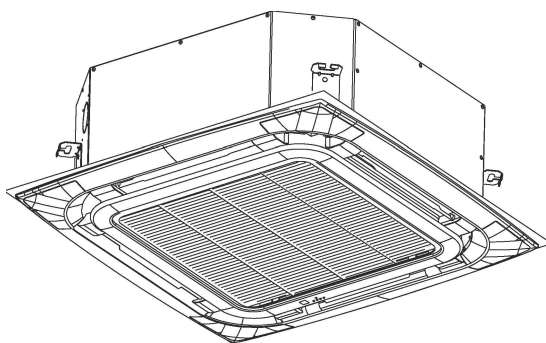




## VRF CASSETTE AIR CONDITIONER Installation and User's Manual



This instruction manual contains important information and recommendations that we would ask you to comply with to obtain best results from air conditioner.

Thank you once again.

# PREFACE

## Dear User:

Thank you for purchasing and using our product. Please read this manual thoroughly before installation, maintenance, or troubleshooting to ensure proper and comprehensive understanding and usage of the product.

This manual is applicable only to the listed indoor unit models. For information related to outdoor unit or anyother indoor units, please refer to the relevant installation and operation manuals.

For detailed operations of supplementary control devices such as wired controller, remote controller, and central controller, please refer to the respective manuals provided with those devices.

- ⑤ **Follow the instructions in this manual strictly to ensure safe and correct usage of the product.**
- ⑤ **All illustrations and contents in this manual are for reference only. To adapt the products to the customers better, we will make continuous improvements and innovations without prior notice.**
- ⑤ **Regular cleaning and maintenance of your product are necessary to enhance air conditioning efficiency and extend the unit's lifespan. Please contact your local service center before each air conditioning season for professional cleaning, maintenance, inspection, and/or repair services (charges apply).**
- ⑤ **After reading this manual, please keep it in a safe place for future reference.**



### **[Prompt]**

Panels, wired controller, and remote controller are available in multiple models. All optional or additional accessories should use our components.

All illustrations in this manual are for explanatory purposes only. The appearance and functions of your product may differ from the illustrations in this manual. Please refer to the actual model.

# Contents

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## Safety Precautions

**!** Read the following safety precautions carefully before use

1. Installation or removal of the equipment must be carried out by professional personnel and must be reliably grounded;
2. DO NOT direct airflow to people, pets, or plants, and avoid excessively lowering indoor temperatures;
3. DO NOT allow the air conditioner to blow on burners or heating devices directly;
4. Use power sources with protective devices such as air switches;
5. DO NOT touch the outdoor unit, place items on it, or excessively push or impact it;
6. DO NOT turn off the air conditioner by using the power switch directly;
7. DO NOT use damaged or non-specified power cords, air switches, or miniature circuit breakers;
8. DO NOT operate the air conditioner with wet hands, or wash the air conditioner with water or other liquids, as this may cause electric shock or damage the air conditioner;
9. DO NOT expose your body to direct cold air for an extended period, and do not set the indoor temperature too low;
10. DO NOT block the air inlet and outlet of the indoor unit or outdoor unit;
11. DO NOT use the air conditioner to dry clothes or refrigerate food;
12. DO NOT use the air conditioner but disconnect the power during thunderstorms or other severe weather conditions;
13. If the air conditioner will not be used for a long time or when cleaning, be sure to unplug the power cord or turn off the power switch;
14. DO NOT insert fingers or other objects into the air inlet or outlet of the indoor or outdoor unit;
15. DO NOT share the power switch or connection cables with other appliances, and do not use fuses of incorrect capacities or types;
16. If an abnormal phenomenon occurs (e.g. a burning smell), be sure to unplug the power cord or turn off the power switch;
17. Never place chemical sprays or dangerous items such as paint near the air conditioner or spray them at the air conditioner;
18. If the power cord is damaged, it must be replaced by the manufacturer, its service department, or similar qualified personnel, so as to avoid danger;
19. DO NOT allow persons with physical, sensory, or mental disabilities, or those lacking experience and knowledge (including children) to use the air conditioner, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety;
20. Children being supervised not to play with the appliance.
21. The appliance shall be installed in accordance with national wiring regulations.
22. 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.
23. Children shall not play with the appliance.
24. Cleaning and user maintenance shall not be made by children without supervision.
25. Each circuit loop of the indoor and outdoor units must be equipped with an all-pole disconnection device with a contact separation distance of at least 3mm;
26. All power circuits must be disconnected before accessing the terminal block;
27. Make sure that the power supply matches the requirements on the nameplate prior to installation;
28. Dispose of used batteries in the "hazardous waste" classification bin;

