	MUE-55HRFNX(GA) MOE30U-55HFN8-R(GA)
Power source	220-240V~ 50Hz, 1Ph 380-415V 3N~50Hz		
Cooling capacity	36000Btu/h	48000Btu/h	54000Btu/h
Heating capacity	40000Btu/h	55000Btu/h	62000Btu/h
Rated current	10.0A	13.0A	14.0A
Rated power input	5000W	6900W	7500W
Outdoor unit resistance class	IP24		

PRODUCT OVERVIEW

NOTE ON ILLUSTRATIONS:

Illustrations in this manual are for explanatory purposes. The actual shape of your indoor unit may be slightly different. The actual shape shall prevail.

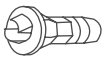
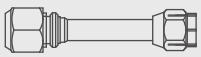


① Air flow louver (air outlet)
② Installation part
③ Drain pipe
④ Connecting pipe
⑤ Outdoor Unit
⑥ Remote controller
⑦ Air Filter
⑧ Air inlet (with air filter in it)
⑨ Display panel

PRODUCT INSTALLATION

ACCESSORIES

The air conditioning system comes with the following accessories. Use all of the installation parts and accessories to install the air conditioner. Improper installation may result in water leakage, electrical shock and fire, or cause the equipment to fail. The items are not included with the air conditioner must be purchased separately.

Name of Accessories	Q'ty(pc)	Shape	Name of Accessories	Q'ty(pc)	Shape
Manual	1-3		Remote controller	1	
Soundproof/insulation sheath (some models)	1		Battery	2	
Outlet pipe sheath (some models)	1		Remote controller holder(purchase separately)	1	
Outlet pipe clasp (some models)	1~2 (depending on models)		Fixing screw for remote controller holder(purchase separately)	2	
Drain joint (some models)	1		Magnetic ring (wrap the electric wires S1 & S2 (P & Q & E) around the magnetic ring twice) (some models)	1	 S1&S2(P&Q&E)
Seal ring (some models)	1		Magnetic ring (Hitch it on the connective cable between indoor unit and outdoor unit after installation)(some models)	Varies by model	
Transfer connector (Φ19-Φ22)(Optional)	1				
Copper nut	2		Conduit installation plate (some models)	1	

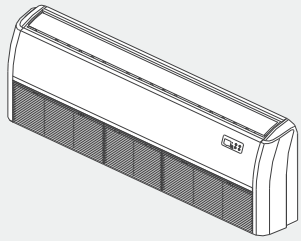
Optional accessories

There are two types of remote controls: wired and wireless.
Select a remote controller based on customer preferences and requirements and install in an appropriate place.
Refer to catalogues and technical literature for guidance on selecting a suitable remote controller.

Name	Shape		Quantity(PC)
Connecting pipe assembly	Liquid side	Φ6.35(1/4in)	Parts you must purchase separately. Consult the dealer about the proper pipe size of the unit you purchased.
		Φ9.52(3/8in)	
		Φ12.7(1/2in)	
	Gas side	Φ9.52(3/8in)	
		Φ12.7(1/2in)	
		Φ16(5/8in)	
		Φ22(7/8in)	

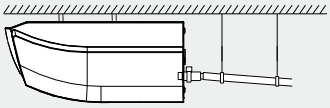
INSTALLATION SUMMARY - INDOOR UNIT

1



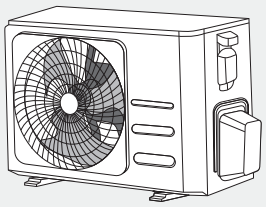
Install the indoor unit

2



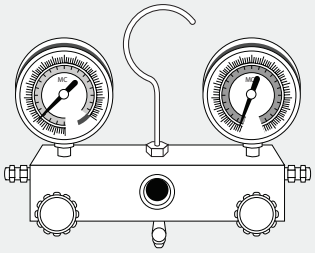
Install the drainpipe

3



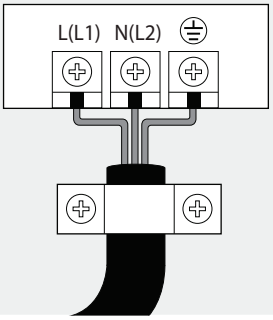
Install the outdoor unit

6



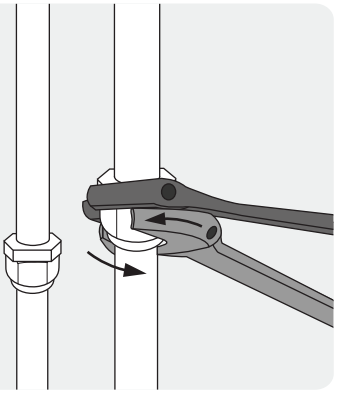
Evacuate the refrigeration system

5



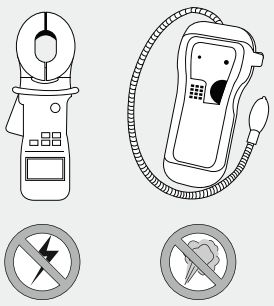
Connect the wires

4



Connect the refrigerant pipes

7



Perform a test run

Install Your Indoor Unit

1 Select installation location

NOTE

Before installing the indoor unit, refer to the label on the product box to make sure that the model number of the indoor unit matches the model number of the outdoor unit.
Panel installation should be performed after piping and wiring have been completed.

Proper installation locations meet the following standards:

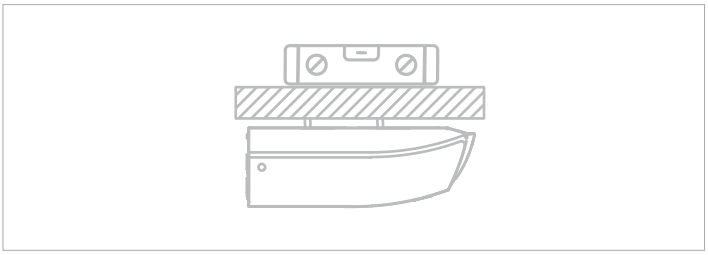
☑ Enough room exists for installation and maintenance.

☑ Enough room exists for the connecting the pipe and drainpipe.

☑ There is no direct radiation from heaters.

☑ The air inlet and outlet are not blocked.

☑ The airflow can fill the entire room.



☑ The ceiling is horizontal and its structure can sustain the weight of the indoor unit.

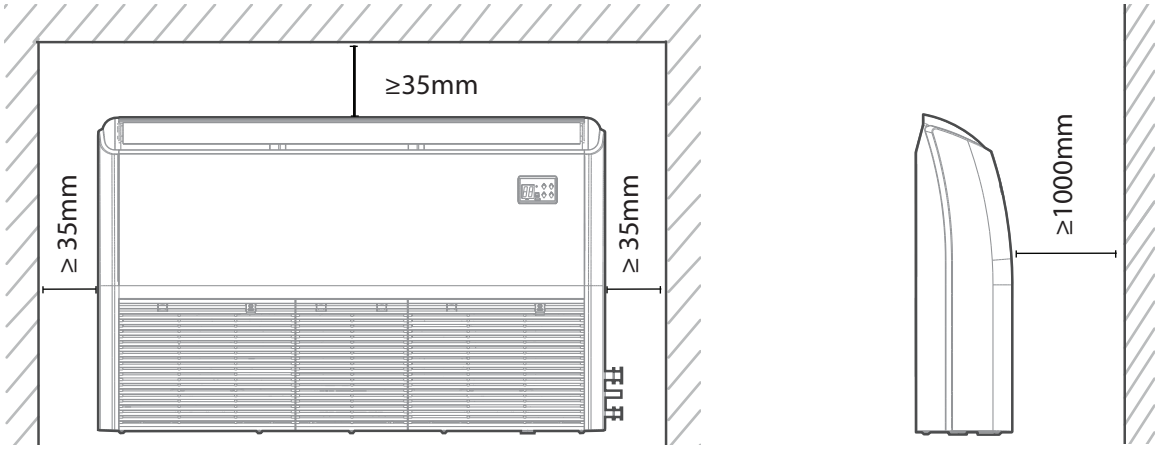
<u>DO NOT</u> install unit in the following locations:

- ⊘ Areas with oil drilling or fracking
- ⊘ Coastal areas with high salt content in the air
- ⊘ Areas with caustic gases in the air, such as hot springs
- ⊘ Areas that experience power fluctuations, such as factories
- ⊘ Enclosed spaces, such as cabinets
- ⊘ Kitchens that use natural gas
- ⊘ Areas with strong electromagnetic waves
- ⊘ Areas that store flammable materials or gas
- ⊘ Rooms with high humidity, such as bathrooms or laundry rooms

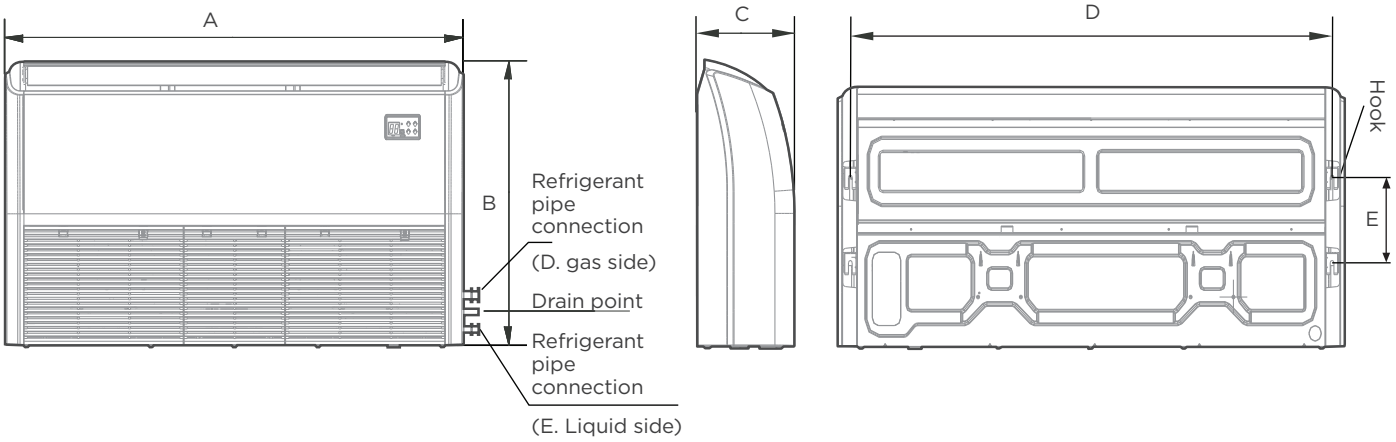
2 Confirm various sizes

Recommended distances between the indoor unit

The distance between the mounted indoor unit should meet the specifications illlustrated in the following diagram.



Indoor parts installation size

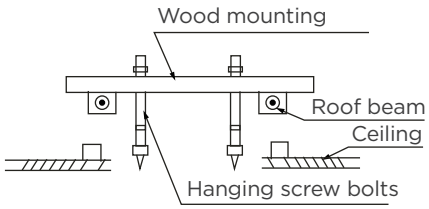


MODEL (Btu/h)	Length of A (mm/inch)	Length of B (mm/inch)	Length of C (mm/inch)	Length of D (mm/inch)	Length of E (mm/inch)
18K~24K	1068/42	675/26.6	235/9.3	983/38.7	220/8.7
30K~48K	1285/50.6	675/26.6	235/9.3	1200/47.2	220/8.7
36K~48K	1650/65	675/26.6	235/9.3	1565/61.6	220/8.7
48K~60K	1650/65	675/26.6	235/9.3	1565/61.6	220/8.7

3 Hang indoor unit

Wooden structure installation

Place the wood mounting across the roof beam, then install the hanging screw bolts.

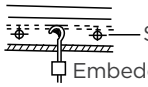


New concrete bricks

Inlay or embed the screw bolts.


(Blade shape insertion)

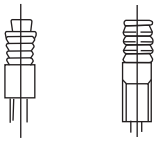

(Slide insertion)



(Pipe hanging and embedding screw bolt)

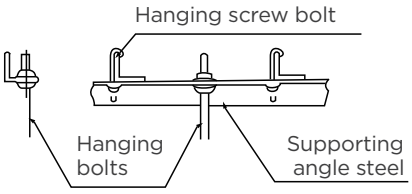
Original concrete bricks

Install the hanging hook with expansible bolt into the concrete to a depth of 45~50mm to prevent loosening.



Steel roof beam structure

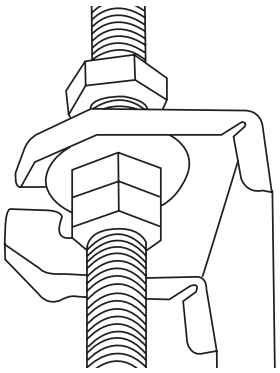
Install and use the supporting steel angle.



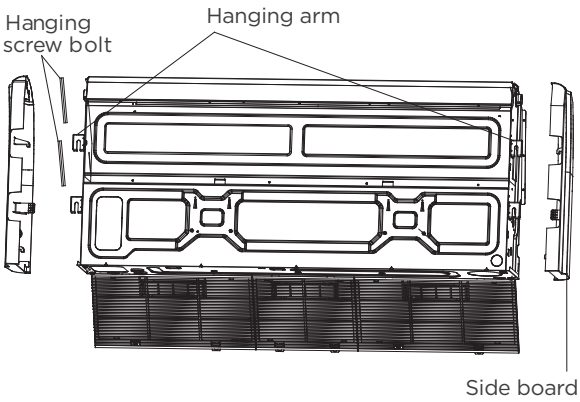
⚠ CAUTION

The unit body must be completely aligned with the hole. Ensure that the unit and the hole are the same size before moving on.

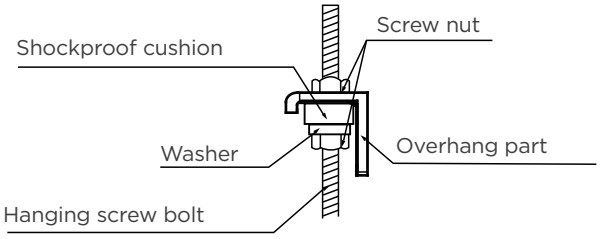
1. Install and fit pipes and wires after you have finished installing the main body.When choosing where to start, determine the direction of the pipes to be drawn out. Especially in cases where there is a ceiling involved, align the refrigerant pipes, drain pipes, and indoor and outdoor lines with their connection points before mounting the unit.
2. The installation of hanging screw bolts.
   - Cut off the roof beam.
   - Strengthen the area at which the cut was made and consolidate the roof beam.
3. After the selection of the installation location, position the refrigerant pipes, drain pipes, and indoor and outdoor wires to the connection points before mounting the machine.
4. Drill 4 holes 10cm (4”) deep at the ceiling hook positions in the internal ceiling. Be sure to hold the drill at a 90° angle to the ceiling.
5. Secure the bolt using the included washers and nuts.
6. Install the four suspension bolts.
7. Mount the indoor unit. You will need two people to lift and secure it. Insert suspension bolts into the unit’s hanging holes. Fasten them using the included washers and nuts.



