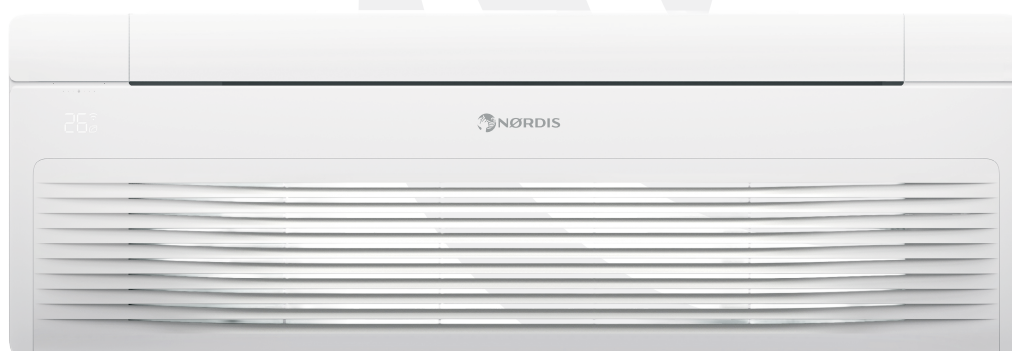


FMA One-Way Cassette

Multi-Split System Air Conditioner



User&Installation Manual

Models:

FMA-09C1RD/DVI;
FMA-12C1RD/DVI;
FMA-18C1RD/DVI;
FMA-24C1RD/DVI



Scan the QR code for manuals in
other languages



Before operating this product,
please read instructions carefully
and keep this manual for the
future use.

Safety Notice

 A2L	CAUTION: Risk of fire. The air conditioner is charged with inflammable refrigerant R32.
	Before using the air conditioner, please read the instruction manual first.
	Before installing the air conditioner, please read the instruction manual first.
	Before repairing the air conditioner, please read the technical service manual first.

Compared with common refrigerant, R32 is an environmentally friendly refrigerant that has no harm to the ozone layer and weak greenhouse effect. Its GWP is 675. Because of its thermodynamic characteristics, R32 requires a smaller charging quantity to reach high energy efficiency. It is inflammable and odorless, but may cause explosion under certain circumstances.

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Safety Precautions

Safety rules and recommendations for the installer

1. **R**ead this guide before installing and using the appliance.
2. **D**uring the installation of the indoor and outdoor units, access to the working area should be forbidden to children. Unforeseeable accidents could happen.
3. **M**ake sure that the base of the outdoor unit is firmly fixed.
4. **C**heck that air cannot enter the refrigerant system and check for refrigerant leaks before moving the air conditioner.
5. **C**arry out a test cycle after installing the air conditioner and record the operating data.
6. **P**rotect the indoor unit with a fuse of suitable capacity for the maximum input current or with another overload protection device.
7. **E**nsure that the mains voltage corresponds to that stamped on the rating plate. Keep the switch or power plug clean. Insert the power plug correctly and firmly into the socket, thereby avoiding the risk of electric shock or fire due to insufficient contact.
8. **C**heck that the socket is suitable for the plug, otherwise have the socket changed.
9. **T**he appliance must be fitted with means for disconnection from the supply mains having a contact separation in all poles that provide full disconnection under "over voltage category III conditions", and these means must be incorporated in the fixed wiring in accordance with the wiring rules.
10. **T**he air conditioner must be installed by a professional or qualified technician.
11. **D**o not install the appliance at a distance of less than 50cm from inflammable substances (alcohol, etc.) or from pressurized containers (e.g. spray cans).
12. **I**f the appliance is used in areas without the possibility of ventilation, precautions must be taken to prevent any leaks of refrigerant gas from remaining in the environment and creating a danger of fire.
13. **T**he packaging materials are recyclable and should be disposed of in the separate waste bins. Take the air conditioner at the end of its useful life to a special waste collection center for disposal.
14. **O**nly use the air conditioner as instructed in this booklet. These instructions are not intended to cover every possible condition and situation. As with any electrical household appliance, common sense and caution are therefore always recommended for installation, operation and maintenance.
15. **T**he appliance must be installed in accordance with applicable national regulations.
16. **T**he appliance shall be installed in accordance with national wiring regulations.
17. **B**efore accessing the terminals, all the power circuits must be disconnected from the power supply.
18. **T**his 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 should not play with the appliance. Cleaning and user maintenance should not be performed by children without supervision.

19. **D**o not try to install the conditioner alone, always contact specialized technical personnel.
20. **C**leaning and maintenance must be carried out by specialised technical personnel. In any case disconnect the appliance from the mains electricity supply before carrying out any cleaning or maintenance.
21. **E**nsure that the mains voltage corresponds to that stamped on the rating plate. Keep the switch or power plug clean. Insert the power plug correctly and firmly into the socket, thereby avoiding the risk of electric shock or fire due to insufficient contact.
22. **D**o not pull out the plug to switch off the appliance when it is in operation, since this could create a spark and cause a fire, etc.
23. **T**his appliance has been made for air conditioning domestic environments and must not be used for any other purpose, such as for drying clothes, cooling food, etc.
24. **A**lways use the appliance with the air filter mounted. The use of the conditioner without air filter could cause an excessive accumulation of dust or waste on the inner parts of the device with possible subsequent failures.
25. **T**he user is responsible for having the appliance installed by a qualified technician, who must check that earthing/grounding is done in accordance with current legislation and insert a thermomagnetic circuit breaker.
26. **T**he batteries in the remote controller must be recycled or disposed of properly. For disposal of scrap batteries, please discard the batteries as sorted municipal waste at the accessible collection point.
27. **N**ever remain directly exposed to the flow of cold air for a long time. The direct and prolonged exposure to cold air could be dangerous for your health. Particular care should be taken in the rooms where there are children, old or sick people.
28. **I**f the appliance gives off smoke or there is a smell of burning, immediately cut off the power supply and contact the service center.
29. **T**he prolonged use of the device in such conditions could cause fire or electrocution.
30. **H**ave repairs carried out only by an authorised service center of the manufacturer. Incorrect repair could expose the user to the risk of electric shock, etc.
31. **U**nhook the automatic switch if you do not plan to use the device for a long time. The airflow direction must be properly adjusted.
32. **T**he flaps must be directed downwards in the heating mode and upwards in the cooling mode.
33. **E**nsure that the appliance is disconnected from the power supply when it will remain inoperative for a long period and before carrying out any cleaning or maintenance.
34. **S**electing the most suitable temperature can prevent damage to the appliance.

Safety rules and prohibitions

1. **D**o not bend, tug or compress the power cord since this could damage it. Electrical shocks or fire are probably due to a damaged power cord. Only specialized technical personnel are recommended to replace a damaged power cord.
2. **D**o not use extensions or gang modules.
3. **D**o not touch the appliance when barefoot or parts of the body are wet or damp.
4. **D**o not obstruct the air inlet or outlet of the indoor or the outdoor unit. The obstruction of these openings causes a reduction in the operative efficiency of the conditioner with possible consequent failures or damages.
5. **I**n no way alter the characteristics of the appliance.
6. **D**o not install the appliance in environments where the air could contain gas, oil or sulphur or near sources of heat.
7. **T**his 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.
8. **D**o not climb onto or place any heavy or hot objects on top of the appliance.
9. **D**o not leave windows or doors open for long when the air conditioner is operating.
10. **D**o not direct the airflow onto plants or animals.
11. **A** long direct exposure to the flow of cold air of the conditioner could have negative effects on plants and animals.
12. **D**o not put the conditioner in contact with water. The electrical insulation could be damaged and thus cause electrocution.
13. **D**o not climb onto or place any objects on the outdoor unit.
14. **N**ever insert a stick or similar object into the appliance. It could cause injury.
15. **C**hildren should be supervised to ensure that they do not play with the appliance. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

Instruction for Servicing (R32)

1. Check the information in this manual to find out the dimensions of space needed for proper installation of the device, including the minimum distances allowed compared to adjacent structures.
2. Appliance shall be installed, operated and stored in a room with a floor area larger than 4m².
3. The installation of pipe-work shall be kept to a minimum.
4. The pipe-work shall be protected from physical damage, and shall not be installed in an unventilated space if the space is smaller than 4m².
5. The compliance with national gas regulations shall be observed.
6. The mechanical connections shall be accessible for maintenance purposes.
7. Follow the instructions given in this manual for handling, installing, cleaning, maintaining and disposing of the refrigerant.
8. Make sure ventilation openings are clear of any obstruction.
- 9. NOTICE:** The servicing shall be performed only as recommended by the manufacturer.
- 10. WARNING:** The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.
- 11. WARNING:** The appliance shall be stored in a room without continuously operating open flames (for example an operating gas appliance) and ignition sources (for example an operating electric heater).
12. The appliance shall be stored so as to prevent mechanical damage from occurring.
13. It is appropriate that anyone who is called upon to work on a refrigerant circuit should hold a valid and up-to-date certificate from an assessment authority accredited by the industry and recognizing their competence to handle refrigerants, in accordance with the assessment specification recognized in the industrial sector concerned. Service operations should only be carried out in accordance with the recommendations of the equipment manufacturer. Maintenance and repair operations that require the assistance of other qualified persons must be conducted under the supervision of the person competent for the use of flammable refrigerants.
14. Every working procedure that affects safety means shall only be carried out by competent persons.
- 15. WARNING**
 - * Do not use any means to accelerate the defrosting process or clean the frost on your own. Follow the recommended guidelines from the manufacturer.
 - * The appliance shall be stored in a room without continuously operating ignition sources (for example: Open flames, an operating gas appliance or an operating electric heater).
 - * Do not pierce or burn.
 - * Be aware that refrigerants may not contain an odor.



CAUTION: Risk of fire

A2L



Read operator's manual



Operating instructions



Read technical manual

16. Information on servicing:

1) Checks to the area

Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimized. For repair to the refrigerating system, the following precautions shall be complied with prior to conducting work on the system.

2) Work procedure

Work shall be undertaken under a controlled procedure so as to minimize the risk of a flammable gas or vapor being present while the work is being performed.

3) General work area

All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided. The area around the workspace shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.

4) Checking for presence of refrigerant

The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with flammable refrigerants, i.e. non-sparking, adequately sealed or intrinsically safe.

5) Presence of fire extinguisher

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

6) No ignition sources

No person carrying out work in relation to a refrigeration system which involves exposing any pipe work shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the

site of installation, repairing, removing and disposal, during which refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. "No Smoking" signs shall be displayed.

7) Ventilated area

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

8) Checks to the refrigeration equipment

Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt consult the manufacturer's technical department for assistance.

The following checks shall be applied to installations using flammable refrigerants:

- The charge size is in accordance with the room size within which the refrigerant containing parts are installed;
- The ventilation machinery and outlets are operating adequately and are not obstructed;
- If an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant;
- Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected;
- Refrigeration pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

9) Checks to electrical devices

Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.

Initial safety checks shall include:

- That capacitors are discharged: This shall be done in a safe manner to avoid possibility of sparking;
- That no live electrical components and wiring are exposed while charging, recovering or purging the system;
- That there is continuity of earth bonding.

17. Repairs to sealed components

- 1) During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon prior to any removal of sealed covers, etc. If it is absolutely necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.
- 2) Particular attention shall be paid to the following to ensure that by working on electrical components, the casing is not altered in such a way that the level of protection is affected. This shall include damage to cables, excessive number of connections, terminals not made to original specification, damage to seals, incorrect fitting of glands, etc. Ensure that apparatus is mounted securely. Ensure that seals or sealing materials have not degraded such that they no longer serve the purpose of preventing the ingress of flammable atmospheres. Replacement parts shall be in accordance with the manufacturer's specifications.

NOTE: The use of silicone sealant may inhibit the effectiveness of some types of leak detection equipment. Intrinsically safe components do not have to be isolated prior to working on them.

18. Repair to intrinsically safe components

Do not apply any permanent inductive or capacitive loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use. Intrinsically safe components are the only types that can be worked on while live in the presence of a flammable atmosphere. The test apparatus shall be at the correct rating. Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of refrigerant in the atmosphere from a leak.

19. Cabling

Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

20. Detection of flammable refrigerants

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used.

21. Leak detection methods

The following leak detection methods are deemed acceptable for systems containing flammable refrigerants. Electronic leak detectors shall be used to detect flammable refrigerants, but the sensitivity may not be adequate, or may need re-calibration (Detection equipment shall be calibrated in a refrigerant-free area). Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used. Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed and the appropriate percentage of gas (25% maximum) is confirmed. Leak detection fluids are suitable for use with most refrigerants but the

use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work. If a leak is suspected, all naked flames shall be removed/ extinguished. If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. Oxygen free nitrogen (OFN) shall then be purged through the system both before and during the brazing process.

22. Removal and evacuation

When breaking into the refrigerant circuit to make repairs or for any other purpose conventional procedures shall be used. However, it is important that best practice is followed since inflammability is a consideration. The following procedure shall be adhered to:

- Remove refrigerant;
- Purge the circuit with inert gas;
- Evacuate;
- Purge again with inert gas;
- Open the circuit by cutting or brazing.

The refrigerant charge shall be recovered into the correct recovery cylinders. The system shall be flushed with OFN to render the unit safe. This process may need to be repeated several times. Compressed air or oxygen shall not be used for this task.

Flushing shall be achieved by breaking the vacuum in the system with OFN and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum. This process shall be repeated until no refrigerant is within the system. When the final OFN charge is used, the system shall be vented down to atmospheric pressure to enable work to take place. This operation is absolutely vital if brazing operations on the pipe-work are to take place.

Ensure that the outlet for the vacuum pump is not close to any ignition sources and there is ventilation available.

23. Decommissioning

Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of reclaimed refrigerant. It is essential that electrical power is available before the task is commenced.

- 1) Become familiar with the equipment and its operation.
- 2) Isolate system electrically.
- 3) Before attempting the procedure, ensure that:
 - Mechanical handling equipment is available, if required, for handling refrigerant cylinders.
 - All personal protective equipment is available and being used correctly.

- The recovery process is supervised at all times by a competent person.
 - Recovery equipment and cylinders conform to the appropriate standards.
- 4) Pump down refrigerant system, if possible.
 - 5) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
 - 6) Make sure that the cylinder is situated on the scales before recovery takes place.
 - 7) Start the recovery machine and operate in accordance with manufacturer's instructions.
 - 8) Do not overfill cylinders (No more than 80% volume liquid charge).
 - 9) Do not exceed the maximum working pressure of the cylinder, even temporarily.
 - 10) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
 - 11) Recovered refrigerant shall not be charged into another refrigeration system unless it has been cleaned and checked.

24. Labeling

Equipment shall be labeled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. Ensure that there are labels on the equipment stating the equipment contains flammable refrigerant.

25. Recovery

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely.

When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge are available. All cylinders to be used are designated for the recovered refrigerant and labeled for that refrigerant (i.e. Special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.

The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of all appropriate refrigerants including, when applicable, flammable refrigerants. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition. Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer if in doubt.

The recovered refrigerant shall be returned to the refrigerant supplier in the correct recover cylinder, and the relevant waste transfer note arranged. Do not mix refrigerants in recovery units and especially

not in cylinders.

If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant.

The evacuation process shall be carried out prior to returning the compressor to the suppliers.

Only electric heating to the compressor body shall be employed to accelerate this process. When oil is drained from a system, it shall be carried out safely.

Important considerations

1. The air conditioner must be installed by professional personnel and the Installation manual is used only for the professional installation personnel! The installation specifications should be subject to our after-sale service regulations.
2. When filling the combustible refrigerant, any of your rough handling may cause serious injury or personal injury and property damage.
3. A leak test must be done after the installation completed.
4. It is a must to do the safety inspection before maintaining or repairing an air conditioner using combustible refrigerant in order to ensure that the fire risk is reduced to minimum.
5. It is necessary to operate the machine under a controlled procedure in order to ensure that any risk arising from the combustible gas or vapor during the operation is reduced to minimum.
6. Requirements for the total weight of filled refrigerant and the area of a room to be equipped with an air conditioner (are shown as in the following Tables GG.1 and GG.2).

