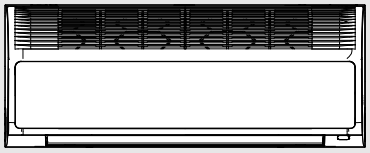
MODELS

Indoor Hi-Wall

HINRMVRF15	HINRMVRF45
HINRMVRF22	HINRMVRF56
HINRMVRF28	HINRMVRF71
HINRMVRF36	HINRMVRF80

REFRIGERANT
R410A



VRF Multi Split Type Air Conditioner - Indoor Unit

Operation Installation Manual

Rinnai

IMPORTANT

Read this manual and SAFETY MANUAL (if any) carefully before installing or operating your new air conditioning unit. Make sure to save this manual for future reference.

Please check the applicable models, technical data and manufacturer information from the "Operation Manual" in the packaging of the outdoor unit.

This appliance must be installed in accordance with:

- Manufacturer's Installation Instructions
- Current AS/NZS 3000, AS/NZS 5149, AS/NZS 5141
- Local Regulations and Municipal Building Codes including local OH&S requirements

This appliance must be installed, maintained and removed only by an Authorised Person.

For continued safety of this appliance it must be installed and maintained in accordance with the manufacturer's instructions.

The design and specifications are subject to change without prior notice for product improvement. Consult with the Dealer or manufacturer for details.

Any updates to the manual will be uploaded to the service website, please check for the latest version.

IMPORTANT

PLEASE REFER TO ANY OPERATING MANUALS AND USER OPERATING GUIDES ACCOMPANYING ANCILLARY EQUIPMENT (WHERE FITTED)

TABLE OF CONTENTS

WARNINGS AND IMPORTANT INFORMATION

IMPORTANT

READ ALL INSTRUCTIONS BEFORE USING THE APPLIANCE

Always comply with the following precautions to avoid dangerous situations and to ensure optimum performance.

Failure to carefully read and follow all instructions in this manual can result in equipment malfunction, property damage, personal injury and/or death.

WARNINGS: WHEN IGNORED, CAN RESULT IN SERIOUS INJURY OR DEATH.

CAUTIONS: WHEN IGNORED, CAN RESULT IN MINOR INJURY OR PRODUCT DAMAGE.

WARNING

REGULATORY / INSTALLATION

This appliance shall be installed in accordance with:

- **Manufacturer's Installation Instructions.**
- **Current AS/NZS 3000, AS/NZS 5141, AS/NZS 5149, AS/NZS 3500 National Plumbing & Drainage, HB276 - A Guide to good practice for energy efficient installation.**
- **Local Regulations and Municipal Building Codes including local OH&S requirements.**
- **This appliance must be installed, maintained and removed by an Authorised Person.**

For continued safety of this appliance it must be installed and maintained in accordance with the manufacturers instructions.

This appliance uses R410A refrigerant.

This appliance is heavy, use 2 people or mechanical lifting device. Improper lifting may result in serious injury.

Take care when opening or unpacking this appliance. Failure to do so may result in serious injury or product failure.

DO NOT modify the electrical wiring of this appliance. If the control power wiring is damaged or deteriorated then it must be replaced by an authorised person. Failure to do so may result in electric shock, fire, serious injury or product failure.

DO NOT install the air conditioner on an unstable or non level surface or where there may be a danger of it falling. It may result in death, serious injury, or product failure.

DO NOT install the outdoor unit where noise may cause nuisance.

DO NOT install the outdoor unit where it will be exposed to sea wind (salt spray) as this will reduce durability.

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

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

IMPORTANT

MANDATORY INSPECTION PRIOR TO INSTALLATION

Immediately report any damage or discrepancies to the Supplier of the appliance. This appliance was inspected and tested at the time of manufacture and packaging, and released for transportation without known damage. Upon receipt, inspect the exterior for evidence of rough handling in shipment. Ensure that the appliance is labelled correctly for the gas and electrical supply, and/or other services it is intended to be connected to.

For safety and warranty purposes, appliances that may be damaged or incorrect MUST NOT be installed or operated under any circumstances. Installation of damaged or incorrect appliances may contravene local government regulations. Rinnai disclaims any liability or responsibility whatsoever in relation to the installation or operation of damaged or incorrect appliances.

WARNING

WARNINGS FOR PRODUCT USE

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

WARNING

ELECTRICAL WARNINGS

- **If any electrical cables are damaged, they MUST be replaced by a suitably qualified and trained service person in order to avoid any potential hazards.**
- **The product MUST be properly earthed at the time of installation, or electrical shock may occur.**
- **For all electrical work, follow all local and national wiring standards, regulations, and the Installation Manual. Connect cables tightly, and clamp them securely to prevent external forces from damaging the terminal. Improper electrical connections can overheat and cause fire, and may also cause shock. All electrical connections must be made according to the Electrical Connection Diagram located on the panels of the indoor and outdoor units.**
- **Appropriately specified and sized cables MUST be used, ensure all connections are tight. Clamp all cables sufficiently so that they cannot be pulled loose or disconnected.**
- **All wiring MUST be properly arranged to ensure that the control board cover can close properly. If the control board cover is not closed properly, it can lead to corrosion and cause the connection points on the terminal to heat up, catch fire, or cause electrical shock.**
- **A correctly specified and sized circuit breaker MUST be installed in accordance with all local and national wiring standards. A dedicated, independent electrical circuit is required for the system.**
- **DO NOT share the electrical outlet with other appliances. Improper or insufficient power supply can cause fire or electrical shock.**
- **If connecting power to fixed wiring, an all-pole disconnection device which has at least 3mm clearances in all poles, and have a leakage current that may exceed 10mA, the residual current device (RCD) having a rated residual operating current not exceeding 30mA, and disconnection must be incorporated in the fixed wiring in accordance with wiring rules.**

CAUTION

Turn off the air conditioner and switch mains power off if you are not going to use it for a long time.

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

SAFETY PRECAUTIONS

PRODUCT INSTALLATION WARNINGS

WARNING

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

FLUORINATED GASES

NOTE

- **This air-conditioning unit contains fluorinated greenhouse gases. For specific information on the type of gas and the amount, please refer to the relevant label on the unit itself or the "Owner's Manual" in the packaging of the outdoor unit.**
- **Installation, service, maintenance and repair of this unit must be performed by a certified technician.**
- **Product uninstallation and recycling must be performed by a certified technician.**
- **For equipment that contains fluorinated greenhouse gases in quantities of 5 tonnes of CO_2 equivalent or more, but less than 50 tonnes of CO_2 equivalent, if the system has a leak- detection system installed, it must be checked for leaks at least every 24 months.**
- **When the unit is checked for leaks, proper record-keeping of all checks is strongly recommended**

FUSE SPECIFICATIONS

NOTE

The air conditioner's circuit board (PCB) is designed with a fuse to provide overcurrent protection. The specifications of the fuse are printed on the circuit board, such as:

- **T5A/250VAC, T10A/250VAC, etc.**
- **T20A/250VAC(<=7kW units), T30A/250VAC(>7kW units)**

NOTE: For the units with R32, only the blast-proof ceramic fuse can be used.

A NOTE ON ILLUSTRATIONS

NOTE

The illustrations used in this manual are for explanatory purposes only and the shape of your indoor unit may vary slightly from that which is shown in this manual.

REFRIGERANT

WARNING

This appliance uses R410A and must be handled by a refrigeration mechanic with an appropriate Australian refrigerant handling licence.

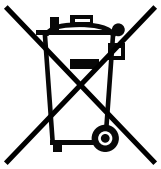
Read the OPERATING INSTRUCTIONS carefully before operation.

Service personnel are required to carefully read the OPERATING INSTRUCTIONS and INSTALLATION MANUAL before operation.

Further information is available in the OPERATING INSTRUCTIONS, INSTALLATION MANUAL, and the like.

Certain levels of refrigerant require minimum room sizes. Please ensure that these minimum room sizes are adhered to for standard installations (up to 15m pipe length). If larger refrigerant charges than standard are used then please consult AS/NZS 60335.2.40 to determine the safe minimum floor area for the installation.

DISPOSAL GUIDELINES



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.

CLEANING AND MAINTENANCE WARNINGS

WARNING

- **Turn off the device and switch the mains power off before cleaning. Failure to do so can cause electric shock**
- **DO NOT clean the air conditioner with excessive amounts of water.**
- **DO NOT clean the air conditioner with combustible cleaning agents. Combustible cleaning agents can cause fire or deformation**

OPERATION PRECAUTIONS

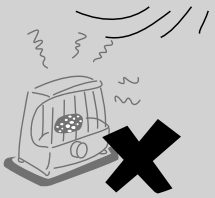
WARNING

If the unit will be not used for a long time, disconnect the main power switch. Otherwise, an accident may occur.

The installation height of the air conditioner shall be at least 2.5m above the ground to avoid the following risks:

1. Touching of moving or live parts, such as fans, motors, or louvers, by a non professional. Running parts may cause harm to you or transmission assemblies may become damaged.

2. Getting too close to the air conditioner may reduce the level of comfort.



Do not let children play with the air conditioner. Otherwise, an accident may occur.

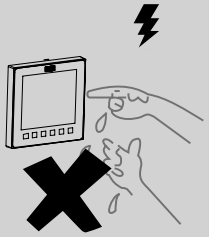
Do not expose the indoor units or controller to moisture or water as this may cause short circuiting or fire.

Do not place any appliance that uses an open flame in the direct air supply of the air conditioner as it could interfere with the combustion of the appliance.

Do not use or store flammable gases or liquids such as natural gas, hair spray, paint or gasoline near the air conditioner. Otherwise, a fire may occur.

To avoid causing harm, do not place animals or plants directly in front of the air conditioner's air supply.

In the event of abnormal conditions such as abnormal noise, smell, smoke, temperature rise, and electric leakage, please cut off the power immediately, and then contact your local dealer or air conditioner customer service center. Do not repair the air conditioner by yourself.



Do not place flammable sprayers near the air conditioner or spray it directly at the air conditioner. Otherwise, a fire may occur.

Do not place a container of water on the air conditioner. If immersed in water, the air conditioner's electrical insulation will weaken, resulting in electrical shock.

After long-term use, confirm whether the installation platform has become worn. If it is worn, the unit could fall, causing injury.

Do not operate the switch with wet hands, as this may result in electric shock.

When servicing the air conditioner, be sure to turn off the air conditioner and cut off the power supply. Otherwise, the high-speed operation of the internal fan will cause injury.

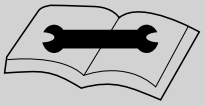
Do not use fuses like iron or copper wire other than those with the specified capacity. Otherwise, a malfunction or fire may occur. The power supply must use the special circuit of the air conditioner at the rated voltage.

Do not place valuables under the air conditioner. Air conditioner condensation problems may damage the valuables.

When the air conditioner needs to be moved and re-installed, please entrust the local dealer or a professional technician to operate it.

CAUTION

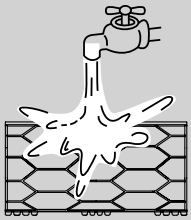
To use the unit normally, please follow the "Operation" section in this manual. Otherwise, the internal protection may be triggered, the unit may begin to drip, or the unit's cooling and heating effects may be impacted.



The room temperature should be set properly, especially when there are elderly, children, or patients in the room.

Lightning or the starting and stopping of large electrical equipment in nearby factories may cause misoperation of the air conditioner. Please turn off the main power switch for a few seconds, and then restart the air conditioner.

To avoid accidental resetting of the thermal circuit breaker, the air conditioner cannot be powered by an external switching device such as a timer or connected to a circuit that is turned on and off by a common component timer.



Check whether the air filter is installed properly. Confirm that the inlet and outlet ports of the indoor unit/outdoor unit are not blocked.

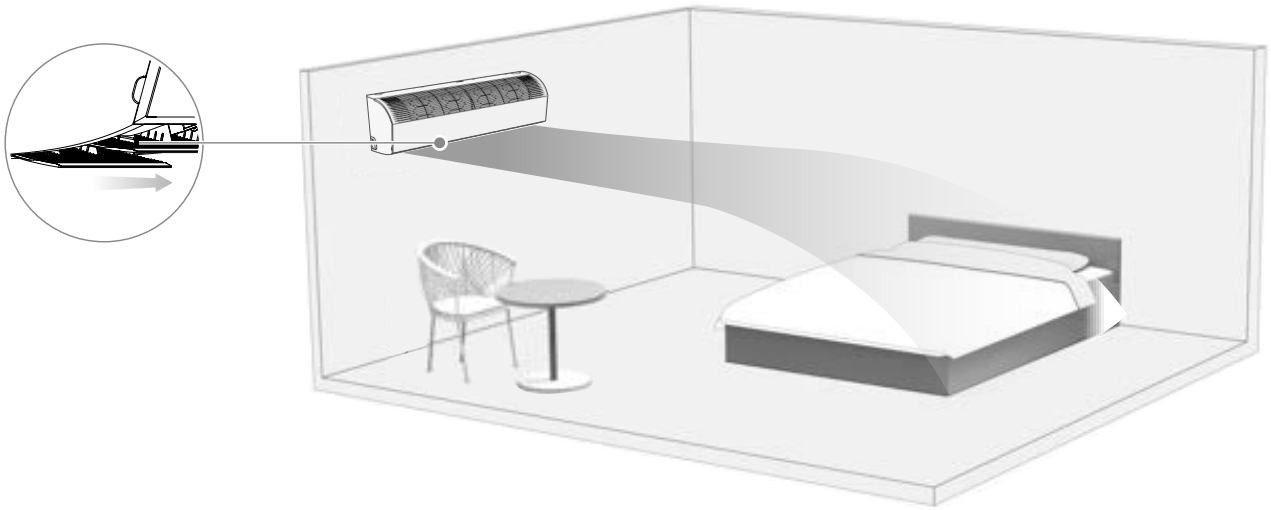
If the air conditioner will not be used for a long time, please clean the air filter before you start the air conditioner. Otherwise, dust and mold on the filter could contaminate the air or produce an unpleasant odor. For more details, please refer to the section "Maintenance and Service".

OPTIMUM OPERATION

As cold air sinks and hot air rises, adjust the direction of louvers respectively in cooling and heating modes to ensure good cooling and heating effects.

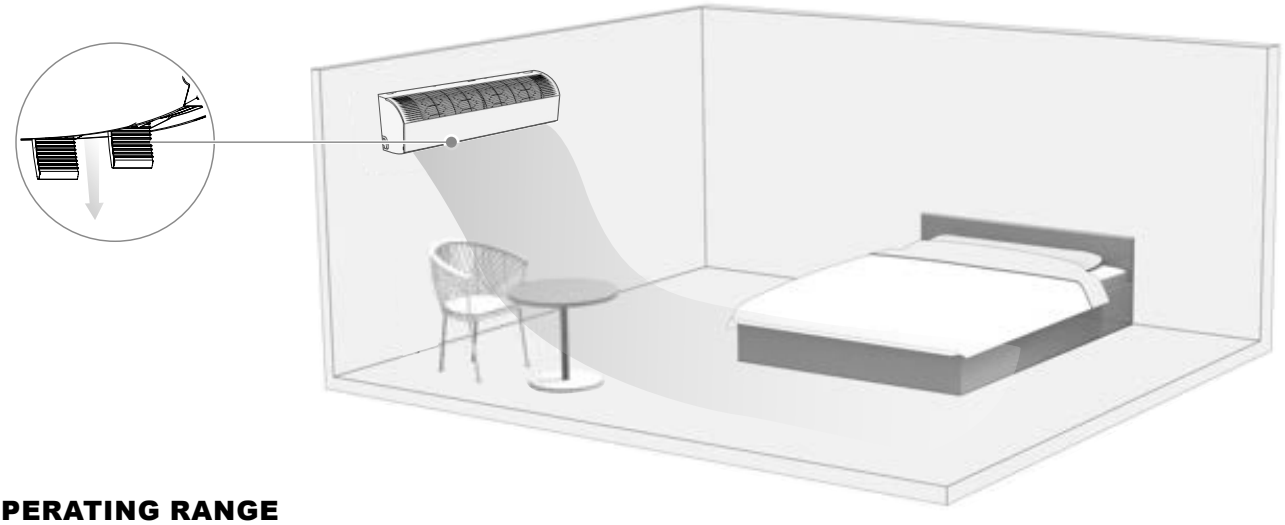
In Cooling Mode

To improve the cooling effect in the room, adjust the air outlet louvers horizontally.



In Heating Mode

To improve the heating effect in the lower parts of a room, adjust the louvers of air outlet grille downwards.



OPERATING RANGE

Use the unit in the following temperature and humidity ranges for safe and effective operation.

Cooling	Indoor temperature	16~32°C
	Indoor humidity	≤80% (When the humidity exceeds 80%, long-time operation of the indoor unit may cause dew condensation on the surface of the indoor unit, generate mist-like cold air from the air outlet or water dripping out of the unit.)
Heating	Indoor temperature	15~30°C

NOTE **If it exceeds this operating range, safety devices may be put in action and the unit may not operate.**

Symptoms That Are Not Faults

During operation, the following phenomena are normal and do not require maintenance.

Protection	When the power switch is on, the air conditioner starts 3-5 minutes after it is turned ON again in case it was turned off just before.
Anti-cold air protection (Heat pump type)	In heating mode (including heating in automatic mode), when the indoor heat exchanger does not reach a certain temperature, the indoor fan temporarily shuts off, or runs in Low mode until the heat exchanger heats up to prevent the blowing of cold air.

Defrosting (Heat pump type)	When the outdoor temperature is low and the humidity is high, the outdoor unit's heat exchanger may become frosted, which may reduce the heating capacity of the air conditioner. If this occurs, the air conditioner will stop heating, enter automatic defrosting mode, and return to heating mode after defrosting has been completed. During the defrosting, the outdoor fan stops running and the indoor fan runs using the anti-cold air protection function. The defrosting operation time varies depending on the outdoor temperature and the degree of frosting. It generally takes 2 to 10 minutes. During the defrosting process, the outdoor unit may emit steam due to the rapid defrosting, which is normal.
Anti-condensation	When the indoor unit detects high humidity, the air conditioner will adjust the louver angle and the fan speed to prevent condensation and avoid dripping.

The Following Symptoms Are Not System Malfunctions

The following phenomena are normal during operation of the air conditioner. They can be solved according to the instructions below or do not need to be solved.

- The indoor unit emits white mist
  1. When humidity is high during cooling mode, white mist may appear due to the humidity and the temperature difference between the air inlet and outlet.
  2. When the air conditioner is switched to heating mode after defrosting, the indoor unit discharges the moisture generated from defrosting as steam.
- The indoor unit blows dust

  When filter is very dirty, dust may enter the indoor unit and be blown out.
- The indoor unit emits odor

  The indoor unit absorbs the odors of rooms, furniture or cigarettes, etc., and disperses the odors during operation. It is advised to have the air conditioner cleaned and maintained regularly by professional technicians.
- Water drips

  When the indoor humidity is high, condensation and water may drip out of the unit.
- "Self-cleaning" sound of icing

  During self-cleaning, there may be a slight clicking sound from the melting thin ice about 10 minutes.
- Noise of Indoor unit
  1. A continuous low "hissing" sound is heard when the system is in "Auto", "Cool", "Dry", and "Heat" modes. This is the sound of refrigerant gas flowing through both indoor and outdoor units.
  2. A "hissing" sound is heard at the start or immediately after stopping operation or defrost operation. This is the noise of refrigerant caused by flow change.
  3. A "zeen" sound is heard immediately after the power supply is turned on. The electronic expansion valve inside an indoor unit starts working and makes the noise. it will reduce in about one minute.

4. A continuous low "shah" sound is heard when the system is in cooling mode, dry mode or at a stop. When the drain pump (optional accessories) is in operation, this noise is heard.
5. A "pishi-pishi" squeaking sound is heard when the system stops after heating operation. Expansion and contraction of plastic parts caused by temperature change make this noise.
6. A low "sah", "choro-choro" sound is heard while the indoor unit is stopped. When another indoor unit is in operation, this noise is heard. In order to prevent oil and refrigerant from remaining in the system, a small amount of refrigerant is kept flowing.

- Switching from cooling/heating (not available for cooling only units) mode to fan only mode

  When the indoor unit reaches the set temperature, the air conditioner controller automatically stops the compressor operation and switches to the fan only mode. When the room temperature rises (in cooling mode) or falls (in heating mode) to a certain level, the compressor is restarted and cooling or heating operation is resumed.

- In winter, the outdoor temperature is low, and heating effects may be decreased

1. In heating mode, the air-conditioning system absorbs heat from the outdoor air and releases heat to the indoor side. When the outdoor temperature is low, less heat is released.
2. When the outdoor temperature is extremely low, the heating capacity of the air conditioner decreases, and other heating equipment may need to be added.

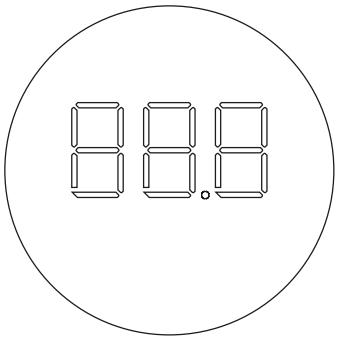
- No heating or cooling permissions

  For the same air conditioning system, if outdoor unit operates in changeover mode, the wired controller of VIP indoor unit allows users to select modes supported by the indoor units, while the wired controllers of other indoor units displays the icon of " No permission ". In this case, other indoor units can only operate in the same mode as the VIP indoor unit.