8. Remove the side board and the grille.

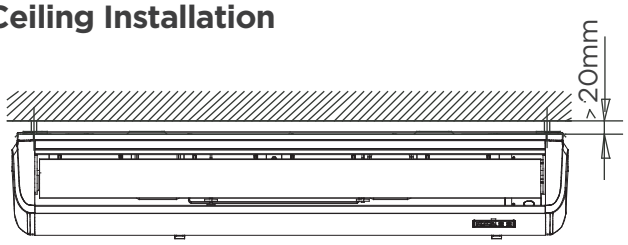


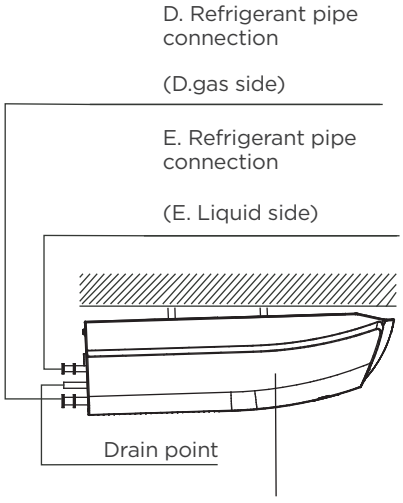
9. Mount the indoor unit onto the hanging screw bolts with a block.
   Position the indoor unit on a flat level by using a level to prevent leaks.



NOTE: Confirm the minimum drain tilt is 1/100 or more.

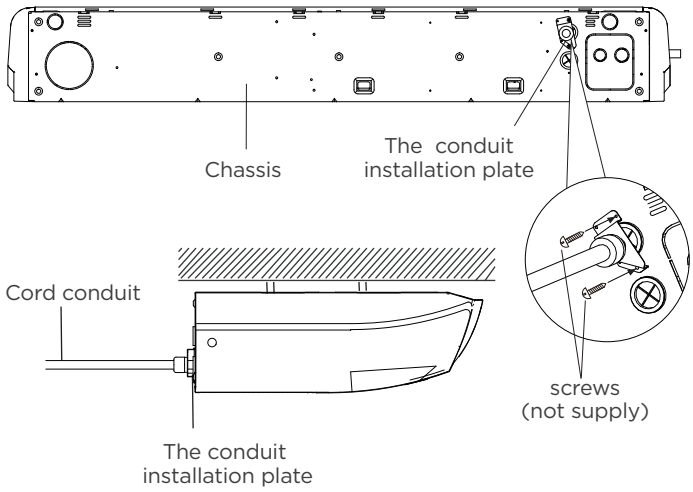
Ceiling Installation



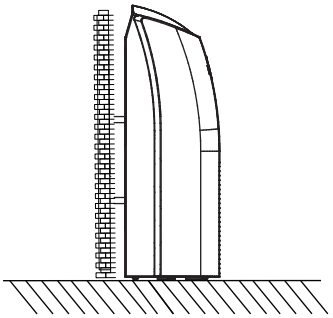


How to install the conduit installation plate (if supplied)

1. Fix the sheath connector (not supply) on the wire hole of the conduit installation plate.
2. Fix the the conduit installation plate on the chassis of the unit.

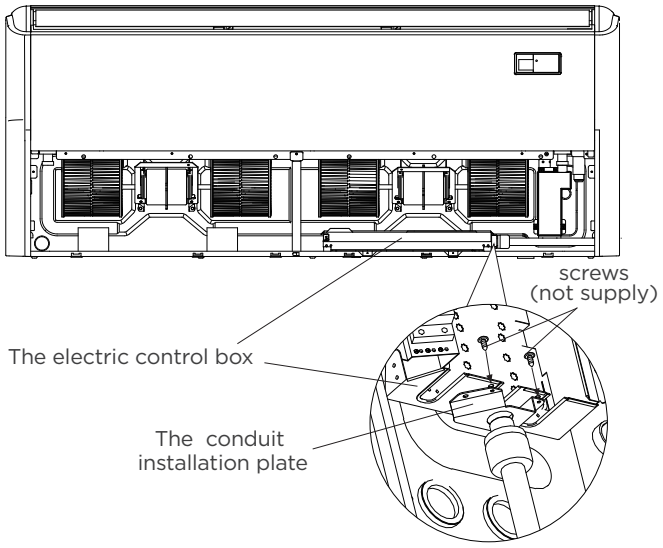


Wall-Mounted Installation



How to install the conduit installation plate (if supplied)

1. Fix the sheath connector (not supply) on the wire hole of the conduit installation plate.
2. Fix the conduit installation plate on the electric control box.

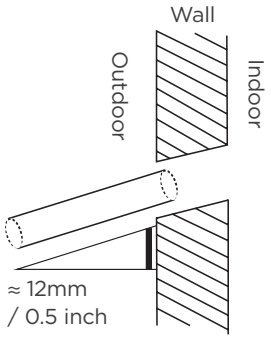


3 Drill wall hole and connect drain piping

1. Determine the location of the wall hole based on the location of the outdoor unit.
2. Using a 65mm (2.5in) or 90mm(3.54in) (depending on models)core drill, drill a hole in the wall. Make sure that the hole is drilled at a slight downward angle, so that the outdoor end of the hole is lower than the indoor end by about 12mm (0.5in). This will ensure proper water drainage.
3. Place the protective wall cuff in the hole. This protects the edges of the hole and will help seal it when you finish the installation process.

⚠ CAUTION

When drilling the wall hole, make sure to avoid wires, plumbing, and other sensitive components.



4. Connect drain hose

The drainpipe is used to drain water away from the unit. Improper installation may cause unit and property damage.

⚠ CAUTION

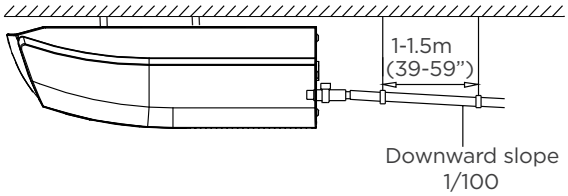
- Insulate all piping to prevent condensation, which could lead to water damage.
- If the drainpipe is bent or installed incorrectly, water may leak and cause a water-level switch malfunction.
- In HEAT mode, the outdoor unit will discharge water. Ensure that the drain hose is placed in an appropriate area to avoid water damage and slippage.
- **DO NOT** pull the drainpipe forcefully. This could disconnect it.

NOTE ON PURCHASING PIPES

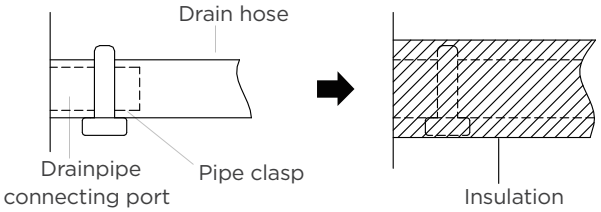
Installation requires a polyethylene tube (exterior diameter = 3.7-3.9cm, interior diameter = 3.2cm), which can be obtained at your local hardware store or dealer.

Indoor Drainpipe Installation

Install the drainpipe as illustrated in the following Figure.



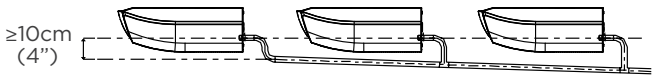
1. Cover the drainpipe with heat insulation to prevent condensation and leakage.
2. Attach the mouth of the drain hose to the unit's outlet pipe. Sheath the mouth of the hose and clip it firmly with a pipe clasp.



NOTE ON DRAINPIPE INSTALLATION

- When using an extended drainpipe, tighten the indoor connection with an additional protection tube to prevent it from pulling loose.
- The drainpipe should slope downward at a gradient of at least 1/100 to prevent water from flowing back into the air conditioner.
- To prevent the pipe from sagging, space hanging wires every 1-1.5m (39-59").
- Incorrect installation could cause water to flow back into the unit and flood.

NOTE: When connecting multiple drainpipes, install the pipes as illustrated in the following Figure.



3. Pass the drain hose through the wall hole. Make sure the water drains to a safe location where it will not cause water damage or a slipping hazard.

NOTE: The drainpipe outlet should be at least 5cm (1.9") above the ground. If it touches the ground, the unit may become blocked and malfunction. If you discharge the water directly into a sewer, make sure that the drain has a U or S pipe to catch odors that might otherwise come back into the house.

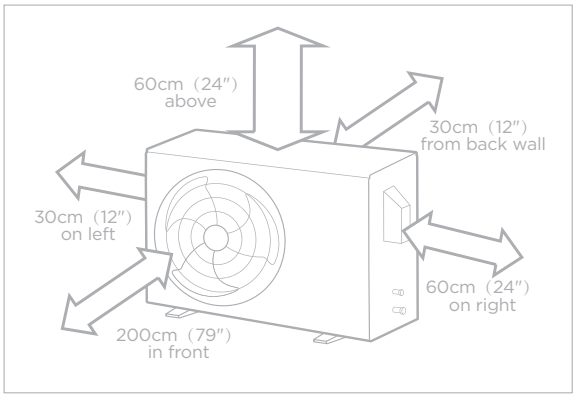
Install Your Outdoor Unit

1 Select installation location

NOTE : PRIOR TO INSTALLATION

Before installing the outdoor unit, you must choose an appropriate location. The following are standards that will help you choose an appropriate location for the unit.

Proper installation locations meet the following standards:



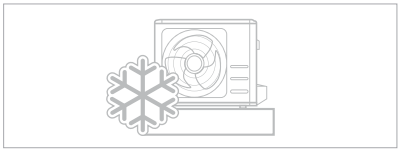
☑ Meets all spatial requirements shown in Installation Space Requirements above.

☑ Good air circulation and ventilation.

☑ Firm and solid—the location can support the unit and will not vibrate.

☑ Noise from the unit will not disturb other people.

☑ Protected from prolonged periods of direct sunlight or rain.



☑ Where snowfall is anticipated, take appropriate measures to prevent ice buildup and coil damage.

NOTE Install the unit by following local codes and regulations , there may be differ slightly between different regions.

⚠ CAUTION:

SPECIAL CONSIDERATIONS FOR EXTREME WEATHER

If the unit is exposed to heavy wind:

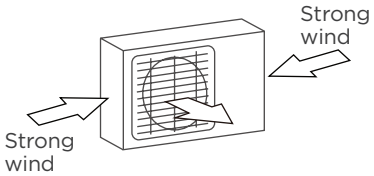
Install unit so that air outlet fan is at a 90° angle to the direction of the wind. If needed, build a barrier in front of the unit to protect it from extremely heavy winds. See Figures below.

If the unit is frequently exposed to heavy rain or snow:

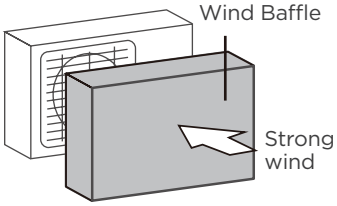
Build a shelter above the unit to protect it from the rain or snow. Be careful not to obstruct air flow around the unit.

If the unit is frequently exposed to salty air(seaside):

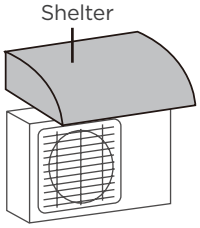
Use outdoor unit that is specially designed to resist corrosion.



90° angle to the direction of the wind



Build a wind Baffle to protect the unit

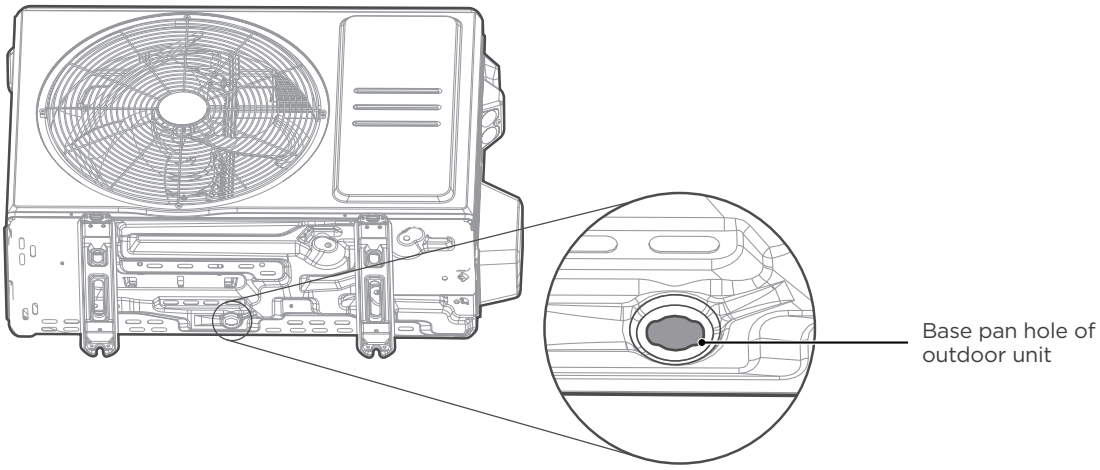


Build a shelter to protect the unit

DO NOT install unit in the following locations:

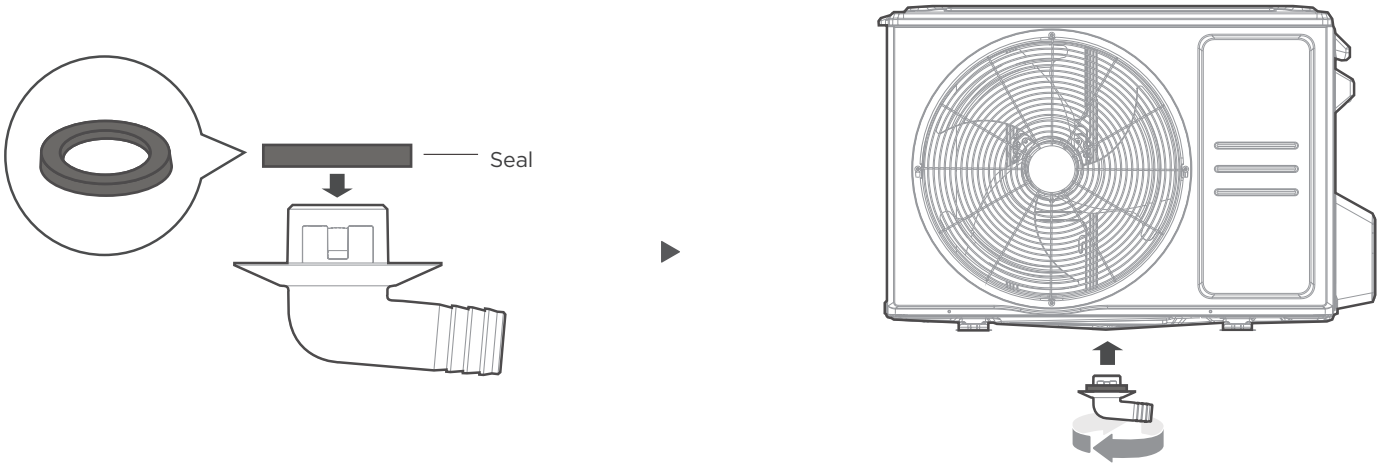
- ⊘ Near an obstacle that will block air inlets and outlets.
- ⊘ Near a public street, crowded areas, or where noise from the unit will disturb others.
- ⊘ Near animals or plants that will be harmed by hot air discharge.
- ⊘ Near any source of combustible gas.
- ⊘ In a location that is exposed to large amounts of dust
- ⊘ In a location exposed to a excessive amounts of salty air.