The maximum charge and the required minimum floor area

$$m_1 = 6 \times \text{LFL}, m_2 = 52 \times \text{LFL}, m_3 = 260 \times \text{LFL}$$

Where LFL is the lower flammable limit in kg/m^3 , R32 LFL is 0.306 kg/m^3

For the appliances with a charge amount $m_1 < M = m_2$

The maximum charge in a room shall be in accordance with the following:

$$M_{\max} = 2.5 \times (\text{LFL})^{(5/4)} \times h_0 \times (A)^{1/2}, \text{ not to exceed } m_{\max} = \text{CF} \times \text{LFL} \times h_0 \times A$$

The required minimum floor area $A_{\min}$ to install an appliance with refrigerant charge $M(\text{kg})$ shall be in accordance with following: $A_{\min} = (m_c / (2.5 \times (\text{LFL})^{(5/4)} \times h_0))^2$, not less than $A_{\min} = m_c / (\text{CF} \times \text{LFL} \times h_0)$

$M \leq 1.836 \text{ kg}$, $A_{\min}$ has no requirements

Where:

Table GG.1 - Maximum charge (kg)

Category	LFL (kg/m ³)	h ₀ (m)	Floor area (m ²)						
			4	7	10	15	20	30	50
R32	0.306	1.8	1.65	2.71	3.24	3.97	4.58	5.61	7.24
		2.2	2.02	3.31	3.96	4.85	5.60	6.86	8.85
		2.5	2.30	3.76	4.50	5.51	6.36	7.79	10.06
		2.8	2.57	4.22	5.04	6.17	7.12	8.73	11.27

Table GG.2 - Minimum room area (m²)

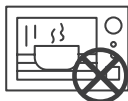
Category	LFL (kg/m ³)	h ₀ (m)	Charge amount (M) (kg) Minimum room area (m ²)						
			1.000	1.836	2.448	3.060	3.672	4.284	4.896
R32	0.306	1.8	/	4.44	5.93	8.93	12.86	17.50	22.85
		2.2	/	3.64	4.85	6.06	8.61	11.71	15.30
		2.5	/	3.20	4.27	5.33	6.66	9.07	11.85
		2.8	/	2.86	3.81	4.76	5.71	7.23	9.44

Installation safety principles

1. Site Safety



Open Flames Prohibited



Ventilation Necessary

2. Operation Safety



Mind Static Electricity



Must wear protective
clothing and anti-static gloves



Don't use mobile phone

3. Installation Safety

- Refrigerant Leak Detector.
- Appropriate Installation Location.

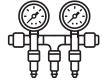
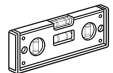


The left picture is the schematic diagram of a refrigerant leak detector.

Please note that:

- 1) The installation site should be well-ventilated.
- 2) The sites for installing and maintaining an air conditioner using Refrigerant R32 should be free from open fire or welding, smoking, drying oven or any other heat source higher than 548°C which easily produces open fire.
- 3) When installing an air conditioner, it is necessary to take appropriate anti-static measures such as wear anti-static clothing and/or gloves.
- 4) It is necessary to choose the site convenient for installation or maintenance wherein the air inlets and outlets of the indoor and outdoor units should not be surrounded by obstacles or close to any heat source or combustible and/or explosive environment.
- 5) If the indoor unit suffers refrigerant leak during the installation, it is necessary to immediately turn off the valve of the outdoor unit and all the personnel should go out till the refrigerant leaks completely for 15 minutes. If the product is damaged, it is a must to carry such damaged product back to the maintenance station and it is prohibited to weld the refrigerant pipe or conduct other operations on the user's site.
- 6) It is necessary to choose the place where the inlet and outlet air of the indoor unit is even.
- 7) It is necessary to avoid the places where there are other electrical products, power switch plugs and sockets, kitchen cabinet, bed, sofa and other valuables right under the lines on two sides of the indoor unit.

Suggested tools

Tool	Picture	Tool	Picture	Tool	Picture
Standard Wrench		Pipe Cutter		Vacuum Pump	
Adjustable/ Crescent Wrench		Screw drivers (Phillips & Flat blade)		Safety Glasses	
Torque Wrench		Manifold and Gauges		Work Gloves	
Hex Keys or Allen Wrenches		Level		Refrigerant Scale	
Drill & Drill Bits		Flaring tool		Micron Gauge	
Hole Saw		Clamp on Amp Meter		Welding Gun	

Pipe length and additional refrigerant

Inverter models capacity (btu/h)	12K	18K	24K
Length of pipe with standard charge	5m/16.7ft	5m/16.7ft	5m/16.7ft
Maximum distance between indoor and outdoor unit	15m/49ft	30m/98ft	50m/162.5ft
Additional refrigerant charge	16g/m	16g/m	16g/m
Max. diff. in level between indoor and outdoor unit	10m/33ft	20m/66ft	25m/82.5ft
Type of refrigerant	R32		

Torque parameters

Pipe size	Newton meter [N x m]	Pound-force foot (lbf-ft)	Kilogram-force meter (kgf-m)
1/4" (φ6.35)	15 - 20	11.1 - 14.8	1.5 - 2.0
3/8" (φ9.52)	31 - 35	22.9 - 25.8	3.2 - 3.6
1/2" (φ12)	45 - 50	33.2 - 36.9	4.6 - 5.1
5/8" (φ15.88)	60 - 65	44.3 - 48.0	6.1 - 6.6

 NOTE

This table is only for reference. The installation shall meet the requirements of local laws and regulations

Operating condition

The protective device may trip within temp range listed below:

HEATING	Outdoor air temperature is over 30°C.
	Outdoor air temperature is below -25°C.
	Room temperature is below 30°C.
COOLING	Outdoor air temperature is over 58°C.
	Outdoor air temperature is below -15°C.
	Room temperature is below 17°C.
DRY	Room temperature is below 17°C.

If the air conditioner runs for a long time in "COOLING" or "DRY" mode at air relative humidity higher than 80% (doors or windows opened) dew may generate and drip near air outlet.

Noise pollution

- Install the air conditioner in a place that can bear its weight in order to operate more quietly.
- Install the outdoor unit in a place where the air discharged and the operation noise do not annoy your neighbors.
- Do not place any obstacles in front of the outlet of the outdoor unit for fear it affects operation and increases the noise level.

Features of protector

1. The protective device will trip at following cases.
 - If you stop the appliance and restart it at once or change other modes during operation, you have to wait 3 minutes before restarting.
 - After switching on the power circuit breaker and then turn on the air conditioner at once, you have to wait about 20 seconds.
2. In case all operations have stopped, you need to:
 - Press "ON/OFF" button again to restart it.
 - Set TIMER once again if it has been canceled.

Inspection

After a long time of operation, the air conditioner should be inspected for the following items.

- Abnormal heating of the power supply cord or even a burnt smell.
- Abnormal operating noise or vibration.
- Water leakage from indoor unit.
- Metal cabinet electrified.
- Stop using the air conditioner if above problem happened.
- It is advisable that the air conditioner should be given a detail check-up after using for five years even if none of the above happen.

Features of HEATING mode

Preheat

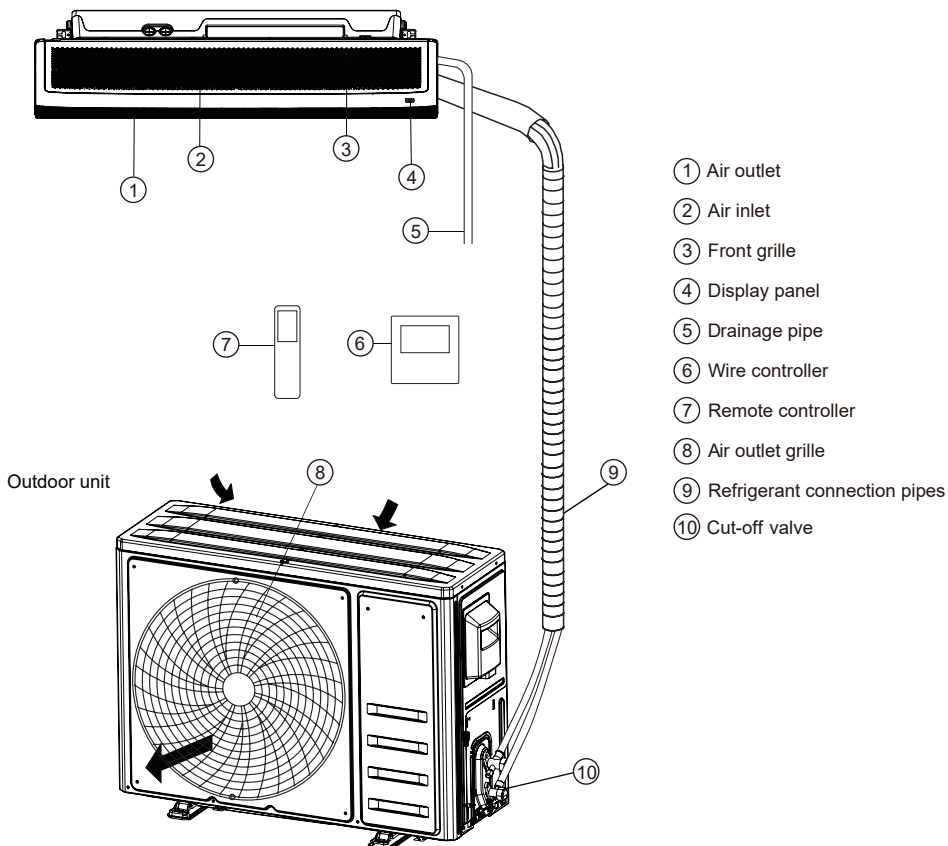
2-5 minutes are necessary to preheat the indoor heat exchanger at the beginning of "HEATING" operation, lest cold air be discharged.

Defrost

In "HEATING" operation the appliance will defrost automatically. This procedure lasts 2~10 minutes, then returns to "HEATING" mode automatically. During defrosting, indoor fan stops running and return to heating mode operation automatically when defrosting has finished.

Parts and Functions

Indoor unit



Actual product may vary from the image.

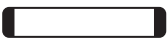
Requirements

- When the air temperature is below -15°C , the air conditioner cannot be started up until it is powered on for 2 hours. Furthermore, in case of a shutdown lasting for about one day only, please do not cut off the electricity supply.
- Notice that the air inlet/outlet must not be choked up. If choke up takes place, the air conditioner behavior may be affected, or air conditioner cannot run because of actuation of protector.

Please check whether the following list of accessories are of full scope. If there are some spare items, please store them carefully aside.

Packing list:

Serial number	Name	Quantity	Diagram
1	Remote control unit	×1	
2	Battery	×2	
3	Soundproof / insulation sheath (some models)	x1	
4	Soundproof / insulation sheath (some models)	x1	
5	Outlet pipe clamp ring assembly	×1	
6	Outlet pipe clasp (some models)	1~2 (Depending on models)	
7	Drain pipe assembly (some models)	×1	
8	Copper nut	2~4 (Depending on models)	
9	Instruction book	×1	
10	Suspension bolt (some models)	x4	
11	Ceiling hook (some models)	x4	
12	Throttle (some units)	x1	
13	Belt (some models)	x1~4	
14	Conduit installation plate (some models)	x1	
15	Hose clamp (some models)	x2	

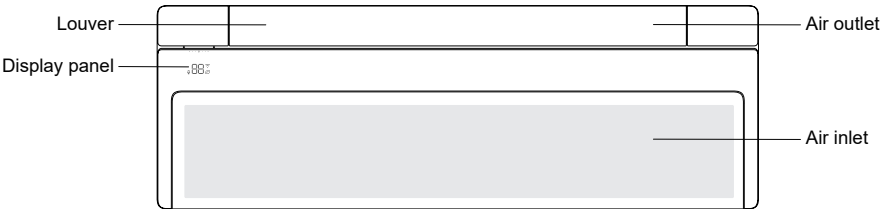
Serial number	Name	Quantity	Diagram
16	Installation paper template (some models)	x1	
17	Anti-shock rubber (some models)	x1	
18	Drain joint (some models)	x1	
19	Seal ring (some models)	x1	
20	Magnetic ring (wrap the electric wires S1&S2 (P&Q&E) around the magnetic ring twice) (some models)	x1	 S1&S2(P&Q&E)
21	Magnetic ring (Hitch it on the connective cable between indoor unit and outdoor unit after installation) (some models)	Varies by model	
22	Tapping screw (some models)	x4	
23	Mounting foot pads for the outdoor unit (some models)	x2	
24	Cable Clamp (some models)	x2	
25	Wired controller plate (some models)	x1	
26	Connecting pipe (some models)	x1	
27	Connecting wire (some models)	x1	
28	Drain joint (indoor unit) (some models)	x1	

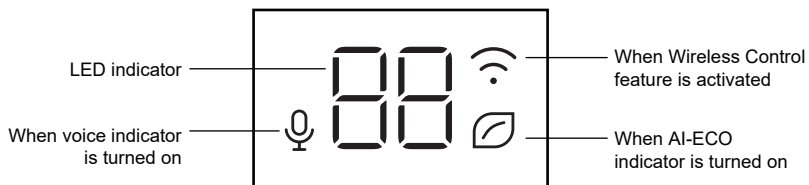
Unit Specifications and Features

 NOTE

Different models have different display panel. Not all the indicators described below are available for the air conditioner you purchased. Please check the indoor display panel 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.

This display panel on the indoor unit can be used to operate the unit in case the remote control has been misplaced or is out of batteries.





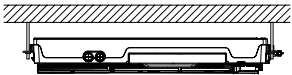
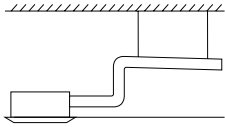
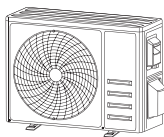
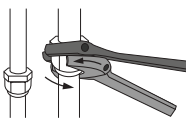
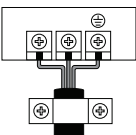
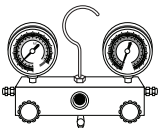
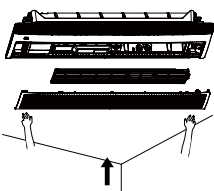
NO.	Symbols	Meaning
1		Displays temperature, operation feature and Error codes.
2		When voice indicator is turned on.
3		When Wireless Control feature is activated.
4		When AI-ECO indicator is turned on.

Display code

Display	Description of the trouble
C8	Code "C8" is not an error but indicates active defrost function. It will resume automatically when defrosting is finished.
CL	The designation "CL" does not indicate an error code; Rather, it signifies that the indoor dust filter requires cleaning. To reset the alarm, please disconnect the power supply for 30 seconds before restoring it.
PP	Indicates that the Wi-Fi module is attempting to connect to the router.
SA	Indicates that the Wi-Fi module can connect through the router.
AP	Indicates that the Wi-Fi module can connect through the internet.

OFF mode: When the display panel is turned off the unit turns off and the remote control is re-enabled.

Installation Summary

1	Install the indoor unit	
2	Install the drainpipe	
3	Install the outdoor unit	
4	Connect the refrigerant pipes	
5	Connect the wires	
6	Evacuate the refrigeration system	
7	Install the front panel	
8	Perform a test run	

Indoor Unit Installation



NOTE

Panel installation should be performed after piping and wiring have been completed.

Step 1: Select installation location

Before installing the indoor 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:

- Enough room exists for installation and maintenance.
- Enough room exists for connecting the pipe and drainpipe.
- The ceiling is horizontal and its structure can sustain the weight of the indoor unit.
- The air inlet and outlet are not blocked.
- The airflow can fill the entire room.
- There is no direct radiation from heaters.

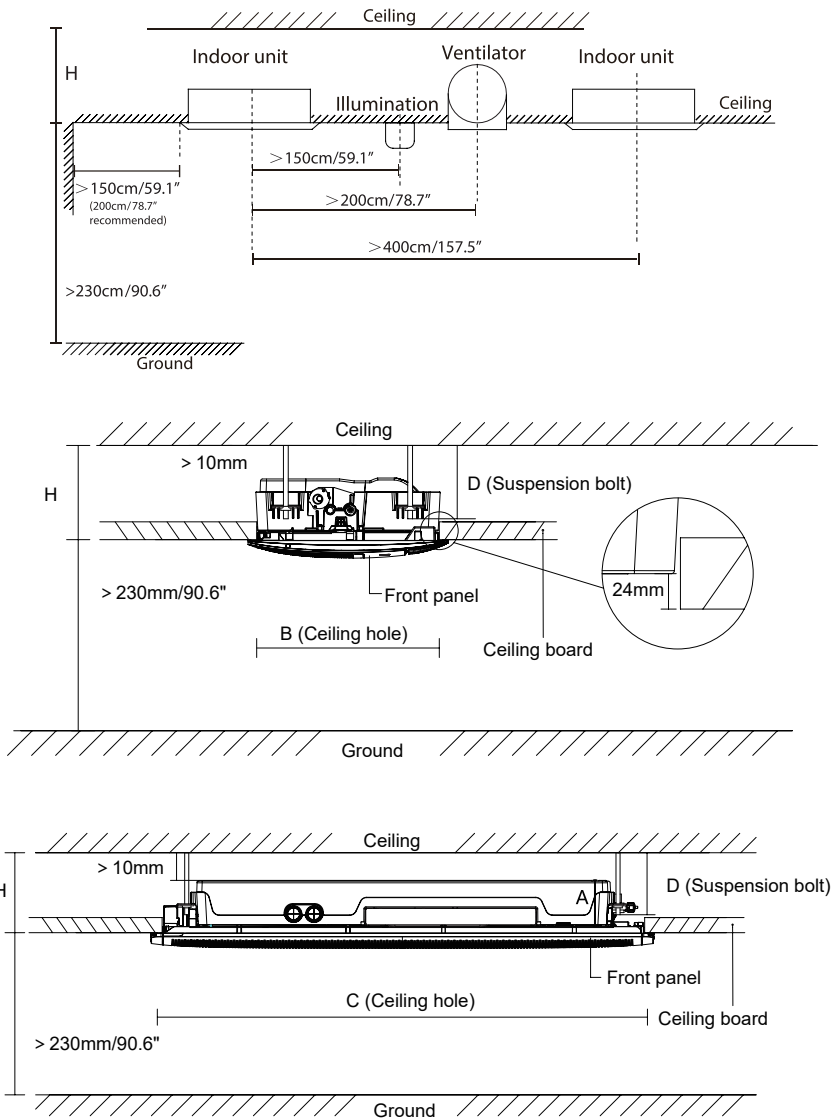


DO NOT install unit in the following locations:

- 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.