DISPLAY PANEL

Display functions:

1. In Standby mode, the main interface displays “---”.
2. When starting up in Cooling or Heating mode, the main interface displays the set temperature. In Fan mode, the main interface displays the indoor temperature. In Dry mode, the main interface displays the set temperature, and when the humidity* is set, the set humidity value is displayed on the wired controller.
3. The light display on the main interface can be turned on or off through the light button on the remote controller.
4. When the system fails or runs in a special mode, the main interface displays the error code or the operating status codes. For details, see the section “Error Codes and definitions”.



Humidity* : The humidity control functions is customised.

NOTE **Some display functions are available only for certain indoor unit and outdoor unit models, wired controllers, and display panels. For more information, consult your dealer or technical support.**

WIFI

WIFI SETUP

1. Open iLetComfort app on your phone

Complete the network setup operation on the mobile APP: Open the mobile APP, select the "Add Device" function, and follow the instructions on the APP page to complete the network setup operation.

iLetComfort

2. Add your appliance

Enter the add device interface and click "commercial AC", then go to the model selection interface and click to select the model "V8 PANEL-WiFi KIT".

3. Connect to the network

Follow the instructions in the app to set up the WiFi connection.If the network connection fails, please refer to the App tips for operation.

4. WiFi function connection

Activate air conditioner network setup mode: Point the air conditioner remote control at the display panel of the air conditioner, and click the "display" button about once every 1.5 s for 4 times (the buzzer will beep 4 times) to activate the air conditioner network setup mode. When the air conditioner enters the network setup mode successfully, the digital display on the display panel will flash for 5 s, and the buzzer will sound 1 long beep followed by 2 short beeps to indicate that the network setup function has been activated successfully.

5. Complete WiFi connection

After the device completes the WiFi connection, you can use your mobile phone to set functions such as mode, temperature, fan speed, swing, sleep, mute, etc., and view information such as error codes.

6. Device WiFi reset

Point the air conditioner remote control at the display panel of the device, and click the "Sleep" button 3 times and the "Display" button 3 times.

NOTE **The currently supported APP software is iLetComfort.**

INSTALLATION

SAFETY PRECAUTIONS

PRODUCT INSTALLATION WARNINGS

WARNING

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

FLUORINATED GASES

NOTE

- **This air-conditioning unit contains fluorinated greenhouse gases. For specific information on the type of gas and the amount, please refer to the relevant label on the unit itself or the "Owner's Manual" in the packaging of the outdoor unit.**
- **Installation, service, maintenance and repair of this unit must be performed by a certified technician.**
- **Product uninstallation and recycling must be performed by a certified technician.**
- **For equipment that contains fluorinated greenhouse gases in quantities of 5 tonnes of CO_2 equivalent or more, but less than 50 tonnes of CO_2 equivalent, if the system has a leak- detection system installed, it must be checked for leaks at least every 24 months.**
- **When the unit is checked for leaks, proper record-keeping of all checks is strongly recommended**

REFRIGERANT

WARNING

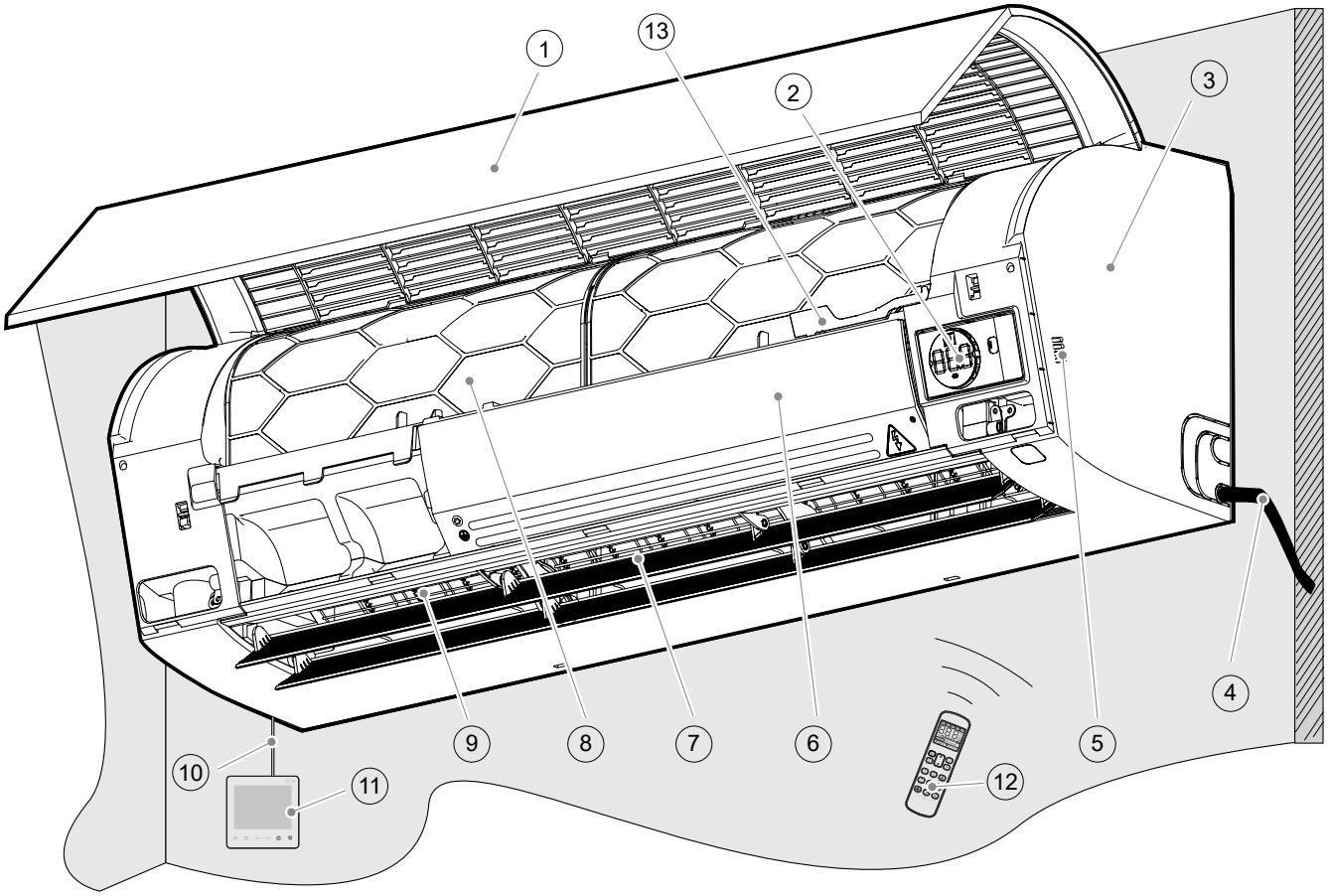
This appliance uses R410A and must be handled by a refrigeration mechanic with an appropriate Australian refrigerant handling licence.

Read the OPERATING INSTRUCTIONS carefully before operation.

Service personnel are required to carefully read the OPERATING INSTRUCTIONS and INSTALLATION MANUAL before operation.

Certain levels of refrigerant require minimum room sizes. Please ensure that these minimum room sizes are adhered to for standard installations (up to 15m pipe length). If larger refrigerant charges than standard are used then please consult AS/NZS 60335.2.40 to determine the safe minimum floor area for the installation.

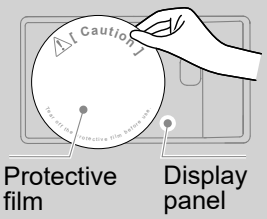
INSTALLATION LAYOUT



① Panel assembly	② Display panel	③ Panel frame
④ *Power supply cable and earth wires	⑤ Room temperature sensor	⑥ Electric control parts
⑦ Upper and lower louvers	⑧ Air filter	⑨ Left and right louver parts (optional)
⑩ *Connection wire	⑪ Wired controller (optional)	⑫ Remote controller (optional)
⑬ WiFi（optional）		

* To be purchased separately.

NOTE **Remove the protective film and sticker from the display panel, otherwise this may result in reduced display quality.**



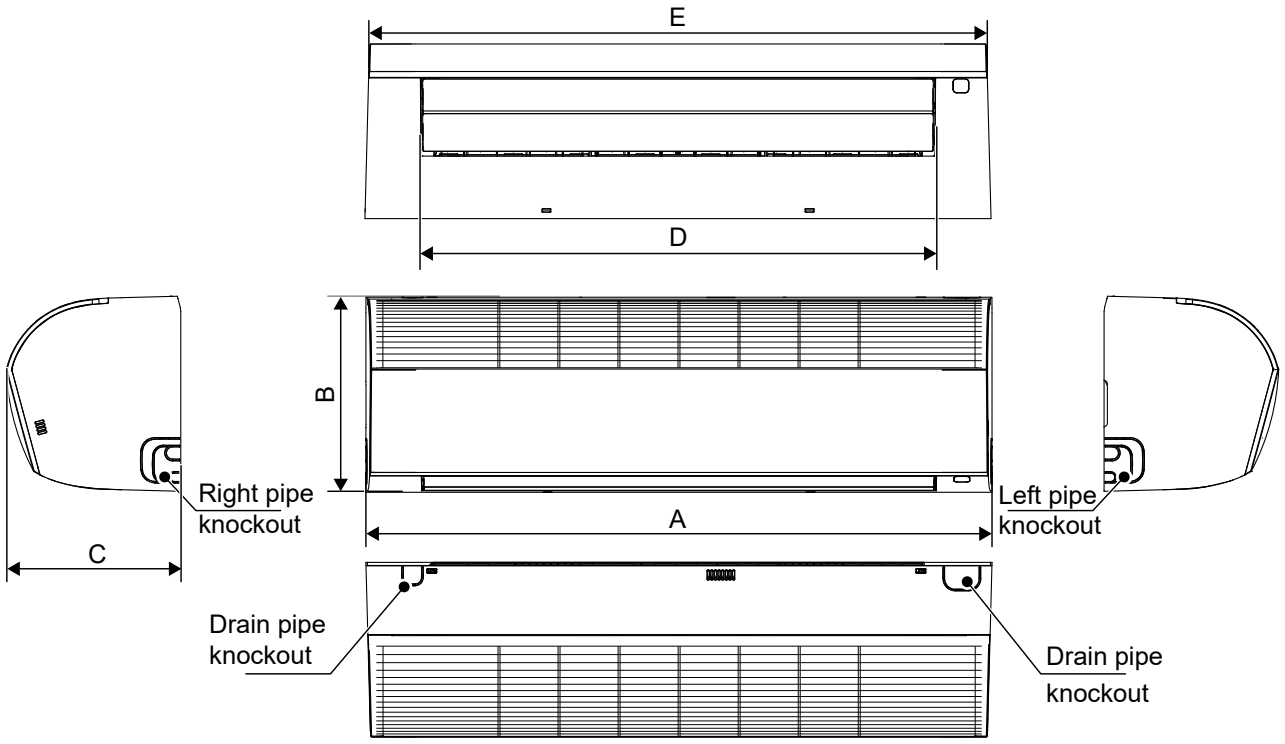
All the optional accessories should be from local dealer.

For optional accessories such as wired controllers, please refer to the manuals of these accessories.

All the figures in the manual explain only the general appearance and functions of the product. The appearance and functions of the purchased product may not be completely consistent with those listed in the figures. Please refer to the actual product.

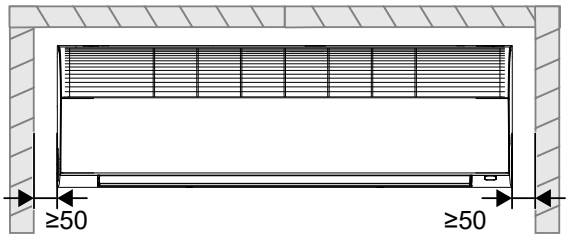
PRODUCT DIMENSIONS

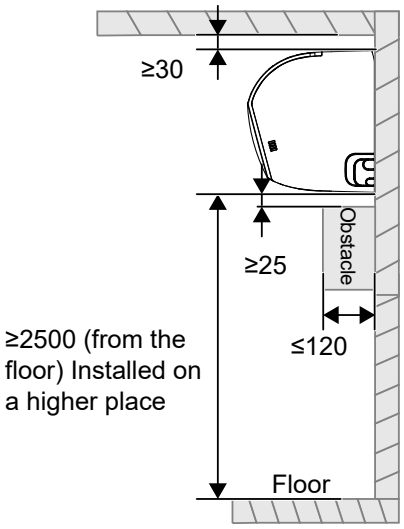
(Unit: mm)



Capacity (kW)	A	B	C	D	E
kW≤3.6	750	295	265	581	736
3.6 < kW≤5.6	950	295	265	781	936
5.6 < kW≤8.0	1200	295	265	1025	1186

CLEARANCES



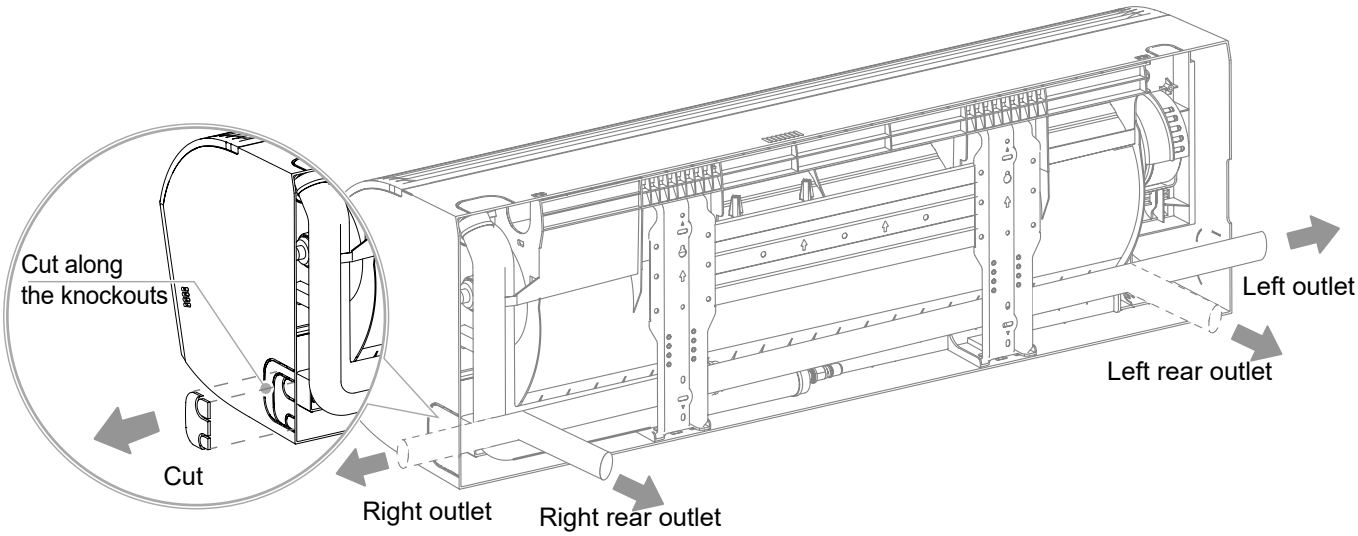


PIPE ROUTING

The refrigerant pipes can be arranged from four directions: left, left rear, right, and right rear.

Corresponding knockouts need to be cut on the panel frame.

Refrigerant pipe routing direction



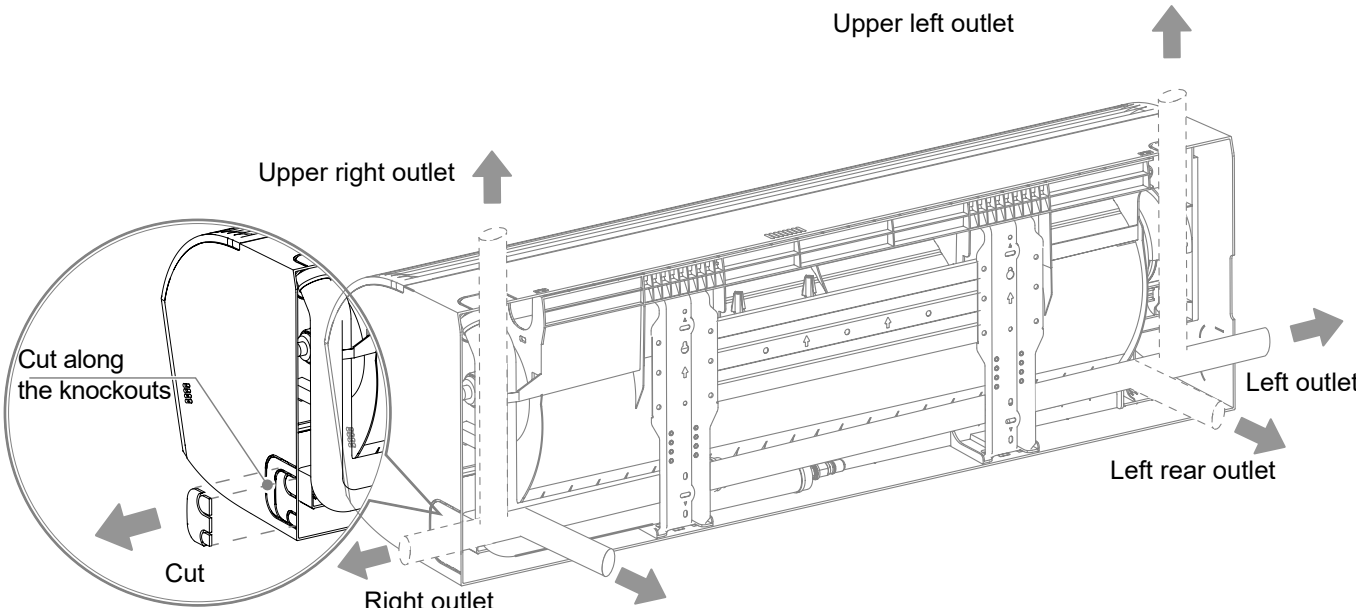
For units with a drainage pump:

The drainage pipe can be arranged from six directions: left, left rear, right, right rear, upper left, and upper right.

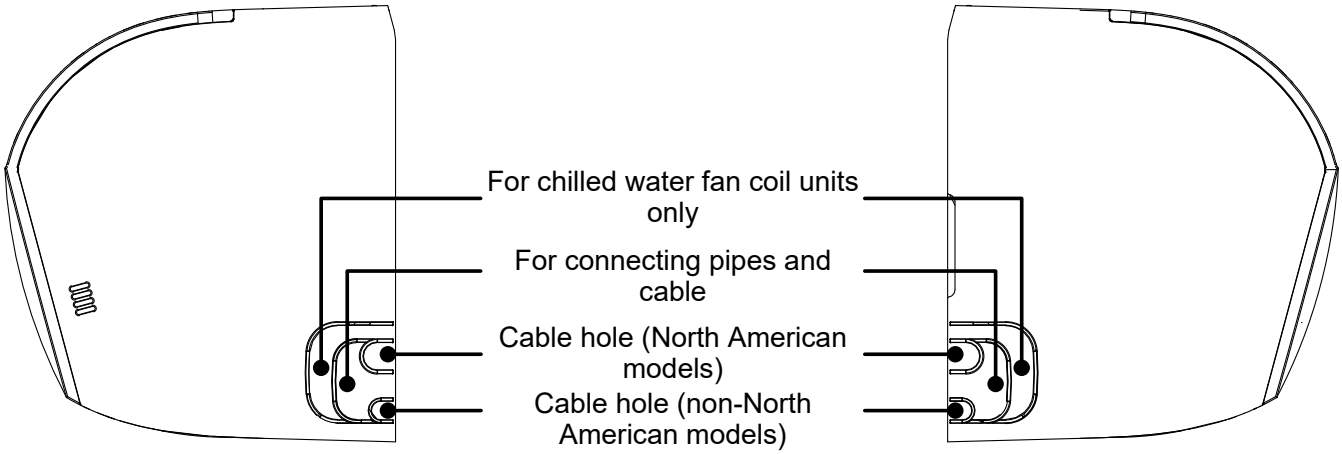
For units without a drainage pump:

The drainage pipe can be arranged from four directions: left, left rear, right, and right rear.