# Product Introduction

## ■ Operating Range

To maintain optimal performance, please operate the air conditioner under the following temperature conditions

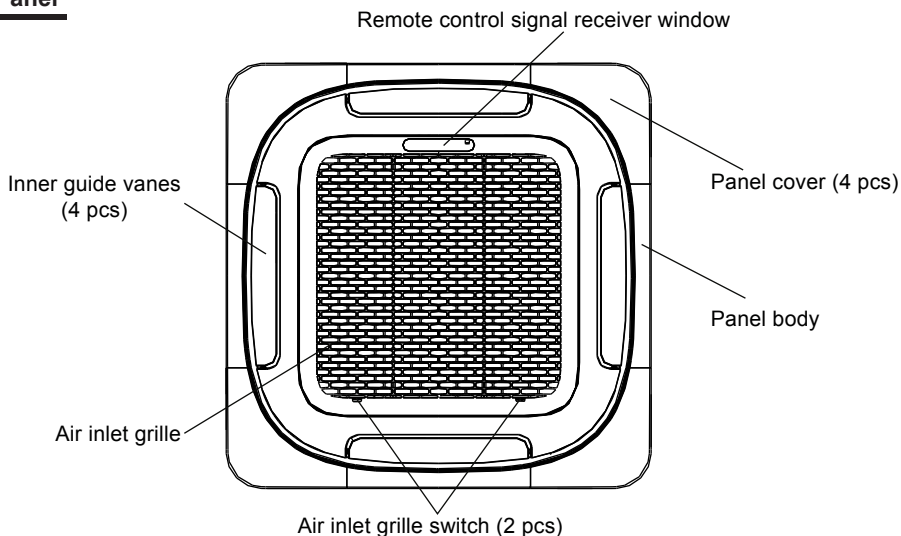
|                   |                    |                                                                                                                                                                              |
|-------------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cooling Operation | Indoor Temperature | 16 ~ 32°C                                                                                                                                                                    |
|                   | Indoor Humidity    | ≤80%<br>(If the humidity exceeds 80%, prolonged operation may result in dew forming on the surface of the indoor unit or mist-like cold air blowing out from the air outlet) |
| Heating Operation | Indoor Temperature | 15 ~ 31°C                                                                                                                                                                    |

## ❗ Note

- The indoor unit operates stably within the temperature range given in the table above. If it exceeds this normal operating range, the indoor unit may stop functioning.
- Set the temperature correctly to save energy: 2°C lower than the desired value when heating, and 2°C higher when cooling.
- Avoid direct sunlight in the room and refrain from frequently opening and closing doors and windows while using the air conditioner.