Recommended distances between the indoor unit and the ceiling

The distance between the mounted indoor unit and the internal ceiling should meet the following specifications.

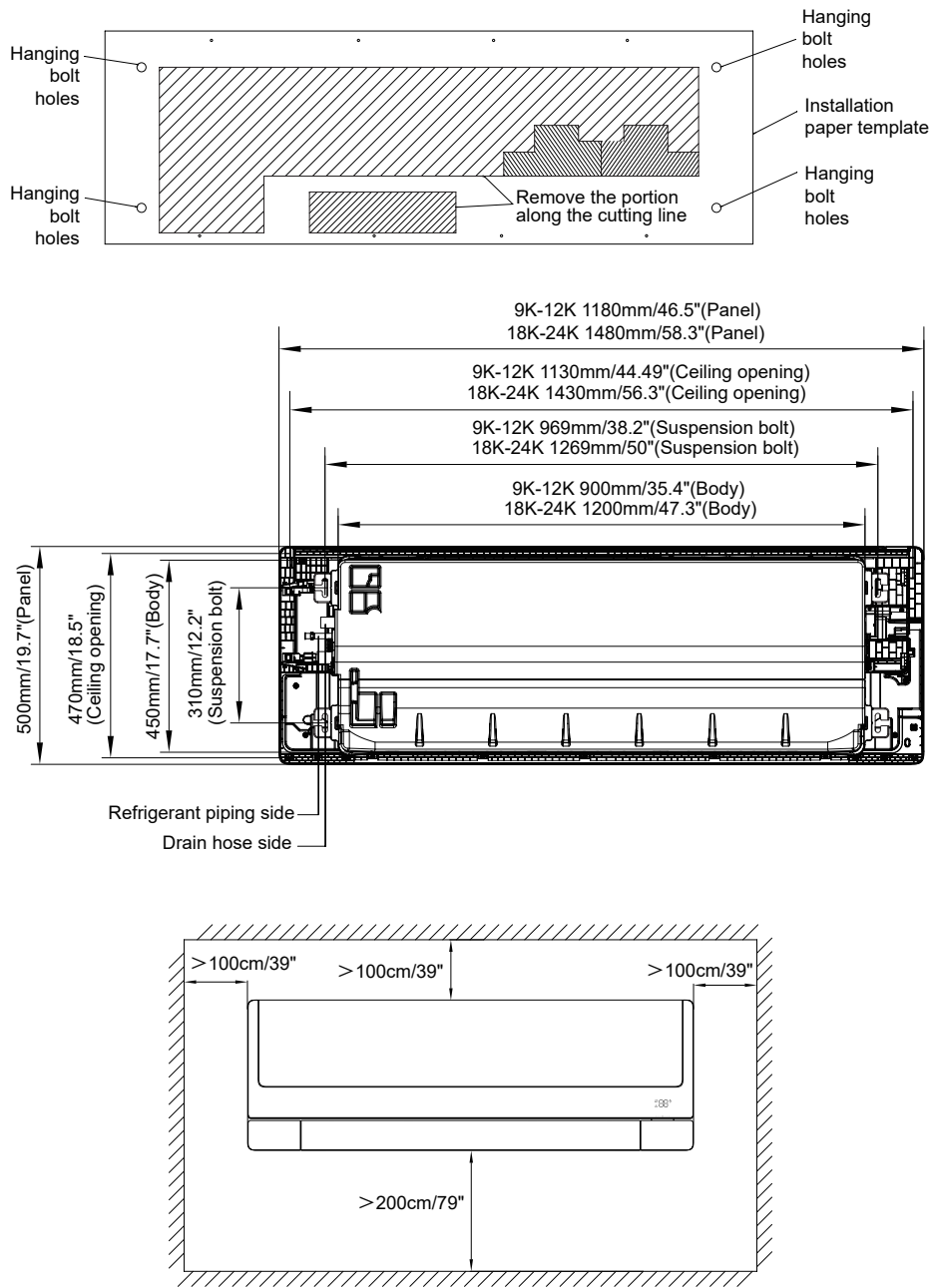


Distance from ceiling relative to height of indoor unit

Model	Length of H (mm/inch)	Length of A (mm/inch)	Length of B (mm/inch)	Length of C (mm/inch)	Length of D (mm/inch)
9k-12k	$>164/6.5$	154/6.1	470/18.5	1120/44.1	H-40/2.4
18k-24k	$>164/6.5$	154/6.1	470/18.5	1420/55.9	H-40/2.4

Step 2: Hang indoor unit

1. Use the included paper template to cut a rectangular hole in the ceiling, leaving at least 1m (39") on all sides. Be sure to mark the areas where ceiling hook holes will be drilled.



⚠ CAUTION

The unit body should align perfectly with the hole. Ensure that the unit and the hole are the same size before moving on.

2.

(A)

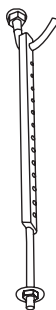
Drill 4 holes 5cm (2") deep at the ceiling hook positions in the internal ceiling. Be sure to hold the drill at a 90° angle to the ceiling.

(B)

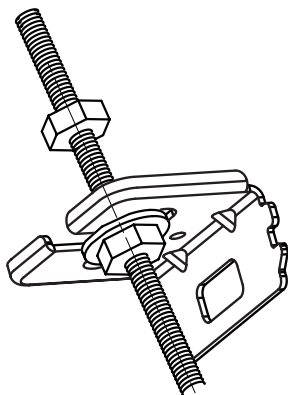
Drill 4 holes 12cm-15.5cm (4.7"-6.1") deep at the ceiling hook positions in the internal ceiling. Be sure to hold the drill at a 90° angle to the ceiling.

3. Using a hammer, insert the ceiling hooks into the pre-drilled holes. Secure the bolt using the included washers and nuts.

4. Install the four suspension bolts.



5. 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.

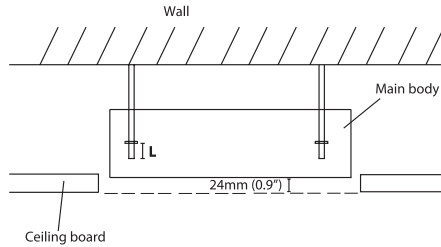


(A)



NOTE

The bottom of the unit should be 24mm (0.9") (Compact models) higher than the ceiling board. Generally, L (indicated in the following figure) should be half the length of the suspension bolt or long enough to prevent the nuts from coming off.

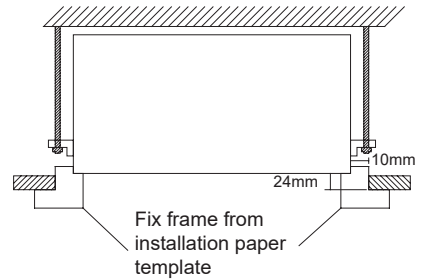
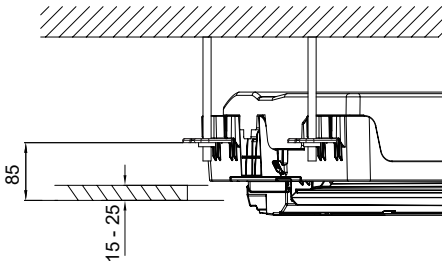


(B)



NOTE

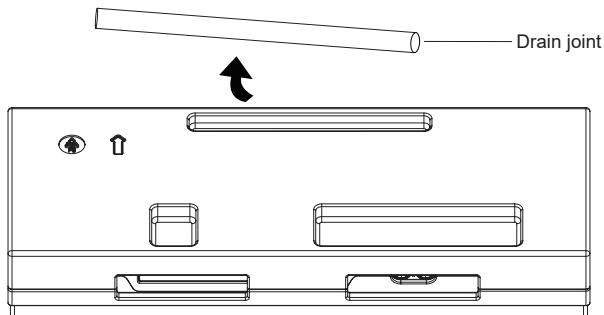
The bottom of the unit should be 15-25mm (0.4-0.98") higher than the ceiling board.



CAUTION

The water pipe must be taken out of the air protective foam before installation.

Ensure that the unit is completely level. Improper installation can cause the drain pipe to back up into the unit or water leakage.

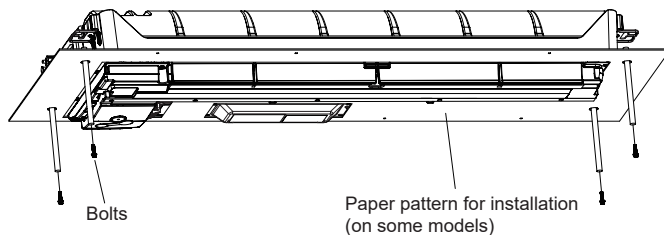


Note for new home installation

When installing the unit in a new home, the ceiling hooks can be embedded in advance.

Make sure that the hooks do not come loose due to concrete shrinkage. After installing the indoor unit, fasten the installation paper template onto the unit with bolts to determine in advance the dimension and position of the opening on the ceiling.

Follow the instructions above for the remainder of the installation.



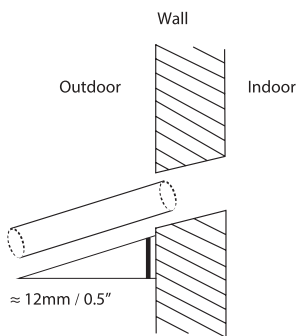
Step 3: Drill wall hole for connective piping

1. Determine the location of the wall hole based on the location of the outdoor unit.
2. Using a 65mm (2.56") or 90mm (3.54") (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 (0.5"). 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

Before drilling into the wall or ground, the user must confirm the location of any concealed wiring, water pipes, or gas pipes; can also be detected through the inductive test pen to detect the location of the drilling whether there is a power line through the power line, to avoid damage to the power line of the drill bit to avoid casualties caused by personal injury accidents.



Step 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.

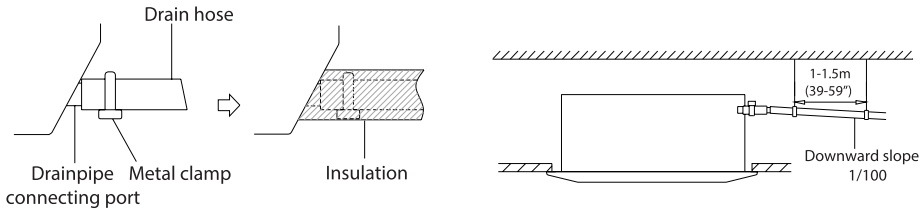
Note on purchasing pipes

Installation requires a polyethylene tube (exterior diameter = 2.5cm or 3.7-3.9cm) (depending on models), which can be obtained at your local hardware store or dealer.

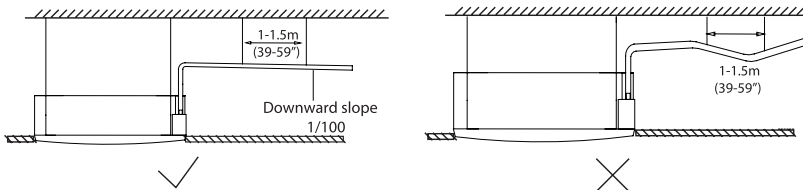
Indoor drainpipe installation

Install the drainpipe as illustrated in the following Figure.

(A)



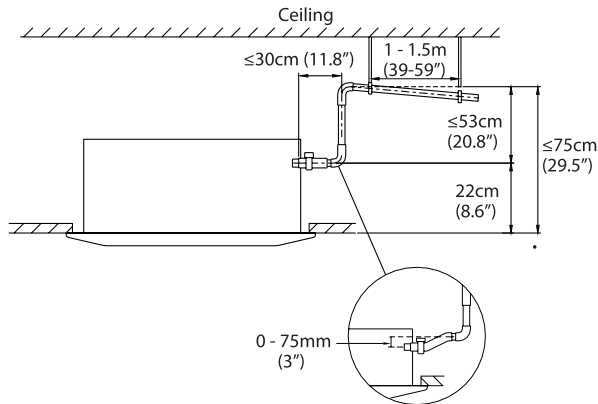
(B)



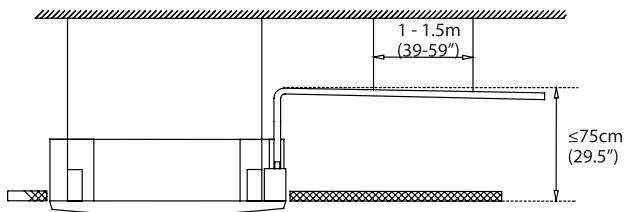
Note on drainpipe installation

- 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").
- If the outlet of the drainpipe is higher than the body's pump joint, provide a lift pipe for the exhaust outlet of the indoor unit. The lift pipe must be installed no higher than 75cm (29.5") from the ceiling board and the distance between the unit and the lift pipe must be less than 30cm (11.8") (depending on models). Incorrect installation could cause water to flow back into the unit and flood.
- To prevent air bubbles, keep the drain hose level or slightly tilted up (<75mm/3") (some models).

(A)



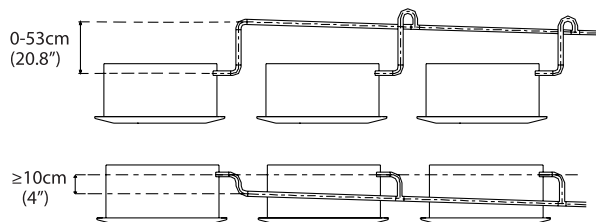
(B)



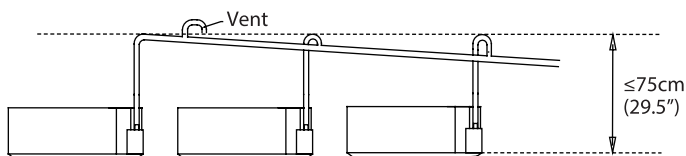
NOTE

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

(A)



(B)



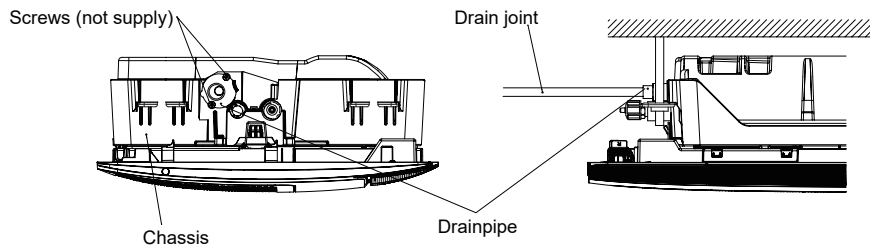
Pass the drain hose through the wall hole. Make sure the water drains to a safe location where it will not cause water damage or a slipping hazard.

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.

How to install the conduit installation plate (if supplied).

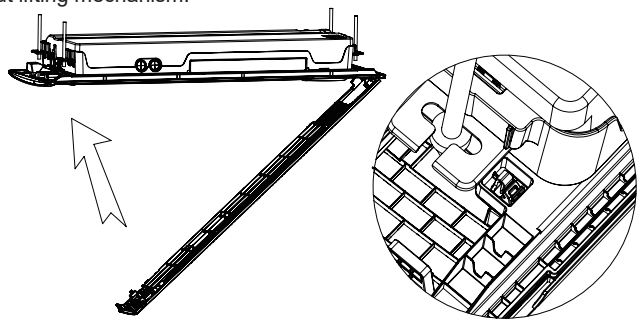
1. Fix the sheath connector (not supplied) on the wire hole of the conduit installation plate.
2. Fix the conduit installation plate on the chassis of the unit.



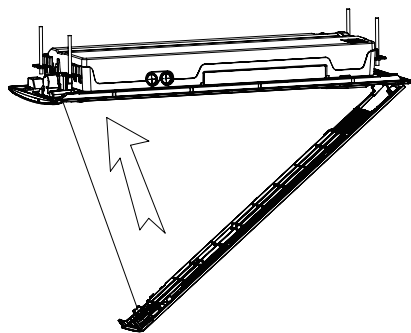
Step 5: Mount the intake grille.

Ensure that the buckles at the back of the grille are properly seated in the groove of the panel.

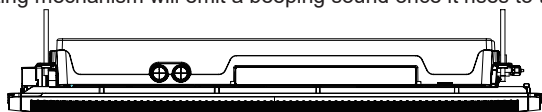
Version A: Without lifting mechanism.



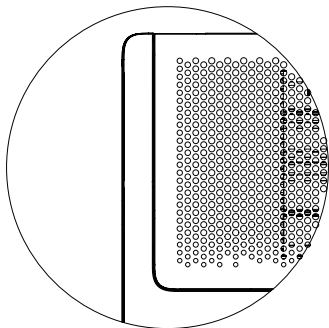
Version B: With lifting mechanism.



The ceiling with the lifting mechanism will emit a beeping sound once it rises to the preset position.