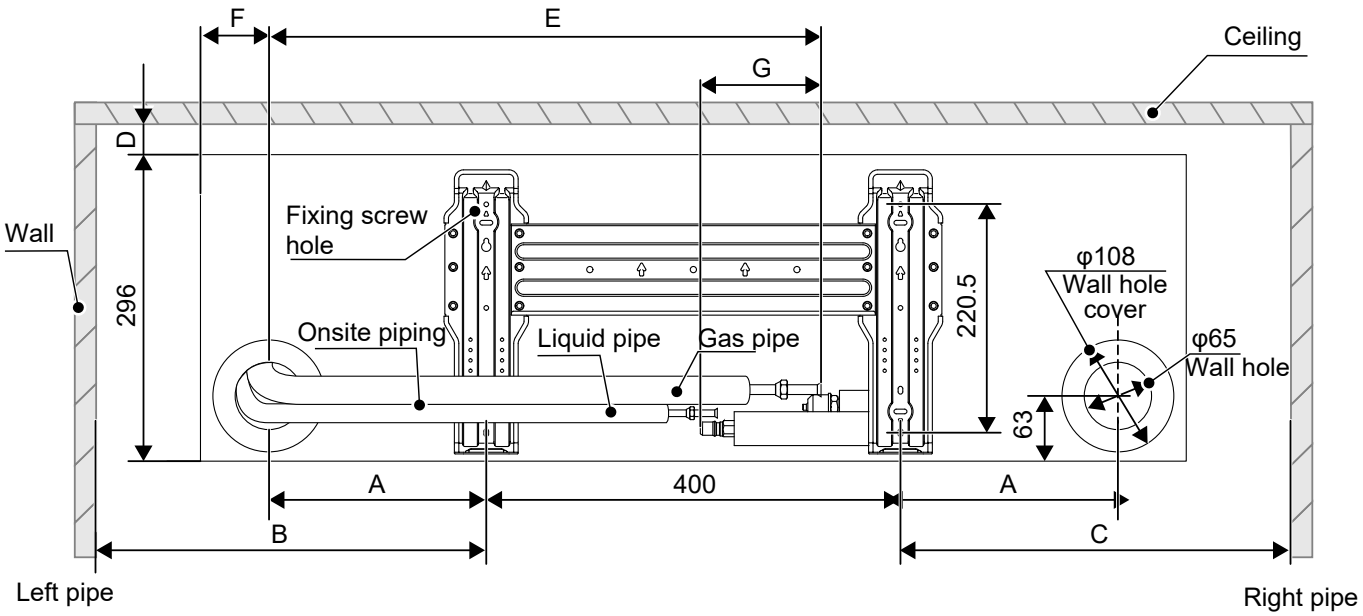
Corresponding knockouts need to be cut on the panel frame.



CUTTING LEFT AND RIGHT KNOCKOUTS



INSTALLATION BOARD DIMENSIONS



Distance / Capacity(kW)	A	B	C	D	E	F	G	Reserved length of power supply cable and signal cable	
								Left pipe	Right pipe
kW≤3.6	100	≥225	≥225	≥30	230	65	102	≥1115	≥415
3.6<kW≤5.6	180	≥325	≥325	≥30	412	65	102	≥1315	≥415
5.6<kW≤8.0	220	≥375	≥375	≥30	530	65	95	≥1565	≥415

INSTALLATION ACCESSORIES KIT

List of accessories				
Installation And Operation Manual X 1 (Make sure to hand it over to the user)	Flare Nut X 2 For use in the installation of connecting pipe	Drain Hose X 1	Installation Plate X 1	Plastic Expansion Screw Anchor X 4
Wall Sleeve X 1	Wall Sleeve Cover X 1	Binding tape X 1	Power Cable Clamp X 2	Screw ST3.9*25 X 4
Screw ST3.9*6.5 X 4	EEV extension cable X 1	Communication cable X 1		

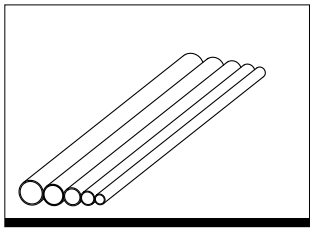
NOTE

Check the accessory kit for the above items. Contact your dealer for missing items.

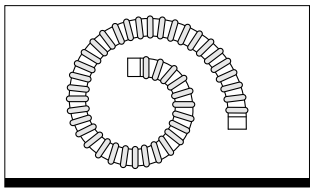
Do not throw away any accessories until the installation is complete.

Customers are free to choose to buy wired controllers, remote controllers (with a seven-speed controller) and other optional accessories.

FIELD SUPPLY ACCESSORIES

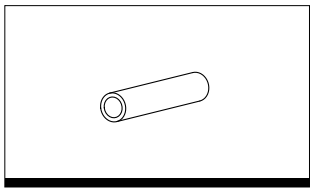


Connecting pipe (Unit: mm)		
Capacity(kW) \ Piping	Liquid side	Gas side
kW≤5.6	Φ6.35×0.75	Φ12.7×0.75
5.6<kW≤8.0	Φ9.52×0.75	Φ15.9×1.0
Remarks	For connection of the indoor unit refrigerant system, it is recommended to use a soft connecting pipe (T2M), with the length selected according to the actual situation.	



Extension drain hose

This is used as the indoor unit's drain pipe, 16mm in diameter. The length is determined according to actual needs.



Thermal insulation pipe

The thickness of the insulation pipe for the connecting pipe is usually 15mm or above; and the thickness of the insulation pipe for the UPVC plastic tube is usually 10mm or above. If the pipe is used in a closed humid area, the thickness should be increased.

NOTE

Materials, including connecting pipes, drain hoses, fasteners (such as pipe supports, clamps, and screws), power supply cable, and signal cables used for installation must be supplied by the installer. Materials and specifications must comply with relevant national or industry standards.

INSULATION MATERIAL REQUIREMENTS

1. The insulation work should only be carried out after the successful completion of the air tight test.
2. Use polyethylene foam as insulation material, fire rating class is B1 and heat resistance is over 120°C.
3. Thickness of the insulation pipe:
   When the pipe diameter is equal to or greater than 15.9mm, the insulation thickness is at least 20mm.
   When the pipe diameter is equal to or smaller than 12.7mm, the insulation thickness is at least 15mm.
4. In cold climates, for heating application, the insulation thickness of outdoor refrigerant pipe is at least 40mm, the insulation thickness of indoor refrigerant pipe is at least 20mm.

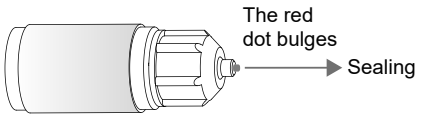
NOTE

The materials and specifications of insulation materials must meet national or industry standards.

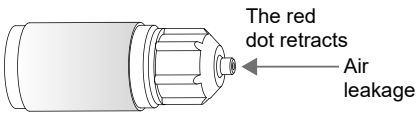
PREPARATIONS BEFORE INSTALLATION

Unpacking Check

1 After unpacking, check whether the packing materials are in good condition, the taccessories that come with the product are complete, the air conditioner is intact, the surfaces of the heat exchanger and other parts are not worn, and if there are oil stains on the stop valves of the unit.



2 Check the two sealing nuts of the refrigerant pipe, and observe whether the red dot on the surface of the sealing nut of the gas pipe bulges. If it bulges, the refrigerant system is well sealed; if it retracts, it is leaking.



3 Check the model before installation.

4 After indoor unit and outdoor unit inspection, pack them with plastic bags to avoid intake of foreign matters.

INSTALLING REFRIGERANT CONNECTING PIPES

When connect different series of outdoor units, the length and level differences of piping connections. Refer to the Installation and Operation Manual of the outdoor unit.

CAUTION

During the installation of the connecting pipes, do not allow air, dust, and other debris to penetrate the piping system, and make sure the interior of the pipes is dry.

Install the connecting pipes only when the indoor units and outdoor units are mounted.

When installing the connecting pipes, record the actual installation length of the liquid pipe so that additional refrigerant can be added.

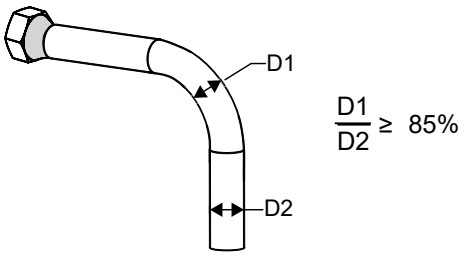
The connecting pipes must be wrapped with thermal insulation materials when they are installed.

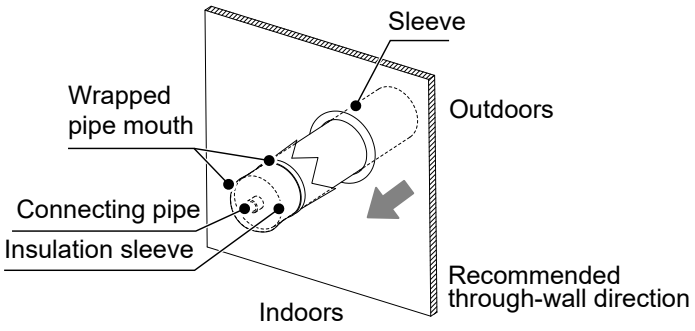
In the event of refrigerant gas leakage during operation, please ventilate immediately.

PIPE LAYOUT

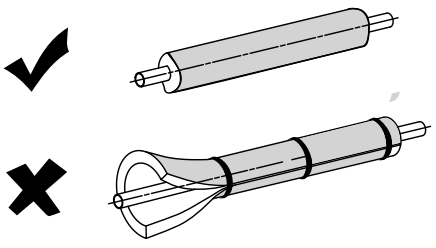
1. The deformed pipe area must not exceed 15% .
2. A protective sleeve should be installed at the wall or floor hole.
3. The weld joint must not be inside the insulation.
4. The drill hole on the external wall must be sealed.

Pipe bending





Pipe insulation



PIPE CONNECTION

Mechanical bending processing: Wider application (ф6.35mm– ф28mm), using spring pipe bender, manual pipe bender or electric pipe bender.

CAUTION

The bending angle should not exceed 90°; otherwise, wrinkles will be formed in the pipe, which can easily break.

The bending radius should not be smaller than 3.5D (pipe diameter) and should be as large as possible to prevent the pipe from becoming flattened or crushed.

Ensure the pipe bender is clean.

✓ **Bend and arrange pipes carefully without damaging the pipes and their insulating layers.**

✗ **Do not let the interface of the indoor unit bear the weight of the connecting pipe; otherwise, the connecting pipe may be crushed and deformed, which will affect the cooling (heating) effect, or the thermal insulation materials may be compressed, resulting in air leakage and condensation.**

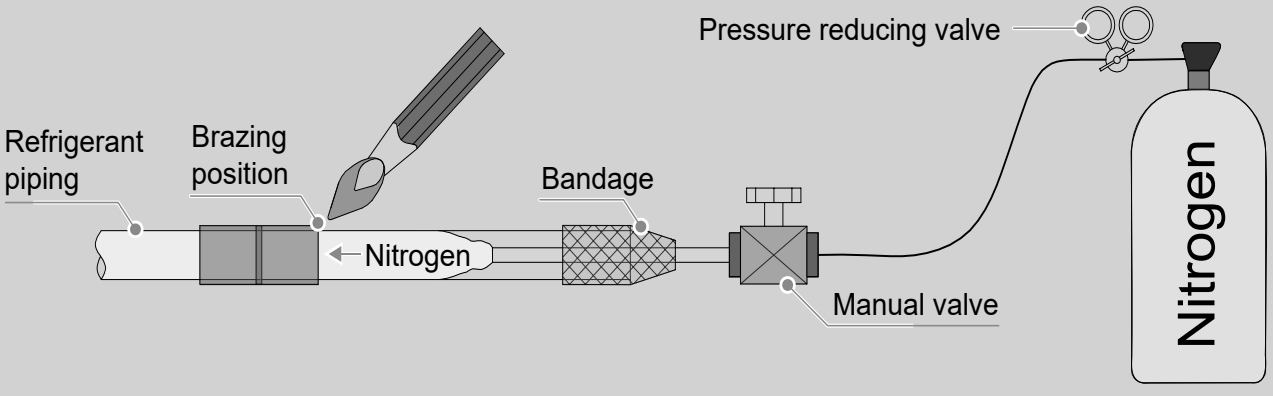
Brazing pipes

CAUTION

When it is necessary to fill the piping with nitrogen during brazing, the pressure must be kept at 0.02MPa using a pressure relief valve.

Do not use flux when brazing the piping. Use a phosphor copper that does not require flux.

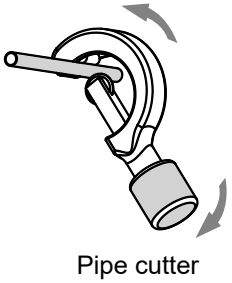
Do not use any antioxidants when brazing the piping. The piping may become clogged with residual antioxidants, which may block components such as electronic expansion valves during operation.

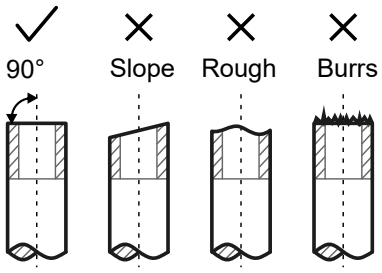


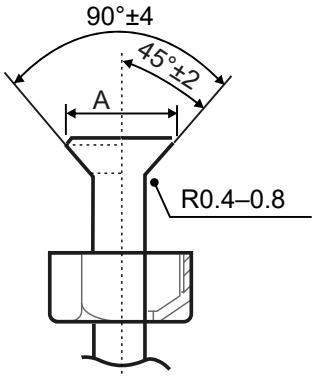
Flaring

To cut the piping with a pipe cutter, rotate the pipe cutter repeatedly.

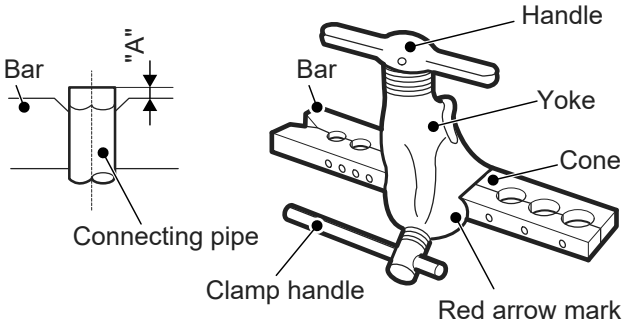
Put the pipe into the connecting nut flaring, and both the gas pipe and liquid pipe of the indoor unit are connected by flaring.







Outer diameter (mm)	A (mm)	
	Max.	Min.
Φ6.35	8.7	8.3
Φ9.52	12.4	12.0
Φ12.7	15.8	15.4
Φ15.9	19.1	18.6
Φ19.1	23.3	22.9



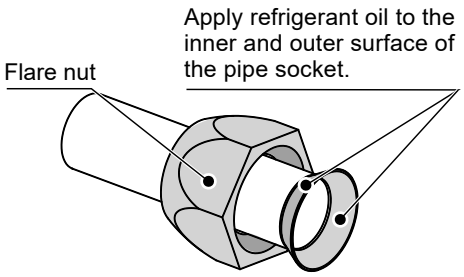
Nut fastening

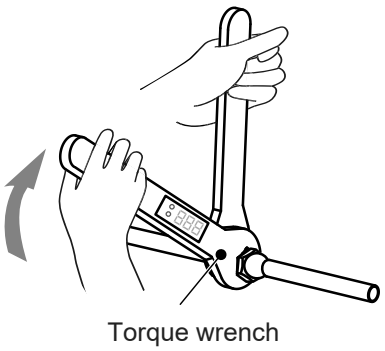
① Connect the indoor unit first, then connect the outdoor unit. Before tightening the flare nut, apply refrigeration oil on the inner and outer surface of the pipe flare (must use refrigeration oil compatible with the refrigerant for this model), and turn it 3 or 4 turns by hand to tighten it. When connecting or removing a pipe, use two wrenches at the same time.

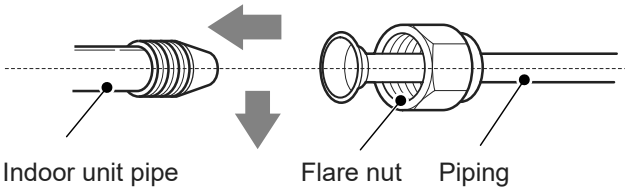
② Align the connecting piping, firstly tighten most of the thread of the connecting nut by hand, and then use a torque wrench to tighten the last 1-2 turns of the thread as shown in the figure.

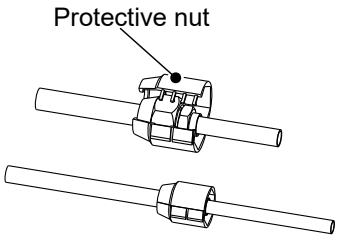
③ The brazing is done on site, and the bell mouth cannot be used indoors.(For IEC/EN 60335-2-40 except IEC 60335-2-40: 2018)

④ The protective nut is a one-time part, it can not be reused. In case it is removed, it should be replaced with a new one.(For IEC 60335-2-40: 2018 only)









CAUTION **When flared joints are reused, the flare MUST be re-fabricated.**

Pipe size (mm)	Tightening torque [N.m (kgf.cm)]
Φ6.35	14.2–17.2 (144–176)
Φ9.52	32.7–39.9 (333–407)
Φ12.7	49.5–60.3 (504–616)
Φ15.9	61.8–75.4 (630–770)
Φ19.1	97.2–118.6 (990–1210)

CAUTION **Excessive torque will damage the flared mouth and nut, and insufficient torque will cause refrigerant leakage. Refer to the above table to determine the appropriate tightening torque.**

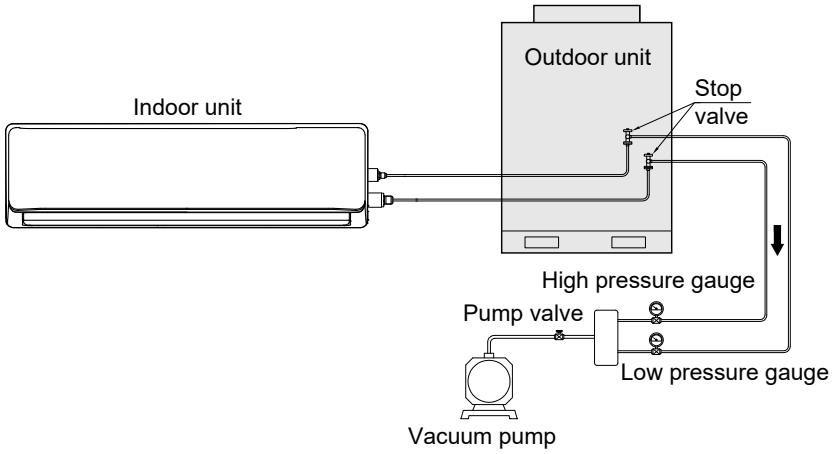
REFRIGERANT PIPING FIXING

Angle iron brackets or round steel hangers should be used for fixing. When the liquid pipe and gas pipe are suspended together, the size of the liquid pipe shall prevail.

Pipe outer diameter (mm)	≤20	20~40	≥40
Horizontal pipe distance (m)	1.0	1.5	2.0
Stand pipe distance (m)	1.5	2.0	2.5

VACUUM PUMPING

Connect the vacuuming unit through a manifold to the service port of all stop valves.



CAUTION **Do not purge the air with refrigerant of outdoor unit, it will cause fire or system malfunction.**

LEAK DETECTION

The leak test must satisfy the specifications of EN378-2.

Vacuum leak test

1. Evacuate the the liquid and gas piping to –100.7 kPa (–1.007 bar)(5 Torr abs.) for more than 2 hours.
2. Once reached, turn off the vacuum pump and check that the pressure does not rise for at least 1 minute.
3. If the pressure rises, the system may either contain moisture (see vacuum drying below) or have leaks.

Pressure leak test

Test for leaks by applying a bubble test solution to all piping connections.

Discharge all nitrogen gas.

Break the vacuum by pressurising with nitrogen gas to a minimum gauge pressure of 0.2 MPa (2 bar). Never set the gauge pressure higher than the maximum operation pressure of the unit, i.e. 4.0 MPa (40 bar).

CAUTION

Under no circumstances use ignition sources such as a Halide torch or flame to detect refrigerant leaks.

Leak detection fluids are suitable for use with most refrigerants but avoid using detergents containing chlorine as this may react with the refrigerant and corrode the connecting pipe-work.

Electronic leak detectors MUST be used to detect flammable refrigerants. (Detection equipment MUST 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 MUST be set at a percentage of the LFL of the refrigerant and MUST be calibrated to the refrigerant employed and the appropriate percentage of gas (25 % maximum) is confirmed.

REFRIGERANT CHARGE

The refrigerant is pre-charged in the outdoor unit at the factory, but additional refrigerant may be necessary depending on the field piping.

WARNING

Compliance with national gas regulations MUST be observed

Keep ventilation openings clear of obstruction.

Ensure that the refrigeration system is earthed prior to charging the system with refrigerant.

Label the system when charging is complete (if not already).

Extreme care shall be taken not to overfill the refrigeration system.

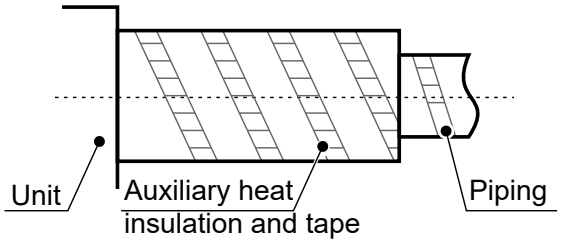
CAUTION

Cylinders MUST be kept upright if a siphon tube is present.

INSULATION TREATMENT

Pipes on the liquid and gas sides have a low temperature during cooling. Take sufficient insulation measures to prevent condensation.

- Be sure to use a thermal insulation material with a heat resistance of 120°C or higher for the pipes.
- The attached insulation material for the part of the indoor unit where the pipe connects must undergo heat insulation treatment that leaves no gaps.
- For outdoor pipelines, additional protective treatments should be performed, such as adding metal duct boxes or wrapping the pipes with aluminum foil materials. Thermal insulation materials directly exposed to the open air will degrade and lose their insulating properties.



Insulating refrigerant piping

Refrigerant pipe construction → Insulation process (except connecting parts) → Air tightness test → Insulation at connecting parts

Connecting parts: For example, brazing area, flare, or connections shall be insulated after passing the air tightness test.

Selection of insulation materials for refrigerant piping

Use the closed-cell foam insulation material, which has a flame retardant level of B1 and heat resistance of over 120℃.