2 Install drain joint(Heat pump unit only)



Step 1:

Find out the base pan hole of outdoor unit.



Step 2:

- Fit the rubber seal on the end of the drain joint that will connect to the outdoor unit.
- Insert the drain joint into the hole in the base pan of the unit. The drain joint will click in place.
- Connect a drain hose extension (not included) to the drain joint to redirect water from the unit during heating mode.

IN COLD CLIMATES

In cold climates, make sure that the drain hose is as vertical as possible to ensure swift water drainage. If water drains too slowly, it can freeze in the hose and flood the unit.

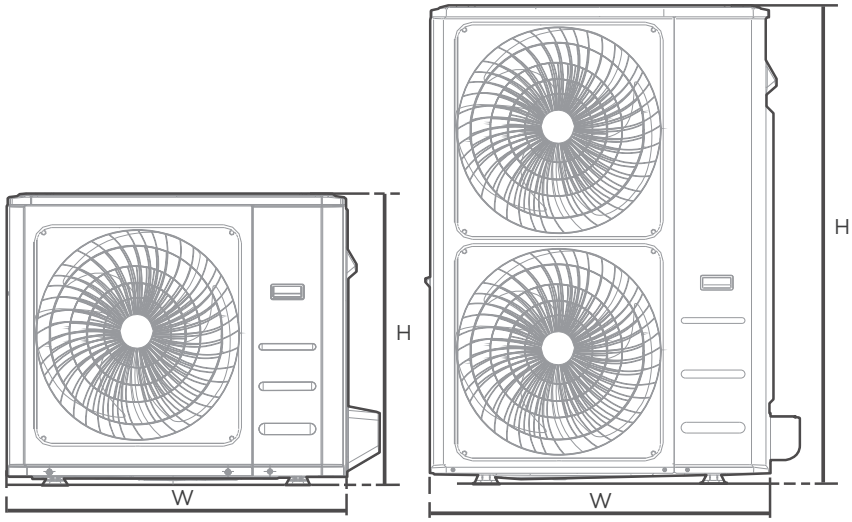
3 Anchor Outdoor Unit

⚠ WARNING

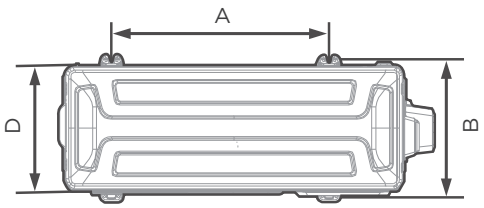
WHEN DRILLING INTO CONCRETE, EYE PROTECTION IS RECOMMENDED AT ALL TIME.

- The outdoor unit can be anchored to the ground or to a wall-mounted bracket with bolt(M10). Prepare the installation base of the unit according to the dimensions below.
- The following is a list of different outdoor unit sizes and the distance between their mounting feet. Prepare the installation base of the unit according to the dimensions below.

Outdoor Unit Types and Specifications (Split Type Outdoor Unit)



Front view



Top view

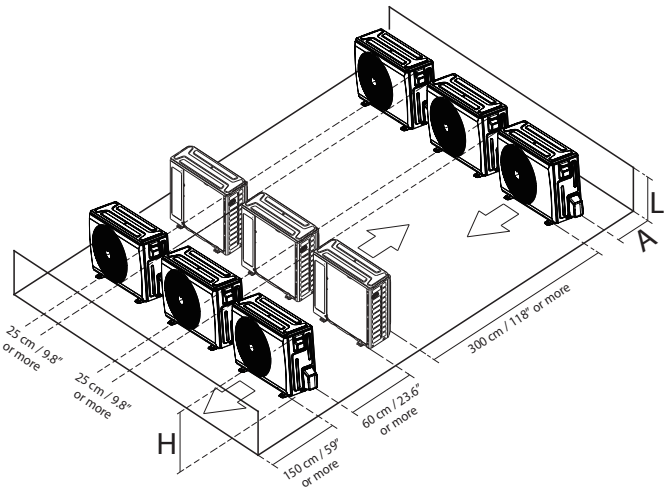
(unit: mm/inch)

Outdoor Unit Dimensions W x H x D	Mounting Dimensions	
	Distance A	Distance B
760x590x285 (29.9x23.2x11.2)	530 (20.85)	290 (11.4)
810x558x310 (31.9x22x12.2)	549 (21.6)	325 (12.8)
845x700x320 (33.27x27.5x12.6)	560 (22)	335 (13.2)
900x860x315 (35.4x33.85x12.4)	590 (23.2)	333 (13.1)
945x810x395 (37.2x31.9x15.55)	640 (25.2)	405 (15.95)
990x965x345 (38.98x38x13.58)	624 (24.58)	366 (14.4)
938x1369x392 (36.93x53.9x15.43)	634 (24.96)	404 (15.9)
900x1170x350 (35.4x46x13.8)	590 (23.2)	378 (14.88)
800x554x333 (31.5x21.8x13.1)	514 (20.24)	340 (13.39)
845x702x363 (33.27x27.6x14.3)	540 (21.26)	350 (13.8)
946x810x420 (37.24x31.9x16.53)	673 (26.5)	403 (15.87)
946x810x410 (37.24x31.9x16.14)	673 (26.5)	403 (15.87)
952x1333x410 (37.5x52.5x16.14)	634 (24.96)	404 (15.9)
952x1333x415 (37.5x52.5x16.34)	634 (24.96)	404 (15.9)
890x673x342 (35x26.5x13.46)	663 (26.1)	354 (13.94)
765x555x303 (30.1x21.8x11.9)	452 (17.8)	286(11.3)
805x554x330 (31.7x21.8x12.9)	511 (20.1)	317 (12.5)
770x555x300 (30.3x21.8x11.8)	487 (19.2)	298 (11.7)

Rows of series installation

The relations between H, A and L are as follows.

	L	A
L ≤ H	L ≤ 1/2H	25 cm / 9.8” or more
	1/2H < L ≤ H	30 cm / 11.8” or more
L > H	Can not be installed	



Refrigerant Piping Connection

When connecting refrigerant piping, **DO NOT** let substances or gases other than the specified refrigerant enter the unit. The presence of other gases or substances will lower the unit's capacity, and can cause abnormally high pressure in the refrigeration cycle. This can cause explosion and injury.

Notes on pipe length and elevation

The maximum length and drop height based on models.(Unit:m/ft.)

Type of model	Capacity (Btu/h)	Length of piping	Maximum drop height
North America, Australia and The EU frequency conversion split type	<15K	25/82	10/32.8
	⩾15K-<24K	30/98.4	20/65.6
	⩾24K-<36K	50/164	25/82
	⩾36K-<60K	65/213	30/98.4
Other Split Type	**12**K	15/49	8/26
	18K-24K	25/82	15/49
	30K-36K	30/98.4	20/65.6
	42K-60K	50/164	30/98.4

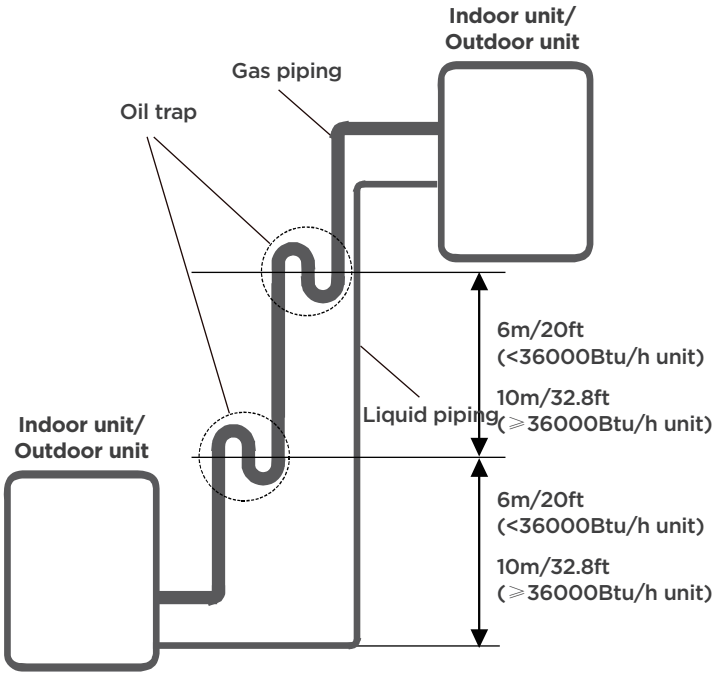
Ensure that the length of the refrigerant pipe, the number of bends, and the drop height between the indoor and outdoor units meets the requirements shown in the table next to it:

⚠ CAUTION

Oil traps

If oil flows back into the outdoor unit's compressor, this might cause liquid compression or deterioration of oil return. Oil traps in the rising gas piping can prevent this.

An oil trap should be installed every 6m(20ft) of vertical suction line riser (＜36000Btu/h unit). An oil trap should be installed every 10m(32.8ft) of vertical suction line riser (⩾36000Btu/h unit).



Connection Instructions—Refrigerant Piping

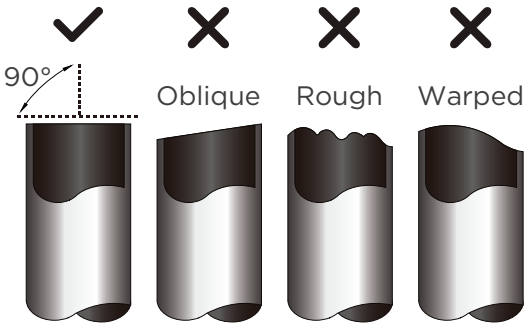
⚠ CAUTION

- The branching pipe must be installed horizontally. An angle of more than 10° may cause malfunction.
- **DO NOT** install the connecting pipe until both indoor and outdoor units have been installed.
- Insulate both the gas and liquid piping to prevent condensation.

Step 1: Cut pipes

When preparing refrigerant pipes, take extra care to cut and flare them properly. This will ensure efficient operation and minimize the need for future maintenance.

- Measure the distance between the indoor and outdoor units.
- Using a pipe cutter, cut the pipe a little longer than the measured distance.
- Make sure that the pipe is cut at a perfect 90° angle.



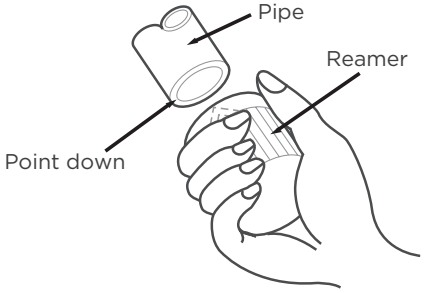
DO NOT DEFORM PIPE WHILE CUTTING

Be extra careful not to damage, dent, or deform the pipe while cutting. This will drastically reduce the heating

Step 2: Remove burrs

Burrs can affect the air-tight seal of refrigerant piping connection. They must be completely removed.

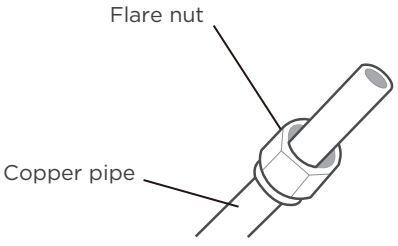
- Hold the pipe at a downward angle to prevent burrs from falling into the pipe.
- Using a reamer or deburring tool, remove all burrs from the cut section of the pipe.



Step 3: Flare pipe ends

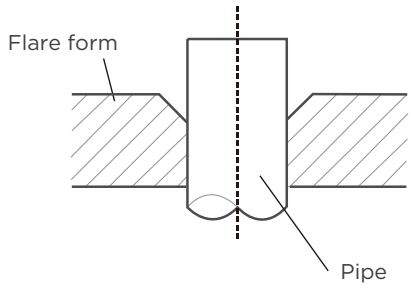
Proper flaring is essential to achieve an airtight seal.

- After removing burrs from cut pipe, seal the ends with PVC tape to prevent foreign materials from entering the pipe.
- Sheath the pipe with insulating material.
- Place flare nuts on both ends of pipe. Make sure they are facing in the right direction, because you can't put them on or change their direction after flaring.



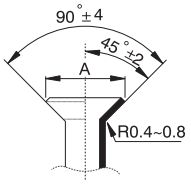
- Remove PVC tape from ends of pipe when ready to perform flaring work.

- Clamp flare from on the end of the pipe. The end of the pipe must extend beyond the flare form.



- Place flaring tool onto the form.
- Turn the handle of the flaring tool clockwise until the pipe is fully flared.

PIPING EXTENSION BEYOND FLARE FORM

Pipe gauge	Tightening torque	Flare dimension(A) (Unit:mm/Inch)		Flare shape
		Min.	Max.	
Ø 6.35 (Ø 1/4")	18-20 N.m (180-200kgf.cm)	8.4/0.33	8.7/0.34	
Ø 9.52 (Ø3/8")	32-39 N.m (320-390kgf.cm)	13.2/0.52	13.5/0.53	
Ø 12.7 (Ø 1/2")	49-59 N.m (490-590kgf.cm)	16.2/0.64	16.5/0.65	
Ø 16 (Ø 5/8")	57-71 N.m (570-710kgf.cm)	19.2/0.76	19.7/0.78	
Ø 19 (Ø 3/4")	67-101 N.m (670-1010kgf.cm)	23.2/0.91	23.7/0.93	
Ø 22 (Ø 7/8")	85-110 N.m (850-1100kgf.cm)	26.4/1.04	26.9/1.06	

- Remove the flaring tool and flare form, then inspect the end of the pipe for cracks and even flaring.