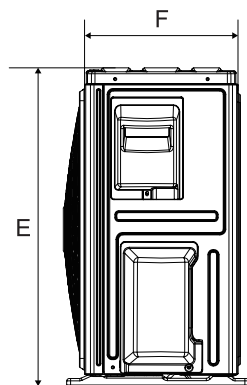
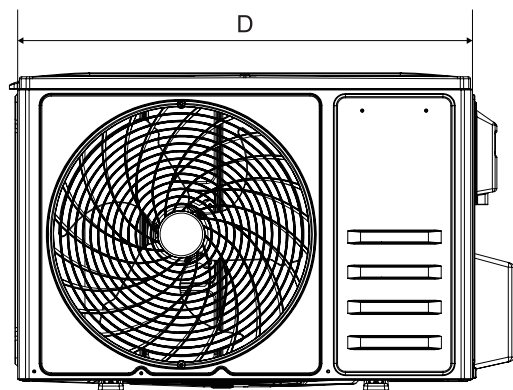
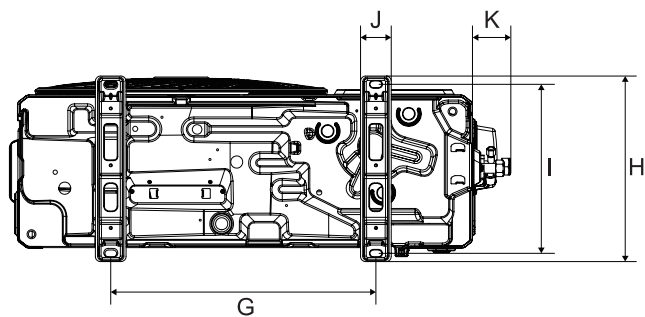


Based on a visual inspection.



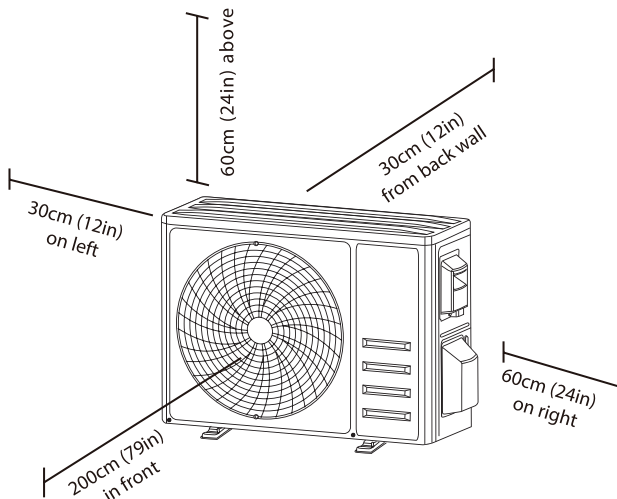
Outdoor Unit Installation

Split type outdoor unit



Model	Outdoor unit (mm)							
	D	E	F	G	H	I	J	K
9/12K	716	499	240	415	290	265	48	60
18K	780	602	292	516	349	314	54	60
24K	845	699	329	586	375	348	59	60

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



Installation instructions - outdoor unit

Step 1: Select installation location

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:

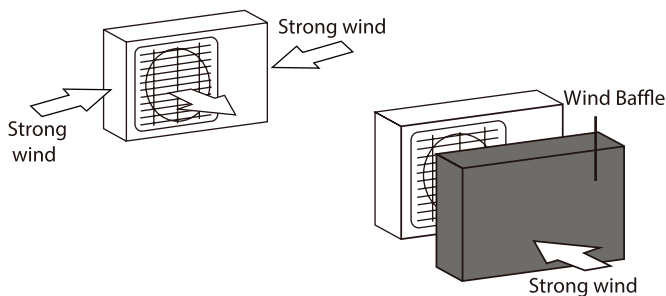
- Meets all spatial requirements shown in Installation Space Requirements above.
- Good air circulation and ventilation.
- Firm and solid - the location can support the unit and will not vibrate.
- Noise from the unit will not disturb others.
- Protected from prolonged periods of direct sunlight or rain.
- Where snowfall is anticipated, take appropriate measures to prevent ice buildup and coil damage.

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 excessive amounts of salty air.

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:

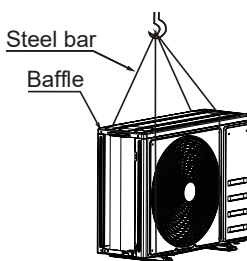
Build a shelter above the unit to protect it from the rain or snow. Be careful not to obstruct air flow around the unit.

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

Use outdoor unit that is specially designed to resist corrosion.

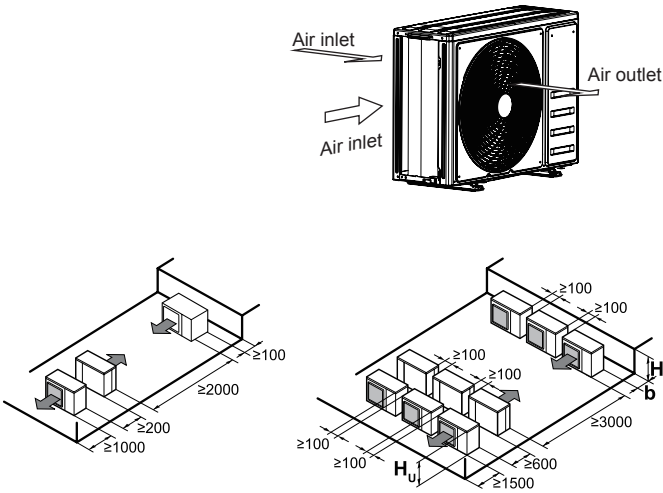
Move outdoor unit

1. Please use 4 pieces of 6mm steel wire to lift the outdoor unit and move it to the desired location.
2. To prevent the outdoor unit from being deformed, please add baffles on the surface of the outdoor unit where the steel wires may come into contact.
3. After moving, please remove the wooden tray from the bottom.



Installation space

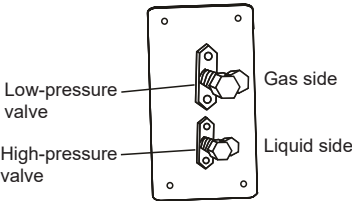
- 1. After leaving repair space as illustrated below, install the outdoor unit with power supply equipment installed at the side of the outdoor unit. Please refer to ELECTRIC SUPPLY INSTALLATION MANUAL for the installation method.
- 2. Please ensure there is sufficient space for installation and repair.



$H_B H_U$	b (mm)
$H_B \leq \frac{1}{2} H_U$	$b \geq 250$
$\frac{1}{2} H_U < H_B \leq H_U$	$b \geq 300$
$H_B > H_U$	/

Refrigerant pipes

- 1. The junction is inside the cover of the right panel. Please remove the cover first.
- 2. Route the pipe through the side gap of the cover.
- 3. After connecting via the valve opening, reinstall the cover from the left, right, or back for installation.
- 4. The diagram on the right is the schematic diagram of the outdoor unit's valve installation panel. The gas side (low-pressure side) is oriented upward, and the liquid side is oriented downward.



Installation

Pre-installation precautions

- Please confirm that the installation personnel are qualified for relevant installation work. If the air conditioner is installed by persons without special skills, normal operations will not be ensured, and even personal and property safety will be affected.

User guideline

- The user's installation site should be provided with a regular power supply conforming to that indicated on the air conditioner's nameplate, and its voltage should be within the range of 90%-110% of the rated voltage value.
- The power circuit should be equipped with a protective device, such as a leakage protector or an air switch, which should have a capacity greater than 1.5 times the maximum current value of the air conditioner.
- Always use a dedicated circuit and a properly-grounded socket compatible with the air conditioner's attached plug. The attached plug is equipped with a grounding pin, and it must not be modified at will.
- Please use the fuse or circuit breaker prescribed in the Installation Instructions.
- Only a qualified electrician is allowed to carry out wiring tasks strictly according to electrical safety requirements.
- Do ensure proper grounding of the air conditioner; in other words, the main power switch of the air conditioner must be connected to a reliable ground wire.

Precautions

- The air conditioner should be installed securely; Otherwise poor installation may lead to abnormal noise and vibration.
- Outdoor unit should be installed at a spot ensuring that its air outlet noises and hot exhaust will not disturb your neighbors.

Unit body installation

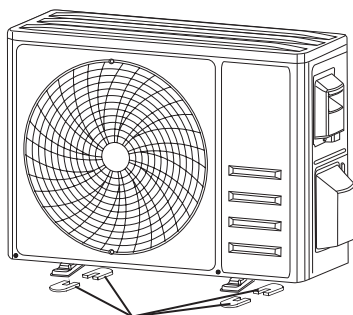
1. Mark the installation position for expansion bolts according to the outdoor unit's installation dimensions.
2. Drill holes, clean the concrete dust, and insert the expansion bolts.
3. If applicable, install 4 rubber pads on the installation holes before placing the outdoor unit (optional).
4. Doing so will reduce vibrations and noise.
5. Place the outdoor unit onto the bolts and pre-drilled holes.
6. Use a wrench to firmly secure the outdoor unit with the bolts.

NOTE

The outdoor unit can be fixed on a wall-mounting bracket.

Follow the wall-mounting bracket's instructions to attach the bracket to the wall. Then, fasten the outdoor unit to the bracket and ensure it is level.

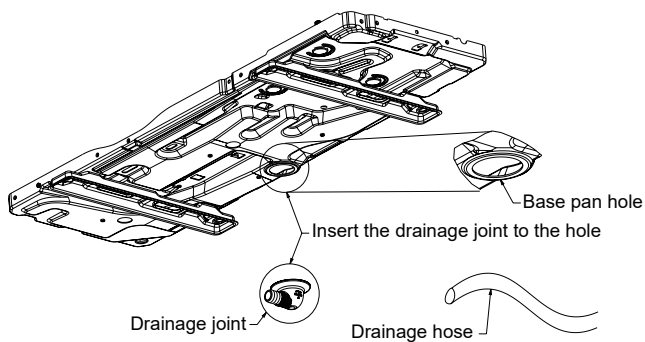
The wall-mounting bracket must support at least 4 times the weight of the outdoor unit.



Install 4 rubber pads (Optional)

Install drainage hose

1. This step is only for heat pump models or RCACs.
2. Insert the drainage joint into the hole at the bottom of the outdoor unit.
3. Connect the drainage hose to the joint and ensure the connection is secure.



NOTE

Before bolting the outdoor unit in place, you must install the drain joint at the bottom of the unit. For units with a base pan built-in (with multiple holes for proper draining during defrost), the drain joint does not need to be installed.

In cold climates, ensure 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.

Refrigerant Pipes Installation

Pipe dimension and installation methods

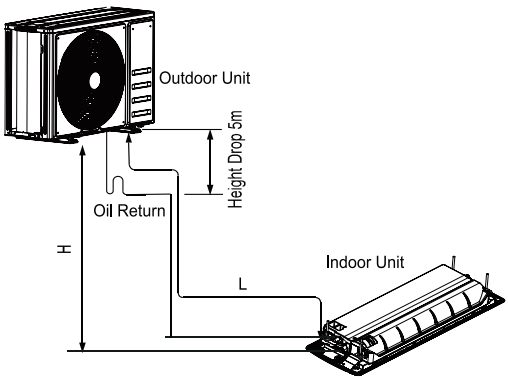
Outdoor pipe dimension and ways of installation (in sequence of cooling capacity).

Pipe material		Copper pipe for air conditioner		
Model		9/12K	18K	24K
Size (mm)	Liquid side	Φ6.35 (1/4inch)	Φ6.35 (1/4inch)	Φ6.35 (1/4inch)
	Gas side	Φ9.52 (3/8inch)	Φ12.7 (1/2inch)	Φ12.7 (1/2inch)

Conventional pipe		12K	18K	24K
Maximum pipe length (liquid side) L		15m	30m	50m
Maximum Height drop	Height drop between indoor and outdoor unit H	10m	20m	25m

Please refer to refrigerant pipe connection for details.

Allowed length and height drop.



Remove objects and water

- Use high-pressure nitrogen to clean the pipe instead of using outdoor refrigerant for this cleaning process.
- Before installing the refrigerant pipe, please clean the pipe to prevent foreign objects from being inside.

Additional refrigerant charge

- The additional charge is based on the diameter and length of the outlet and inlet liquid pipes.
- This AC has been charged with a standard amount of refrigerant for 7.5m connection pipes.
Connection pipes beyond 7.5m should be additionally charged as follows.

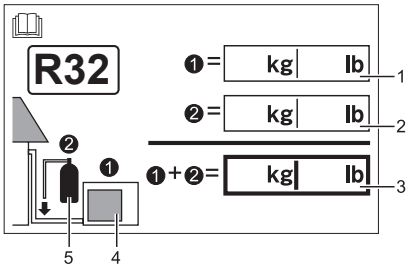
Inverter models capacity (btu/h)	12K	18K	24K
Length of pipe with standard charge	5m/16.7ft	5m/16.7ft	5m/16.7ft
Maximum distance between indoor and outdoor unit	15m/49ft	30m/98ft	50m/162.5ft
Additional refrigerant charge	16g/m	16g/m	16g/m
Max. diff. in level between indoor and outdoor unit	10m/33ft	20m/66ft	25m/82.5ft
Type of refrigerant	R32		

Refrigerant charge label

Please fill in with indelible ink.

- ① The factory refrigerant charge of the product;
- ② The additional refrigerant amount charged in the field and;
- ① + ② the total refrigerant charge on the refrigerant charge label supplied with the product.

Affix the refrigerant charge label near the manufacturer's label after filling it out.

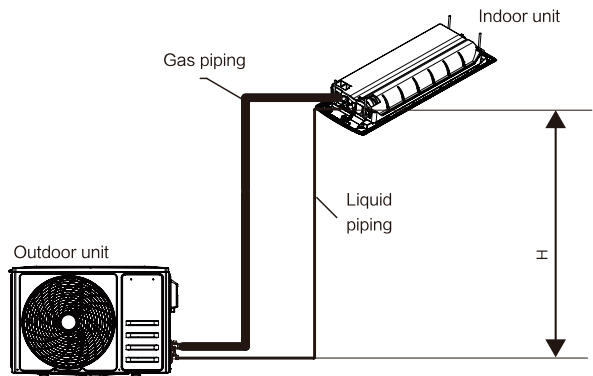


1. Factory refrigerant charge of the product: See unit manufacturer's label.
2. Additional refrigerant amount charged in the field.
3. Total refrigerant charge.
4. Outdoor unit.
5. Refrigerant cylinder and manifold for charging.

Non-return bend and oil return bend

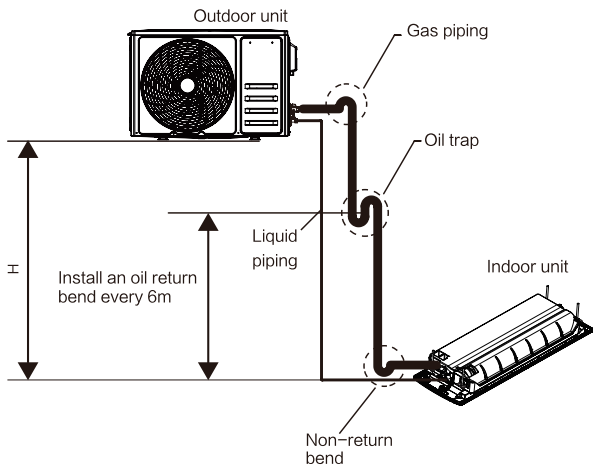
1) Outdoor unit is beneath the indoor unit.

There's no need to add non-return bend at the lowest or highest position of the vertical pipe, as shown below:

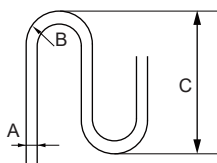


2) Outdoor unit is above the indoor unit.

It's necessary to add oil return bend and non-return bend at the lowest and highest position of the vertical pipe, as shown below:



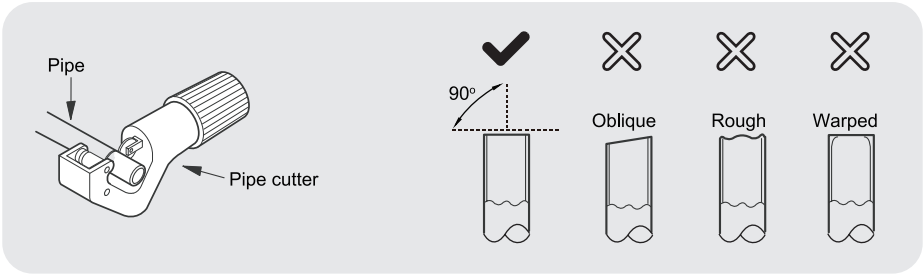
Dimensions for the making of oil return bend are as follows:



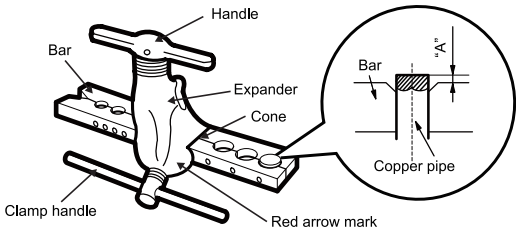
A (inch)	B (mm)	C (mm)
Φ3/8	≥20	≤150
Φ1/2	≥26	≤150
Φ5/8	≥33	≤150

Flaring

1. Cut the refrigerant pipe off with a pipe cutter.



2. Flare the pipe after putting it into the connection nut.



Outside diameter (mm)	A (mm)	
	Max	Min
Φ6-6.35 (1/4")	1.3	0.7
Φ9.52 (3/8")	1.6	1.0
Φ12-12.70 (1/2")	1.8	1.0
Φ16-15.88 (5/8")	2.4	2.2

Stop valve operation item

- Open the valve rod until it reaches the stop position. Do not attempt to open it further.
- Fasten the valve bonnet with a spanner or other similar tools.
- Ensure the valve rod bonnet is securely fastened.