Thickness of the insulation layer

When the outer diameter d of the connecting pipe is not greater than Φ12.7mm, the thickness δ of insulation layer is greater than 15mm.

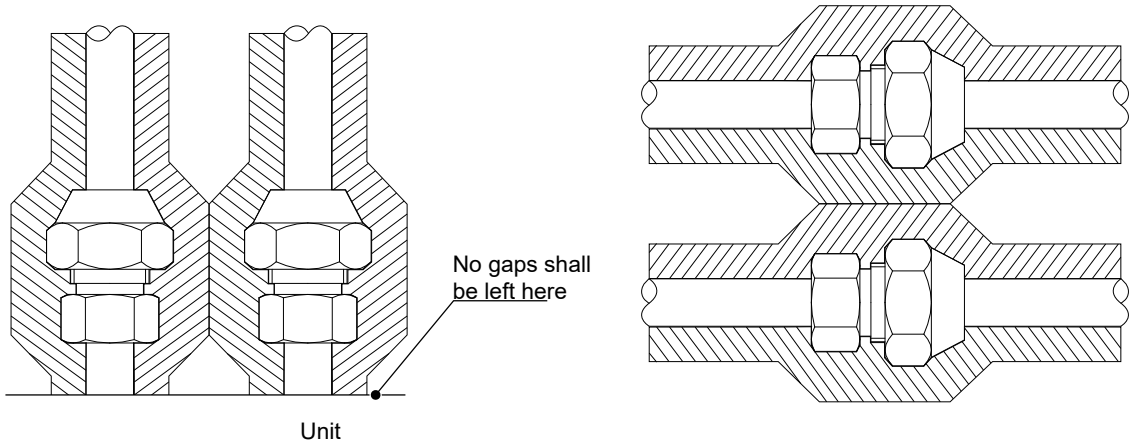
When the outer diameter d of the connecting pipe is not smaller than Φ15.9mm, the thickness δ of insulation layer is greater than 20mm.

CAUTION

The above thickness should be increased if the place is hot and humid.

The pipes outdoors should be protected by metal covers to avoid sunlight, rain, weathering, external force or artificial damage.

Installation and insulation tips



CAUTION

Avoid any gaps where the insulation materials connect.

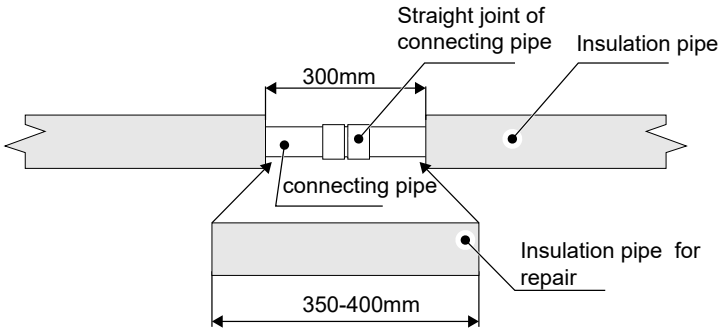
Pulling or wrapping the connecting sections too tightly can cause them to shrink.

Avoid squeezing out the air in the materials, as this can reduce their insulation effects.

Stress generated by tight wrapping will accelerate the aging and peeling of the tape.

Do not wrap the insulated pipes of the concealed sections of the indoor unit.

Repairing insulation pipe:

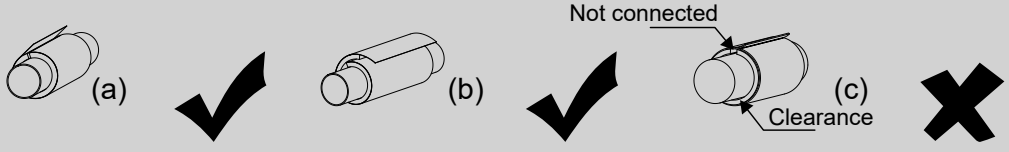


Cut a section of insulation pipe longer than the gap, cut one side along the centerline, install the insulation pipe to the connecting pipe, and apply glue to the all joints.

1. The length of the insulation pipe for repair must be 50–100 mm longer than the gap.
2. Tightly insert the insulation pipe for repair into the gap.
3. All the sectional areas and cuts must be glued.
4. Wrap the joints with tape.

CAUTION

When installing the insulation pipe on site, please cut it according to the actual needs. (Either method (a) or (b) is OK. Method (c) is incorrect. There must be no gap between the insulation pipe and connecting pipe.)



DRAIN PIPE INSTALLATION

Before installation of the drain pipe, determine its direction and elevation to avoid intersection with other pipelines to ensure that the slope is straight.

The highest point of the drain pipe should be equipped with a vent port to ensure the smooth drainage of condensate water, and the vent port must face downwards to prevent dirt from entering the pipe.

Do not connect the drain pipe to the wastewater pipe, sewage pipe, or other pipes that produce corrosive gases or odors. Otherwise, the indoor unit (especially the heat exchanger) may be corroded and odor may enter the room, negatively impacting the heat exchange effects and user experience. The user will assume responsibility for any consequences resulting from failure to abide by instructions.

After the pipeline connection is completed, a water test and a full water test should be done to check whether the drainage is smooth and whether the pipeline system leaks.

The air conditioner drain pipe must be installed separately from other sewage pipes, rainwater pipes and drain pipes in the building.

Adverse slope, convex and concave pipes are prohibited, as improper airflow will cause poor drainage.

Drain pipes need to be evenly wrapped with thermal insulation pipes to prevent condensation.

All joints of the drainage system must be sealed to prevent water leakage.

Please connect the drain pipes in the following ways. Improper installation of the pipes may result in water leakage and damage to furniture and property.

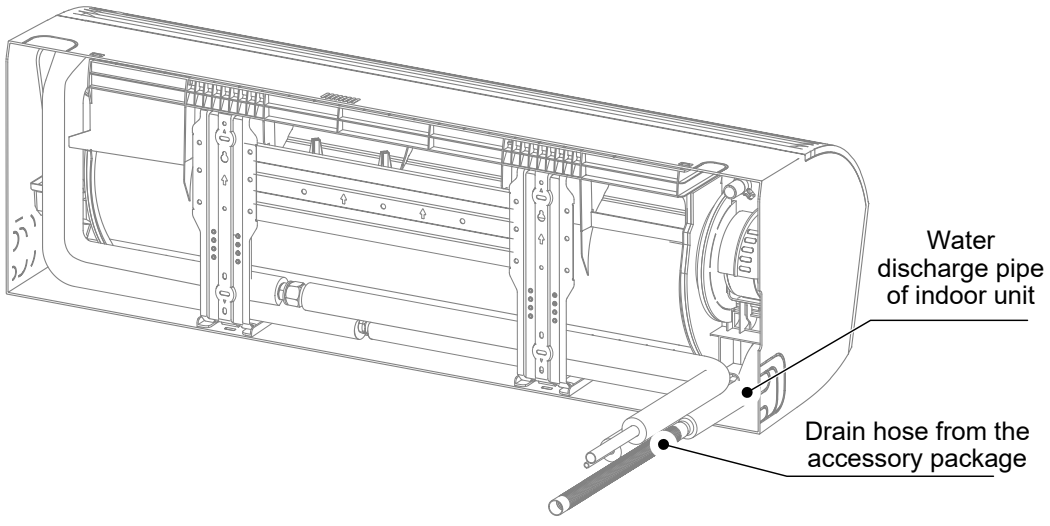
Install the drain hose.

① Connect the drain hose to the water discharge pipe of the indoor unit.

② Wrap the joint with waterproof tape, cover the exposed drain hoses with insulation material, and tie them with a binding tape.

③ Insert the end of the drain hose outdoors into the drain pipe.

The drain hose is at the outer layer of the indoor unit drain pipe. Connect the two pipes at the end.

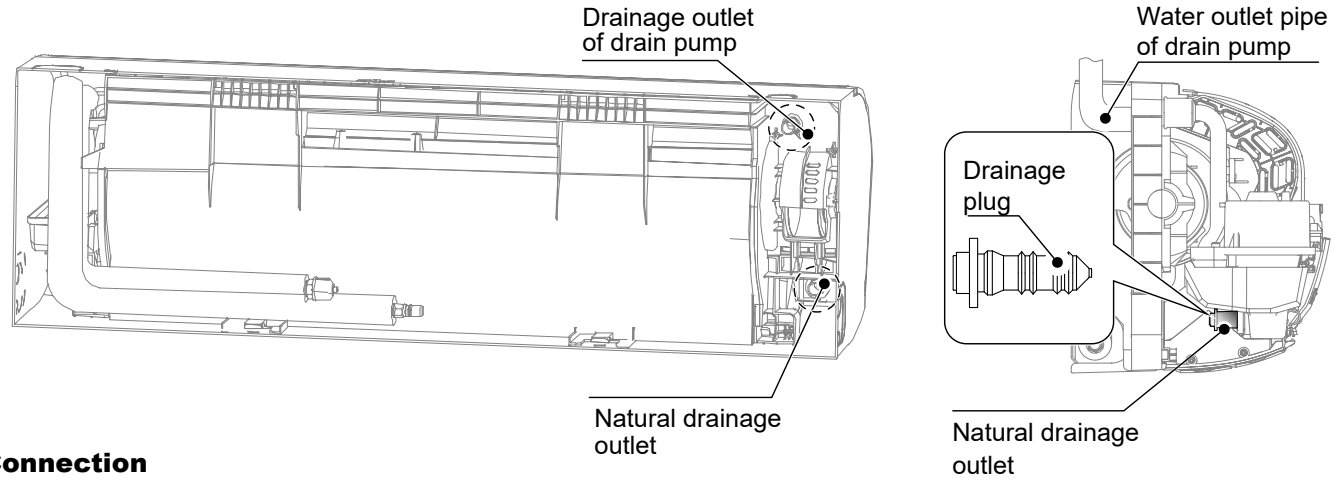


Selection of drainage outlet

For a unit without a drain pump, connect the drain hose to the natural drainage outlet.

For a unit with a drain pump, connect the drain hose to the drainage outlet of drain pump, seal the natural drainage outlet to use a drainage plug.

CAUTION **Wrong selection of drainage outlet will result in malfunction of water drainage.**

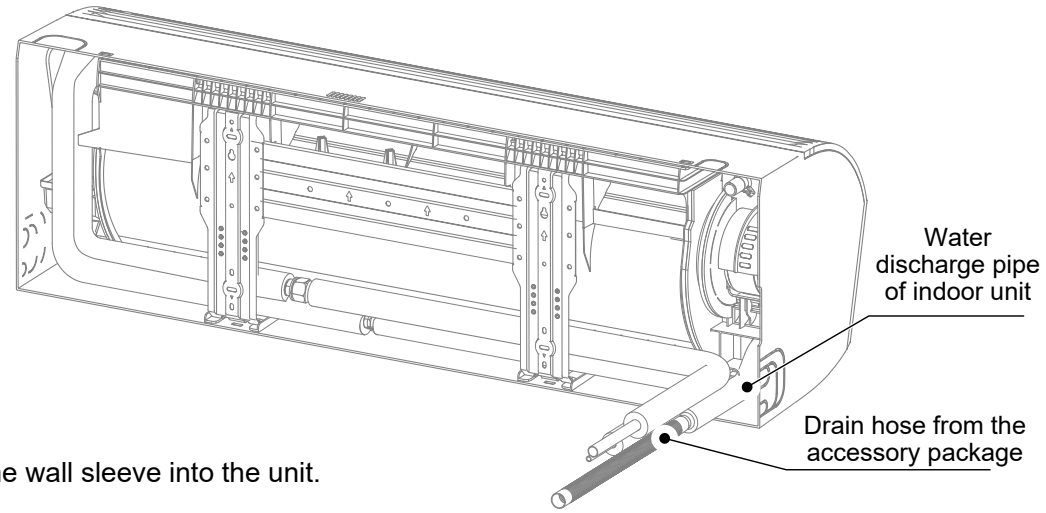


Connection

① Connect the drain hose to the selected drainage outlet.

② For natural drainage outlet , wrap the joints, exposed drain hose and refrigerant connecting pipes with waterproof insulating tape, and tie them with a binding tape.

CAUTION **Drain hose is below the refrigerant pipes.**



Insert the wall sleeve into the unit.

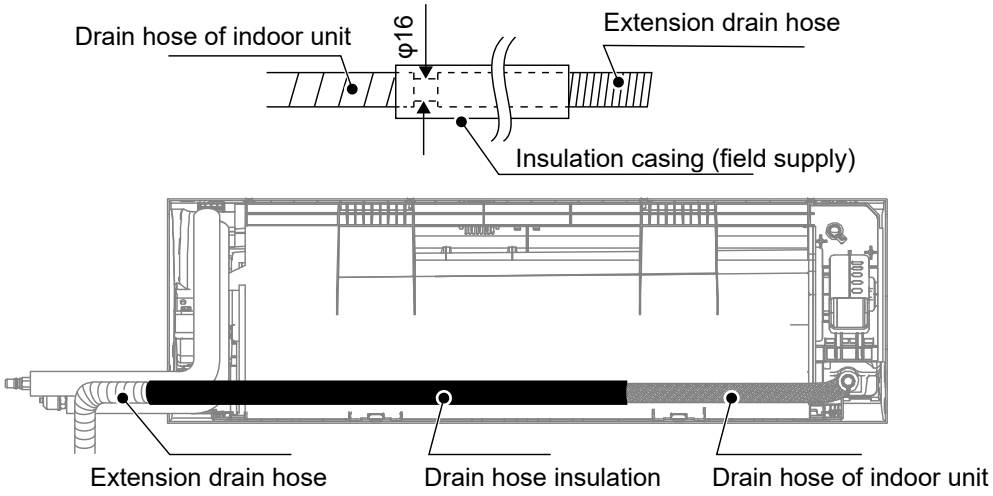
NOTE **Install the wall sleeve cover after laying the refrigerant piping and drain pipe.**

③ For drainage outlet of drain pump, wrap the joints and exposed drain hose with waterproof insulating tape, and tie it with a binding tape.

Extend the drain pipe.

To extend the length of a drain pipe, purchase an extension drain hose locally.

Ensure the extended portion of the drain hose indoors undergoes heat insulation treatment.



CAUTION

Indoor parts of the drain hose shall be insulated to prevent condensation, and drain hose insulation should be thicker than 10mm.

If the pipe is not wholly insulated, ensure to reinsulate the cut part.

Use glue or clamp to connect the joints and cuts of the thermal insulation pipe, and ensure clamp header is at the top of the pipes.

Install the wall sleeve

Drill a 80mm feed-through hole in the wall with a downward slope towords the outside.

Hook the indoor unit on the installation plate.

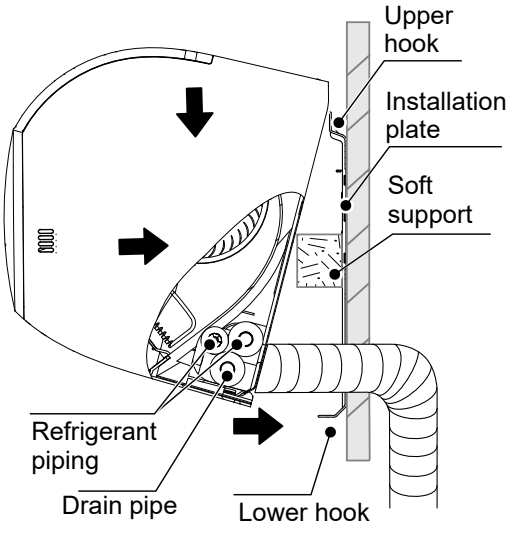
① Pass the properly bundled pipeline and connection cables through the wall hole, ensure the connecting pipes are free of sand and dust.

② Hang the buckle at the back of the indoor unit on the upper hook of the installation plate. Push the indoor unit left and right to check that the unit is securely and firmly mounted.

③ Push the lower part of the indoor unit against the wall, and push the indoor unit up and down and left and right to check that the connection is secure.

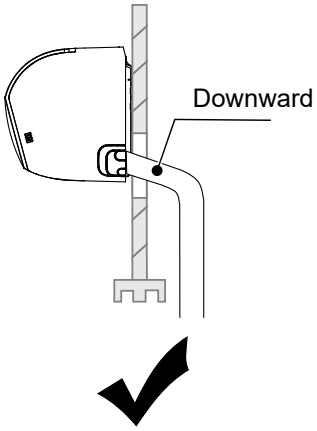
④ Until the indoor unit can be connected properly, make sure that the indoor unit is buckled into the slots. Use your hands to shake the unit to check that it does not move up, down, left or right.

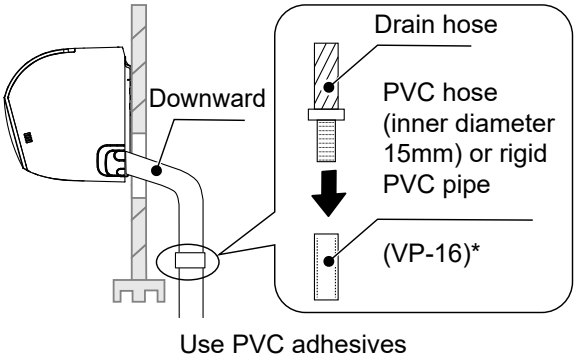
⑤ Use a level to verify that the indoor unit is level.



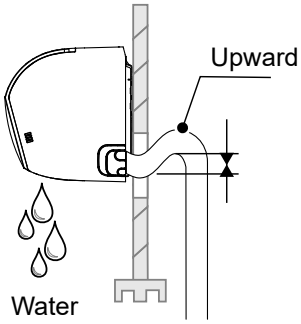
INSTALLATION REQUIREMENTS FOR DRAIN PIPE

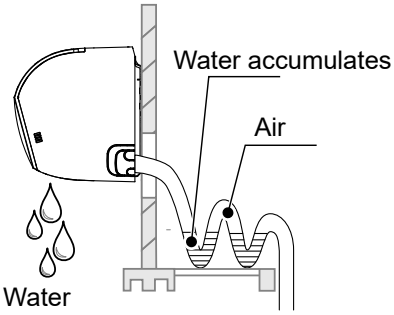
The drain pipe must be inclined downwards (1/100 or above) to avoid condensate water dropping.