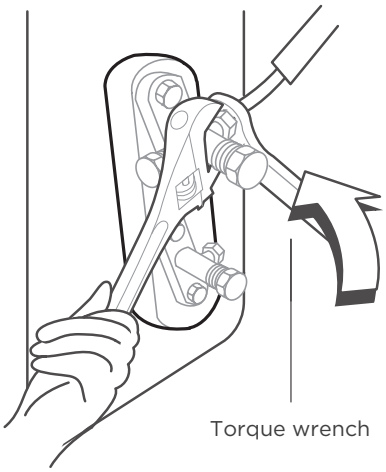
Step 4: Connect pipes

Connect the copper pipes to the indoor unit first, then connect it to the outdoor unit. You should first connect the low-pressure pipe, then the highpressure pipe.

- When connecting the flare nuts, apply a thin coat of refrigeration oil to the flared ends of the pipes.
- Align the center of the two pipes that you will connect.
- Tighten the flare nut snugly by hand.
- Using a wrench, grip the nut on the unit tubing.
- While firmly gripping the nut, use a torque wrench to tighten the flare nut according to the torque values in above table.

NOTICE

Use both a spanner and a torque wrench when connecting or disconnecting pipes to/from the unit.



⚠ CAUTION

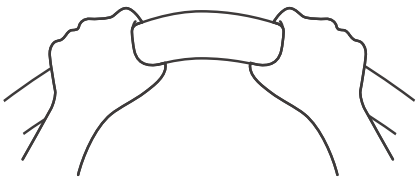
Ensure to wrap insulation around the piping. Direct contact with the bare piping may result in burns or frostbite.

- Make sure the pipe is properly connected. Over tightening may damage the bell mouth and under tightening may lead to leakage.

NOTICE
MINIMUM BEND RADIUS

Carefully bend the tubing in the middle according to the diagram below.
DO NOT bend the tubing more than 90° or more than 3 times.

Use appropriate tool



min-radius 10cm(3.9")

- After connecting the copper pipes to the indoor unit, wrap the power cable, signal cable and the piping together with binding tape.

NOTICE

DO NOT intertwine signal cable with other wires. While bundling these items together.
DO NOT intertwine or cross the signal cable with any other wiring.

Wiring precautions

⚠ WARNING

BEFORE PERFORMING ANY ELECTRICAL WORK, READ THESE WARNINGS.

- All wiring must comply with local and national electrical codes, regulations and must be installed by a licensed electrician.
- All electrical connections must be made according to the Electrical Connection Diagramlocated on the panels of the indoor and outdoor units.
- If there is a serious safety issue with the power supply, stop work immediately. Explain your reasoning to the client, and refuse to install the unit until the safety issue is properly resolved.
- Power voltage should be within 90-110% of rated voltage. Insufficient power supply can cause malfunction, electrical shock, or fire.
- Installation of an external surge suppressor at the outdoor disconnect is recommended.
- If connecting power to fixed wiring, a switch or circult breaker that disconnects all poles and has a contact separation of at least 1/8in (3mm) must be incorporated in the fixed wiring. The qualified technician must use an approved circuit breaker or switch.
- Only connect the unit to an individual branch circuit. Do not connect another appliance to that outlet.
- Make sure to properly ground the air conditioner.
- Every wire must be firmly connected. Loose wiring can cause the terminal to overheat, resulting in product malfunction and possible fire.
- Do not let wires touch or rest against refrigerant tubing, the compressor, or any moving parts within the unit.
- If the unit has an auxiliary electric heater, it must be installed at least 1 meter (40in) away from any combustible materials.
- To avoid getting an electric shock, never touch the electrical components soon after the power supply has been turned off. After turning off the power, always wait 10 minutes or more before you touch the electrical components.
- Make sure that you do not cross your electrical wiring with your signal wiring. This may cause distortion, interference or
- possibly damage to circuit boards.
- No other equipment should be connected to the same power circuit.
- Connect the outdoor wires before connecting the indoor wires.

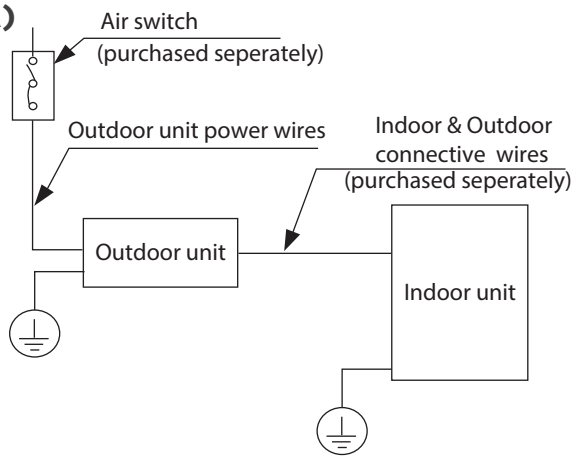
⚠ WARNING

BEFORE PERFORMING ANY ELECTRICAL OR WIRING WORK, TURN OFF THE MAIN POWER TO THE SYSTEM.

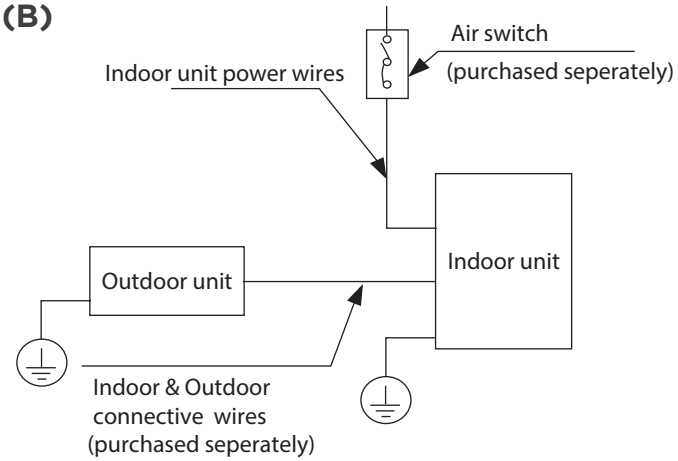
NOTE ON AIR SWITCH

When the maximum current of the air conditioner is more than 16A, an air switch or leakage protection switch with protective device shall be used(purchased seperately). When the maximum current of the air conditioner is less than 16A, the power cord of air conditioner shall be equipped with plug (purchased seperately). In North America, the applicance should be wired according to NEC and CEC requirements.

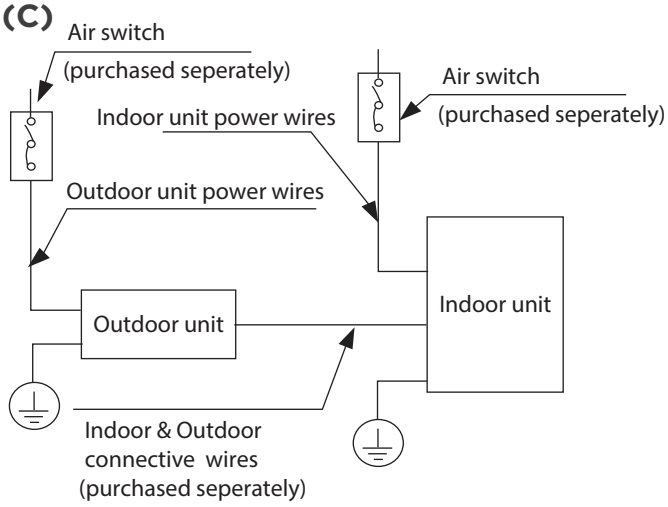
(A)



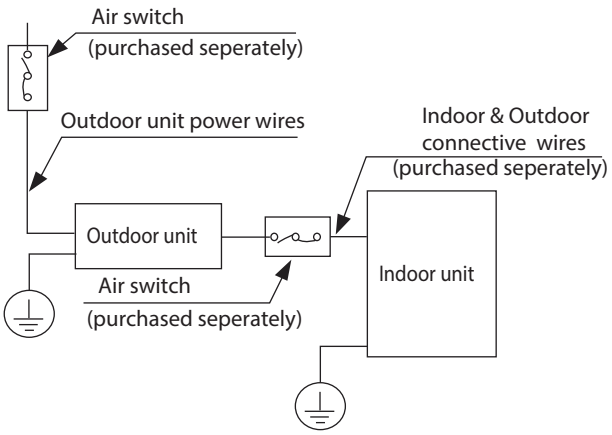
(B)



(C)



(D) Only for the North American



NOTE: The cographs are for explanation purpose only. Your machine may be slightly different. The actual shape shall prevail.

OUTDOOR UNIT WIRING

⚠ WARNING

Before performing any electrical or wiring work, turn off the main power to the system.

1. Prepare the cable for connection

a. You must first choose the right cable size. Be sure to use H07RN-F cables.

NOTE: In North America, choose the cable type according to the local electrical codes and regulations.

Minimum Cross-Sectional Area of Power and Signal Cables (For reference)

Rated Current of Appliance (A)	Nominal Cross-Sectional Area (mm^2)
> 3 and ≤ 6	0.75
> 6 and ≤ 10	1
> 10 and ≤ 16	1.5
> 16 and ≤ 25	2.5
> 25 and ≤ 32	4
> 32 and ≤ 40	6

CHOOSE THE RIGHT CABLE SIZE

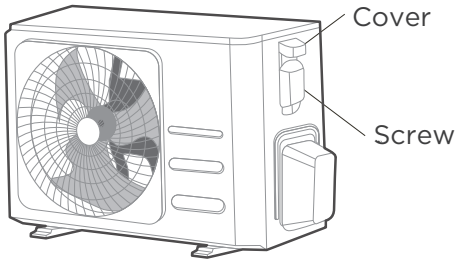
The size of the power supply cable, signal cable, fuse, and switch needed is determined by the maximum current of the unit. The maximum current is indicated on the nameplate located on the side panel of the unit. Refer to this nameplate to choose the right cable, fuse, or switch.

NOTE: In North America, please choose the right cable size according to the Minimum Circuit Ampacity indicated on the nameplate of the unit.

b. Using wire strippers, strip the rubber jacketfrom both ends of the signal cable to reveal approximately 15cm (5.9") of wire.
c. Strip the insulation from the ends.
d. Using a wire crimper, crimp u-lugs on the ends.

NOTE: When connecting the wires, strictly follow the wiring diagram found inside the electrical box cover.

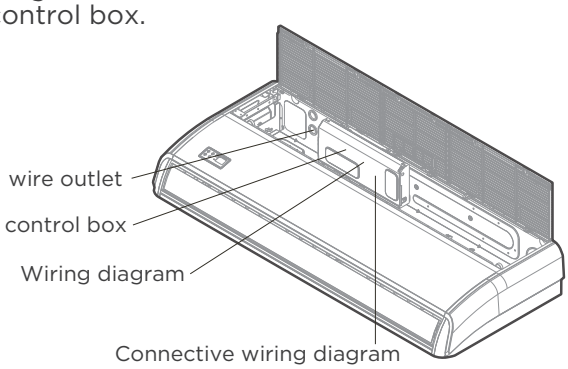
2. Remove the electric cover of the outdoor unit. If there is no cover on the outdoor unit, take off the bolts from the maintenance boardand remove the protection board.



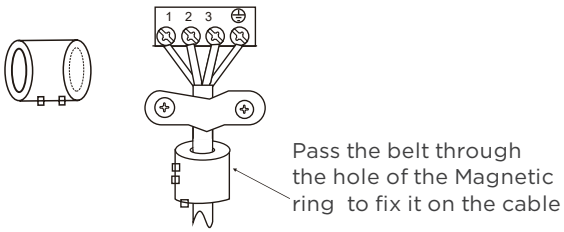
3. Connect the u-lugs to the terminals
   Match the wire colors/labels with the labels on the terminal block. Firmly screw the u-lug of each wire to its corresponding terminal.
4. Clamp down the cable with the cable clamp.
5. Insulate unused wires with electrical tape. Keep them away from any electrical or metal parts.
6. Reinstall the cover of the electric control box.

INDOOR UNIT WIRING

1. Prepare the cable for connection
   a. Using wire strippers, strip the rubber jacket from both ends of the signal cable to reveal about 15cm (5.9") of the wire.
   b. Strip the insulation from the ends of the wires.
   c. Using a wire crimper, crimp the u-lugs to the ends of the wires.
2. Open the front panel of the indoor unit. Using a screwdriver,remove the cover of the electric control box on your indoor unit.
3. Thread the power cable and the signal cable through the wire outlet.
4. Connect the u-lugs to the terminals.
   Match the wire colors/labels with the labels on the terminal block. Firmly screw the u-lug of each wire to its corresponding terminal. Refer to the Serial Number and Wiring Diagram located on the cover of the electric control box.



Magnetic ring (if supplied and packed with the accessories)



⚠ CAUTION

- While connecting the wires, please strictly follow the wiring diagram.
- The refrigerant circuit can become very hot. Keep the interconnection cable away from the copper tube.

5. Clamp down the cable with the cable clamp. The cable must not be loose or pull on the u-lugs.
6. Reattach the electric box cover.

Power Specifications(Not applicable for North America)

NOTE

Electric auxiliary heating type circuit breaker/fuse need to add more than 10 A.