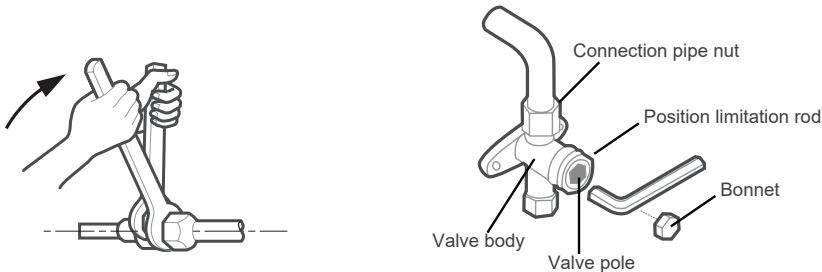
Junction fixture

Align with the connection pipe, fix the nut of the connection pipe, and then tighten it with a spanner as shown in the following diagram.



NOTE

According to the installation conditions, an excessively large tightening torque will damage the nut.

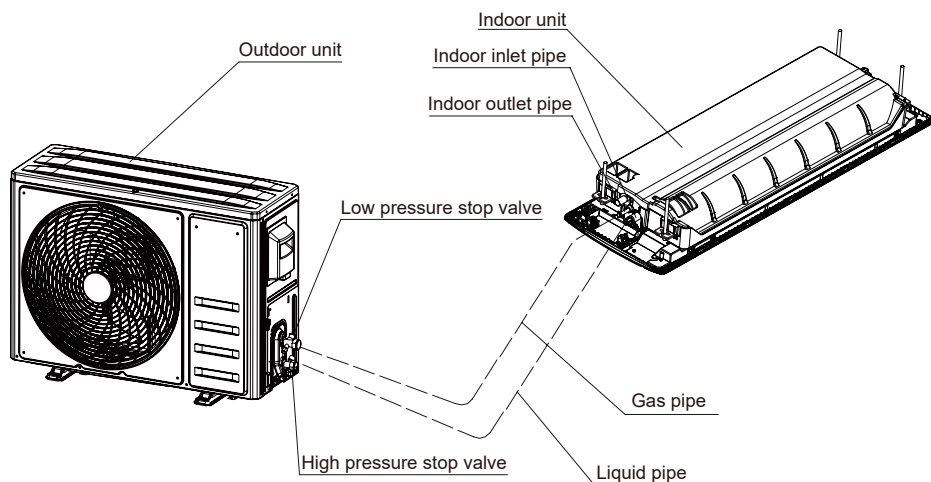


Pipe size	Newton meter (N x m)	Pound-force foot (lbf-ft)	Kilogram-force meter (kgf-m)
1/4" (φ6.35)	15-20	11.1-14.8	1.5-2.0
3/8" (φ9.52)	31-35	22.9-25.8	3.2-3.6
1/2" (φ12.7)	45-50	33.2-36.9	4.6-5.1
5/8" (φ15.88)	60-65	44.3-48.0	6.1-6.6

NOTE

This table is only for reference. The installation shall meet the requirements of local laws and regulations.

- The following figure only shows the assembly relationship of the indoor unit, outdoor unit and refrigerant pipes.
- Please refer to the following figures to install.



NOTE

- The throttle subassembly has been installed in the outdoor unit.
- Use two spanners to connect the pipe with indoor/outdoor pipes to avoid the copper pipe cracking.
- Please pay attention to the connection orientation when connecting.

Joints shall be tested with detection equipment with a capability of 5g/year of refrigerant or better, with the equipment in standstill and under operation or under a pressure of at least these standstill or operation conditions.

Electric Wiring

CAUTION

- Be sure to install current leakage protection switch.
 - Otherwise, electric shock may occur.
 - The appliance must be positioned so that the plug is accessible.
 - The appliance shall be installed in accordance with national wiring regulations.
1. Power cord is to be selected according to national regulations.
 2. Outdoor unit power cord should be selected and connected according to the outdoor unit installation manual.
 3. Wiring should be away from high temperature components, or the insulation layer of the wires may melt down.
 4. Use wire clamp to fix the wires and terminal block after connection.
 5. Control wire should be wrapped together with heat insulated refrigerant pipes.
 6. Connect the indoor unit to power only after the refrigerant has been vacuumed.
 7. Don't connect the power wire to the signal wire connection end.

Panel wiring

Connect the swing motor terminal block according to cassette indoor unit wiring diagram.

Terminal board diagram

Please refer to cassette indoor unit wiring for the wiring.

1. Pipe Binding

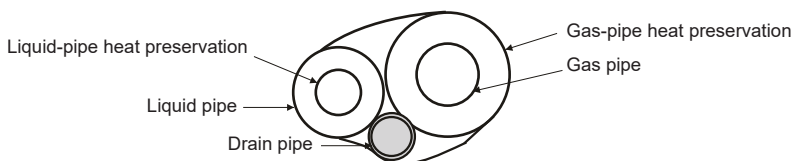
Once the connecting wires have been properly connected, bind the connecting tubing, connecting wire and drain pipe by binding tapes.

After binding treatment, the cross section is shown in the figure below:



Drain pipe must not be flattened during binding treatment.

Drain pipe outlet should be led to a place that can avoid affecting the environment.



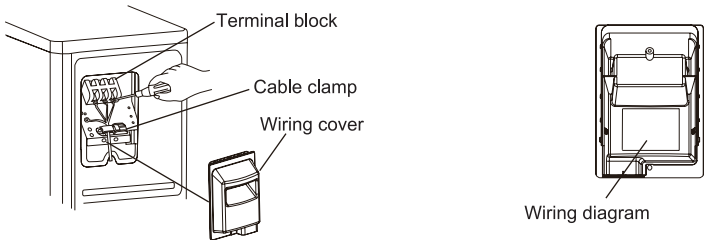
- Open or close incorrectly.
- Objects or water into the AC.
- Fuse or electric leakage protector breaks trips repeatedly.

Install wiring

1. Use a Phillips screwdriver to unscrew wiring cover, grasp and press it down gently to take it down.
2. Unscrew the cable clamp and take it down.
3. According to the wiring diagram pasted inside the wiring cover, connect the connecting wires to the corresponding terminals, and ensure all connections are firm and secure.
4. Reinstall the cable clamp and wiring cover.

NOTE

When connecting the wires of indoor and outdoor units, the power should be cut off.



Dedicated distribution device and wire for air conditioner

Wiring material ampacities	mm ²
3	0.5
6	0.75
10	1
16	1.5
25	2.5
32	4
40	6

NOTE

This table is only for reference. The installation shall meet the requirements of local laws and regulations. The suitable temperature for selecting wire gauge is 25°C±5°C.

Power supply				
Model	Voltage	MCA	Breaker	Recommended power cord specifications
12K	208-230V	11	15	1.5mm ²
18K	208-230V	12	20	1.5mm ²
24K	208-230V	17	25	2.5mm ²

Air purging

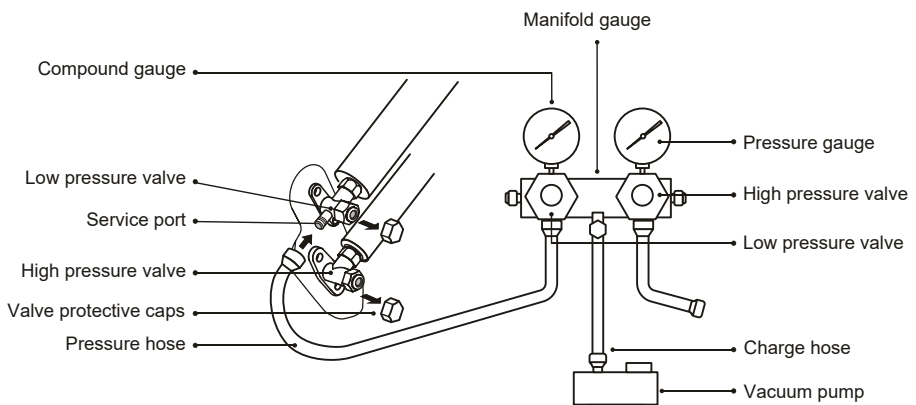
Use a vacuum pump to vacuum from the gas-side refrigerant charging port of the outdoor unit.

If air and moisture remain inside the refrigeration system, they may have the following adverse effects:

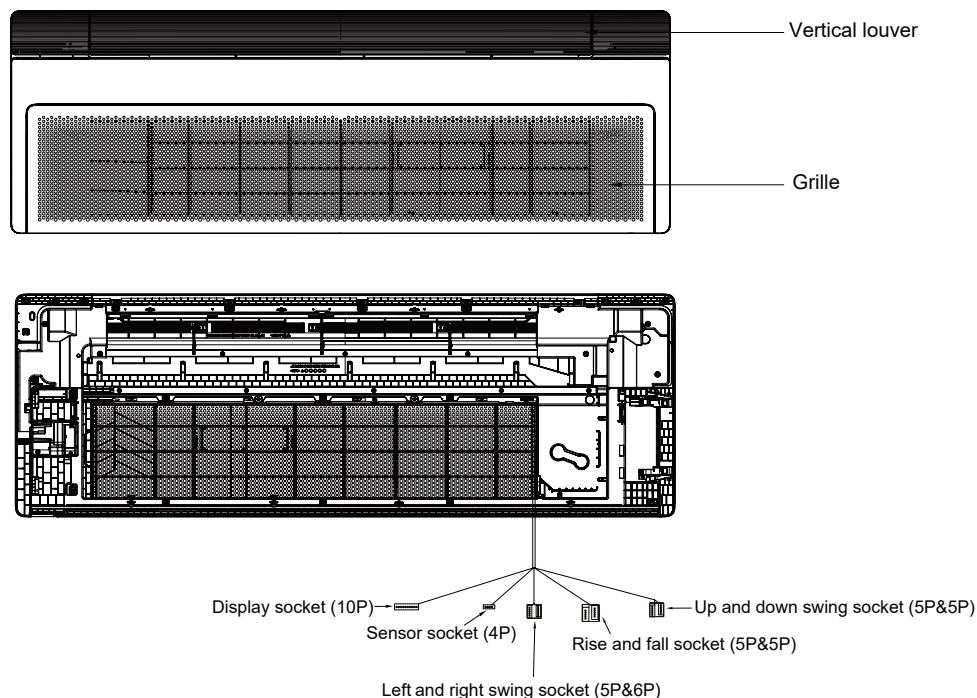
- A rise in pressure inside the refrigeration system.
- A decrease in cooling effect.
- Moisture freezing and blocking the refrigeration system.
- Rusting of certain system components.
- Don't use the outdoor unit's refrigerant to perform vacuuming (A certain volume of refrigerant was added to the outdoor unit at the factory).
- When a vacuum pump is used, each low-pressure valve must be operated as follows.

Please refer to the operation manual for the usage of the manifold gauge.

1. Use a spanner to take down the protective caps from the service port, low pressure valve and high pressure valve of the outdoor unit.
 2. Connect the pressure hose of manifold gauge to the service port on the outdoor unit low pressure valve.
 3. Connect the charge hose from the manifold gauge to the vacuum pump.
 4. Open the low pressure valve of the manifold gauge and close the high pressure valve.
 5. Turn on the vacuum pump to vacuum the system.
 6. The vacuum time should not be less than 15 minutes, or make sure the compound gauge indicates -0.1 MPa (-76 cmHg).
 7. Close the low pressure valve of the manifold gauge and turn off the vacuum.
 8. Wait for 5 minutes, then check that there has been no change in system pressure.
 9. Open the high pressure valve counterclockwise for $1/4$ turn with hexagonal wrench to allow a small amount of refrigerant to enter the system, and close the high pressure valve after 5 seconds and quickly remove the pressure hose.
 10. Check all indoor and outdoor joints for leakage with soapy water or leak detector.
 11. Fully open the low pressure valve and high pressure valve of the outdoor unit with hexagonal wrench.
 12. Reinstall the protective caps of the service port, low pressure valve and high pressure valve of the outdoor unit.
 13. Reinstall the valve cover.
- The following figure only shows the assembly relationship of the indoor unit, outdoor unit, and refrigerant pipes.
 - Please refer to the following figures to install.



Panel Installation



NOTE

The infrared controller wire should follow the display wire in the panel after installing the panel.

Step 1: Pass the infrared controller wire through the wire outlet and enter the control box along with the display wire.

Step 2: Route the wire along the edge of the PCB panel and fasten it with a clamp.

Step 3: Pass it through the other wire outlet of the control box, route it along the power wire, and pass it through the hole of the indoor unit.

 CAUTION

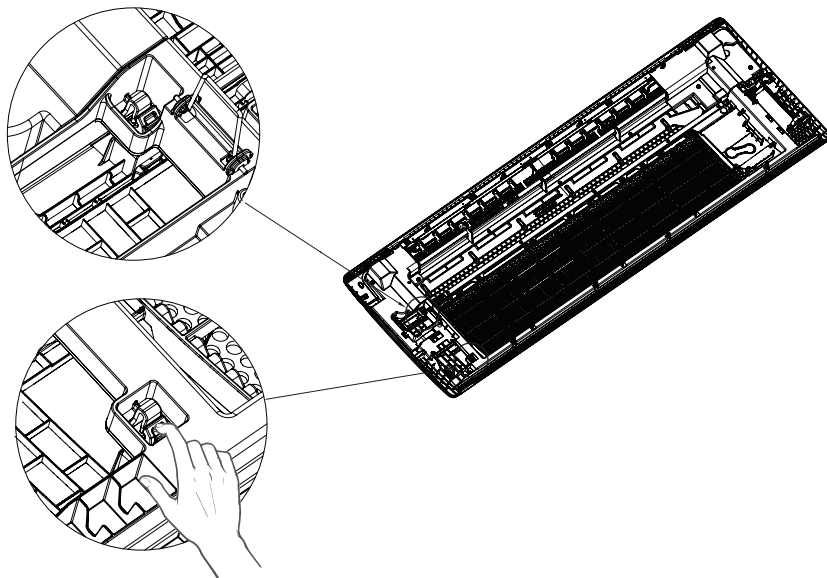
DO NOT place the panel facedown on the floor, against a wall, or on uneven surfaces.

Step 1: Remove the front grille.

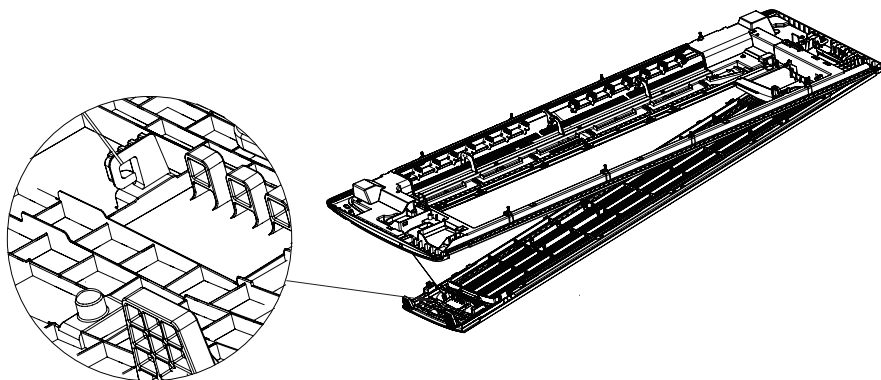
1. Push both of the tabs towards the middle simultaneously to unlock the hook on the grille.

Version A: Without lifting mechanism.

1) Grip the edge of the grille and pull it down, while supporting the grille with your other hand.