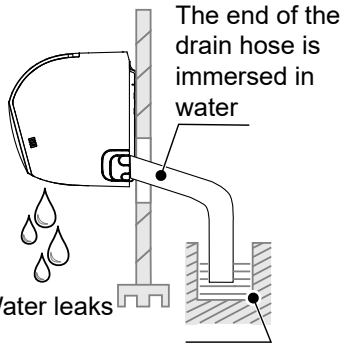


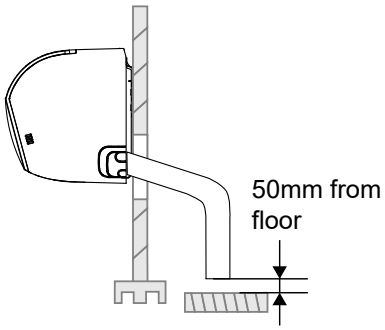
Use PVC adhesives

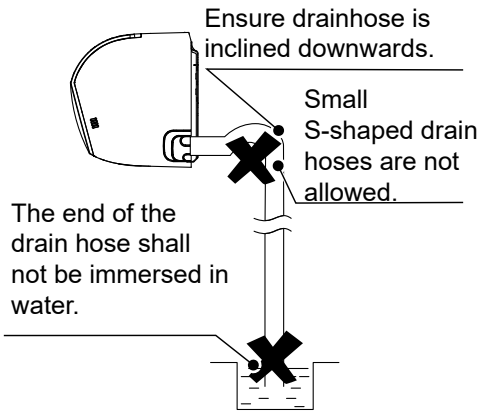




The drain hose deflects and generates air resistance

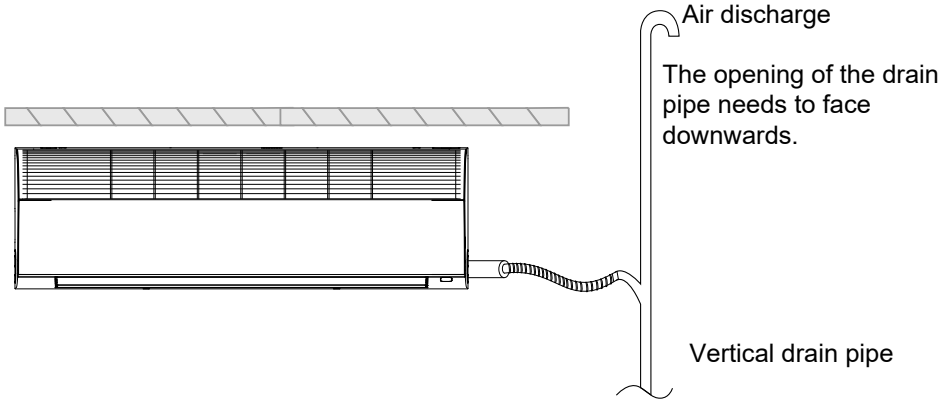






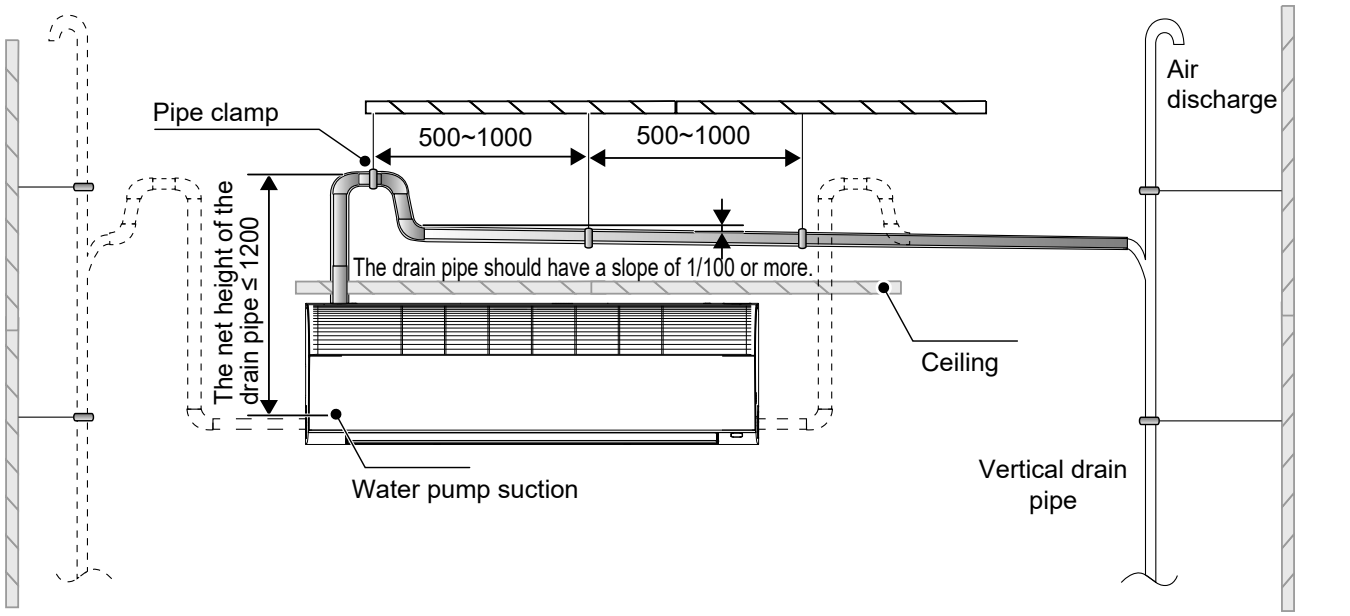
Connecting the drain pipe

For units without drain pump:



For units with drain pump:

(Unit: mm)



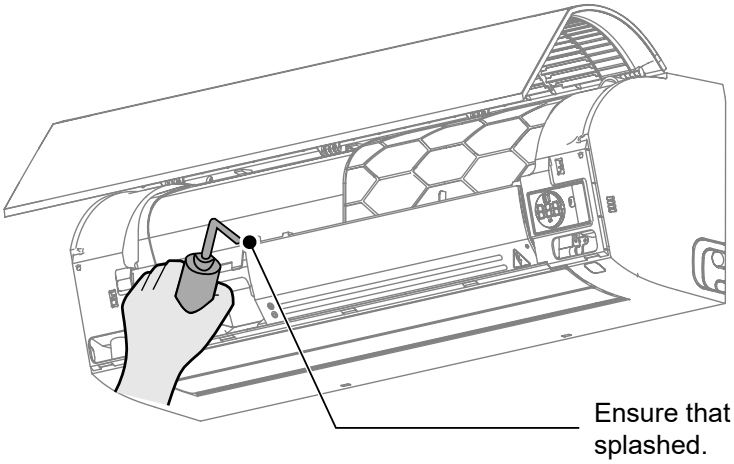
CAUTION

Requirements for slope of the drain pipe:

1. **The horizontal drain pipe shall have a slope of at least 1% that follows the direction of water flow. Lifting bolts shall be placed every 1–1.5m at a horizontal drain pipe and every 1.5–2.0m at a vertical drain pipe. Each vertical drain pipe shall have at least two fixing points for branch pipes and lifting bolts.**
2. **Adverse slopes are prohibited, and no water may accumulate in the elbow pipe. The outlet end shall not be immersed in liquid.**

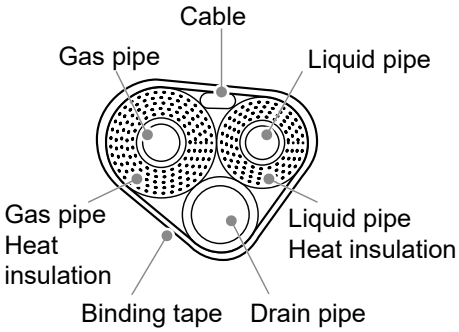
WATER DRAINAGE TEST

1. Open the panel assembly and remove the air filter.
2. Pour water into the drain pan.
3. After confirming that the drainage is smooth and free of water leakage, install the air filter and close the panel assembly.



LAY AND INSULATE PIPES

1. Straighten and place the connecting pipes on the floor, and lay the drain pipe and various cables (remember to distinguish the two ends of the cable) around the connecting pipes.
2. Measure and adjust the distances of the gas pipe, liquid pipe and various cables based on the connecting point of the drain pipe, and bind them together with cable ties.
3. Lay the pipes and cables in the following sequence: drain pipe at the bottom, connecting pipe in the middle, and power supply cable at the top.
4. Use binding tape to tie the pipes and cable together.



Note: If the drain pipe is wrapped above the piping, it may cause poor drainage or backflow of water.

NOTE

The cables may vary from model to model.

The binding shall be seamless and neat in appearance.

ELECTRICAL CONNECTION

SAFETY PRECAUTIONS

WARNING

The power supply must be cut off before any electrical work is carried out. Do not conduct electrical work when the power is on; otherwise, it may cause serious personal injury.

The air conditioning unit must be earthed reliably and must meet the requirements of the local country/region. If the earthing is not reliable, serious personal injury due to electric leakage may occur.

WARNING

- **The appliance shall be installed in accordance with national wiring regulations.**
- **Installation, inspection or maintenance operations must be completed by professional technicians. All parts and materials must comply with the relevant regulations of the local country/region.**
- **The air conditioning unit must be equipped with a special power supply, and the power supply voltage should conform to the nominal working voltage range of the air conditioning unit.**
- **The power supply of the air conditioning unit must be equipped with a power disconnect device that conforms to the requirements of relevant local technical standards for electrical equipment. The power disconnecting device must be equipped with short circuit protection, overload protection and electric leakage protection. The clearance between open contacts of the power disconnecting device shall be at least 3mm.**
- **The core of the power supply cable must be made of copper, and the wire diameter should meet the current-carrying requirements. For details, refer to the "Power supply cable Diameter and Electric Leakage Protector Selection". A wire diameter that is too small may cause the power supply cable to heat up, resulting in a fire.**
- **The power supply cable and the earth wires should be secured reliably to avoid stress on the terminals. Do not pull the power supply cable forcibly; otherwise, the wiring may become loosened or the terminal blocks may be damaged.**
- **Strong current wires such as power supply cable cannot be connected to weak current wires such as communication wiring; otherwise, the product may be seriously damaged.**
- **Do not bond and connect the power supply cable. Bonding and connecting the power supply cable may cause it to heat up, resulting in a fire.**

CAUTION

Avoid bonding and connecting the communication wiring.

The power supply cable and communication wiring must be routed separately, with a distance of over 5 cm. Otherwise, communication failure may occur.

Do not connect the earth wires to the gas pipe, water pipe, lightning rod earth wires or telephone earth wires.

After all wiring is completed, check carefully before turning on the power supply.

ELECTRICAL SPECIFICATIONS

Capacity (kW)	Electric Specifications Of The Indoor Unit				Indoor Fan Motor	
	Frequency (Hz)	Voltage (V)	MCA (A)	MFA (A)	Rated Motor Output (W)	FLA (A)
1.5	50/60	220~240	0.28	10	20	0.22
2.2			0.29		20	0.23
2.8			0.36		20	0.29
3.6			0.39		20	0.31
4.5			0.41		20	0.33
5.6			0.51		20	0.41
7.1			0.69		50	0.55
8.0			0.98		50	0.78

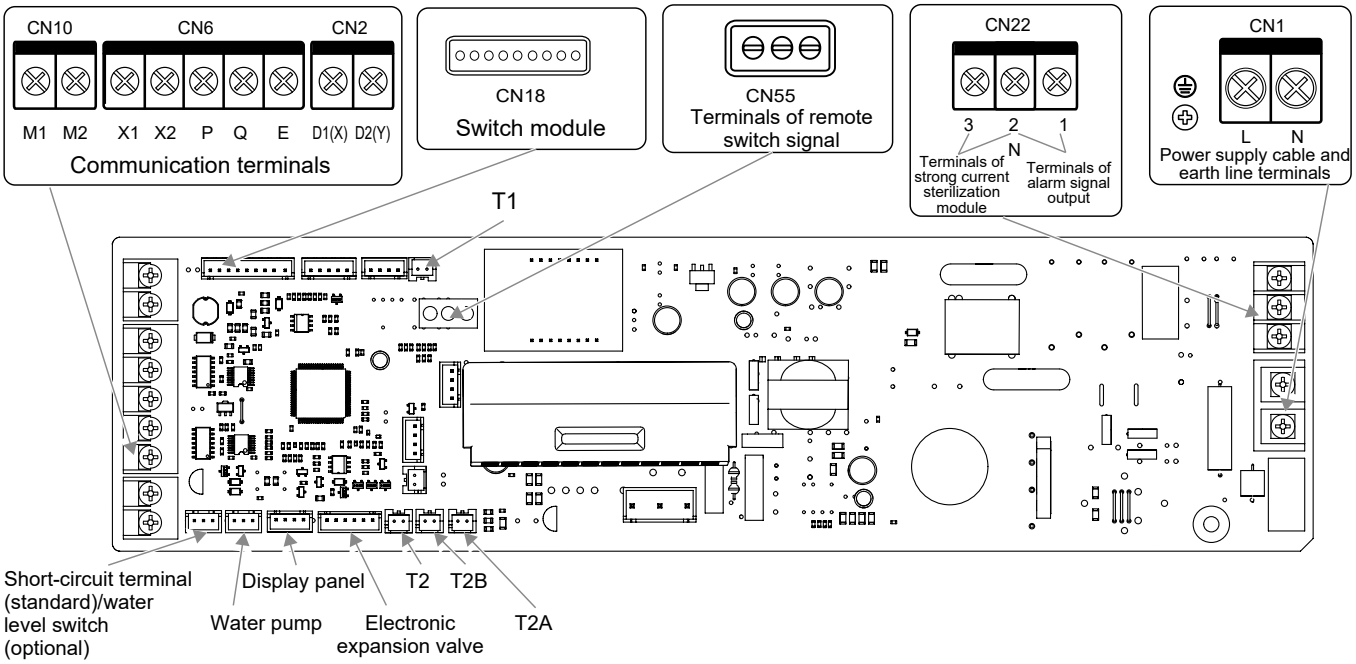
NOTES:

MCA: Min. Circuit Amps. (A), which is used to select the minimum circuit size to ensure safe operation over a long period of time.

MFA: Max. Fuse Amps. (A), which is used to select the circuit breaker.

FLA: Full Load Amps. (A), which is the full load current of the indoor fan motor (reliable operation at the fastest speed setting).

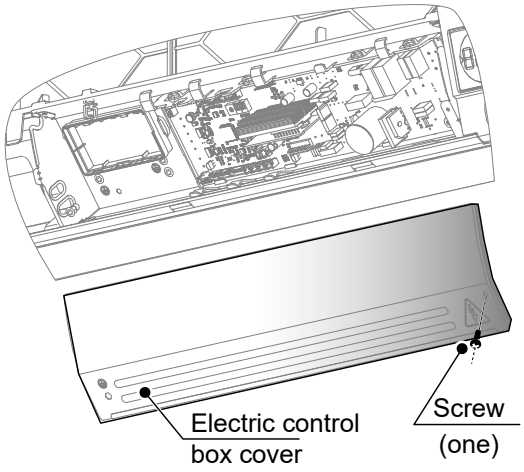
MAIN CONTROL BOARD SCHEMATIC



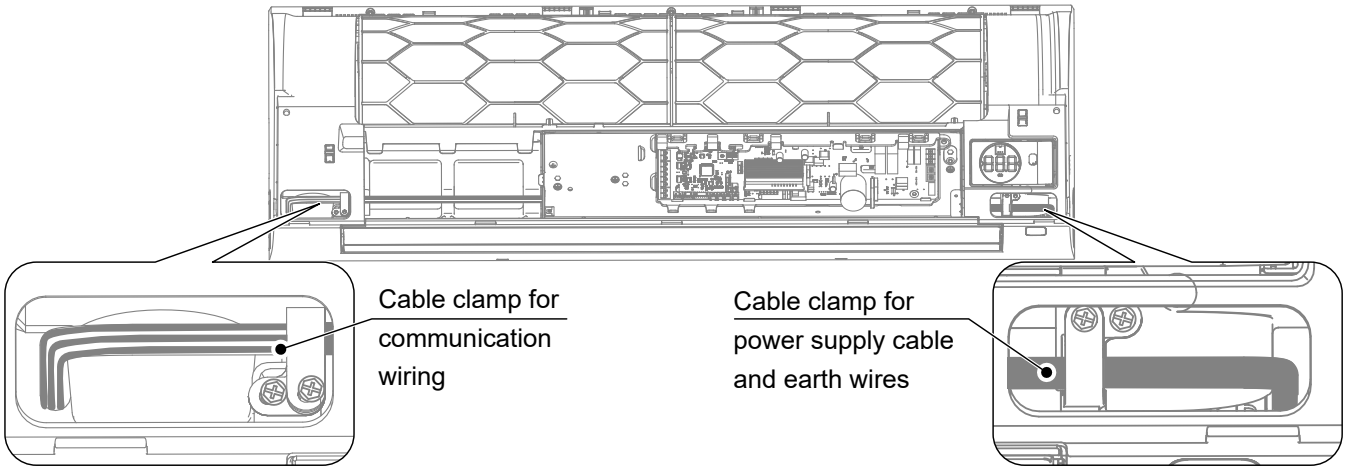
All weak point connection points meet SELV, such as X1, X2, P, Q, E, M1, M2, CN18, CN55 etc.

CONNECTING THE WIRING

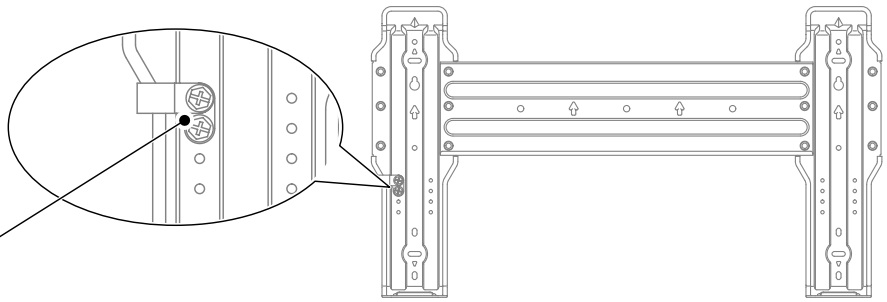
1. Open the indoor unit's electric control box cover.
2. Loosen the screws on the right side of the electric control box cover and remove.



3. Connect the strong current wires (power supply cable, alarm signal output wires) and weak current wires (communication wiring, remote switch communication wiring, expansion board communication wiring) to the electric control box through the strong and weak current inlets of electric control box.



When there are multiple communication wires, it may not be possible to fix all the wires on the drain pan. In this case, use two ST3.6*6.5 self-tapping screws and clamps from the accessory pack to fix the wires on the installation plate.



CAUTION

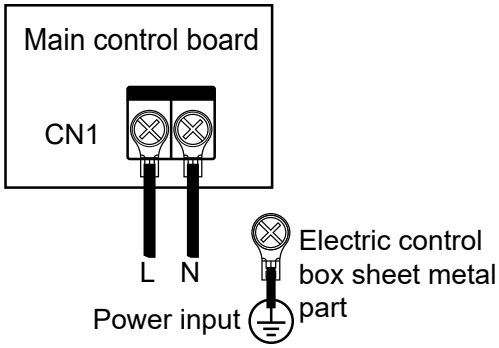
Power supply cables must be routed separately from other cables such as communication and display box wiring.

Water level switch terminals are shorted when the water level switch is unavailable.

POWER SUPPLY CABLE CONNECTION

Connection between power supply cable and power supply terminal

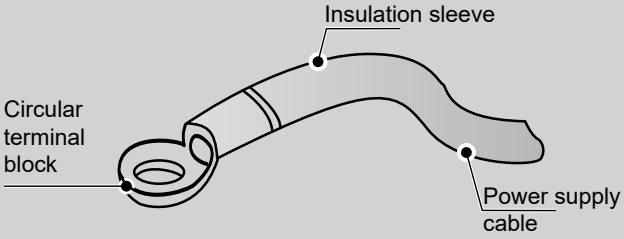
The power supply terminal of the indoor unit is fixed on the main control board, the power supply cable is connected to the power supply terminal labeled "CN1" on the main control board. The live and neutral wires are connected according to the main control board logos "L" and "N", and the earth wires is directly connected to the electric control box sheet metal part.



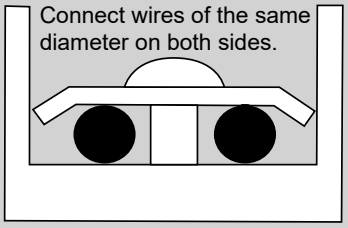
CAUTION

A Do not bond and connect the power supply cable. Bonding and connecting the power supply cable may cause it to heat up, resulting in a fire.

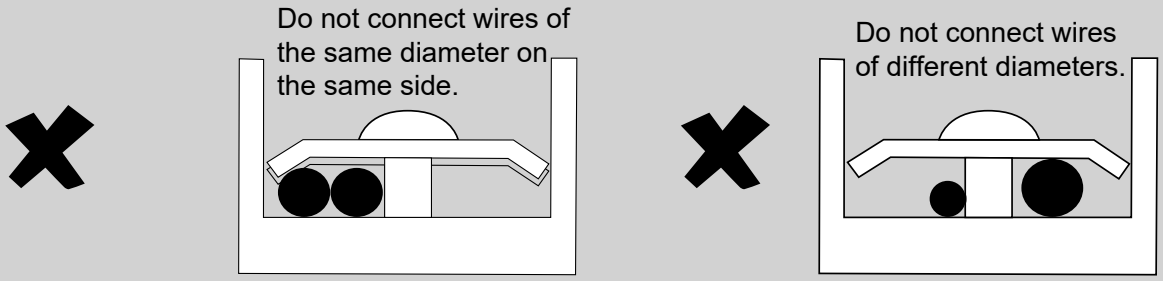
B The power supply cable must be crimped reliably using an insulated circular terminal block, and then connected to the power supply terminal of the indoor unit, as shown in the figure below.



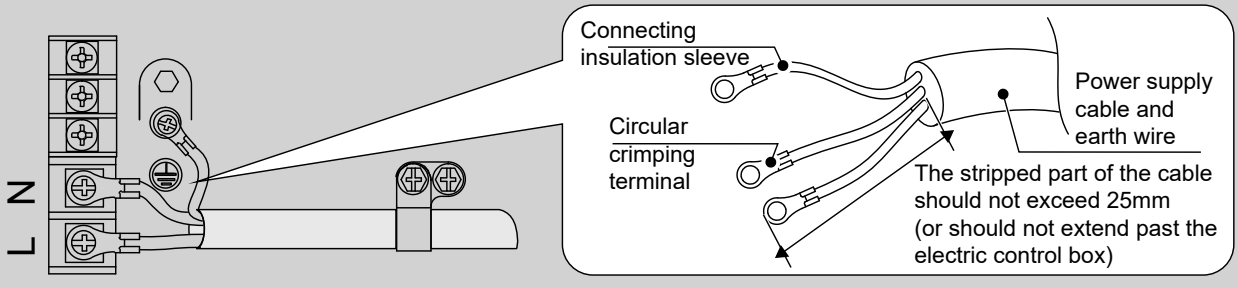
C If it fails to crimp the insulated circular terminal block due to on-site limitations, connect the power supply cable of the same diameter to both sides of the power supply terminal block of the indoor unit, as shown in the figure below.



D Do not press the power supply cable of the same wire diameter on the same side of the terminal. Do not use two power supply cable of different wire diameters for the same terminal blocks; otherwise, they can easily loosen due to uneven pressure and cause accidents, as shown in the figure below.