Indoor Power Supply Specifications

MODEL(Btu/h)		≤18K	19K~24K	25K~36K	37K~48K	49K~60K
POWER	PHASE	1 Phase	1 Phase	1 Phase	1 Phase	1 Phase
	VOLT	208-240V	208-240V	208-240V	208-240V	208-240V
CIRCUIT BREAKER/ FUSE(A)		25/20	32/25	50/40	70/55	70/60

MODEL(Btu/h)		≤36K	37K~60K	≤36K	37K~60K
POWER	PHASE	3 Phase	3 Phase	3 Phase	3 Phase
	VOLT	380-420V	380-420V	208-240V	208-240V
CIRCUIT BREAKER/FUSE(A)		25/20	32/25	32/25	45/35

Outdoor Power Supply Specifications

MODEL(Btu/h)		≤18K	19K~24K	25K~36K	37K~48K	49K~60K
POWER	PHASE	1 Phase	1 Phase	1 Phase	1 Phase	1 Phase
	VOLT	208-240V	208-240V	208-240V	208-240V	208-240V
CIRCUIT BREAKER/ FUSE(A)		25/20	32/25	50/40	70/55	70/60

MODEL(Btu/h)		≤36K	37K~60K	≤36K	37K~60K
POWER	PHASE	3 Phase	3 Phase	3 Phase	3 Phase
	VOLT	380-420V	380-420V	208-240V	208-240V
CIRCUIT BREAKER/FUSE(A)		25/20	32/25	32/25	45/35

Independent Power Supply Specifications

MODEL(Btu/h)		≤18K	19K~24K	25K~36K	37K~48K	49K~60K
POWER (indoor)	PHASE	1 Phase	1 Phase	1 Phase	1 Phase	1 Phase
	VOLT	208-240V	208-240V	208-240V	208-240V	208-240V
CIRCUIT BREAKER/ FUSE(A)		15/10	15/10	15/10	15/10	15/10
POWER (outdoor)	PHASE	1 Phase	1 Phase	1 Phase	1 Phase	1 Phase
	VOLT	208-240V	208-240V	208-240V	208-240V	208-240V
CIRCUIT BREAKER/ FUSE(A)		25/20	32/25	50/40	70/55	70/60

MODEL(Btu/h)		≤36K	37K~60K	≤36K	37K~60K
POWER (indoor)	PHASE	1 Phase	1 Phase	1 Phase	1 Phase
	VOLT	208-240V	208-240V	208-240V	208-240V
CIRCUIT BREAKER/FUSE(A)		15/10	15/10	15/10	15/10
POWER (outdoor)	PHASE	3 Phase	3 Phase	3 Phase	3 Phase
	VOLT	380-420V	380-420V	208-240V	208-240V
CIRCUIT BREAKER/FUSE(A)		25/20	32/25	32/25	45/35

Inverter Type A/C Power Specifications

MODEL(Btu/h)		≤18K	19K~24K	25K~36K	37K~48K	49K~60K
POWER (indoor)	PHASE	1 Phase	1 Phase	1 Phase	1 Phase	1 Phase
	VOLT	220-240V	220-240V	220-240V	220-240V	220-240V
CIRCUIT BREAKER/ FUSE(A)		15/10	15/10	15/10	15/10	15/10
POWER (outdoor)	PHASE	1 Phase	1 Phase	1 Phase	1 Phase	1 Phase
	VOLT	208-240V	208-240V	208-240V	208-240V	208-240V
CIRCUIT BREAKER/ FUSE(A)		25/20	25/20	40/30	50/40	50/40

MODEL(Btu/h)		≤36K	37K~60K	≤36K	37K~60K
POWER (indoor)	PHASE	1 Phase	1 Phase	1 Phase	1 Phase
	VOLT	220-240V	220-240V	220-240V	220-240V
CIRCUIT BREAKER/FUSE(A)		15/10	15/10	15/10	15/10
POWER (outdoor)	PHASE	3 Phase	3 Phase	3 Phase	3 Phase
	VOLT	380-420V	380-420V	208-240V	208-240V
CIRCUIT BREAKER/FUSE(A)		25/20	32/25	32/25	40/30

AIR EVACUATION

NOTICE

When opening valve stems, turn the hexagonal wrench until it hits against the stopper. Do not try to force the valve to open further.

Preparations and precautions

Air and foreign matter in the refrigerant circuit can cause abnormal rises in pressure, which can damage the air conditioner, reduce its efficiency, and cause injury. Use a vacuum pump and manifold gauge to evacuate the refrigerant circuit, removing any non-condensable gas and moisture from the system. Evacuation should be performed upon initial installation and when unit is relocated.

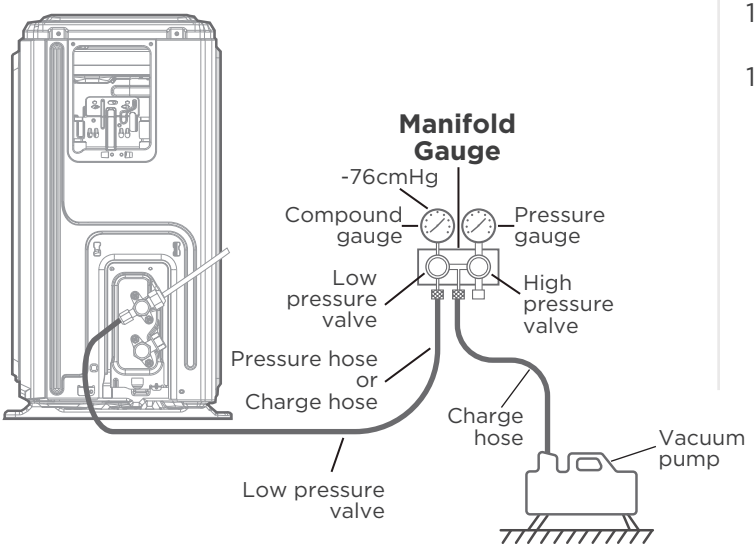
BEFORE PERFORMING EVACUATION

- ☑ Check to make sure the connective pipes between the indoor and outdoor units are connected properly .
- ☑ Check to make sure all wiring is connected properly.

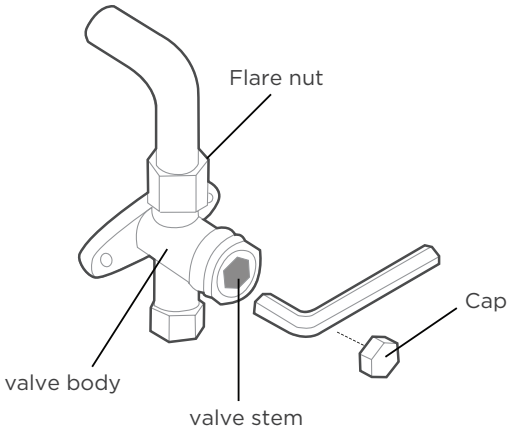
Evacuation Instructions

1. Connect the charge hose of the manifold gauge to service port on the outdoor unit's low pressure valve.
2. Connect another charge hose from the manifold gauge to the vacuum pump.
3. Open the Low Pressure side of the manifold gauge. Keep the High Pressure side closed.
4. Turn on the vacuum pump to evacuate the system.
5. Run the vacuum for at least 15 minutes, or until the Compound Meter reads -76cmHG(-10^5Pa).

Outdoor unit



6. Close the Low Pressure side of the manifold gauge, and turn off the vacuum pump.
7. Wait for 5 minutes, then check that there has been no change in system pressure.
8. If there is a change in system pressure, refer to Gas Leak Check section for information on how to check for leaks. If there is no change in system pressure, unscrew the cap from the packed valve (high pressure valve).
9. Insert hexagonal wrench into the packed valve (high pressure valve) and open the valve by turning the wrench in a 1/4 counterclockwise turn. Listen for gas to exit the system, then close the valve after 5 seconds.
10. Watch the Pressure Gauge for one minute to make sure that there is no change in pressure. The Pressure Gauge should read slightly higher than atmospheric pressure.
11. Remove the charge hose from the service port.



12. Using hexagonal wrench, fully open both the high pressure and low pressure valves.
13. Tighten valve caps on all three valves (service port, high pressure, low pressure) by hand. You may tighten it further using a torque wrench if needed.

NOTE ON ADDING REFRIGERANT

⚠ CAUTION

DO NOT mix refrigerant types.

Some systems require additional charging depending on pipe lengths. The standard pipe length varies according to local regulations. For example, in North America, the standard pipe length is 7.5m (25'). In other areas, the standard pipe length is 5m (16'). The refrigerant should be charged from the service port on the outdoor unit's low pressure valve. The additional refrigerant to be charged can be calculated using the following formula:

	Liquid Side Diameter		
	ϕ6.35(1/4")	ϕ9.52(3/8")	ϕ12.7(1/2")
R410A: (metering device in the indoor unit)	(Total pipe length - standard pipe length) x30g(0.32oZ)/m(ft)	(Total pipe length - standard pipe length) x65g(0.69oZ)/m(ft)	(Total pipe length - standard pipe length) x115g(1.23oZ)/m(ft)
R410A: (metering device in the outdoor unit)	(Total pipe length - standard pipe length) x15g(0.16oZ)/m(ft)	(Total pipe length - standard pipe length) x30g(0.32oZ)/m(ft)	(Total pipe length - standard pipe length) x65g(0.69oZ)/m(ft)
R32 :	(Total pipe length - standard pipe length)x 12g(0.13oZ)/m(ft)	(Total pipe length - standard pipe length)x 24g(0.26oZ)/m(ft)	(Total pipe length - standard pipe length)x 40g(0.42oZ)/m(ft)

TEST RUN

⚠ CAUTION

Failure to perform the test run may result in unit damage, property damage, or personal injury.

Before test run

A test run must be performed after the entire system has been completely installed. Confirm the following points before performing the test:
a) Indoor and outdoor units are properly installed.
b) Piping and wiring are properly connected.
c) No obstacles near the inlet and outlet of the unit that might cause poor performance or product malfunction.
d) Refrigeration system does not leak.
e) Drainage system is unimpeded and draining to a safe location.
f) Heating insulation is properly installed.
g) Grounding wires are properly connected.
h) Length of the piping and additional refrigerant capacity have been recorded.
i) Power voltage is the correct voltage for the air conditioner

Test Run Instructions

1. Open both the liquid and gas stop valves.
2. Turn on the main power switch and allow the unit to warm up.
3. Set the air conditioner to COOL mode.
4. For the Indoor Unit
   a. Ensure the remote control and its buttons work properly.
   b. Ensure the louvers move properly and can be changed using the remote control.
   c. Double check to see if the room temperature is being registered correctly.
   d. Ensure the indicators on the remote control and the display panel on the indoor unit work properly.
   e. Ensure the manual buttons on the indoor unit works properly.
   f. Check to see that the drainage system is unimpeded and draining smoothly.
   g. Ensure there is no vibration or abnormal noise during operation.
5. For the Outdoor Unit
   a. Check to see if the refrigeration system is leaking.
   b. Make sure there is no vibration or abnormal noise during operation.
   c. Ensure the wind, noise, and water generated by the unit do not disturb your neighbors or pose a safety hazard.
6. Drainage Test
   a. Ensure the drainpipe flows smoothly. New buildings should perform this test before finishing the ceiling.
   b. Remove the test cover. Add 2,000ml of water to the tank through the attached tube.
   c. Turn on the main power switch and run the air conditioner in COOL mode.
   d. Listen to the sound of the drain pump to see if it makes any unusual noises.
   e. Check to see that the water is discharged. It may take up to one minute before the unit begins to drain depending on the drainpipe.
   f. Make sure that there are no leaks in any of the piping.
   g. Stop the air conditioner. Turn off the main power switch and reinstall the test cover.

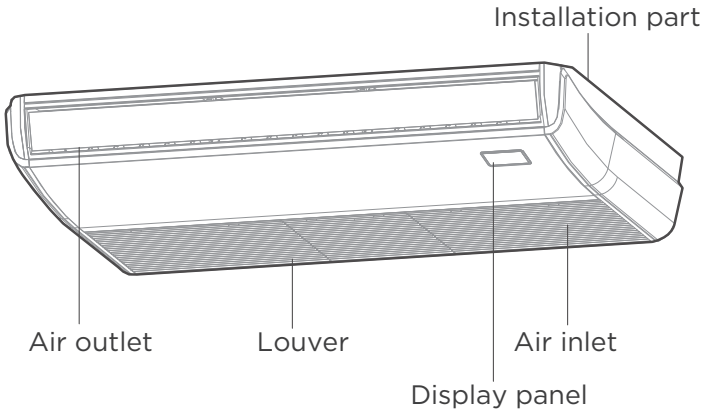
NOTE: If the unit malfunctions or does not operate according to your expectations, please refer to the Troubleshooting section of the Owner's Manual before calling customer service.

OPERATION INSTRUCTIONS

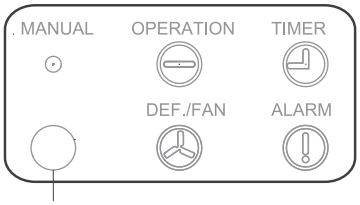
NOTE

- Different models have different front panel and display window. Not all the indicators describing below are available for the air conditioner you purchased. Please check the indoor display window of the unit you purchased.
- Illustrations in this manual are for explanatory purposes. The actual shape of your indoor unit may be slightly different. The actual shape shall prevail.

Indoor Unit Display

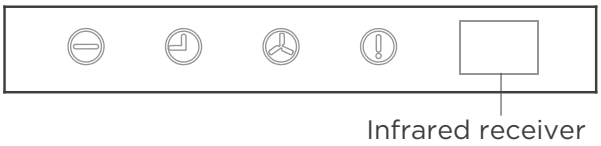


(A)

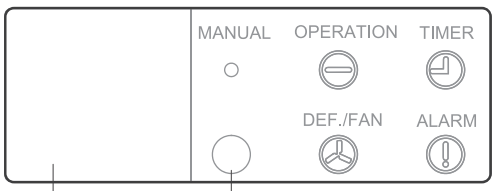


(B)

(C)

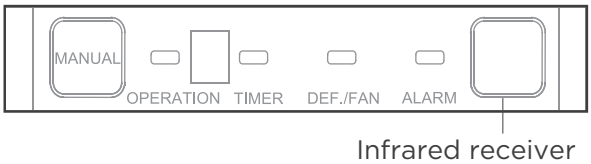


(D)

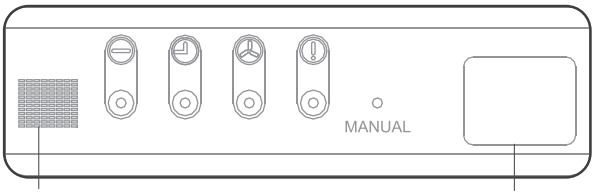


(E)

(F)

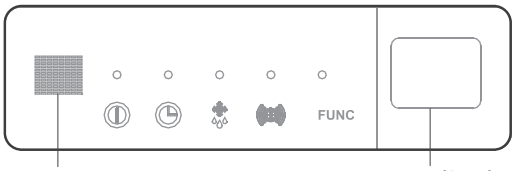


(G)



Infrared receiver LED display

(H)



Infrared receiver LED display

- **MANUAL button :** This button selects the mode in the following order: AUTO, FORCED COOL, OFF.

  FORCED COOL mode : In FORCED COOL mode, the Operation light flashes. The system will then turn to AUTO after it has cooled with a high wind speed for 30 minutes. The remote control will be disabled during this operation.

  OFF mode : The unit turns off.

- **Operation indicator :**

- **Timer indicator :**

- **PRE-DEF indicator : (pre-heating/defrost)**

- **Alarm indicator :**

- **Func button :**

Operating Temperature

When your air conditioner is used outside of the following temperature ranges, certain safety protection features may activate and cause the unit to disable.

Inverter Split Type

	COOL Mode	HEAT Mode	DRY Mode
Room Temp.	17°C~32°C(62°F~90°F)	0°C~30°C(32°F~86°F)	10°C~32°C(50°F~90°F)
Outdoor Temp.	0°C~50°C(32°F~122°F)	-15°C~24°C(5°F~75°F)	0°C~50°C(32°F~122°F)
	-15°C~50°C(5°F~122°F) For models withlow temp. cooling systems.		
	0°C~52°C(32°F~126°F) For special tropical models		0°C~52°C(32°F~126°F) For special tropical models

FOR OUTDOOR UNITS WITH AUXILIARY ELECTRIC HEATER

When outside temperature is below 0°C (32°F), we strongly recommend keeping the unit plugged in at all time to ensure smooth ongoing performance.