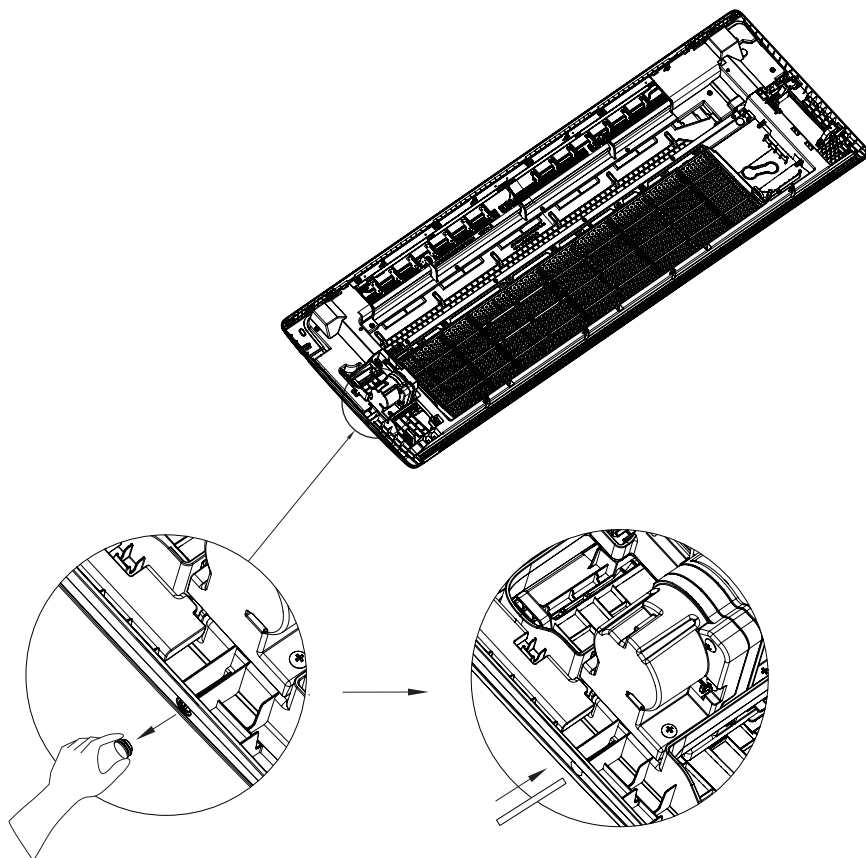


2) Remove the string from the hook on the grille.



Version B: With lifting mechanism.

- Remove the rubber plug on the side to reveal the side hole.
- Use a long tool to push into the side hole (while supporting the air intake grille with your hand).



Step 2: Remove the air inlet grille and the garnish.

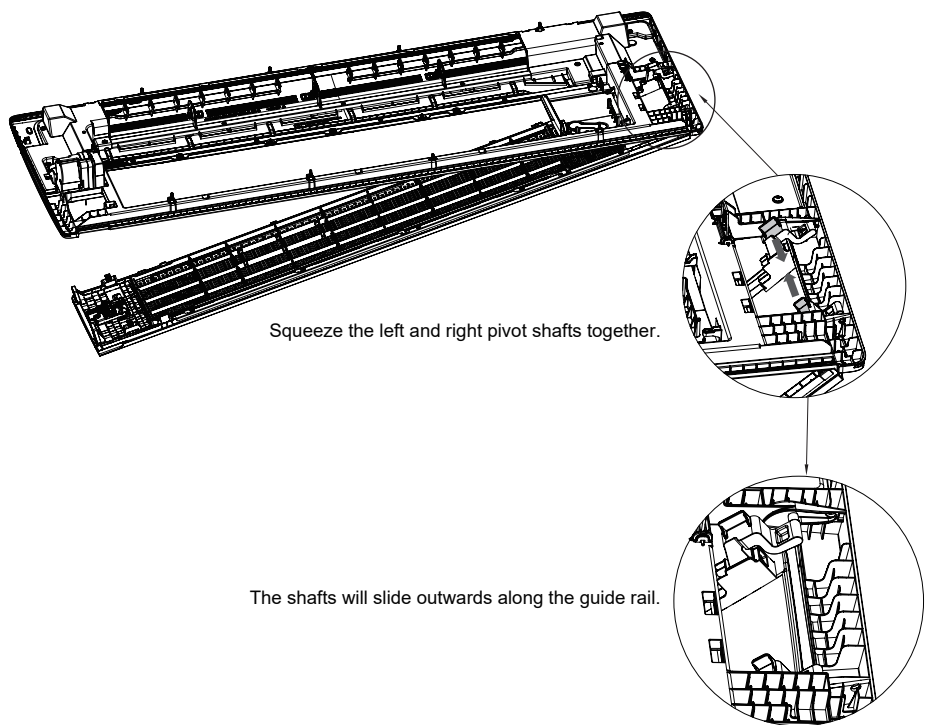


Fig. 1

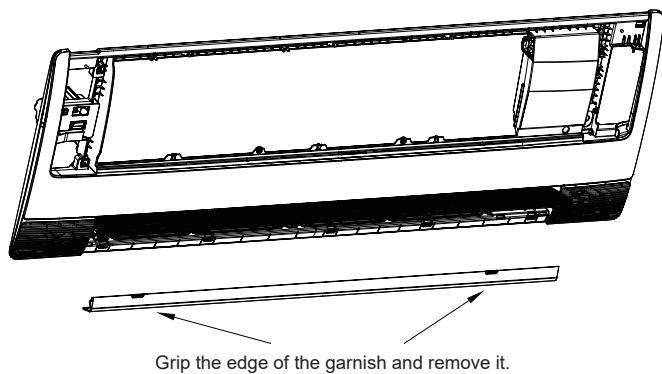


Fig. 2

Step 3: Remove the electronic control box cover from the indoor unit.

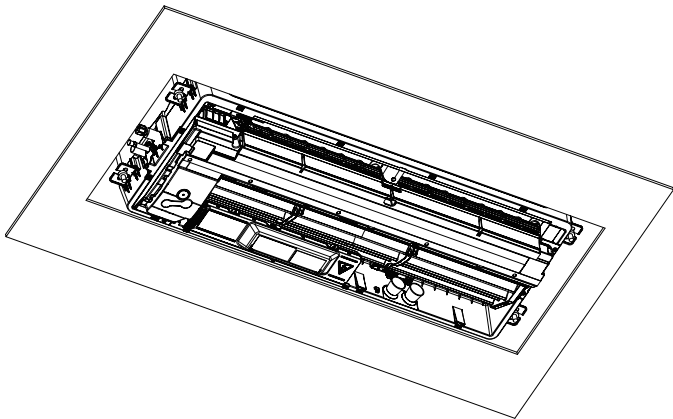


Fig. 1

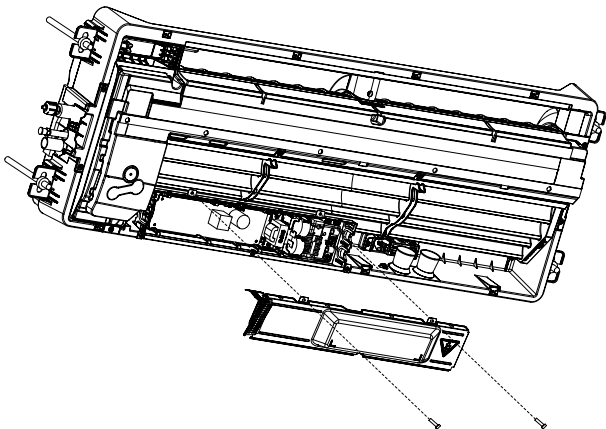


Fig. 2

Step 4: Hang the panel on the indoor unit.

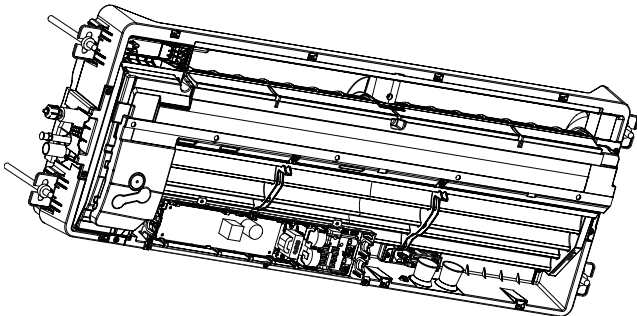


Fig. 1

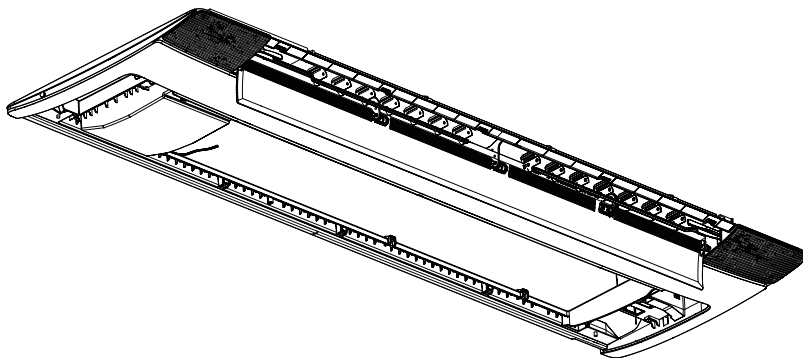


Fig. 2

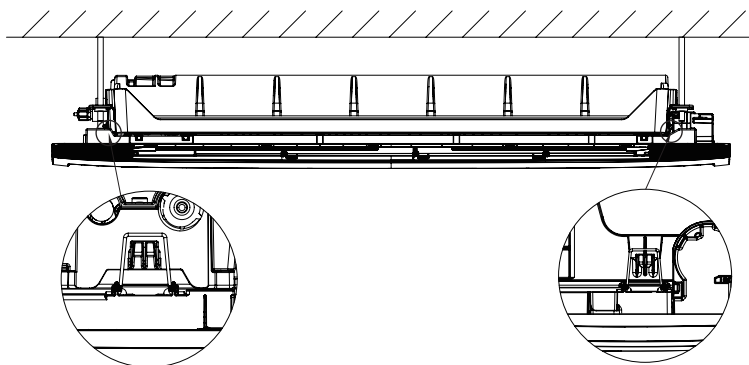
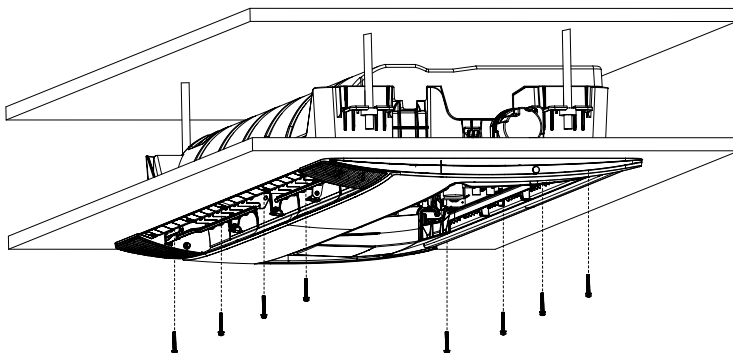
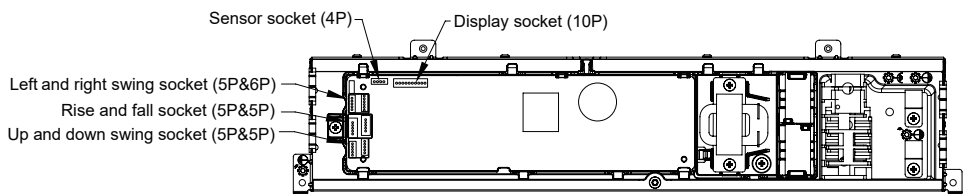


Fig. 3

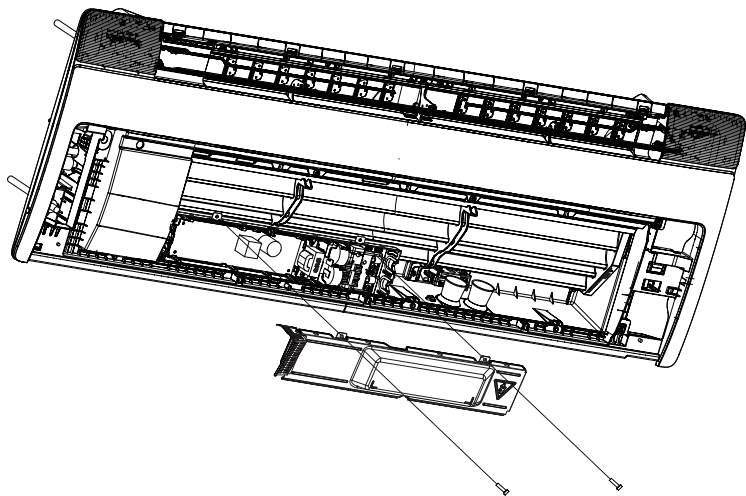
Step 5: Use M4*30 screws to secure the panel to the indoor unit.



Step 6: Insert the panel wire into the corresponding position inside the electrical control cover.

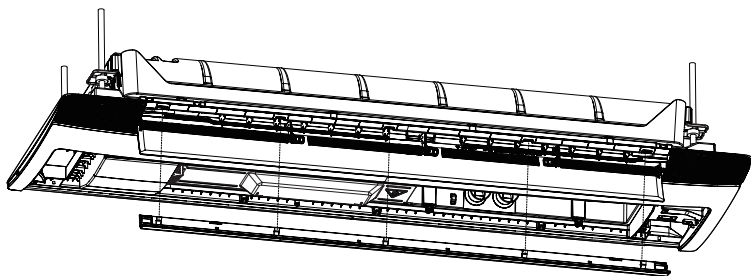


Step 7: Install the electronic control cover.



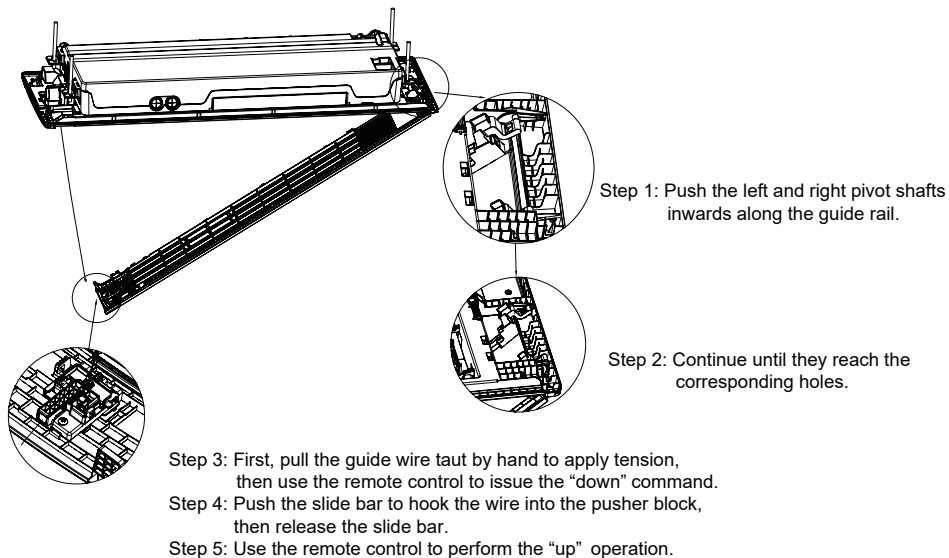
Step 8: Install the garnish.

Align the clips and press firmly until they snap into place.

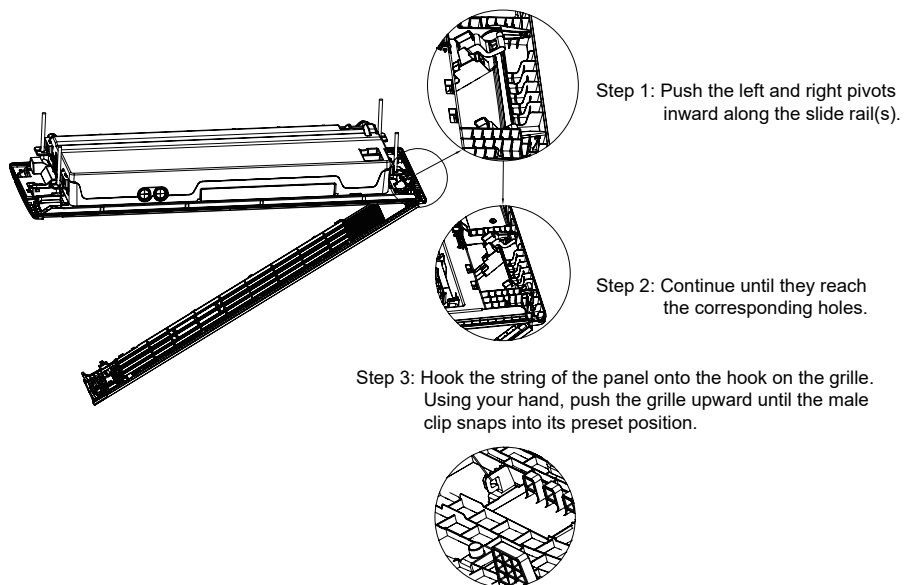


Step 9: Install the front grille.

Version A: With lifting mechanism.