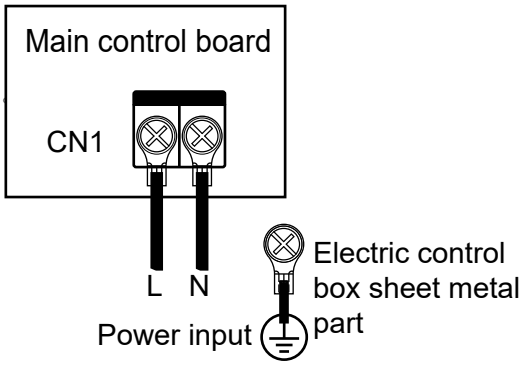


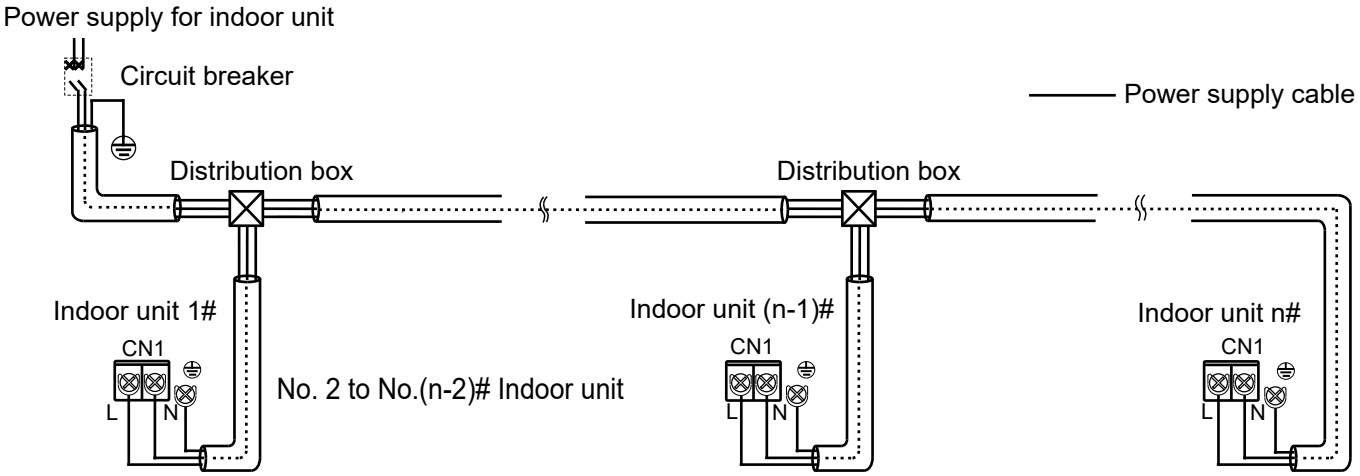
E The connected power supply cable should be secured with a wire clamp to prevent loosening, as shown in the figure.



Power supply cable system connection

The power supply terminal of the indoor unit is fixed on the main control board, the power supply cable is connected to the power supply terminal labeled "CN1" on the main control board. The live and neutral wires are connected according to the main control board logos "L" and "N", and the earth wires are directly connected to the electric control box sheet metal.





CONNECTING THE WEAK CURRENT CABLE

Extension cable of the electronic expansion valve coil connection

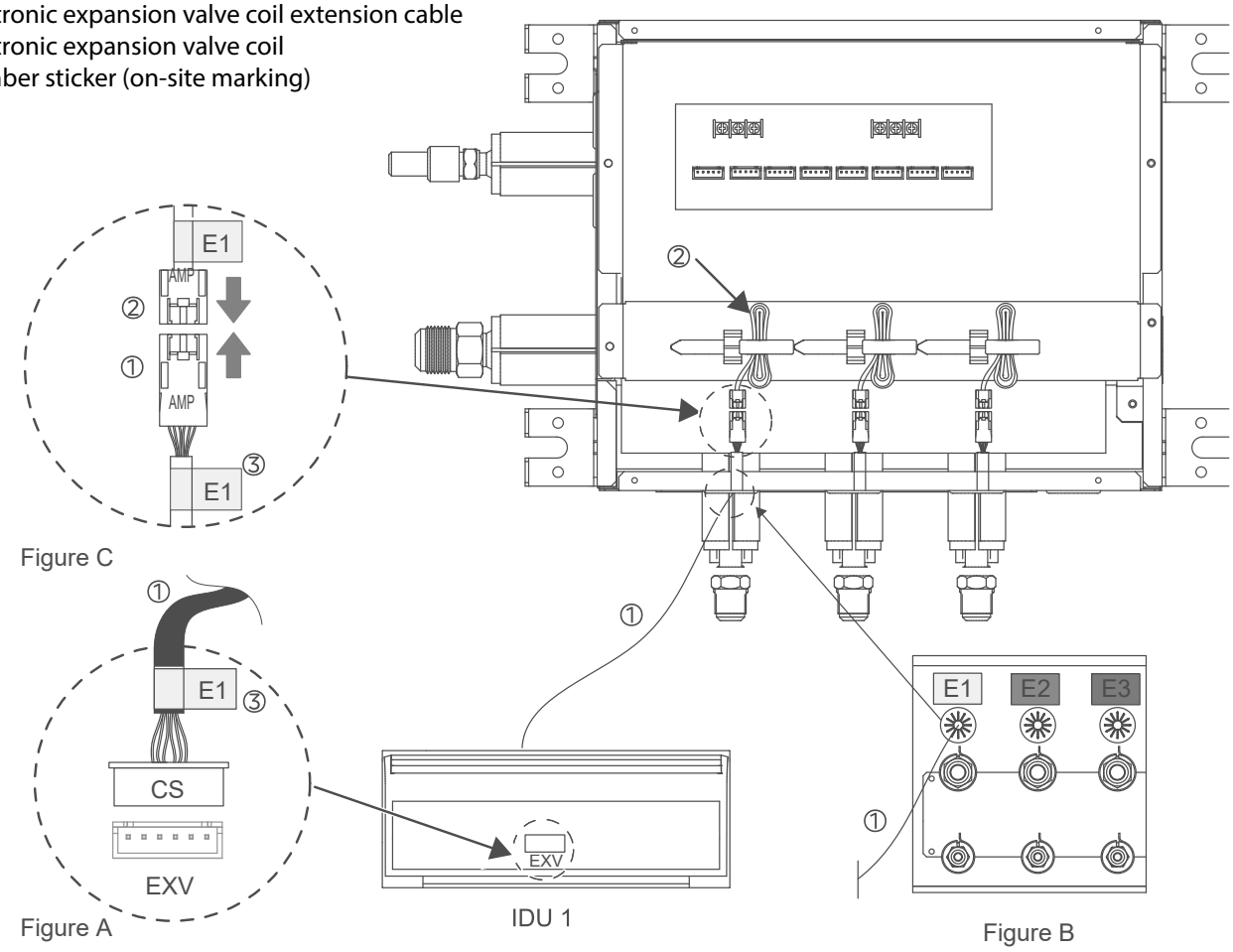
1. Remove number stickers (3) from the accessory kit, and attach the number stickers (E1-E6, indicating connection to IDUs 1-6 of the branch box) to both ends of the (1) extension cable of the electronic expansion valve coil
2. Figure A: Insert the CS terminal (with the E1 number sticker) of the (1) extension cable of electronic expansion valve coil to the EXV port of the IDU 1 main control board PCB.
   Figure B: Pass the AMP terminal of the (1) extension cable of the electronic expansion valve coil through the knockout hole. Number stickers E1, E2, and E3 indicate that the knockout hole, branch pipe joint (liquid-side), and branch pipe joint (gas-side) correspond to IDUs 1/2/3, respectively.
   Figure C: Connect the AMP terminal (with E1 number sticker) of the (1) extension cable of the electronic expansion valve coil to the AMP terminal (with the E1 sticker) of the (2) electronic expansion valve coil.

NOTE **The adhesive side of the stickers should be pressed firmly onto the cable after both ends are folded.**

NOTE **The (1) extension cable of the electronic expansion valve coil comes with three specifications: 4 m, 10 m, and 20 m.**
On-site construction personnel purchase extension cables of proper specifications from the manufacturer based on the installation distance between the IDUs and branch box.

NOTE **The gas/liquid branch pipes of IDUs 1/2/3/4 must correspond to the gas/liquid pipe screw joints marked with E1/E2/E3/E4 on the branch box. Connecting these in an incorrect sequence will cause errors in the electronic expansion valve that controls IDU refrigerant flow, frosting or freezing of the IDU, refrigerant noise, and other errors.**

① Electronic expansion valve coil extension cable
② Electronic expansion valve coil
③ Number sticker (on-site marking)



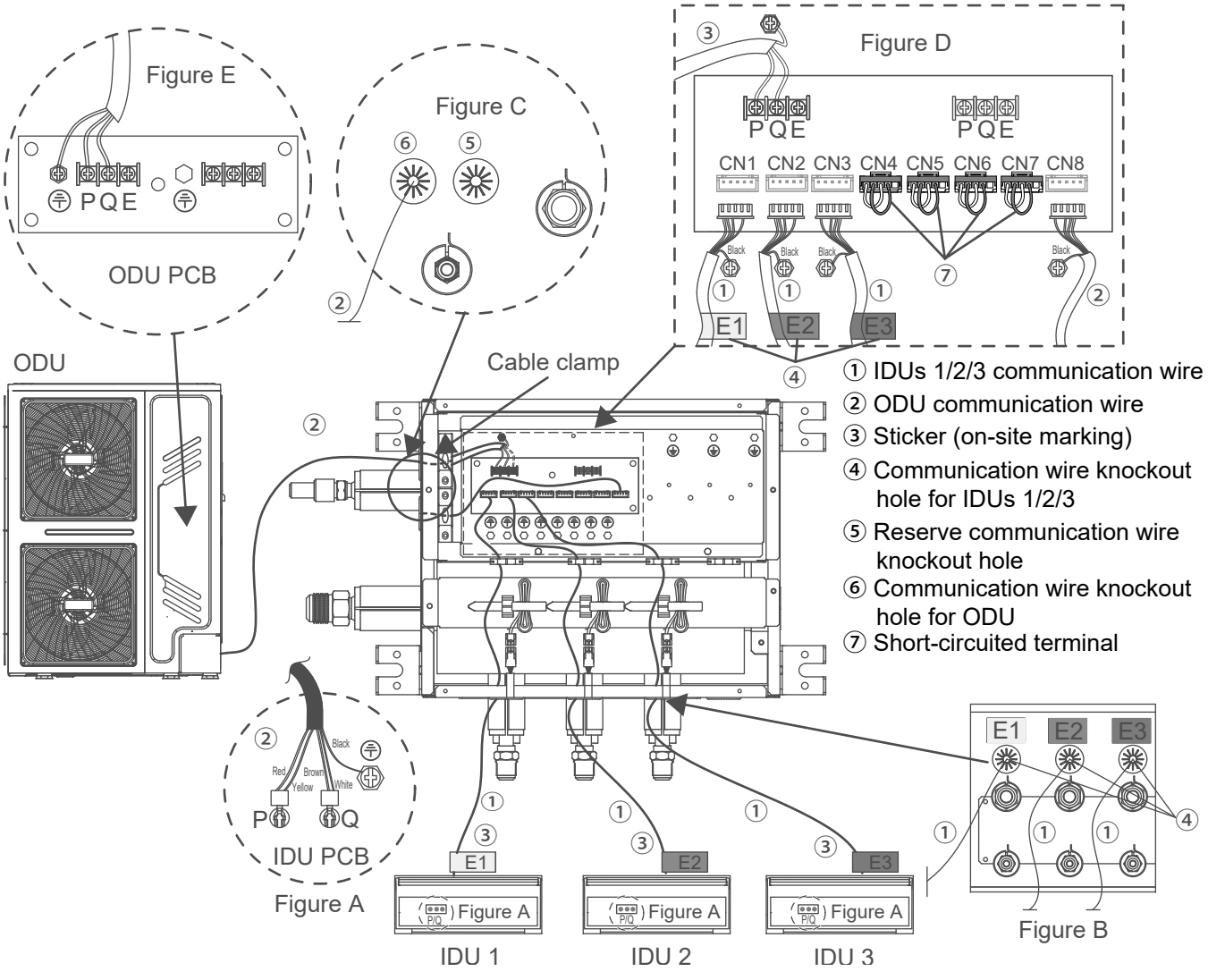
CONNECTING THE ELECTRONIC EXPANSION VALVE COIL EXTENSION CABLE

1. Remove number stickers (3) from the accessory kit, and attach the number stickers (E1-E6, indicating connection to IDUs 1-6 of the branch box) to both ends of the (1) extension cable of the electronic expansion valve coil
2. Figure A: Connect the U-shaped plugins of the ① IDUs 1/2/3 communication wires (with number stickers) to the P/Q ports of the IDUs 1/2/3 main control board PCB.
   Figure B: Pass the other terminal of the ① IDUs 1/2/3 communication wires through the ④ knockout hole. The stickers numbered E1, E2, and E3 indicate that the knockout hole, branch pipe joint (liquid-side), and branch pipe joint (gas-side) correspond to IDUs 1/2/3, respectively.
   Figure C: Pass the other terminal of the ② ODU communication wire through the ⑥ knockout hole.
   Figure D: Insert ① IDUs 1/2/3 communication wires to CN1/CN2/CN3 ports of corresponding PCB , and connect ② ODU communication terminal to P/Q port of corresponding PCB
   Figure E: Connect the other terminal of the ② ODU communication wire to the P/Q port of the ODU PCB

NOTE **The adhesive side of the stickers should be pressed firmly onto the cable after both ends are folded.**

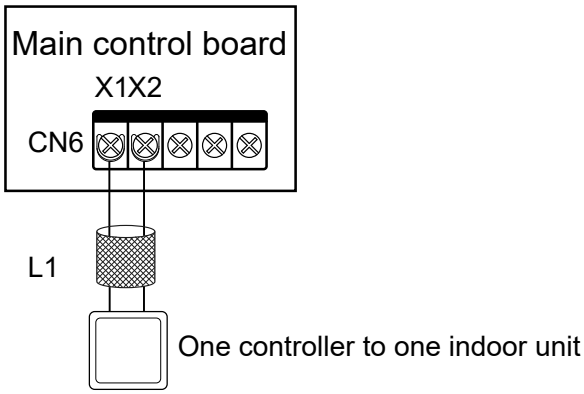
CAUTION

- **The IDU and ODU communication wires must have their shielded layer earthed.**
- **The CN1/CN2/CN3/CN4/CN5/CN6 ports on the PCB shown in Figure D are for connecting the communication wires of the IDUs with external electronic expansion valves in the branch box. The CN7/CN8 ports are for connecting the communication wires of the IDUs with built-in electronic expansion valves. These two types of connections must not be mixed.**

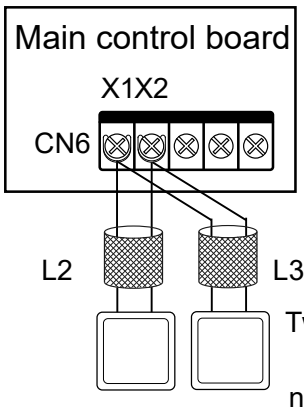


X1/X2 communication cable connection

The X1X2 communication wiring is mainly connected to the wired controller to achieve one controller per indoor unit and two controllers per indoor unit. The total length of the X1X2 communication wiring can reach 200 meters. Please use shielded wires, but the shield layer cannot be earthed. X1 and X2 ports are located at terminal block "CN6" of the main control board. There is no distinction between negative and positive electrodes. For details, see the following figure:



One controller to one indoor unit



Two controllers to one indoor unit
(Master-slave wired controller needs to be set. For details, see the wired controller manual.)

L1 ≤ 200m, L2+L3 ≤ 200m.

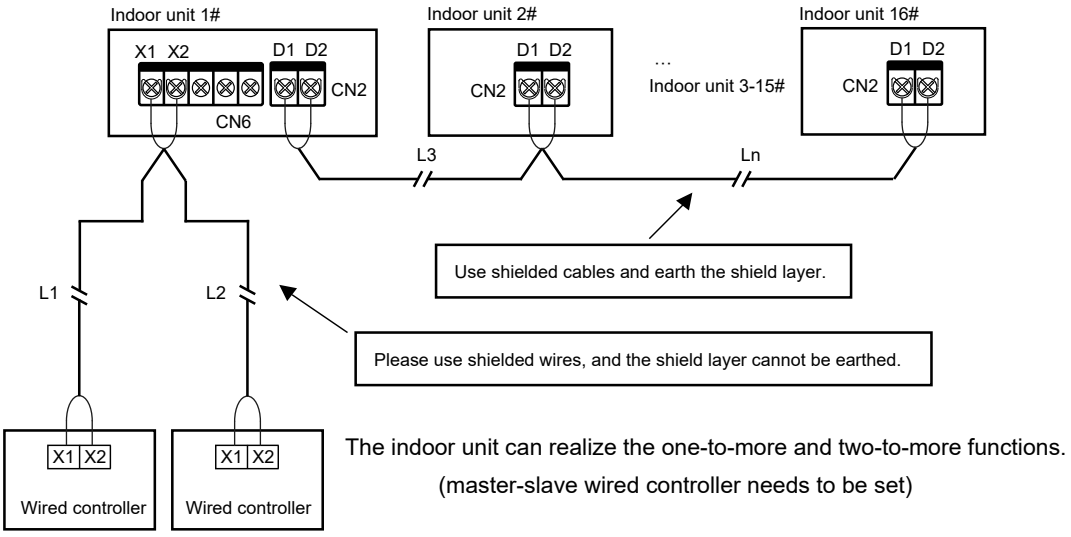
CAUTION

Two wired controllers of the same model can be used to control one indoor unit at the same time. In this case, one controller must be set to be the master and the other to be the slave. For details, see the wired controller manual.

D1D2 communication wiring connection (limited to outdoor unit and system configuration)

A Achieving one-to-multiple and two-to-multiple functions of the indoor unit wired controller through D1D2 communication (a maximum of 16 sets)

D1D2 communication is 485 communication. The one-to-more and two-to-more functions of the indoor unit wired controller can be achieved through D1D2 communication, as shown in the figure below:



L1+L2 ≤ 200m, L3+Ln ≤ 1200m

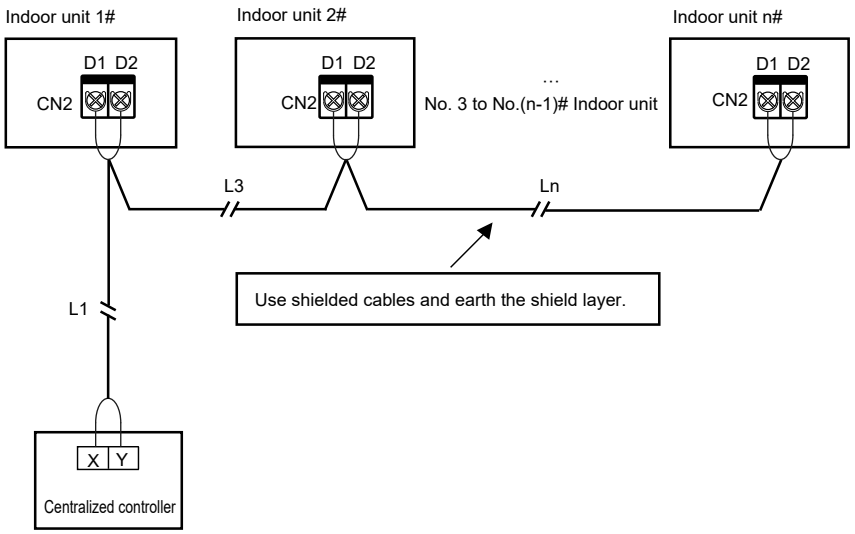
CAUTION

When the indoor units in the same refrigerant system are V8 indoor units, D1D2 communication can enable one-to-multiple and two-to-multiple functions of the indoor unit wired controller.

To enable two-to-multiple functions, wired controllers must be of the same model.

B Achieving centralized control of the indoor unit through D1D2 communication

The D1D2 communication wiring can also be connected to the centralized controller to achieve centralized control of the indoor unit, as shown in the figure below:



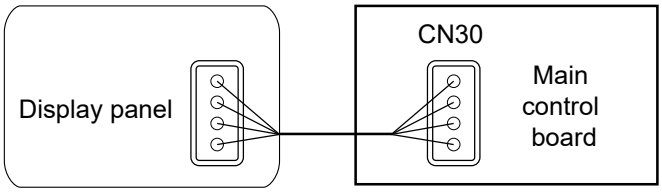
L1+L3+Ln ≤ 1200m

EXTERNAL BOARD CONNECTION

The external boards are connection module outside the main control board, including a Switch module, 1# Expansion board and 2# Expansion board. Limited to outdoor unit and system configuration.