Fixed-speed Type

	COOL Mode	HEAT Mode	DRY Mode
Room Temp.	17°C~32°C (62°F~90°F)	0°C~30°C (32°F~86°F)	10°C~32°C(50°F~90°F)
Outdoor Temp.	18°C~43°C (64°F~109°F)	-7°C~24°C(19°F~75°F)	11°C~43°C (52°F~109°F)
	-7°C~43°C (19°F~109°F) For models with low-temp cooling systems		18°C~43°C (64°F~109°F)
	18°C~52°C (64°F~126°F) For special tropical models		18°C~52°C (64°F~126°F) For special tropical models

NOTE: Room relative humidity less than 80%. If the air conditioner operates in excess of this figure, the surface of the air conditioner may attract condensation. Please sets the vertical air flow louver to its maximum angle (vertically to the floor), and set HIGH fan mode.

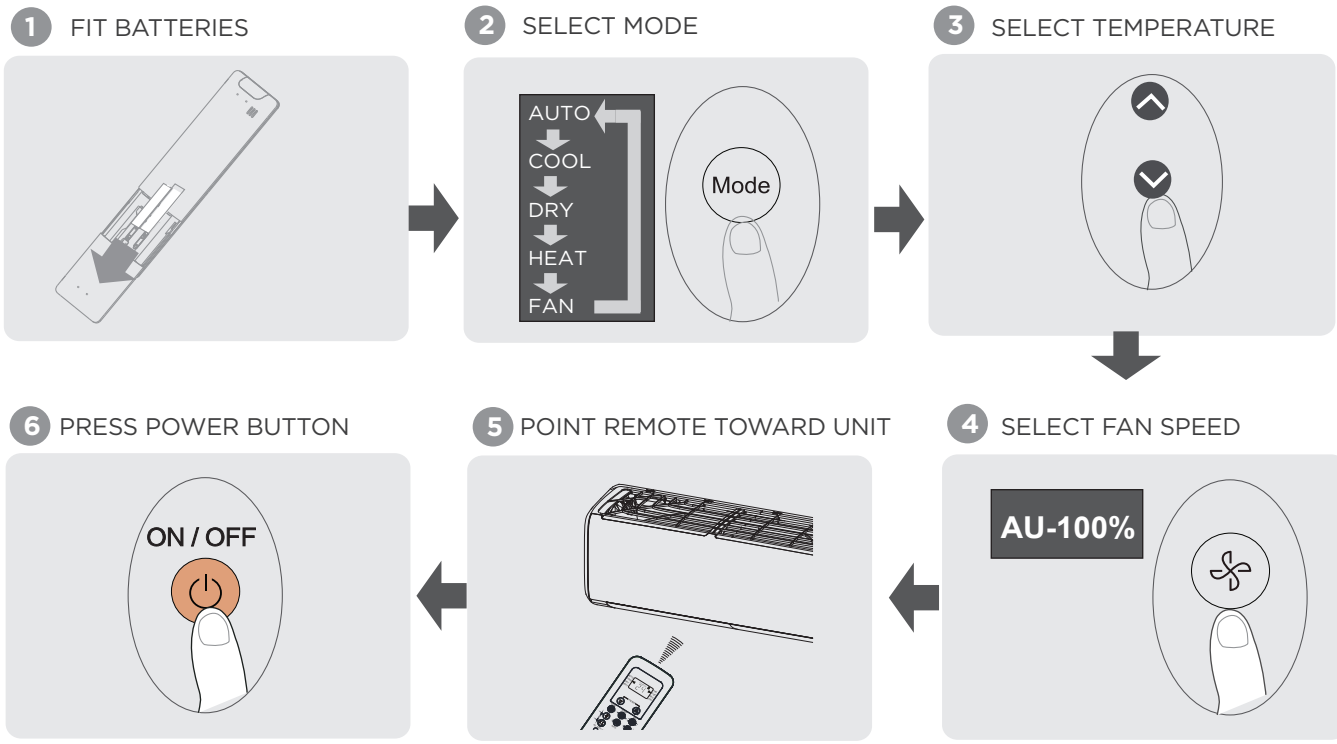
To further optimize the performance of your unit, do the following:

- Keep doors and windows closed.
- Limit energy usage by using TIMER ON and TIMER OFF functions.
- Do not block air inlets or outlets.
- Regularly inspect and clean air filters.

Remote Control Operations

Model	RG10A(B2S)/BGEF, RG10A(B2S)/BGEFU1, RG10A1(B2S)/BGEF,RG10A2(B2S)/BGEFU1, RG10A2(B2S)/BGCEFU1, RG10A2(B2S)/BGCEF, RG10A10(B2S)/BGEF
Rated Voltage	3.0V(Dry batteries R03/LR03×2)
Signal Receiving Range	8m
Environment	-5°C~60°C(23°F~140°F)

Quick Start Guide



NOT SURE WHAT A FUNCTION DOES?
Refer to the How to Use Basic Functions and How to Use Advanced Functions sections of this manual for a detailed description of how to use your air conditioner.

SPECIAL NOTE

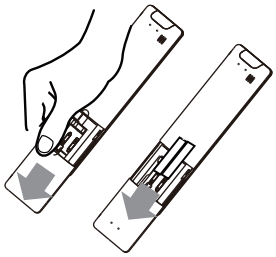
- Button designs on your unit may differ slightly from the example shown.
- If the indoor unit does not have a particular function, pressing that function's button on the remote control will have no effect.

Handling the Remote Controller

Inserting and Replacing Batteries

Your air conditioning unit may come with two batteries(some units). Put the batteries in the remote control before use.

1. Slide the back cover from the remote control downward, exposing the battery compartment.
2. Insert the batteries, paying attention to match up the (+) and (-) ends of the batteries with
3. the symbols inside the battery compartment. Slide the battery cover back into place.



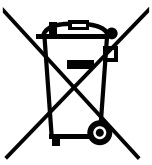
Remote Control

- Direct sunlight can interfere with the infrared signal receiver.
- There must be a clear line of sight between the remote and the appliance.
- If the signals from the remote control happen to control another appliance, move the appliance to another location or contact customer service.

Battery Disposal

- Do not dispose of batteries as unsorted municipal waste. Refer to local laws for proper disposal of batteries.
- Batteries may have a chemical symbol at the bottom of the disposal icon. This chemical symbol means that the battery contains a heavy metal that exceeds a certain concentration. An example is Pb: Lead (>0.004%).

- Appliances and used batteries must be treated in a specialized facility for reuse, recycling and recovery. By ensuring correct disposal, you will help avoid possible negative consequences for the environment and human health.



Pb

Battery Performance

For optimal product performance:

- Do not mix old and new batteries, or batteries of different brands.
- Do not leave batteries in the remote control if you don't plan on using the device for more than 2 months.

Notes For Using Remote Control

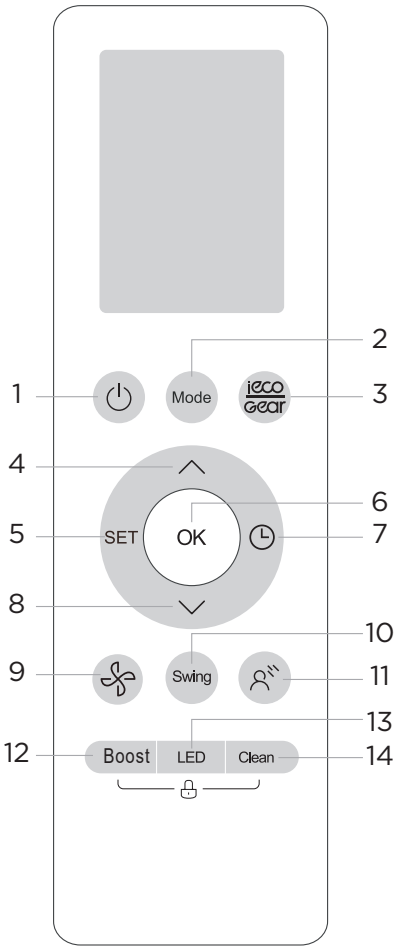
The device could comply with the local national regulations.

- In Canada, it should comply with CAN ICES-3(B)/NMB-3(B).
- In USA, 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.

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.
- Changes or modifications not approved by the party responsible for compliance could void user's authority to operate the equipment.

Buttons and Functions



Model:

RG10A2(B2S)/BGEFU1.

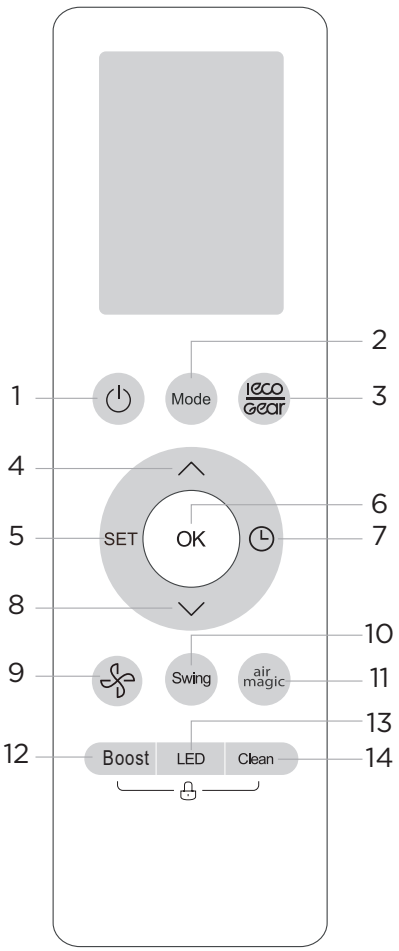
RG10A10(B2S)/BGEF(20-28°C/68-82°F).

RG10A(B2S)/BGEF & RG10A(B2S)/BGEFU1 (Fresh feature is not available)

RG10A2(B2S)/BGCEFU1 & RG10A2(B2S)/BGCEF(Cooling only models, AUTO mode and HEAT mode are not available)

	Description
No.1	**ON/OFF** Turn the unit on or off.
No.2	**MODE** Auto > Cool > Dry > Heat > Fan **NOTE:** HEAT mode is not supported by the cooling only appliance.
No.3	**ECO/GEAR** ECO > GEAR(75%) > GEAR(50%) > Previous setting mode > ECO
No.4	**TEMP.** Increases temperature in 1°C (1°F) increments. Max. temperature is 30°C (86°F). (Press together ∧ & ∨ buttons at the same time for 3 seconds will alternate the temperature display between the °C & °F).
No.5	**SET** Air magic/UV lamp* > Sleep > Follow Me > AP mode* > Air magic/UV lamp* [*]: Model dependent
No.6	**OK** Used to confirm the selected functions
No.7	**TIMER** Set timer to turn unit on or off
No.8	**TEMP.** Decreases temperature in 1°C (1°F) increments. Min. temperature is 16°C (60°F)
No.9	**FAN SPEED** **AU > 20% >40% > 60% > 80% > 100%** Press the TEMP ∧ or ∨ button to increase/ decrease the fan speed in 1% increments.
No.10	SWING Starts and stops the horizontal louver movement. Hold down for 2 seconds to initiate vertical louver auto swing feature(some units).
No.11	BREEZE AWAY Avoids direct air flow blowing on the body (This feature is available under cool, Fan and Dry mode only)
No.12	BOOST Reach desired temperature in shortest possible time.
No.13	LED Turns LED display & air conditioner buzzer on and off
No.14	CLEAN Used to start/stop the Self Clean or Active Clean function.
No.15	Boost — 🔒 — Clean **LOCK** Press together these two buttons simultaneously for 5 seconds to lock the keyboard. Press together these two buttons for 2 seconds to unlock the keyboard.

Buttons and Functions



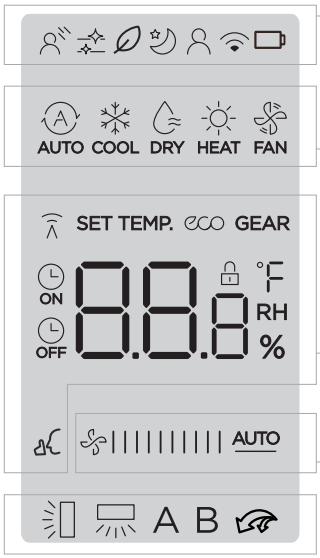
Model:

RG10A1(B2S)/BGEF

	Description
No.1	**ON/OFF** Turn the unit on or off.
No.2	**MODE** Auto > Cool > Dry > Heat > Fan **NOTE:** HEAT mode is not supported by the cooling only appliance.
No.3	**ECO/GEAR** ECO > GEAR(75%) > GEAR(50%) > Previous setting mode > ECO
No.4	**TEMP.** Increases temperature in 1°C (1°F) increments. Max. temperature is 30°C (86°F). (Press together ∧ & ∨ buttons at the same time for 3 seconds will alternate the temperature display between the °C & °F).
No.5	**SET** Breeze away*> Sleep > Follow Me > AP mode* > Breeze away* [*]: Model dependent
No.6	**OK** Used to confirm the selected functions
No.7	**TIMER** Set timer to turn unit on or off
No.8	**TEMP.** Decreases temperature in 1°C (1°F) increments. Min. temperature is 16°C (60°F)
No.9	**FAN SPEED** **AU > 20% >40% > 60% > 80% > 100%** Press the TEMP ∧ or ∨ button to increase/ decrease the fan speed in 1% increments.
No.10	SWING Starts and stops the horizontal louver movement. Hold down for 2 seconds to initiate vertical louver auto swing feature(some units).
No.11	**Air magic** Used to start/stop the Air magic and UV-C lamp (if any) function.
No.12	BOOST Reach desired temperature in shortest possible time.
No.13	LED Turns LED display & air conditioner buzzer on and off
No.14	CLEAN Used to start/stop the Self Clean or Active Clean function.
No.15	Boost — 🔒 — Clean **LOCK** Press together these two buttons simultaneously for 5 seconds to lock the keyboard. Press together these two buttons for 2 seconds to unlock the keyboard.

Remote Screen Indicators

Information are displayed when the remote controller is power up.



Breeze Away* | Active clean | Air magic/* UV lamp mode | Sleep mode | Follow me | Wireless control* | Low battery (If flashes)

MODE display Displays the current mode

AUTO | COOL | DRY | HEAT | FAN

Transmission Indicator | ECO Feature | GEAR Feature | Timer ON | Timer OFF | Lock Feature | Slience Feature

Temperature/Timer/Fan speed display

Displays the set temperature by default, or fan speed or timer setting when using TIMER ON/OFF functions.