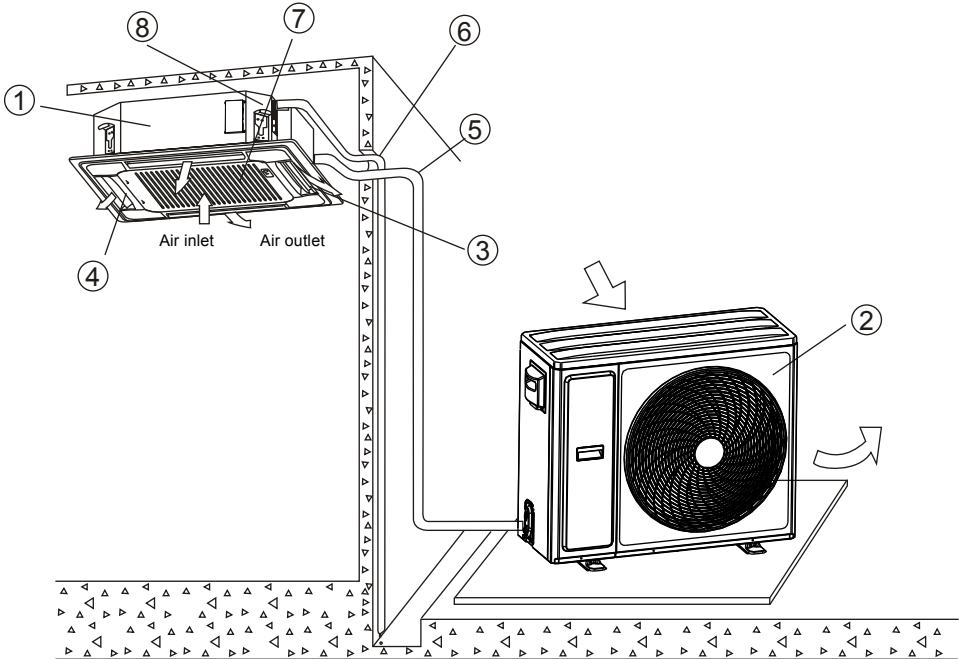
## ■ Key Parts of the Product

### Panel



The panel is a schematic diagram, and the physical object shall prevail.

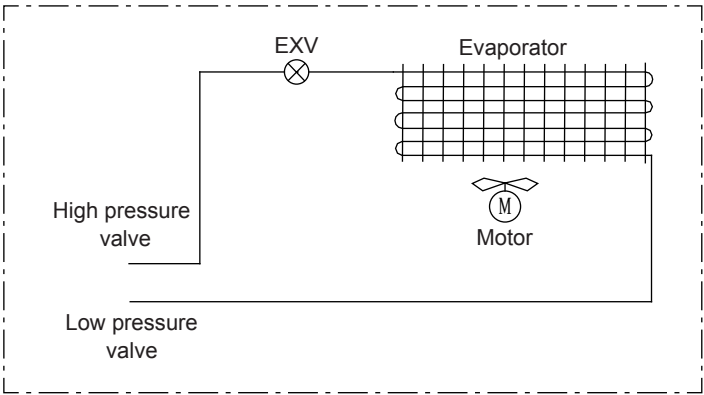
**Complete Machine Assembly Diagram**



- |                   |                |              |                 |
|-------------------|----------------|--------------|-----------------|
| ① Indoor Unit     | ② Outdoor Unit | ③ Air Outlet | ④ Air Deflector |
| ⑤ Connecting Pipe | ⑥ Drain Pipe   | ⑦ Air Inlet  | ⑧ Drain Pump    |

Note: This diagram is for illustration purposes only. The appearance and functions of your air conditioner may differ from those shown.

**■ System Schematic Diagram**

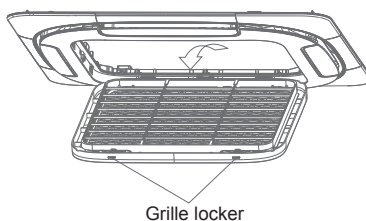
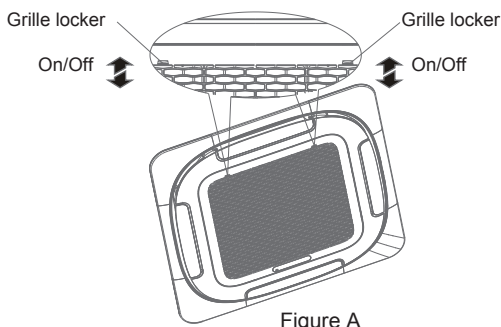


# Cleaning & Maintenance

|                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Read the following safety instructions carefully before cleaning | <ul style="list-style-type: none"> <li>• Turn off the unit and power switch before cleaning to avoid the risk of electric shock. Do not wet the unit; ensure that water is never used to clean the unit, as it can cause electric shock.</li> <li>• Avoid using volatile liquids such as thinner or gasoline, as they can damage the unit.</li> <li>• Regularly clean the filters (recommended every three months) to prevent dust buildup, which can affect performance. If the unit is used in a dusty environment, increase the frequency of cleaning.</li> <li>• Do not touch the fins of the indoor unit with your fingers after removing the filter to avoid injury.</li> </ul> |
| Cleaning the Filter                                              | <p>Remove the filter.</p> <ul style="list-style-type: none"> <li>• Clean the filter thoroughly and allow it to dry in a shaded area.</li> <li>• Reinstall the filter.</li> <li>• Tip: It is recommended to have the air conditioner cleaned and maintained regularly by professionals to ensure optimal performance. You can contact customer service for paid cleaning services.</li> </ul>                                                                                                                                                                                                                                                                                          |
| Maintenance                                                      | <ul style="list-style-type: none"> <li>• Remove the batteries from the remote control and turn off the power switch of the unit.</li> <li>• When using the unit again after a long period:               <ol style="list-style-type: none"> <li>1. Check the air outlet and return air inlet for any obstructions;</li> <li>2. Ensure that the drainage pipe is unobstructed;</li> <li>3. Install the batteries in the remote control and check if it can be power on.</li> </ol> </li> </ul>                                                                                                                                                                                         |