Connection of Display Panel

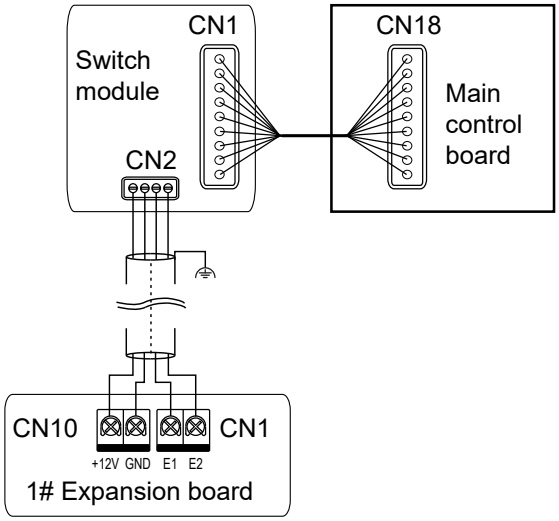
The display panel is connected to the main control board through a 4-core cable, and is connected to the "CN30" socket of the main control board, as shown in the following figure:



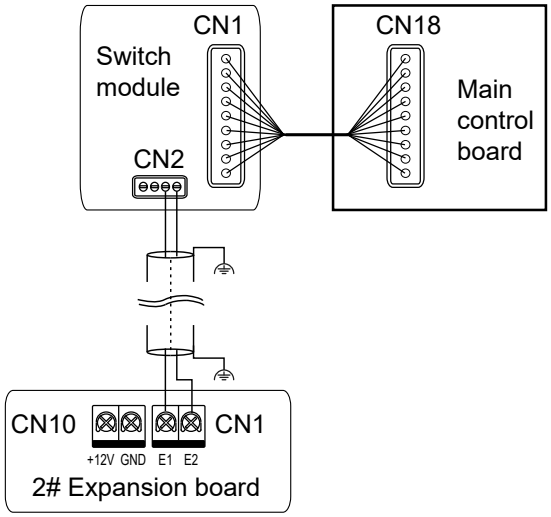
Switch module connection

Expansion boards can communicate with the main control board through the Switch board. Use one or both of the two expansion boards.The wiring figures are as follows:

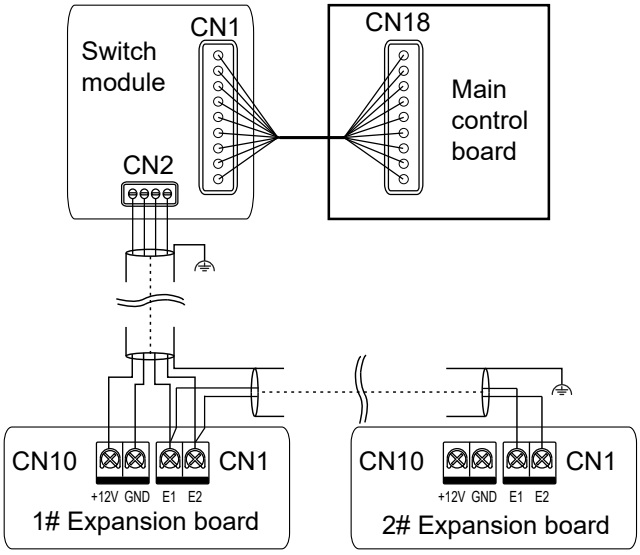
Use 1# Expansion board



Use 2# Expansion board



Use 1# and 2# Expansion boards

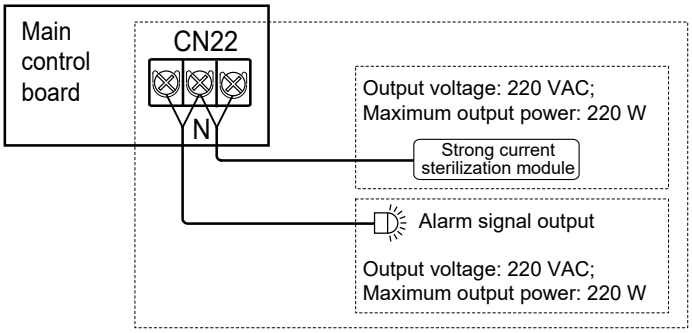


For the function introduction of the Switch module, 1# Expansion boards and 2# Expansion boards, please refer to the function module manual.

ALARM SIGNAL AND STERILISATION MODULE

Refer to the following figure for the wiring of alarm signal and Sterilisation module.

The output voltage is 220-240V~.



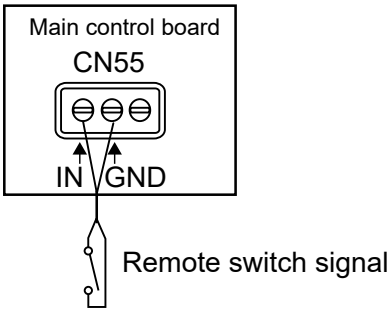
The Sterilisation function needs to be active by the wired controller, refer to the manual of wired controller for the detail setting.

Other optional in-series equipment may be connected, contact the agent for detail.

Remote On/Off control

Refer to the following figure for using Remote On/Off control.

Remote Switch	Air Conditioning System
On	Off
Off	On

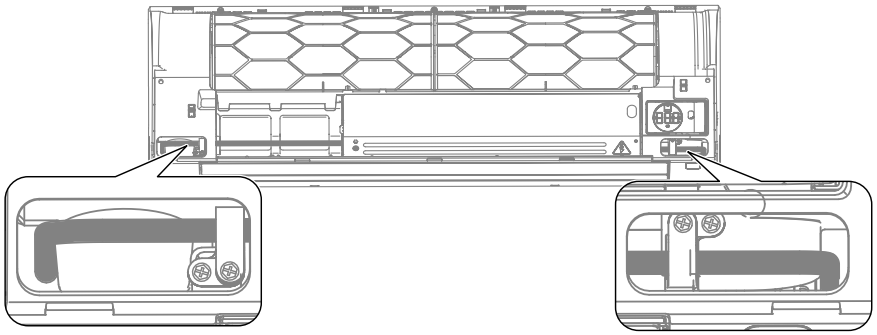


The priority of remote control is higher than that of the wired controller.

More remote control functions, such as delayed control, air conditioning system is on when remote control is on, please refer to the manual of wired controller.

Closing the electric control box cover

Straighten out the connecting wires and lay them flat, and separate and fix the power cable and communication wires with cable clamps.



Do not cover the electric control box during power-on.

When covering the electric control box, arrange the cables carefully and do not clip the connecting wires between electric control box cover and electric control box..

ERROR AND STATUS CODES

ERROR CODES

The error code is displayed on the display box and the wired controller display.

Definition	Error code	Digital display
Emergency stop	A01	
R32 refrigerant leaks, ⚠ **DANGER** requiring shutdown immediately	A11	
Outdoor unit fault	A51	
Interlocking control Heat Recovery Ventilation Unit fault(in-series application)	A71	
The Humidity Unit fault	A72	
Interlocking control Heat Recovery Ventilation Unit fault（non-serial application)	A73	
The AHU Kit slave unit fault	A74	
Self-check fault	A81	
MS (refrigerant flow direction switching device) fault	A82	
Mode conflict	A91	
1# EEV coil fault	b11	
1# EEV body fault	b12	
2# EEV coil fault	b13	
2# EEV body fault	b14	
Protection on 1# water pump	b34	
Protection on 2# water pump	b35	
Water level switch alarm	b36	
Reheating electric heater fault	b71	
Preprocessing electric heater fault	b72	
Humidifier fault	b81	
Duplicate indoor unit address code	C11	
Abnormal communication between the indoor unit and outdoor unit	C21	

Definition	Error code	Digital display
Abnormal communication between the indoor unit main control board and fan drive board	C41	
Abnormal communication between the indoor unit and wired controller	C51	
Abnormal communication between the indoor unit and Wi-Fi Kit	C52	
Abnormal communication between the indoor unit main control board and display board	C61	
Abnormal communication between the AHU Kit slave unit and master unit	C71	
Number of AHU Kits is not the same as the set number	C72	
Abnormal communication between the linked humidifying indoor unit and master indoor unit	C73	
Abnormal communication between the linked FAPU and master indoor unit (series setting)	C74	
Abnormal communication between the linked FAPU and master indoor unit (non-series setting)	C75	
Abnormal communication between the main wired controller and secondary wired controller	C76	
Abnormal communication between the indoor unit main control board and 1# Expansion board	C77	
Abnormal communication between the indoor unit main control board and 2# Expansion board	C78	
Abnormal communication between the indoor unit main control board and Switch board	C79	
The indoor unit is in power-off state	C81	
Air inlet temperature of the indoor unit is too low in heating mode	d16	
Air inlet temperature of the indoor unit is too high in cooling mode	d17	
Alarm for exceeding temperature and humidity range	d81	
Sensor control board fault	dE1	
PM2.5 sensor fault	dE2	
CO2 sensor fault	dE3	
Formaldehyde sensor fault	dE4	
Human Detect sensor fault	dE5	
T0 (fresh inlet air temperature sensor) short-circuits or cuts off	E21	
The upper dry bulb temperature sensor short-circuits or cuts off	E22	
The lower dry bulb temperature sensor short-circuits or cuts off	E23	
T1 (Indoor unit return air temperature sensor) short-circuits or cuts off	E24	

Definition	Error code	Digital display
The built-in room temperature sensor of the wired controller short-circuits or cuts off	E31	
The wireless temperature sensor short-circuits or cuts off	E32	
The external room temperature sensor short-circuits or cuts off	E33	
Tcp (pre-cooled fresh air temperature sensor) short-circuits or cuts off	E61	
Tph (pre-heated fresh air temperature sensor) short-circuits or cuts off	E62	
TA (outlet air temperature sensor) short-circuits or cuts off	E81	
Outlet air humidity sensor fault	EA1	
Return air humidity sensor fault	EA2	
Upper wet bulb sensor fault	EA3	
Lower wet bulb sensor fault	EA4	
R32 refrigerant leakage sensor fault	EC1	
T2A (heat exchanger inlet temperature sensor) short-circuits or cuts off	F01	
T2 (heat exchanger middle temperature sensor) short-circuits or cuts off	F11	
T2 (heat exchanger middle temperature sensor) overtemperature protection	F12	
T2B (heat exchanger outlet temperature sensor) short-circuits or cuts off	F21	
Fan drive board input side overcurrent protection	P31	
At least 6 times P31 fault codes detected within 60 minutes	P34	
Power supply voltage is too low fault	P52	
Main control board EEPROM fault	P71	
Indoor unit display control board EEPROM fault	P72	
Locked (electronic lock)	U01	
Unit model code not set	U11	
Capacity(HP) code not set	U12	
Capacity(HP) code setting error	U14	
AHU Kit fan control input signal DIP setting error	U15	
Address code not detected	U38	

Definition	Error code	Digital display
Motor failed more than once	J01	
IPM (fan module) overcurrent protection	J1E	
Instantaneous overcurrent protection for phase current	J11	
Low bus voltage fault	J3E	
High bus voltage fault	J31	
Phase current sample bias error	J43	
Motor and indoor unit are unmatched	J45	
IPM and indoor unit are unmatched	J47	
Motor startup failure	J5E	
Motor blocking protection	J52	
Speed control mode setting error	J55	
Phase lack protection of motor	J6E	

OPERATING STATUS CODES AND DEFINITIONS

Definition	Code	Digital display
Oil return or preheating operation	d0	
Self-cleaning	dC	
Mode conflict	dd	
Defrosting	dF	
Static pressure detection	d51	
Remote shutdown	d61	
Indoor unit backup operation	d71	
outdoor unit backup operation	d72	
Main control program upgrading	OTA	

CAUTION

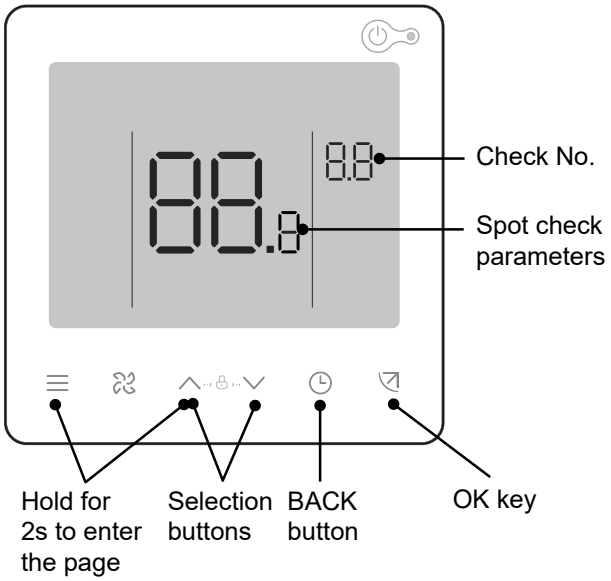
Error codes are displayed only for certain outdoor unit models and indoor unit configurations

During main control program updates, ensure the indoor unit and outdoor unit remain powered on. Otherwise, the update process will stop.

SPOT CHECK FUNCTION

Use the bi-directional communication wired controller (for example, WDC3-86S) to activate the spot check function in the following steps:

1. On the main page, hold "☰" and "▲" for 2s to enter the query page. The wired controller displays "CC". Press "▲" or "▼" key to select the indoor unit address n00-n74 (indicating the address of a specific indoor unit), and press the " ⏎ " key to enter the parameter query page.
2. Press the "▲" or "▼" key to query the parameters, and the parameters can be queried cyclically. See the spot check list below for details.
3. Press the " 🕒 " key to exit the query function.
4. On the top of the query page, the "Timing area" displays the spot check serial number, and the "Temperature area" displays the content of the spot check parameters.



No.	Displayed content	No.	Displayed content
1	Indoor unit address	11	Actual RH indoor humidity
2	Capacity HP of indoor unit	12	Actual fresh air processing unit TA air supply temperature
3	Actual set temperature Ts		
4	Set temperature of the unit that is operating currently, Ts (Remarks: The temperature displayed is the actual set temperature Ts)	13	Air-blow pipe temperature
		14	Compressor discharge temperature
		15	Target superheat
5	Actual T1 indoor temperature	16	EXV opening (actual opening/8)
6	Modified indoor temperature T1_modify	17	Software version No.
7	T2 heat exchanger intermediate temperature	18	Historical error code (recent)
8	T2A heat exchanger liquid pipe temperature	19	Historical error code (sub-recent)
9	T2B heat exchanger gas pipe temperature	20	Fan drive version No.
10	Actual set humidity RHs	21	[———] is displayed

CHECKLIST AND TEST RUN

CHECKLIST BEFORE TEST RUN

CAUTION **After the installation of the unit, check the items listed BEFORE powering on.**

Pass/Fail	Check list
	Read the complete installation and operation manual.
	Installation Check that the units are properly installed, to avoid abnormal noises and vibrations when starting up the units.
	Compressor and others shipping brackets removed.
	'The Piping Length' and 'Additional Refrigerant Charge' are calculated and recorded on the table of the unit.
	Be sure that the stop valves are open on both liquid and gas side.
	All Controllers installed and all control wiring is installed and properly connected at each terminal block.
	All drain piping is connected, including indoor units tie-in, and insulated as required.
	Refrigerant lines are completely insulated including flare nut connections at Indoor Units.
	All ductwork is connected and air filters installed.
	Air inlet/outlet Check that the air inlet and outlet of the unit is not obstructed by paper sheets, cardboard, or any other material.
	Field wiring Be sure that the field wiring has been carried out according to the manual and the applicable legislation.
	Earth wiring Be sure that the earth wires have been connected properly and that the earth terminals are tightened.
	Insulation test of the main power circuit Using a megatester for 500 V, check that the insulation resistance of 2 MΩ or more is attained by applying a voltage of 500 V DC between power terminals and earth. (NEVER use megatester for the communication wiring).
	Fuses, circuit breakers, or protection devices Check that the fuses, circuit breakers, or the locally installed protection devices are of the specified size and type. Do not bypass a fuse and a protection device.
	Internal wiring Check the electrical component box and inside the unit for loose connections or damaged electrical components.
	Components damage Check for damaged components and extruded piping inside the unit. Consistency Check between Refrigeration Pipelines and Communication wirings Check and confirm that the refrigerant piping and wiring belong to the same unit.
	Oil leak Check if there is oil leaking from the compressor and piping. If there is an oil leak, try to repair the leak. If the repair is not successful, please call the local agent.
	Refrigerant leak Check for refrigerant leaks inside the unit. Try to repair any leak. If unsuccessful, please call the local agent. Do not come into contact with the refrigerant leaking from the refrigerant piping connections. It may cause frostbite.
	Flammable refrigerant. If there is a refrigerant leak, keep ventilation to avoid the risk of refrigerant stagnating. If a leak is suspected, all naked flames shall be removed/extinguished. If a refrigerant leak requires brazing, all refrigerant shall be recovered from the system, or isolated.
	Line Voltage is checked and verified to be within specified range for all system components. Power the outdoor units 12 hours before operation to power the crankcase heater and protect the compressor.

TEST RUN

Power up the unit and check the following items:

Indoor Unit

- The wired/remote controller switch is operating normally.
- The display of the wired/remote controller is normal, the function keys work normally, the room temperature adjustment is normal, and the air flow and direction adjustment are normal.
- The LED indicator is on.
- Water drainage is normal.
- Check the indoor units one by one for normal operation, and the cooling and heating functions are normal without vibration or abnormal sound.

Outdoor Unit

- There are no vibrations or strange sounds during operation.
- The fan, noise and condensation do not affect the neighbors.
- There is no refrigerant leakage.

Refer to the "Symptoms That Are Not Faults" in the "Operation" in this manual.

CLEANING AND MAINTENANCE

WARNING

- **For safety reasons, always turn off and power down before cleaning the air conditioner.**
- **Only professional service personnel can carry out maintenance.**
- **Do not use flammable or explosive materials near the product.**
- **Do not use organic solvents such as paint thinner to clean this product.**
- **Only qualified dealers and professionally qualified electricians can install the optional accessories.**
- **Be sure to use the optional accessories specified by local dealer.**
- **Improper installation by yourself may result in water leakage, electric shock or fire.**
- **Do not wash the air conditioner with water; otherwise, it may cause an electric shock.**
- **Use a stable standing platform.**

CLEANING

Cleaning the Air Filter

CAUTION

Air filters can be used to remove dust or other particles from the air, and if clogged, the effectiveness of the air conditioner will be greatly reduced. clean the air filter frequently when using for extended periods.

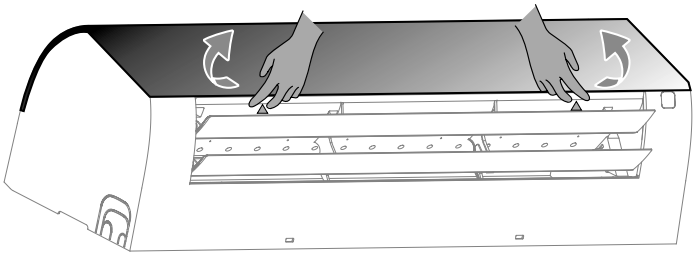
If excess dirt makes the filter difficult to clean, replace the filter.

Do not remove the air filter unless it is being cleaned; otherwise, it may cause malfunction.

To avoid deformation of the air filter, do not use fire or a burning appliance to dry the air filter.

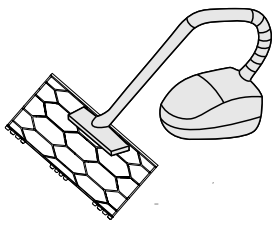
Non-professionals should not disassemble, replace or repair the filter.

① Use two hands to hold the panel above the air outlet, open it in the direction of the arrow. Use one hand to hold the panel and the other to lift the middle part of the air filter and pull it out downwards.

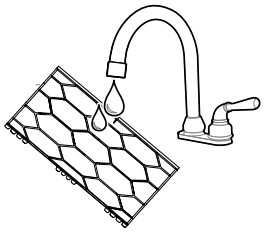


②

Clean the air filter with a vacuum cleaner, or soft brush.



Clean the air filter with clean water (except for the activated carbon module), and neutral detergent.



③ Reinstall the air filter in the reverse sequence of the steps above and put the panel in original place.

Cleaning the Louvre and Unit Surface

① Use soft cloth to clean the louvre and unit surface .

② If a stain is hard to remove, use neutral detergent and clean the stain.

Do not use gasoline, benzene, volatile agents, decontamination powder or liquid insecticides. Otherwise, the air outlet or panel may become discolored or deformed.

Do not expose the inside of the indoor unit to moisture, as it may result in electric shock or fire.

When cleaning the louvre with water, do not scrub it violently.

If the air conditioner is used without an air filter, the accumulation of dust in the air conditioner will often cause malfunctions due to the failure to remove dust from the indoor air.

MAINTENANCE

During in-depth maintenance, the air conditioner should be cleaned and maintained by professional technicians every 2 to 3 years.

For the indoor unit in constant speed mode, the primary efficiency filter is usually cleaned every three months.

When operating in a dusty environment, the air flow and capacity of the filter will decrease. The filter may even become blocked, and the air conditioner performance and indoor air compromised.

Preheat the unit in advance.

When the heating season comes, power on the outdoor unit master unit for preheating more than 12 hours before use. The preheating time depends on the weather temperature. This can make the air conditioner operate more stably and help the refrigeration oil in the air conditioner compressor to maintain the best lubrication state, which can prolong the service life of the compressor.

Complete the following steps before the air conditioner is put out of use for a long period:

1. If the air conditioner is not in use for a long time due to seasonal changes, keep the unit running for 4-5 hours in fan mode until the unit becomes completely dry. Otherwise, it may grow mold indoors and have negative health effects.
2. When not in use for a long time, power off or unplug the power plug to reduce standby power consumption, and wipe the wireless remote controller with a clean soft dry cloth and remove the battery.
3. Turn on the power switch 12 hours before using the air conditioner again. In addition, in seasons when air conditioners are frequently used, keep the power switch on. Otherwise, failures may occur.

Before the air conditioner is idle for a long time, the internal components of the outdoor units should be checked and cleaned regularly. For more details, please contact the local air conditioner customer service center or special technical service department.

Check the return air inlet and outlet of the outdoor unit and indoor unit after long periods of use to see if they are blocked; if an inlet/outlet is blocked, clean it immediately.

Wooden buildings, newly renovated houses, and frequent use of disinfectants may contain acidic components in the air, such as formic acid, acetic acid, and hypochlorous acid, which can corrode connecting pipes and solder joints, leading to refrigerant leaks.

Factories, chemical plants, livestock farms, vegetable markets, sewage pits, and other environments may contain sulfides, acid gases such as sulfur dioxide, ammonia, and chlorides in the air, which can corrode connecting pipes and solder joints, leading to refrigerant leaks.

These places may cause corrosion to the connecting pipes and joints of the indoor unit, and it is necessary to have a professional inspection every six months.