FAN SPEED

AUTO	SLIENCE	LOW	MED	HIGH
AUTO	1% 2-20%	21-40%	41-60%	61-80% 81-100%

Note: This fan speed can not be adjusted in AUTO or DRY mode.

Horizontal louver swing

Vertical louver auto swing

A B

Not available for this unit

Boost mode

[*]: Model dependent

NOTE

1. All indicators shown in the figure are for the purpose of clear presentation. But during the actual operation, only the relative function signs are shown on the display window.

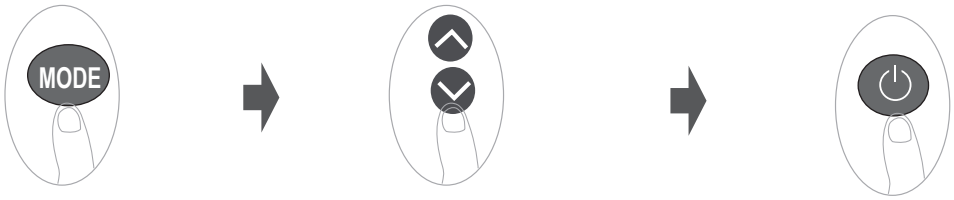
How to Use Basic Functions

NOTE

Before operation, please ensure the unit is plugged in and power is available.

AUTO Mode

Select AUTO mode → Set your desired temperature → Turn on the air conditioner

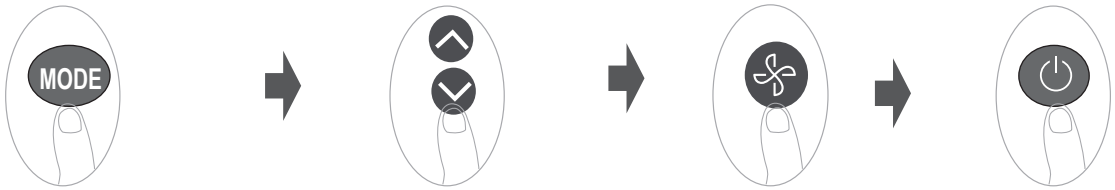


NOTE:

1. In AUTO mode, the unit will automatically select the COOL, FAN, or HEAT function based on the set temperature.
2. In AUTO mode, fan speed can not be set.

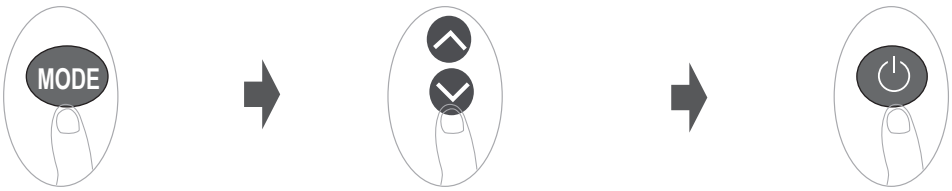
COOL or HEAT Mode

Select COOL/HEAT mode → Set the temperature → Set the fan speed → Turn on the air conditioner



DRY Mode

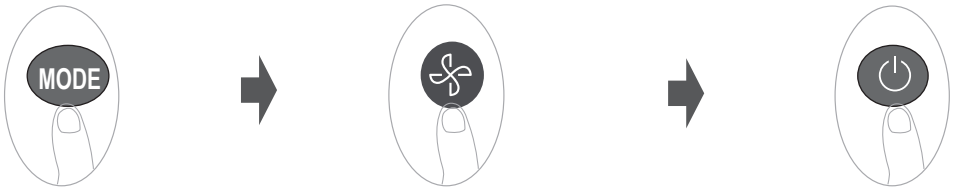
Select DRY mode → Set your desired temperature → Turn on the air conditioner



NOTE: In DRY mode, fan speed can not be set since it has already been automatically controlled.

FAN Mode

Select FAN mode → Set the fan speed → Turn on the air conditioner



NOTE: In FAN mode, you can't set the temperature. As a result , no temperature displays in remote screen.

Setting the TIMER

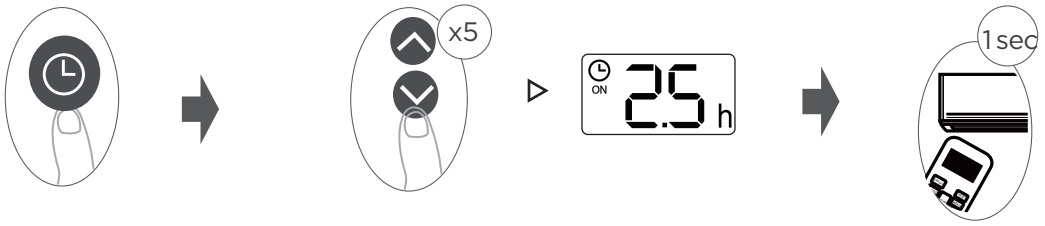
TIMER ON/OFF - Set the amount of time after which the unit will automatically turn on/off.

TIMER ON setting

Press TIMER button to initiate the ON time sequence.

Press Temp. up or down button for for multiple times to set the desired time to turn on the unit.

Point remote to unit and wait 1sec, the TIMER ON will be activated.

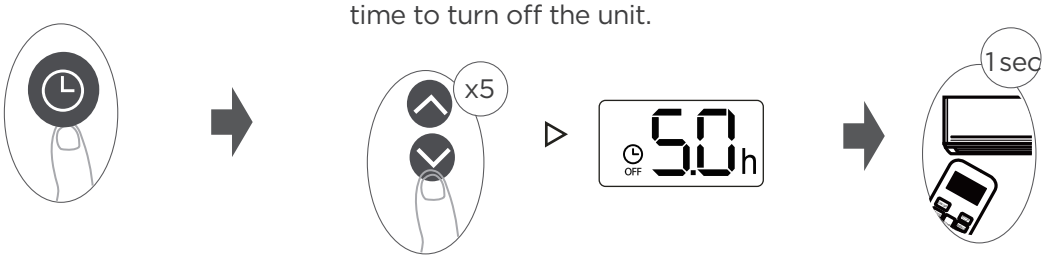


TIMER OFF setting

Press TIMER button to initiate the OFF time sequence.

Press Temp. up or down button for for multiple times to set the desired time to turn off the unit.

Point remote to unit and wait 1sec, the TIMER OFF will be activated.

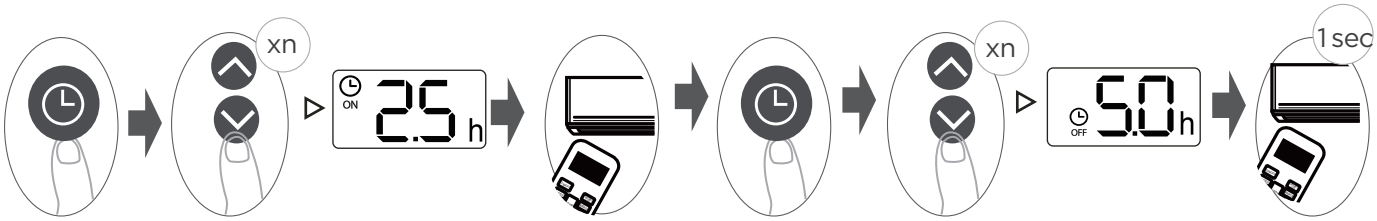


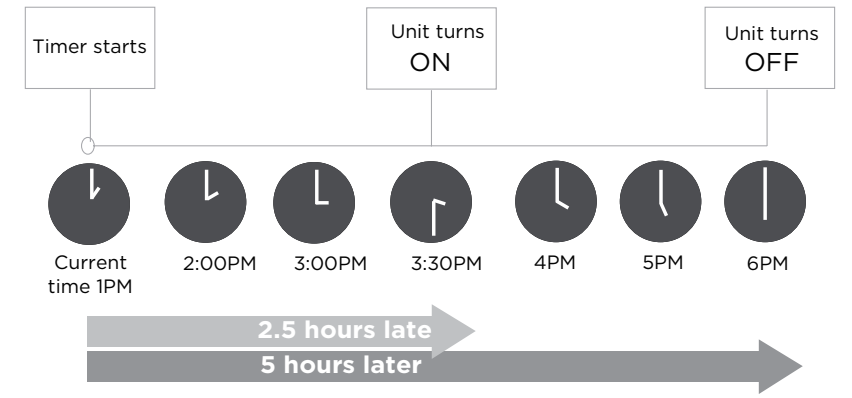
NOTE:

1. When setting the TIMER ON or TIMER OFF, the time will increase by 30 minutes increments with each press, up to 10 hours. After 10 hours and up to 24, it will increase in 1 hour increments. (For example, press 5 times to get 2.5h, and press 10 times to get 5h,) The timer will revert to 0.0 after 24.
2. Cancel either function by setting its timer to 0.0h.

TIMER ON & OFF setting(example)

Keep in mind that the time periods you set for both functions refer to hours after the current time.



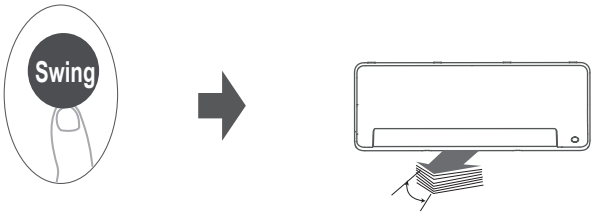


Example: If current timer is 1:00PM, to set the timer as above steps, the unit will turn on 2.5h later (3:30PM) and turn off at 6:00PM.

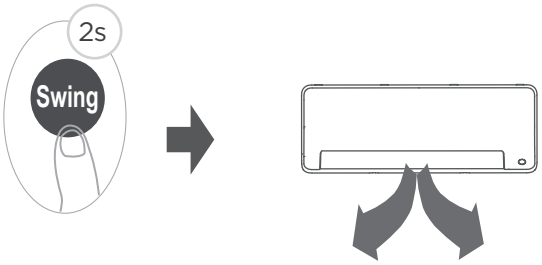
How to Use Advanced Functions

Swing function

Press Swing button

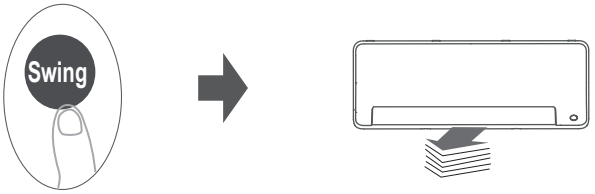


The horizontal louver will swing up and down automatically when pressing Swing button. Press again to make it stop.



Keep pressing this button more than 2 seconds, the vertical louver swing function is activated. (Model dependent)

Airflow direction



If continue to press the SWING button, five different airflow directions can be set. The louver can be move at a certain range each time you press the button. Press the button until the direction you prefer is reached (Model dependent).

LED DISPLAY

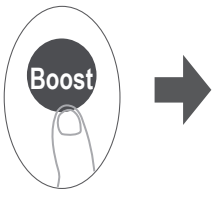
Press this button to turn on and turn off the display on the indoor unit.

Press this button more than 5 seconds(some units)

Keep pressing this button more than 5 seconds, the indoor unit will display the actual room temperature. Press more than 5 seconds again will revert back to display the setting temperature.

BOOST Function

Press Boost button



When you select Boost feature in COOL mode, the unit will blow cool air with strongest wind setting to jump-start the cooling process.

When you select Boost feature in HEAT mode, the unit will blow heat air with strongest wind setting to jump-start the heating process(some units). For units with Electric heat elements, the Electric HEATER will activate and jump-start the heating process.

ECO/GEAR function

Press this button to enter the energy efficient mode in a sequence of following:
ECO → GEAR(75%) → GEAR(50%) → Previous setting mode → ECO.....
Note:This function is only available under COOL mode.

ECO operation:

Under cooling mode, press this button, the remote controller will adjust the temperature automatically to 24°C/75°F, fan speed of Auto to save energy (only when the set temperature is less than 24°C/75°F). If the set temperature is above 24°C/75°F, press the ECO button, the fan speed will change to Auto, the set temperature will remain unchanged.

NOTE: Pressing the ECO button, or modifying the mode or adjusting the set temperature to less than 24°C/75°F will stop ECO operation. Under ECO operation, the set tmeperature should be 24°C/75°F or above, it may result in insufficient cooling. If you feel uncomfortable, just press the ECO button again to stop it.

GEAR operation:

Press the ECO/GEAR button to enter the GEAR operation as following:
75%(up to 75% electrial energy consumption) → 50%(up to 50% electrial energy consumption)→ Previous setting mode.

Under GEAR operation, the setting temperature will revert back in the display screen after 3 seconds you select the desired electrical energy consumption operation

Silence function

Keep pressing Fan button for more than 2 seconds to activate/disable Silence function.

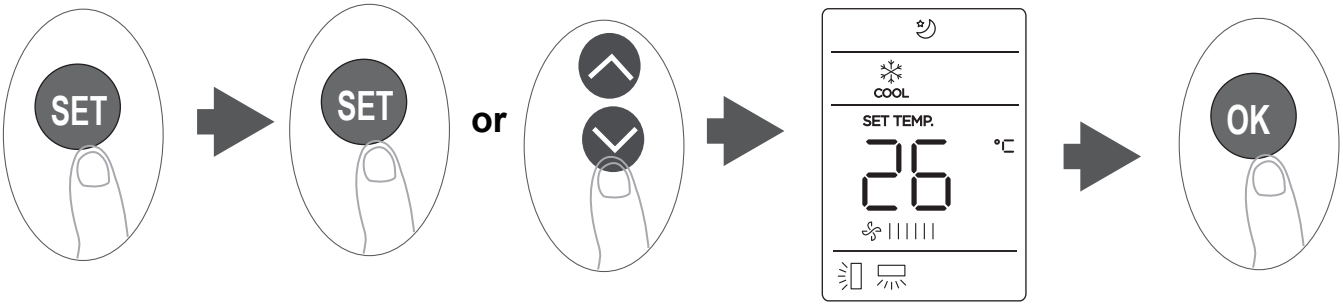
Due to low frequency operation of compressor, it may result in insufficient cooling and heating capacity. Press ON/OFF, Mode, Sleep, Boost or Clean button while operating will cancel silence function.

FP function

Press this button 2 times during one second under HEAT Mode and setting temperature of 16°C/60°F to activate the FP function.

The unit will operate at high fan speed (while compressor on) with temperature automatically set to 8°C/46°F.

SET function



- Press the SET button to enter the function setting, then press SET button or TEMP ∨ or TEMP ∧ button to select the desired function. The selected symbol will flash on the display area, press the OK button to confirm.
- To cancel the selected function, just perform the same procedures as above.
- Press the SET button to scroll through operation functions as follows:

  Breeze Away*( )→ Air magic/UV-C lamp*( )→Sleep( )→ Follow Me( )→AP mode*( )

  [*]: If your remote controller has Breeze Away button or Air magic button, you can not use the SET button to select the Breeze Away or Air magic/UV-C lamp feature.