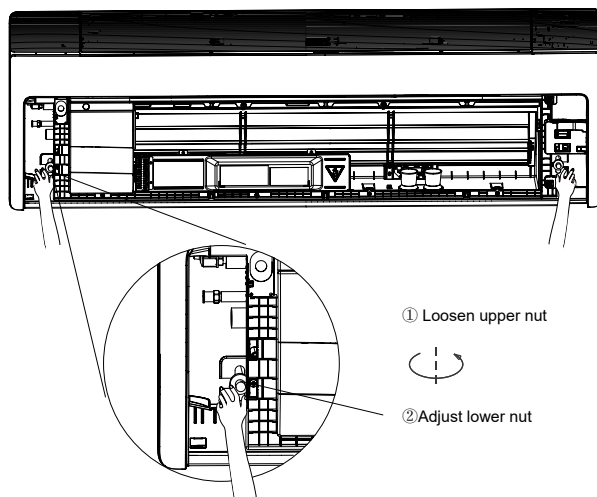
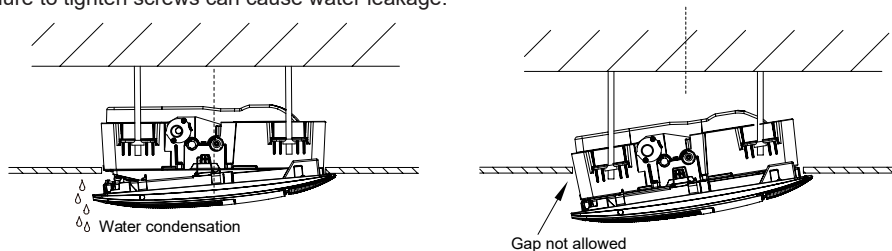


Version B: Without lifting mechanism.



CAUTION

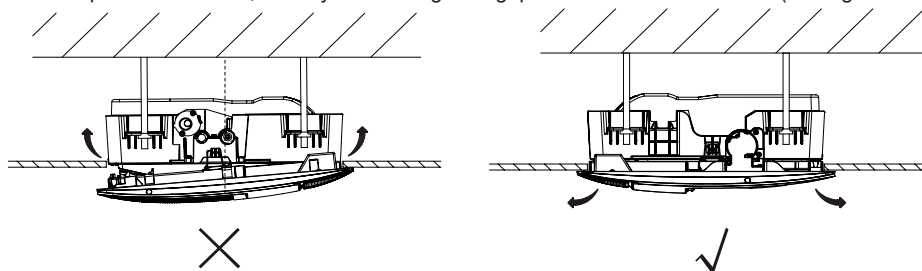
Failure to tighten screws can cause water leakage.



CAUTION

If the unit is not hung correctly and a gap exists, the unit's height must be adjusted to ensure proper function. The unit's height can be adjusted by loosening the upper nut, and adjusting the lower nut.

After installing the decoration panel, ensure that there is no space between the unit body and decoration panel. Otherwise, air may leak through the gap and cause condensation. (See figure below)



Before changing the filter or cleaning, turn off the unit and disconnect its power.

Test Run

Before testing

1. Check if piping, drainage and external wiring have been finished correctly.
2. Check if the power supply complies with requirements; if there is refrigerant leakage; if all the wires and cables are correctly connected and well fixed.

Function test

1. After checking, energize your appliance and press the buttons on the control panel to see if the buttons function.
2. Check if the LCD screen displays normally.



NOTE

1. Please read these operating and installation instructions carefully.
2. Do not let air in or refrigerant out during installation or reinstallation of the appliance.
3. Test run the air conditioner after finishing installation and keep the record.
4. Type of fuse for controller of indoor unit is 50CT/524, rated specification is T5A, 250VAC. Fuse for the whole unit is not supplied by the manufacturer, so the installer must employ a suitable fuse or other over-current protective device for the power supply circuit according to the maximum power input as required.
5. The air conditioner operates safely when ambient static pressure is 0.8~1.05 standard atmosphere pressure.

Checks Before Operation



CAUTION

1. Check that the wiring is not broken off or disconnected.
2. Check that the air filter is installed (some air-conditioners have no air filters).
3. Check that the outdoor unit air outlet or inlet is not blocked.

Before you clean the air conditioner, be sure to disconnect the power supply plug.

4. Check the access control and dry contact interfaces on the electrical control board; They cannot be connected simultaneously. Only one should be connected at a time.

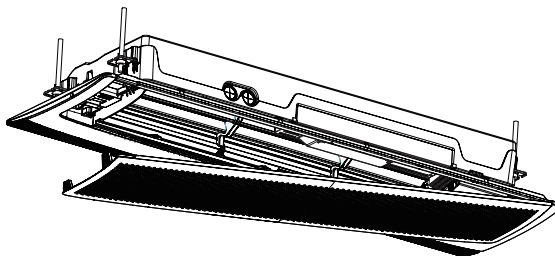
Clean the air filter

- The air filter can prevent the dust or other particulate from going inside. In case of blockage of the filter, the working efficiency of the air conditioner may greatly decrease. Therefore, the filter must be cleaned once every two weeks during long time usage.
- If the air conditioner is positioned in a dusty place, the cleaning frequency of the air filter must be increased.
- If the filter is too dirty to be cleaned, please replace the filter with a new one (replaceable air filter is an optional fitting).
- Clean the air filter (Vacuum cleaner or pure water may be used to clean the air filter. If the dust accumulation is too heavy, please use soft brush and mild detergent to clean it and allow it to dry in a cool place).

Step 1:

Without lifting mechanism

- Removing the Air Filter
 1. Grip the left edge of the air intake grille and apply pressure to unlatch it.
 2. Slowly lower the grille to an angle of approximately 60°, supporting its weight with your hand throughout the process.
- Installing the Air Filter
 1. While supporting the grille with your hand, gently push it upward until the clips snap securely into place.
 2. Ensure the grille is flush with the surface of the main panel.



With lifting mechanism

- Removing the Air Filter

Use the remote control to lower the air intake grille to its maximum angle.

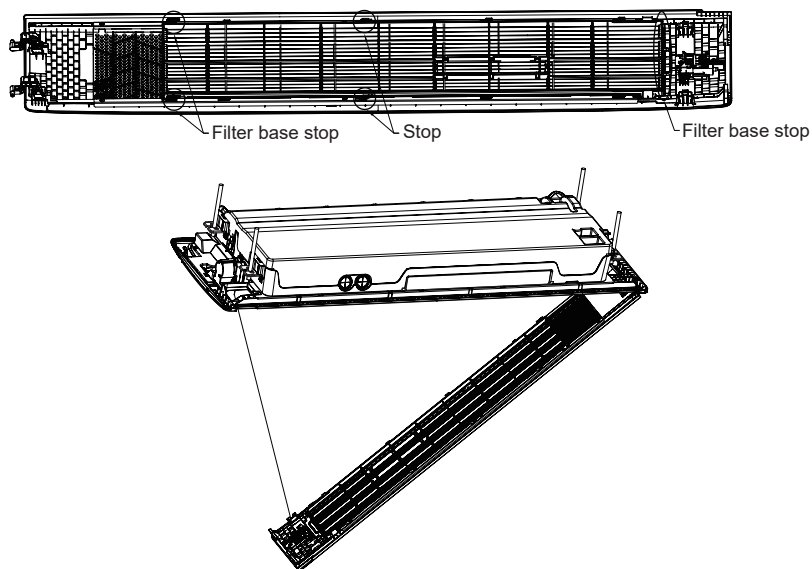
- Installing the Air Filter

Use the remote control to lower the air intake grille to its maximum angle.

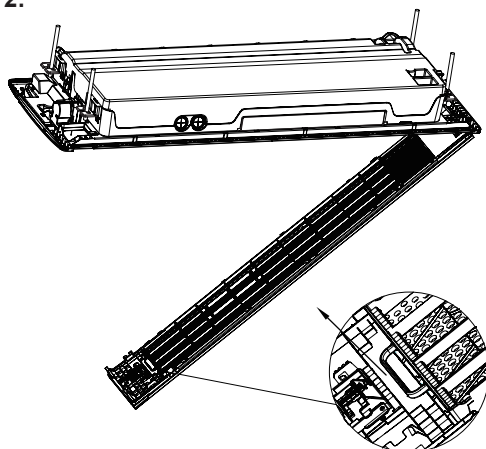
Filter installation guide

1. Align the filter bottom and center with the stop and slide it in.

2. Snap the top into the groove.

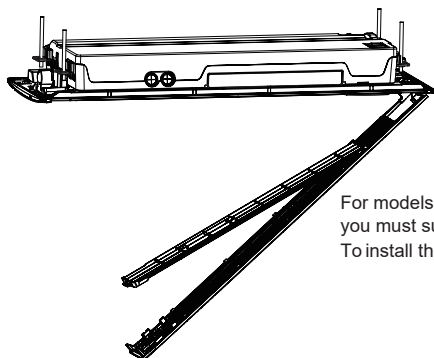


Step 2:



Removal direction:
Press down until the clip clicks into place.

Step 3:



For models without the auto-lift feature,
you must support this edge with your hand.
To install the air filter, follow the removal steps in reverse order.

Adjusting Air Flow Direction

While the unit is in operation, you can adjust the air flow louver to change the flow direction and equalize the room temperature evenly.

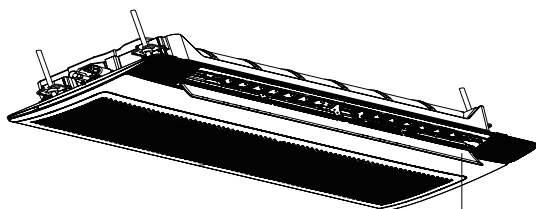
Thus you can enjoy it more comfortably.

1. Set the desired air flow direction.

Push the SWING button to adjust the louver to the desired position and push this button again to maintain the louver at this position.

2. Adjust the air flow direction automatically.

Push the SWING button, the louver will swing automatically.



Adjust up and down

While this function is set, the swing fan of indoor unit runs; Otherwise, the swing fan doesn't run.

When the air conditioner isn't in operation (including when TIMER ON is set), the SWING button will be disabled.

Maintenance



WARNING

Disconnect the power supply before cleaning the air conditioner.

Cleaning the indoor unit and remote controller.



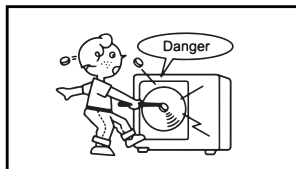
CAUTION

1. Use a dry cloth to wipe the indoor unit and remote controller.
2. A cloth dampened with cold water may be used on the indoor unit if it is very dirty.
3. Never use a damp cloth on the remote controller.
4. Do not use a chemically-treated duster for wiping or leave such material on the unit for long, because it may damage or fade the surface of the unit.
5. Do not use benzene, thinner, polishing powder, or similar solvents for cleaning. These may cause the plastic surface to crack or deform.

If you do not plan to use the unit for at least 1 month:

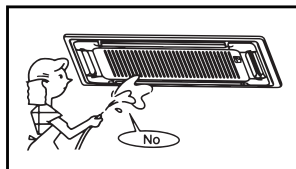
1. Operate the fan for about half a day to dry the inside of the unit.
2. Stop the air conditioner and disconnect power.
3. Remove the batteries from the remote controller.

Important Safety Information



⚠ CAUTION

Do not attempt to install this unit by yourself. This unit requires installation by qualified persons.

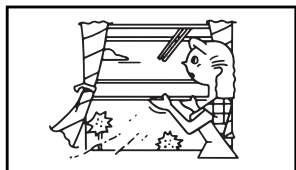


⚠ DANGER

Do not attempt to service the unit yourself. This unit has no user serviceable components. Opening or removing the cover will expose you to dangerous voltage. Turning off the power supply will not prevent potential electric shock.

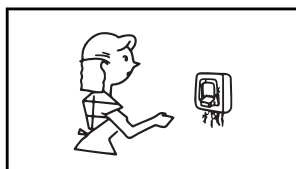
⚠ DANGER

Never put hands or objects into the air outlet of indoor or outdoor units. These units are installed with a fan running at high speed. Touching the moving fan will cause serious injury.



⚠ DANGER

To avoid the risk of serious electrical shock, never sprinkle or spill water or liquids on the unit.



⚠ WARNING

Ventilate the room regularly while the air conditioner is in use, especially if there is also a gas appliance in use in this room. Failure to follow these directions may result in a loss of oxygen in the room.

⚠ WARNING

To prevent electric shock, be sure to turn off the power before cleaning or maintenance.

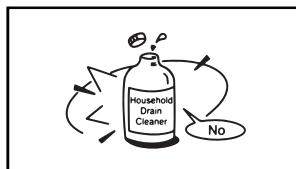


⚠ WARNING

Do not use liquid cleaners or aerosol cleaners. Use a soft and dry cloth for cleaning the unit. To avoid electric shock, never attempt to clean the units by sprinkling water.

⚠ CAUTION

Do not use caustic household drain cleaners in the unit. Drain cleaners can quickly destroy the unit components (drain pan and heat exchanger coil, etc.).



⚠ NOTE

For proper performance, operate the unit in temperature and humidity ranges indicated in this owner's manual. If the unit is operated beyond these conditions, it may cause malfunctions of the unit or dew dripping from the unit.

Voice Function Operation Guide (Optional)

Voice function activation:

1. After power on, the product must be activated via the wake word before using voice commands (refer to the voice function operation guide for details).
2. If the air conditioner does not receive a command after being awakened for more than 25 seconds, it will exit the wake-up state and need to be awakened again for the next use.
3. The system features "Multi-Round Dialogue" interaction, meaning a single wake-up allows for continuous recognition.

The user says the offline command word, and the air conditioner will immediately start the next round of recognition after executing it.

Voice function switch:

- Press and hold the "MODE" and "↘" buttons on the remote control for 3 seconds to activate the voice switch.
- Control the switch through the "Voice Manager" in the app.



NOTE

1. The voice function is available on selected models only. Please refer to the actual product.
2. If there is noise or human voices around the air conditioner, and there are sounds similar to wake-up words or command words, there may be a "false wake-up" or "false recognition", which is a normal phenomenon and not an air conditioning malfunction.
3. In environments with high noise levels, the probability of speech recognition will be reduced.
4. The voice module supports OTA upgrades. When the APP prompts for software updates, please update the software in a timely manner to enjoy the latest features and resources.

Disposal Guideline

This appliance contains refrigerant and other potentially hazardous materials. When disposing of this appliance, the law requires special collection and treatment. DO NOT dispose of this product as household waste or unsorted municipal waste.

When disposing of this appliance, you have the following options:

- Dispose of the appliance at designated municipal electronic waste collection facility.
- When buying a new appliance, the retailer will take back the old appliance free of charge.
- The manufacturer will also take back the old appliance free of charge.
- Sell the appliance to certified scrap metal dealers.
- Disposing of this appliance in the forest or other natural surroundings endangers your health and is bad for the environment. Hazardous substances may leak into the ground water and enter the food chain.



AIR CONDITIONER REMOTE CONTROLLER ILLUSTRATION

Thank you very much for purchasing our air conditioner. Please read this operation manual carefully before using your air conditioner. Make sure to save this manual for future reference.

CONTENTS

Handling The Remote Control	1
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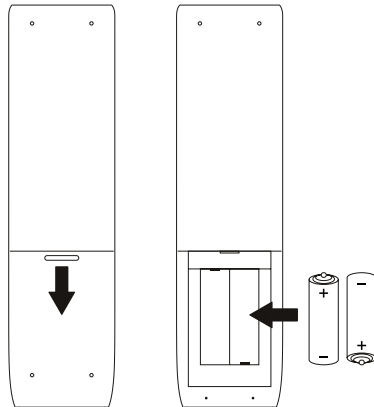
Handling The Remote Control

Inserting and Replacing Batteries

Your air conditioning unit may come with two batteries (depending on the model). Put the batteries in the remote control before use.

Steps:

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 the symbols inside the battery compartment.
3. Slide the battery cover back into place.



The image is for reference only; please refer to the actual product.

Battery Performance Tips

For optimal product performance:

- Use 2 LR03 AAA (1.5V) batteries.
- Do not use rechargeable batteries.
- Replace the old batteries with new ones of the same type when the display is no longer legible.
- 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.

Tips For Using Remote Control

Recommendations for locating and using the remote control holder (if present).

The remote control should be kept in a wall-mounted holder.

Notes For Using The Remote Control

1. Direct the remote control toward the Air conditioner.
2. Check that there are no objects between the remote control and the Signal receptor in the indoor unit.
3. Never leave the remote control exposed to the rays of the sun.
4. Keep the remote control at a distance of at least 1m from the television or other electrical appliances.

Specifications

Model	85T
Rated Voltage	3V
Signal Receiving Range	8m
Environment	-5°C~60°C (23°F~140°F)

Buttons & Functions



The display and some functions of the remote control may vary according to the model.

Remote control buttons

NO.	Button	Function
1		To turn on/off the air conditioner.
2	TURBO	To activate/deactivate the TURBO function.
3	MUTE	To switch-on/off the MUTE function.
4	MODE	To select the mode of operation (AUTO, COOL, DRY, FAN, HEAT).
5	ECO	To activate/deactivate the ECO function.
		Long press to activate/deactivate the 8°C heating function (depending on models).
6	TIMER	To set the time for TIMER on/off.
7	^	To increase temperature, or Timer setting hours.
8	∨	To decrease temperature, or Timer setting hours.
9		To stop or start horizontal flaps louver movement or set the desired up/down air flow direction.
10		To stop or start vertical deflectors louver movement or set the desired left/right air flow direction.
11	FAN	To select the fan speed of auto/mute/low/mid-low/mid/mid-high/high/turbo.
12	DISPLAY	To switch-on/off the LED display.
13	SLEEP	To switch-on/off the function SLEEP.
14	ANTI-DIRECT WIND	To activate/deactivate the ANTI-DIRECT WIND function.
15	I FEEL	To switch-on/off the I FEEL function.
16	CLEAN	To activate/deactivate the SELF-CLEAN function (depending on models).
17	HEALTH	To activate/deactivate the HEALTH function (depending on models).
18	GEN	In the powered-on state, long press the MUTE button for 3 seconds to switch on/off the GENERATOR mode.