REMOTE CONTROLLER SETUP

GENERAL PRECAUTIONS

To gain full advantage of the controller's functions and to avoid malfunction due to mishandling, we recommend that you read this instruction manual carefully before use.

The precautions described herein are classified as WARNING and CAUTION. They both contain important information regarding safety. Be sure to observe all precautions without fail.

Information classified as NOTE contains instructions to ensure proper use of the controller.

After reading, keep this manual in a convenient place so that you can refer to it whenever necessary. If the controller is transferred to a new user, be sure also to hand over the manual.

Prolonged, direct exposure to cool or warm air from the air conditioner or to air that is too cold or warm can be harmful to your physical body and health.

- **Do not spray pesticides, disinfectants and flammables directly on the remote controller.**
- **If there is a fault with the remote controller, turn it off and contact your local agent.**
- **Remove batteries before cleaning the remote controller. Do not wash the controller with water.**

- **Do not operate the device with wet hands to prevent water from entering the remote controller.**
- **Do not use the air conditioner for purposes other than those for which it is intended.**
- **Ventilate the area regularly. Be careful using the air conditioner with other heating equipment.**

PRECAUTIONS IN HANDLING REMOTE CONTROLLER

- Direct the transmitting part of the remote controller to the receiving part of the air conditioner.
- If something blocks the transmitting and receiving path of the indoor unit and the remote controller, it will not operate.
- Transmitting distance is approximately 7 m.
- 1 short beeps from the receiver indicates that the transmission is properly done.
- Do not drop or get it wet.
- Never press the button of the remote controller with a hard, pointed object. The remote controller may get damaged.

INSTALLATION SITE

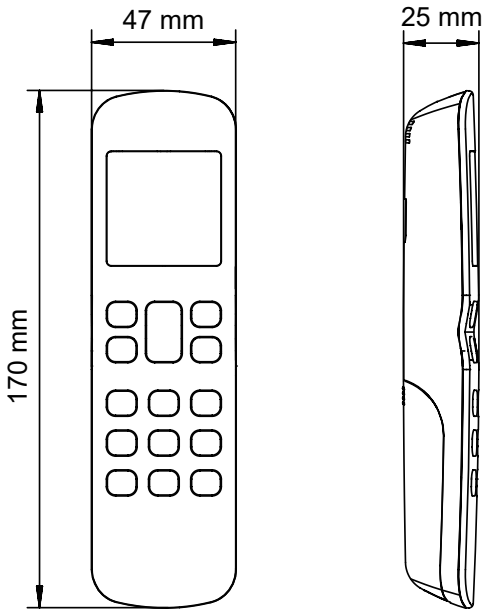
- It is possible that signals will not be received in rooms that have electronic fluorescent lighting. Please consult with the dealer before buying new fluorescent lights.
- If the remote controller operated some other electrical apparatus, move that machine away or consult your dealer.

INSTALLATION ACCESSORIES

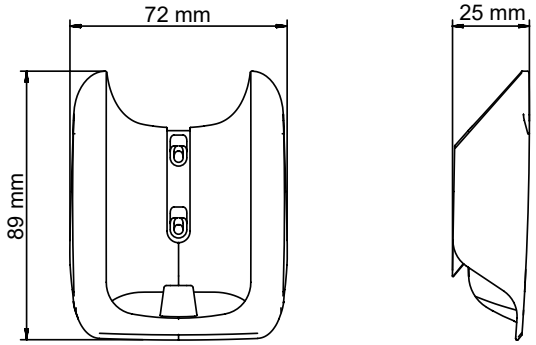
• Please check that you have all the following parts.

No.	Name	Schematic	Qty
①	Remote controller bracket		1
②	Screw lid		1
③	Philips head screw (M2.9*12)		2
④	AAA battery		2
⑤	Remote controller manual		1

DIMENSIONS OF REMOTE CONTROLLER AND BRACKET



Dimensions of remote controller



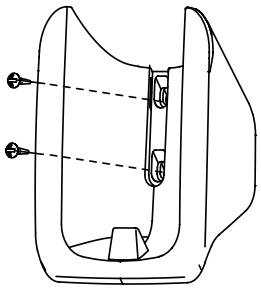
Dimensions of bracket

MODEL AND KEY PARAMETERS

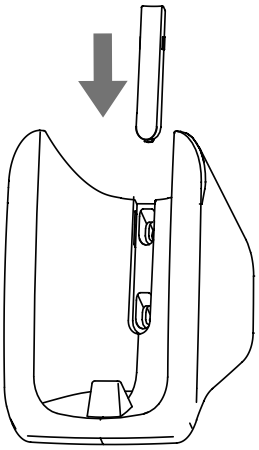
Product Part Code	17317000012384
Rated Voltage	3.0 V (AAA battery x 2)
Ambient Temperature	-5 to 43°C
Ambient Humidity	RH ≤ 90%

INSTALLATION AND FIXING

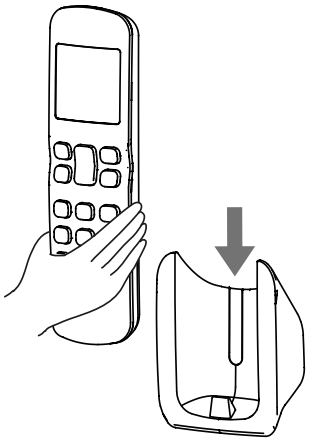
1) Use the screws (accessories) to fix and secure the remote controller bracket in a stable position



2) Slot the screw lid into the bracket cover on top of the screws (see below)

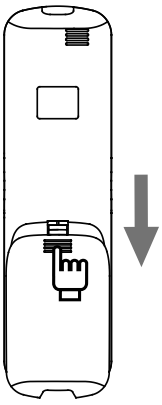


3) Slide the remote controller vertically down into the remote controller bracket (see below).

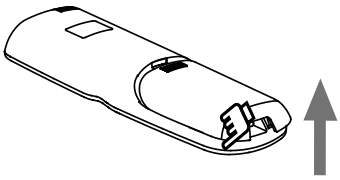


REPLACE THE BATTERIES

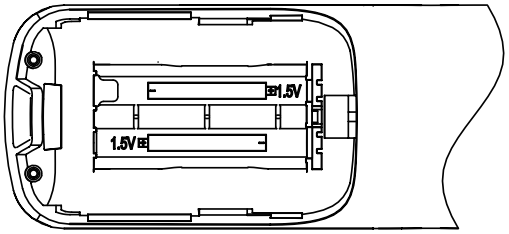
1) Slide to move the battery cover at the back of the remote controller in the direction indicated by the arrow (see below);



2) Lift up from the lower left end of the battery cover to open it (see below);

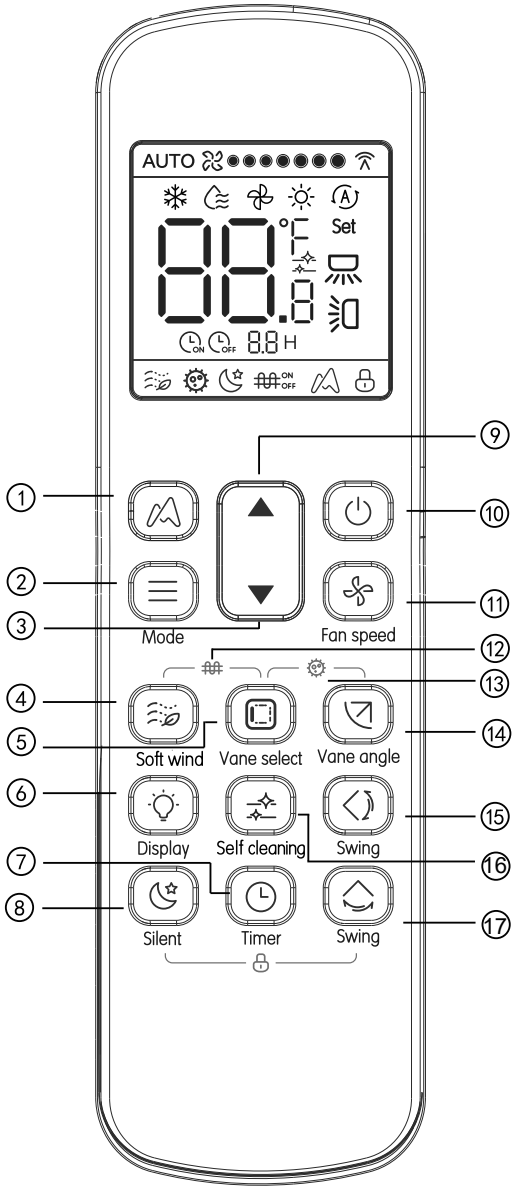


3) Take out the old batteries. Install two new AAA batteries according to the positive and negative polarities indicated (see adjacent). Close the battery cover.



REMOTE CONTROLLER OPERATION

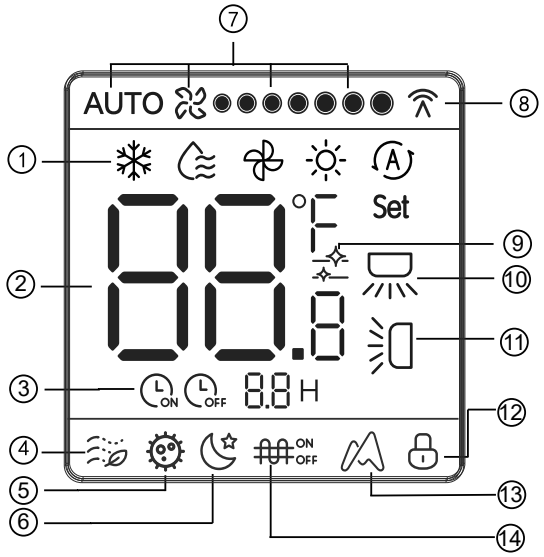
BUTTON NAMES AND FUNCTIONS



No.	Button	Function
①	-	No function on this model
②	Mode	Set operating mode: Cool → Dry→ Fan→ Heat
③	▼ Adjust downwards	Adjust the temperature setting or timer (programmed time) downwards
④	Soft wind	In Cool mode, press this button to turn on or off the Soft wind function.
⑤	-	No function on this model
⑥	Display	Turn on or off the display of the indoor unit
⑦	Timer on/off	Set the on/off timer
⑧	Silent	Turn on/off the silent function
⑨	▲ Adjust upwards	Adjust the temperature setting or timer (programmed time) upwards
⑩	On/off switch	Switch on/off the unit
⑪	Fan speed	Fan speed setting
⑫	-	No function on this model
⑬	-	No function on this model
⑭	Vane angle	Adjust the angle of the horizontal louver
⑮	Vertical swing	Turn on/off the vertical swing function
⑯	-	No function on this model
⑰	Horizontal Swing	Turn on/off the horizontal swing function

NAME AND FUNCTION ON DISPLAY SCREEN

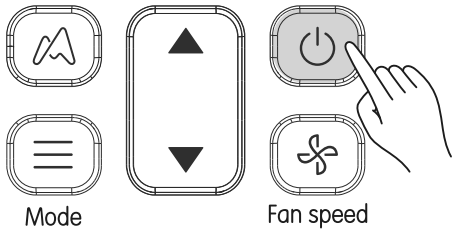
- The buttons and are not available for first generation indoor units.
- The button is only available for indoor unit with individual vane control function.
- The is only available for indoor unit with soft wind function.



No.	Name	Display Function
①	Operating mode	Displays the current operating mode
②	Temperature	Displays current temperature setting
③	Timer On/Off	Displays times to turn on/off the unit
④	Soft wind	In Cool mode, press this button to turn on or off the Soft wind function
⑤	Sterilize function	Shows that Sterilize function is on
⑥	Silent mode	Shows that Silent is on
⑦	Fan speed	Displays the current fan speed
⑧	Signal transmission	Displays signal send to the indoor unit from the remote controller
⑨	Self cleaning	Shows Self cleaning function is on
⑩	Horizontal swing	Shows that Horizontal Swing is on
⑪	Vertical swing	Shows that Vertical Swing is on
⑫	Lock	Shows that the remote controller button is locked
⑬	ETA function	Shows that ETA function is on
⑭	Auxiliary heater	Shows that auxiliary heater is on

ON/OFF OPERATION

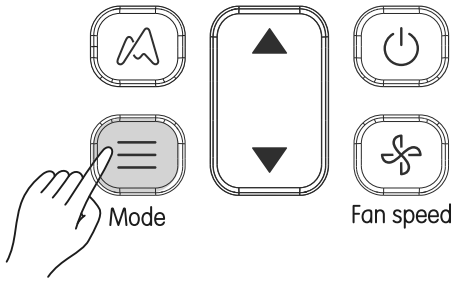
1) Press (see below), Indoor unit starts to run;



2) Press again. The indoor unit stops running.In power-off status, modes are displayed.

MODE AND TEMPERATURE OPERATION

1) Press (see below). Display screen shows the operating mode ;

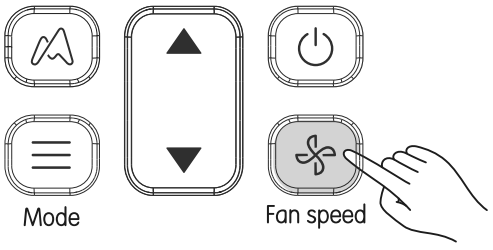


2) Press each time to change the operating mode according to the order shown below;

3) In Cool, Dry or Heat mode, press ▲ and ▼ to adjust the temperature setting. Press ▲ and ▼ to adjust the temperature by 1°C (default). Long press to change the temperature continuously.

Note: Temperature setting cannot be adjusted in the Fan mode.

FAN SPEED OPERATION



Every time when you press the button, fan speed is changed in the following order.

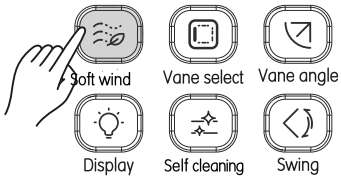
1) 7 fan speeds:

2) 3 fan speeds:

Note: Fan speeds cannot be adjusted in Dry mode.

SOFT WIND OPERATION

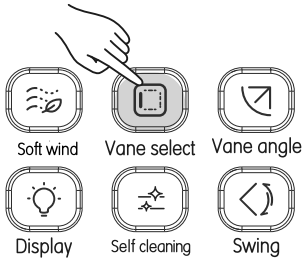
Press  to adjust the direction of the vertical louvre (see below).



① In Cool mode, press this button to turn on or off the Soft wind function.
② In Soft wind function, the fan operates at the minimum speed and swings at the minimum angle.

VANE SELECTION OPERATION

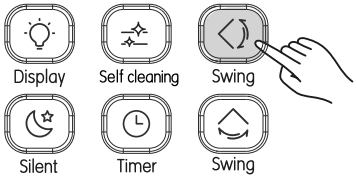
In power-on status, press this button to select the vane to be controlled.
If you press this button continuously, you can select vanes in to circulate.



The indicator in the indoor unit corresponding to the selected vane will be on, and then off after 15 seconds. After selecting the vane to be controlled, use  and  set the swing angle.

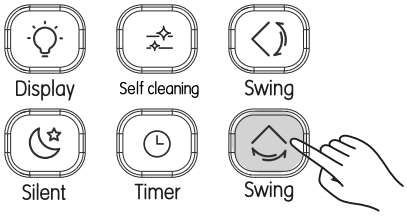
SWING OPERATION

1) Vertical Swing
① When the unit is on. Press  (see below). Start the vertical swing function, and the will light up;



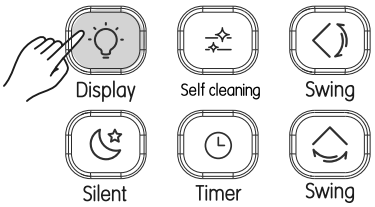
② When the vertical swing is on, press  to turn off this function.
Note:
• When the unit is turned off, the  button is invalid.
• Each time the vertical swing signal is sent, the icon will light for 15s. The unit remains in vertical swing mode.

2) Horizontal Swing
① When the unit unit is on. Press  (see below). Start the horizontal swing function, and  will light up.



② When the horizontal swing is on, press  to turn off the horizontal swing function.
Note:
• When the unit is turned off, the  button is invalid.
• Each time the horizontal swing signal is sent, the icon will light for 15s. The unit remains horizontal swing mode.

DISPLAY OPERATION



The Display function is used to control the on/off state of the display in the indoor unit.

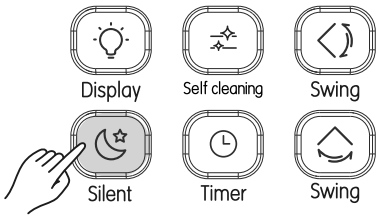
1) When the remote controller is in on or off state, press (see adjacent), and the display will light up;

2) When the display of the indoor unit lights up, press to turn off the light.

SILENT MODE OPERATION

The Silent function is used by the remote controller to send the "Silent" signal to the indoor unit. The indoor unit automatically optimises the noise it generates when it is in the "Silent" mode.

1) When the unit is in the Cool or Heat mode, press (see below) to start the Silent function. Screen displays the icon;



2) In Silent mode, press to turn off the Silent function, and the icon will disappear.

Note:

• Once it has been running for 8 hours, will no longer light up, and the unit will exit the Silent mode.

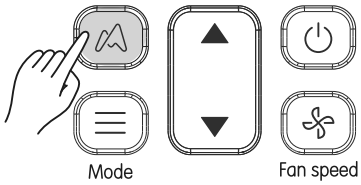
• The Silent and ETA functions cannot be implemented at the same time.

ETA FUNCTION OPERATION

The remote controller can send the ETA function signal to the indoor unit when the unit is operating in Cool or Heat mode.

1) Press (see below) to send the ETA function signal to the indoor unit. The icon is displayed;

2) Then press , , , or to exit the ETA function. The icon disappears.



Note:

• When ETA function is set up, the Fan Speed is forced to Auto.

• Once it has been running for 8 hours, will no longer light up.

• The Silent and ETA function cannot be implemented at the same time.

TIMER OPERATION

"Timer" is used to set the timed on/off state of indoor unit.

1) When the unit is powered on:

① Press (see below), and the remote controller will display "Timer off", and "0.0H" will appear in the display

② Press to adjust the timer settings;

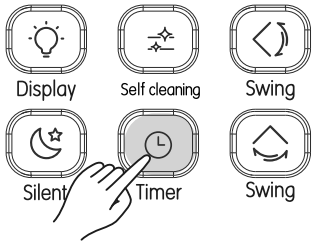
2) When the unit is powered off:

① Press (see below), and the remote controller will display "Timer On", and "0.0H" will appear in timer area.

Adjust the Timer On settings now;

② Press to adjust the timer settings;

③ Once the adjustment is done, the timer information is sent to the indoor unit.



Note:

• When Timer On is being set, you can set the power-on mode, fan speed, and temperature.

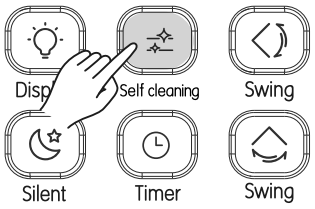
• If the timing period is more than 10 hours, the timing period increases by 1 hour.

• To change the time: Press the corresponding button, change the time, and then confirm the changes.

• Adjust the Timer on/off to 0.0h to cancel the Timer on/off settings.

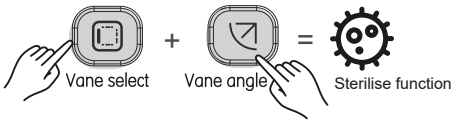
SELF-CLEANING OPERATION

Press (see below) to send the Self cleaning signal to the indoor unit. The icon is displayed



STERILISE FUNCTION OPERATION

1) Press and at the same time to start the Sterilise function.
The screen will display the icon (see below);



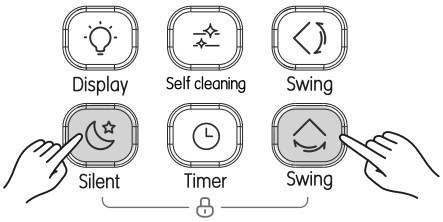
2) When the Sterilise function is on, press and at the same time to turn off this function, and the icon will disappear from the display.

BUTTON LOCK OPERATION

Once the buttons on the remote controllers are locked, all the other button operations except for Unlock and IDU Address Setting are invalid.

1) Press and at the same time to lock the button (see below), and the screen will display the lock icon

2) Press and at the same time, and the lock icon will disappear. Button is unlocked.



AUXILIARY HEATER OPERATIONS (RESERVED)

1) Press and at the same time to start auxiliary heater (see below), and the screen will display the icon ON;
2) Press and at the same time, and the screen will display the icon OFF, the signal of stop the auxiliary heater will send to the IDU.

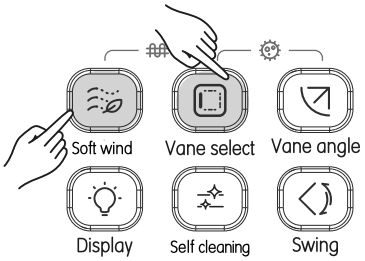


Figure 3.20

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**Cost of a local call may be higher from a mobile phone. (National calls from public phones in Australia are free.)*

For further information visit **www.rinnai.com.au** or email **enquiry@rinnai.com.au**

Rinnai has a Service and Spare Parts network with personnel who are fully trained and equipped to give the best service on your Rinnai appliance. If your appliance requires service, please call our National Help Line. Rinnai recommends that this appliance be serviced once a year.

With our policy of continuous improvement, we reserve the right to change, or discontinue at any time, specifications or designs without notice.