Breeze Away function (some units) :

This feature avoids direct air flow blowing on the body and makes you feel indulging in silky coolness.

NOTE: This feature is available under cool, Fan and Dry mode only.

Air magic/UV-C lamp function(some units)

When this function is selected, the fresh or UV-C lamp(model dependent) feature will be activated. If has both features, these two features will be activated at the same time.

Sleep function

The SLEEP function is used to decrease energy use while you sleep(and don't need the same temperature settings to stay comfortable).

NOTE: The SLEEP function is not available in FAN and DRY mode.

AP function(some units) :

Choose AP mode to do wireless network configuration. For some units, it doesn't work by pressing the SET button. To enter the AP mode, continuously press the LED button seven times in 10 seconds.

Follow me function

The FOLLOW ME function enables the remote control to measure the temperature at its current location and send this signal to the air conditioner every 3 minutes interval. When using AUTO, COOL or HEAT modes, measuring ambient temperature from the remote control(instead of from the indoor unit itself) will enable the air conditioner to optimize the temperature around you and ensure maximum comfort.

NOTE: Press and hold Boost button for seven seconds to start/stop memory feature of Follow Me function.

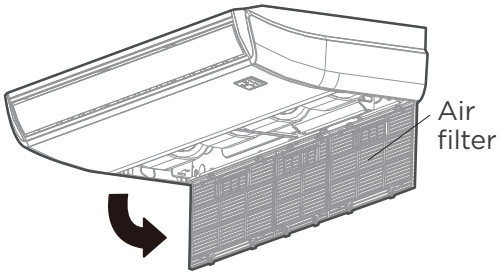
- If the memory feature is activated, " On" displays for 3 seconds on the screen.
- If the memory feature is stopped, "OF" displays for 3 seconds on the screen.
- While the memory feature is activated, press the ON/OFF button, shift the mode or power failure will not cancel the Follow me function.

CLEANING AND MAINTENANCE

⚠ CAUTION

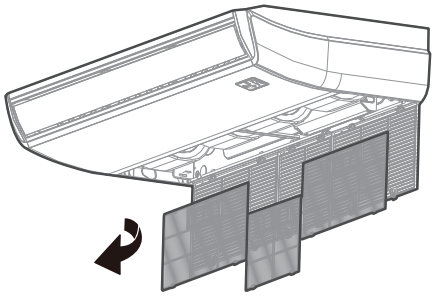
- The cooling efficiency of your unit and your health would be damaged for the glogged AC, Make sure to clean the filter every two weeks.
- Always **TURN OFF** your AC system and disconnect its power supply before cleaning or maintenance.
- **Do not** touch air freshening (Plasma) filter at least 10 minutes after turning off the unit.
- Only use a soft, dry cloth to wipe the unit clean. You can use a cloth soaked in warm water to wipe it clean if the unit is especially dirty.
- Do not use chemicals or chemically treated cloths to clean the unit
- Do not use benzene, paint thinner, polishing powder or other solvents to clean the unit. They can cause the plastic surface to crack or deform.
- Do not use water hotter than 40°C (104°F) to clean the front panel. This can cause the panel to deform or become discolored.

Cleaning Your Indoor Unit(Air Filter)



Step 1:

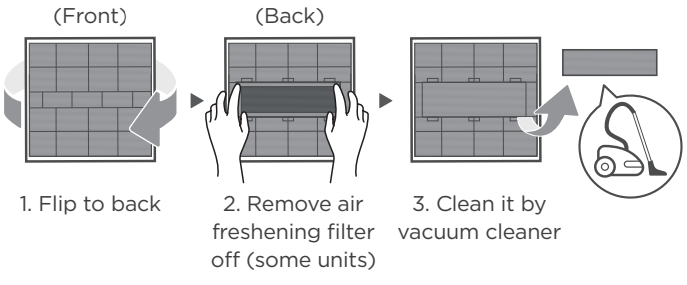
Open the air intake with a screwdriver or similar tool. Detach the grille from the main unit by holding the grille at a 45° angle, lifting it up slightly, and then pulling the grille forward.



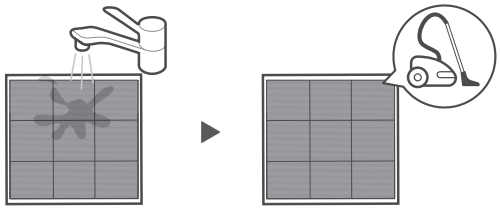
Step 2:

Take out the air filter. (applicable to 3.2~10.5KW air conditioners only).

Directly pull out the air filter from the air inlet as indicated (applicable to 14~16KW air conditioners only).



1. Flip to back
2. Remove air freshening filter off (some units)
3. Clean it by vacuum cleaner



If using water, the inlet side should face down and away from the water stream.

If using a vacuum cleaner, the inlet side should face the vacuum.

Step 3:

Remove the air filter.

Clean the air filter by vacuuming the surface or washing it in warm water with mild detergent.

Step 4:

Rinse the filter with clean water and allow it to air-dry. **DO NOT** let the filter dry in direct sunlight.

Reinstall the filter.

⚠ CAUTION

- Before changing the filter or cleaning, turn off the unit and disconnect its power supply.
- When removing filter, do not touch metal parts in the unit. The sharp metal edges can cut you.
- Do not use water to clean the inside of the indoor unit. This can destroy insulation and cause electrical shock.
- Do not expose filter to direct sunlight when drying. This can shrink the filter.
- Any maintenance and cleaning of outdoor unit should be performed by an authorized dealer or a licensed service provider.
- Any unit repairs should be performed by an authorized dealer or a licensed service provider.

Maintenance your AC.

Maintenance – Long Periods of Non-Use

If you plan not to use your air conditioner for an extended period of time, do the following:

Clean all filters

Turn on FAN function until unit dries out completely

Turn off the unit and disconnect the power

Remove batteries from remote control

Maintenance – Pre-Season Inspection

After long periods of non-use, or before periods of frequent use, do the following:

Check for damaged wires

Clean all filters

Check for leaks

Make sure nothing is blocking all air inlets and outlets

Replace batteries

TROUBLESHOOTING

⚠ CAUTION

If any of the following conditions occurs, turn off your unit immediately!

- The power cord is damaged or abnormally warm
- You smell a burning odor
- The unit emits loud or abnormal sounds
- A power fuse blows or the circuit breaker frequently trips
- Water or other objects fall into or out of the unit

DO NOT ATTEMPT TO FIX THESE YOURSELF! CONTACT AN AUTHORIZED SERVICE PROVIDER IMMEDIATELY.

Common Issues

The following problems are not a malfunction and in most situations will not require repairs.

Issue	Possible Causes
Unit does not turn on when pressing ON/OFF button	The Unit has a 3-minute protection feature that prevents the unit from overloading. The unit cannot be restarted within three minutes of being turned off.
	Cooling and Heating Models: If the Operation light and PRE-DEF (Pre-heating/ Defrost) indicators are lit up, the outdoor temperature is too cold and the unit's anti-cold wind is activated in order to defrost the unit.
	In Cooling-only Models: If the "Fan Only" indicator is lit up, the outdoor temperature is too cold and the unit's anti-freeze protection is activated in order to defrost the unit.
The unit changes from COOL/HEAT mode to FAN mode	The unit may change its setting to prevent frost from forming on the unit. Once the temperature increases, the unit will start operating in the previously selected mode again.
	The set temperature has been reached, at which point the unit turns off the compressor. The unit will continue operating when the temperature fluctuates again.
The indoor unit emits white mist	In humid regions, a large temperature difference between the room's air and the conditioned air can cause white mist.
Both the indoor and outdoor units emit white mist	When the unit restarts in HEAT mode after defrosting, white mist may be emitted due to moisture generated from the defrosting process.
The indoor unit makes noises	A rushing air sound may occur when the louver resets its position.
	A squeaking sound is heard when the system is OFF or in COOL mode. The noise is also heard when the drain pump (optional) is in operation.
	A squeaking sound may occur after running the unit in HEAT mode due to expansion and contraction of the unit's plastic parts.
Both the indoor unit and outdoor unit make noises	Low hissing sound during operation: This is normal and is caused by refrigerant gas flowing through both indoor and outdoor units.
	Low hissing sound when the system starts, has just stopped running, or is defrosting: This noise is normal and is caused by the refrigerant gas stopping or changing direction.
	Squeaking sound: Normal expansion and contraction of plastic and metal parts caused by temperature changes during operation can cause squeaking noises.

Issue	Possible Causes
The outdoor unit makes noises	The unit will make different sounds based on its current operating mode.
Dust is emitted from either the indoor or outdoor unit	The unit may accumulate dust during extended periods of non-use, which will be emitted when the unit is turned on. This can be mitigated by covering the unit during long periods of inactivity.
The unit emits a bad odor	The unit may absorb odors from the environment (such as furniture, cooking, cigarettes, etc.) which will be emitted during operations.
	The unit's filters have become moldy and should be cleaned.
The fan of the outdoor unit does not operate	During operation, the fan speed is controlled to optimize product operation.

NOTE: If problem persists, contact a local dealer or your nearest customer service center. Provide them with a detailed description of the unit malfunction as well as your model number.

When troubles occur, please check the following points before contacting a repair company.

Problem	Possible Causes	Solution
Poor Cooling Performance	Temperature setting may be higher than ambient room temperature	Lower the temperature setting
	The heat exchanger on the indoor or outdoor unit is dirty	Clean the affected heat exchanger
	The air filter is dirty	Remove the filter and clean it according to instructions
	The air inlet or outlet of either unit is blocked	Turn the unit off, remove the obstruction and turn it back on
	Doors and windows are open	Make sure that all doors and windows are closed while operating the unit
	Excessive heat is generated by sunlight	Close windows and curtains during periods of high heat or bright sunshine
	Too many sources of heat in the room (people, computers, electronics, etc.)	Reduce amount of heat sources
	Low refrigerant due to leak or long-term use	Check for leaks, re-seal if necessary and top off refrigerant

Problem	Possible Causes	Solution
The unit is not working	Power failure	Wait for the power to be restored
	The power is turned off	Turn on the power
	The fuse is burned out	Replace the fuse
	Remote control batteries are dead	Replace batteries
	The Unit's 3-minute protection has been activated	Wait three minutes after restarting the unit
	Timer is activated	Turn timer off
The unit starts and stops frequently	There's too much or too little refrigerant in the system	Check for leaks and recharge the system with refrigerant.
	Incompressible gas or moisture has entered the system.	Evacuate and recharge the system with refrigerant
	System circuit is blocked	Determine which circuit is blocked and replace the malfunctioning piece of equipment
	The compressor is broken	Replace the compressor
	The voltage is too high or too low	Install a manostat to regulate the voltage
Poor heating performance	The outdoor temperature is extremely low	Use auxiliary heating device
	Cold air is entering through doors and windows	Make sure that all doors and windows are closed during use
	Low refrigerant due to leak or long-term use	Check for leaks, re-seal if necessary and top off refrigerant
Indicator lamps continue flashing		
Error code appears and begins with the letters as the following in the window display of indoor unit: • **E(x), P(x), F(x)** • **EH(xx), EL(xx), EC(xx)** • **PH(xx), PL(xx), PC(xx)**	The unit may stop operation or continue to run safely. If the indicator lamps continue to flash or error codes appear, wait for about 10 minutes. The problem may resolve itself. If not, disconnect the power, then connect it again. Turn the unit on. If the problem persists, disconnect the power and contact your nearest customer service center.	

NOTE: If your problem persists after performing the checks and diagnostics above, turn off your unit immediately and contact an authorized service center.

The design and specifications are subject to change without prior notice for product improvement. Consult with the sales agency or manufacturer for details. Any updates to the manual will be uploaded to the service website, please check for the latest version.

TRADEMARKS, COPYRIGHTS AND LEGAL STATEMENT

Midea logo, word marks, trade name, trade dress and all versions thereof are valuable assets of Midea Group and/or its affiliates ("Midea"), to which Midea owns trademarks, copyrights and other intellectual property rights, and all goodwill derived from using any part of an Midea trademark. Use of Midea trademark for commercial purposes without the prior written consent of Midea may constitute trademark infringement or unfair competition in violation of relevant laws.

This manual is created by Midea and Midea reserves all copyrights thereof. No entity or individual may use, duplicate, modify, distribute in whole or in part this manual, or bundle or sell with other products without the prior written consent of Midea.

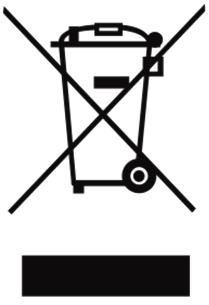
All the described functions and instructions were up to date at the time of printing this manual. However, the actual product may vary due to improved functions and designs.

DISPOSAL AND RECYCLING

Important instructions for environment(European Disposal Guidelines)

Compliance with the WEEE Directive and Disposing of the Waster Product:
This product complies with EU WEEE Directive (2012/19/EU). This product bears a classification symbol for waster electrical and electronic equipment (WEEE).

This symbol indicates that this product shall not be disposed with other household wastes at the end of its service life. Used device must be returned to official collection point for recycling of electrical electronic devices. To find these collection systems please contact to your local authorities or retailer where the product was purchased. Each household performs important role in recovering and recycling of old appliance. Appropriate disposal of used appliance helps prevent potential negative consequences for the environment and human health.



DATA PROTECTION NOTICE

For the provision of the services agreed with the customer,
we agree to comply without restriction with all stipulations of applicable data protection law, in line with agreed countries within which services to the customer will be delivered, as well as, where applicable, the EU General Data Protection Regulation (GDPR).

Generally, our data processing is to fulfil our obligation under contract with you and for product safety reasons, to safeguard your rights in connection with warranty and product registration questions. In some cases, but only if appropriate data protection is ensured, personal data might be transferred to recipients located outside of the European Economic Area.

Further information are provided on request. You can contact our Data Protection Officer via **MideaDPO@midea.com**. To exercise your rights such as right to object your personal date being processed for direct marketing purposes, please contact us via **MideaDPO@midea.com**. To find further information, please follow the QR Code.

The design and specifications are subject to change without prior notice for product improvement. Consult with the sales agency or manufacturer for details. Any updates to the manual will be uploaded to the service website, please check for the latest version.

Importer: FG EUROPE SA 128, VOULIAGMENIS AVE
16674 GLYFADA, GREECE

Manufacturer: GD Midea Air-Conditioning Equipment Co,.Ltd.
Lingang Road Beijiao Shunde Foshan Guangdong
People’s Republic of China 528311

Midea

make yourself at home

www.midea.com

QS003UI-DL
16122000A74292