NO.	Button	Function
19	CHILD-LOCK	To activate the function of Child Lock, press MODE and TIMER buttons together for more than 3 seconds.
20	RESET Wi-Fi	To reset Wi-Fi, press MODE + $\wedge$ (TEMP UP) buttons together for more than 3 seconds (depending on models).
21	VOICE	To activate/deactivate the VOICE function, press MODE + $\vee$ (TEMP DN) buttons together for more than 3 seconds (depending on models).
22	GENTLE WIND	To activate the function of GENTLE WIND, press FAN and MUTE buttons together for more than 3 seconds (depending on models).
23	FILTER LOWER/ LIFT	In the powered-off state, long press the CLEAN + HEALTH buttons together for 3 seconds to switch on/off the FILTER LOWER/LIFT function.
24	BUZZER	To activate the function of buzzer, press FAN and $\wedge$ buttons together for more than 3 seconds.
22	°C/°F	Long press the TURBO or FAN buttons to switch between °C/°F display.

 The display and some functions of the remote control may vary according to the model.

 The shape and position of buttons and indicators may vary according to the model, but their functions are the same.

 The unit confirms the correct reception of each button press with a beep.

 Remind: Some functions may not be available on your air conditioner. If you press such a button, you can hear a beep, but the unit will not respond.

Remote Screen Icon

Remote control DISPLAY, meaning of symbols on the liquid crystal display

NO.	Symbols	Meaning
1		BATTERY indicator
2		AUTO mode indicator
3		COOLING mode indicator
4		DRY mode indicator
5		FAN mode indicator
6		HEATING mode indicator
7		ECO indicator
8		TIMER indicator
9		TEMPERATURE/CLOCK indicator
10		Fan speed: Auto/low/mid-low/mid/mid-high/high
11		MUTE indicator
12		TURBO indicator
13		Up-down auto swing
14		Left-right auto swing
15		SLEEP mode indicator
16		HEALTH indicator
17		I FEEL indicator
18		8°C heating function indicator
19		Signal indicator
20		GENTLE WIND indicator
21		CHILD LOCK indicator
22		DISPLAY LIGHT indicator
23		GENERATOR mode indicator
24		CLEAN function indicator
25		ANTI-MILDEW indicator

⚠ The display and some functions of the remote control may vary according to the model.

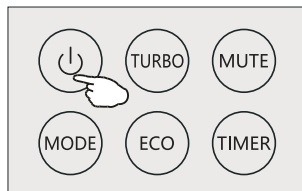
⚠ The shape and position of buttons and indicators may vary according to the model, but their functions are the same.

⚠ The unit confirms the correct reception of each button press with a beep.

Operating Instructions

Turn ON / Turn OFF the air conditioner

Press the button  to turn on or turn off the air conditioner.



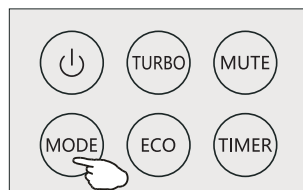
COOLING MODE

COOL 

The cooling function allows the air conditioner to cool the room and reduce air humidity at the same time.

To activate the cooling function (COOL), press the **MODE** button until the symbol  appears on the display.

Use the  or  button to set a temperature lower than the current room temperature.



HEATING MODE

HEAT 

The heating function allows the air conditioner to heat the room.

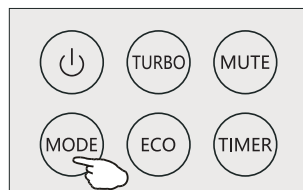
To activate the heating function (HEAT), press the **MODE** button until the symbol  appears on the display.

Use the  or  button to set a temperature higher than the current room temperature.

 In HEATING operation, the appliance can activate a defrost cycle automatically, which is essential to clean the frost on the condenser so as to recover its heat exchange function. This procedure usually lasts for 2-10 minutes. During defrosting, the indoor unit fan stop operation. After defrosting, it returns to HEATING mode automatically.

(For North American market)

If necessary, you can press ECO button 10 times within 8 seconds under heating mode to start the forced defrosting. It will defrost the outdoor ice much faster.



FAN MODE (Not FAN button)

FAN 

Fan mode, air ventilation only.

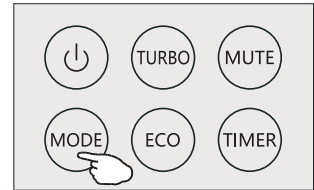
To set the FAN mode, Press **MODE** until  appears on the display.

DRY MODE

DRY 

This function reduces the humidity of the air to make the room more comfortable.

To set the DRY mode , Press **MODE** until  appears on the display. An automatic function of presetting is activated.



AUTO MODE

AUTO 

Automatic mode.

To set the AUTO mode, press **MODE** until  appears on the display.

In AUTO mode the unit will operate according to the room temperature automatically.

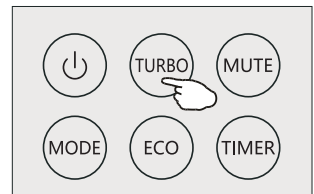
TURBO function

TURBO 

To activate turbo function, press the **TURBO** button, and  will appear on the display.

Press again to cancel this function.

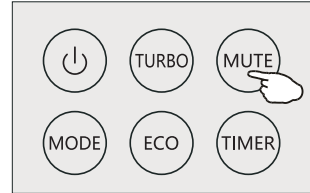
In COOL/HEAT mode, when you select TURBO feature, the appliance will turn to quick COOL or quick HEAT mode, and operate the highest fan speed to blow strong airflow.



MUTE function

MUTE 

1. Press **MUTE** button to activate this function, and  will appear on the remote display. Do it again to deactivate this function.
2. When the MUTE function runs, the remote controller will display the auto fan speed, and the indoor unit will operate at lowest fan speed to help experience a quiet feeling.
3. When press **FAN** / **TURBO** button, the MUTE function will be cancelled. MUTE function can not be activated under dry mode.



ECO MODE (Optional)

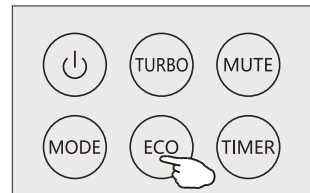


In this mode the appliance auto-matically sets the operation to save energy.

While powered on, pressing the **ECO** button in COOLING or HEATING mode at any temperature can enable or disable the ECO function. The  icon will appear on the display, and the unit will enter ECO mode, with an adjustable temperature range of 16-31°C.

- In COOLING mode, if ECO is activated and the temperature is below 26°C, it will be adjusted to 26°C;
- In HEATING mode, if ECO is activated and the temperature is above 25°C, it will be adjusted to 25°C;

Once ECO is enabled, the adjustable temperature range is 16-31°C.



NOTE:

The ECO function is available in both COOLING and HEATING modes.

TIMER function —TIMER ON

TIMER  To automatically switch on the appliance.

When the unit is switched off, you can set the TIMER ON.

To set the time of automatic switch-on as below:

1. Press **TIMER** button first time to set the switch-on,  and  will appear on the remote display and flashes.
2. Press  or  to button to set desired Timer-on time. Each time you press the button, the time increases/decreases by half an hour between 0 and 10 hours and by one between 10 and 24 hours.
3. Press **TIMER** button second time to confirm.
4. After Timer-on setting, set the needed mode (Cool/Heat /Auto/Fan/Dry), by press the **MODE** button. And set the needed fan speed, by press **FAN** button. And press  or  to set the needed operation temperature.

To cancel this function:

1. Press the **TIMER** button twice.
2. Press the **TIMER** button once and if no time is set within 5 seconds.

TIMER function —TIMER OFF

TIMER  To automatically switch off the appliance.

When the unit is switched on, you can set the TIMER OFF.

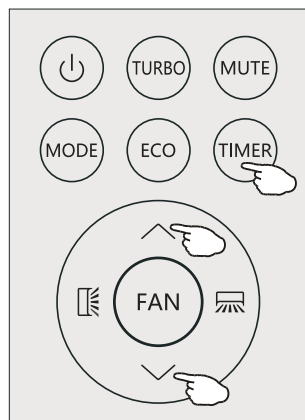
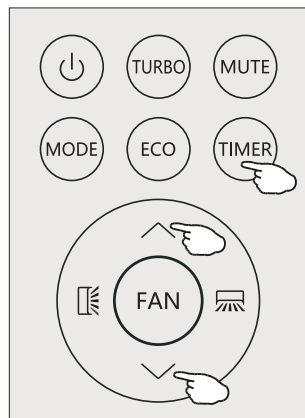
To set the time of automatic switch-off, as below:

1. Confirm the appliance is ON.
2. Press the **TIMER** button at first time to set the switch-off. Press  or  to set the needed timer.
3. Press **TIMER** button at the second time to confirm.

To cancel this function:

1. Press the **TIMER** button twice.
2. Press the **TIMER** button once and if no time is set within 5 seconds.

NOTE: All programming should be operated within 5 seconds, otherwise the setting will be cancelled.

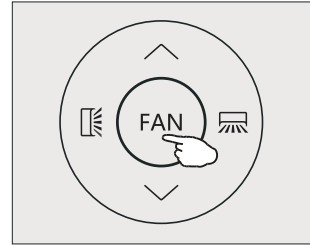
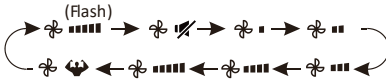


FAN SPEED function (FAN button)

FAN

Change the operating fan speed.

Press **FAN** button to set the running fan speed, it can be set to AUTO/MUTE/LOW/MID-LOW/MID/MID-HIGH/HIGH/TURBO speed circularly.

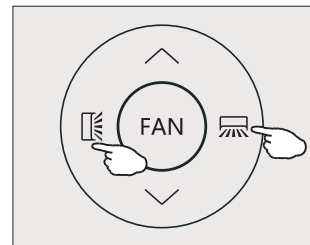
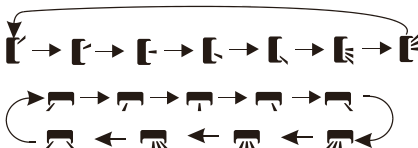


SWING function



1. Press the button SWING to activate the louver,

- 1) Press  to activate the horizontal flaps to swing from up to down, the  will appear on the remote display.
- 2) Press  to activate the vertical deflectors to swing from left to right, the  will appear on the remote display.
- 3) Do it again to stop the swing movement at the current angle.
2. If the vertical deflectors are positioned manually which placed under the flaps, they allow to move the air flow direct to rightward or leftward.
3. Long press  or  over 3 seconds to select more angles of the airflow direction. (Only for non-hotel model)



⚠ Never position "Flaps" manually, the delicate mechanism might get seriously damaged!

⚠ Never put fingers, sticks or other objects into the air inlet or outlet vents. Such accidental contact with live parts might cause unforeseeable damage or injury.

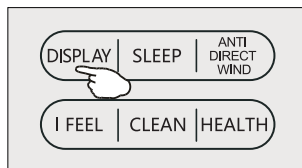
⚠ The display and some functions of the remote control may vary according to the model.

LED display light ON/OFF



Switch ON/OFF the LED display on panel.

Press **DISPLAY** button to switch off the LED display on the panel. Press again to switch on the LED display.



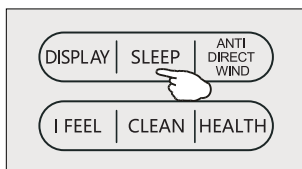
SLEEP MODE



Pre-setting automatic operating program.

Press **SLEEP** button to activate the SLEEP function, and  appears on the display.
Press again to cancel this function.

After 10 hours running in sleep mode, the air conditioner will change to the previously set mode.



ANTI-DIRECT WIND (Optional)



To activate the ANTI-DIRECT WIND function, press the **ANTI-DIRECT WIND** button until the symbol  appears on the display.

Anti-direct wind is only effective in COOLING, DRY, and FAN modes when the device is powered on. It is not effective in HEATING and AUTO modes.

When the Anti-direct wind feature is enabled, press the  button will disable the anti-direct blow feature.



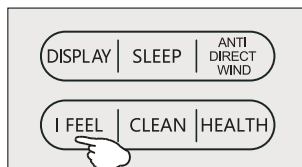
I FEEL function (Optional)



Press **I FEEL** button to activate the function, the  will appear on the remote display.

Do it again to deactivate this function.

This function enables the remote control to measure the temperature at its current location, and send this signal to the air conditioner to optimize the temperature around you and ensure the comfort.



SELF-CLEAN function (Optional)



Only optional for some heating pump inverter appliance.

To activate this function, turn off the indoor unit at first, then press **CLEAN** button then you will hear a beep, "AC" will appear on the indoor LED, and  will appear on the remote display.

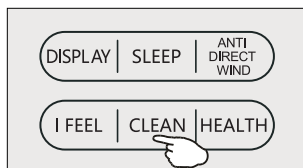
1. This function helps carry away the accumulated dirt, bacteria, etc from the indoor evaporator.
2. This function will run about 30 minutes, and it will return to the pre-setting mode. You can press  button to cancel this function during the process. You will hear 2 beeps when it's finished or cancelled.

⚠ It's normal if there is some noise during this function process, as plastic materials expand with heat and contract with cold.

⚠ We suggest operating this function at the following ambient conditions to avoid certain safety protection features.

Indoor unit	Temp < 30°C (86°F)
Outdoor unit	5°C (41°F) < Temp < 30°C (86°F)

⚠ It's suggested to utilize this function every 3 months.



HEALTH function (Optional)



Press **HEALTH** button to activate / exit the health functions such as ion generator/ plasma etc.

NOTE: Health function is not available when the air conditioner is off.



GENERATOR MODE (Optional)

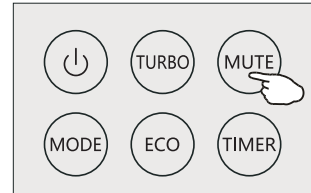


The air conditioner works in generator mode, it is helpful for the unstable net power area.

Through GEN mode, you can choose the current level of the unit. There are six levels (L1, L2, L3, L4, L5, L6) in this mode, and the current increases in turn.

1. Turn on the indoor unit at first, and long press **MUTE** button 3 seconds to activate, and do it again to deactivate this function.
2. Under this function, short press **MUTE** button to select the General type L6 - L5 - L4 - L3 - L2 - L1 - OF.
3. Select OF and wait 2 seconds to exit it.

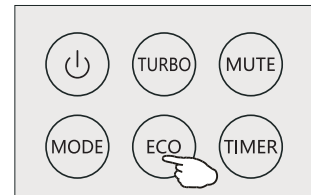
For areas with unstable power supply, users can independently select the operation gear when using generator power. Gear L1 represents the operation with the minimum current, and gear L6 represents the operation with the maximum current.



8°C heating function (Optional)

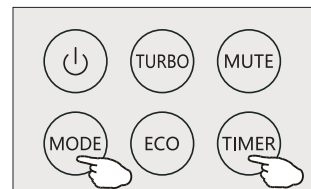
8H

1. Long press **ECO** button over 3 seconds to activate this function, and 8°C (46°F) will appear on the remote display.
2. This function will auto start the heating mode when the room temperature is lower than 8°C (46°F), and it will stop heat if the temperature reaches 9-11°C (48-52°F).
3. Long press **ECO** button over 3 seconds again, the appliance will cancel this function automatically.



Child-Lock function

1. Long press **MODE** and **TIMER** button together to activate this function, and do it again to deactivate this function.
2. Under this function, no single button will activate.



GENTLE WIND (Optional)



1. Turn on the indoor unit, and change to COOL mode, then long press **FAN** and **MUTE** button together for 3 seconds to activate this function,  will appear on the display.

Do it again to deactivate it.

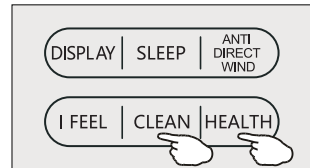
2. This function will automatically close the vertical flaps, and give you the comfortable gentle wind feeling.



FILTER LOWER/LIFT MODE (Optional)

When the unit is powered off, press and hold **CLEAN** + **HEALTH** buttons and for 3 seconds to enter FILTER LOWER/LIFT mode.

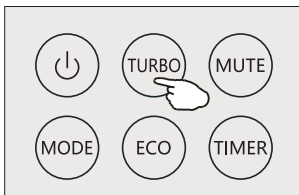
Use the $\wedge$ and $\vee$ buttons to set the filter lift or lower, press the **FAN** button to pause.



°C / °F Switch

For some models of the remote control, you can program the temperature display between °C and °F.

1. Press and hold the **TURBO** or **FAN** button for more than 5 seconds to enter the change mode.
2. Continue pressing and holding the **TURBO** or **FAN** button until it switches to °C or °F.
3. Then, release the button and wait for 5 seconds; the function will then be selected.



or



Battery Disposal

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.



These instructions are for reference only. The actual functions or display may differ from this manual. Please refer to the product itself as the final authority.