## ■ Cleaning the Air Filter

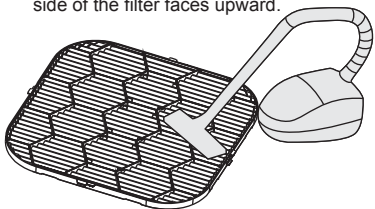
1. Open the air inlet grille, press the air inlet grille switch while holding the grille (as shown in Figure A), then slowly pull it down.



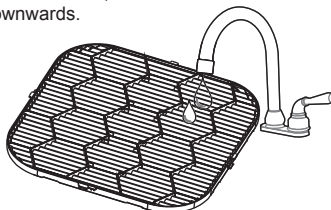
2. Remove the air inlet grille (with dust filter, see Figure B)  
Open the air inlet grille to a 45° angle and lift it upward to remove it.
3. Remove the dust filter.

4. Dust filter cleaning: Clean the dust filter using a vacuum cleaner or clean water.

When using a vacuum cleaner, ensure the air intake side of the filter faces upward.



Clean the filter with fresh water (except for the activated carbon module), with the air intake side facing downwards.



 **[Prompt]**

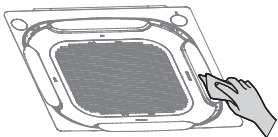
- Do not dry the filter under direct sunlight or with a fire, as this can cause deformation.
- If the filter is heavily soiled, use a soft brush and neutral detergent for cleaning. Shake off excess water and dry it in a cool, shaded place.
- If the dirt is severe and difficult to clean, replace the dust filter (The dust filter is an optional parts).
- Do not allow non-professionals to disassemble, replace, or repair the filter.

5. Reinstalling the Filter.

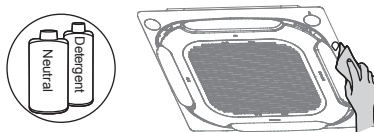
6. Reinstall the filter by reversing the sequence of step 1 and step 2 mentioned above and then close the air inlet grille.

## Cleaning the Air Outlet and Exterior Panel

**1** Wipe with a soft, dry cloth.



**2** If stains are difficult to remove, wash with clean water or a neutral detergent.



**[Note]**

- Never use gasoline, benzene, solvents, scouring powders, or liquid insecticides, as these can cause discoloration or deformation.
- DO NOT allow the inside of the indoor unit to get wet, otherwise electric shock or fire may occur.
- When cleaning the air deflector with water, do not scrub it forcefully.
- If you use an air conditioner without an air filter, dust builds up in the air conditioner and often causes malfunctions as it fails to remove dust from the indoor air.

# Precautions for Installation

## ■ Qualifications and Safety Requirements

### ⚠ [Warning]

Please perform the installation work according to national standards!

- Installation should be performed by dealers or professionals.  
**This unit must be installed by qualified technical personnel. Installers must have relevant professional knowledge. Users should not install it by themselves, as improper operation may lead to fire, electric shock, injury, water leakage, and other hazards.**
- Never attempt self-modification or repair.  
**Improper repair can cause fire, electric shock, injury, or water leakage. Always entrust repair work to dealers or professionals.**
- Ensure that a leakage protection switch is installed.  
**It is mandatory to install a leakage protection switch to prevent electric shock.**
- When connecting to the power supply, follow the local electric company's regulations.  
**Reliable grounding is required by law. Incomplete grounding may cause electric shock.**
- If the air conditioner needs to be moved, dismantled, or reinstalled, always entrust these tasks to dealers or professionals.  
**Improper installation can lead to fire, electric shock, injury, or water leakage.**
- Use only company-designated accessories and separately sold parts.  
**When installing optional or separately sold parts, use company-designated accessories. Improper installation by oneself may lead to fire, electric shock, or water leakage.**
- Use power cords and communication lines of designated specifications. Ensure all connections are securely made to prevent pulling on terminal connectors, power cords, and communication lines. Poor wiring or improper installation may cause a fire.
- The air conditioner must be properly grounded. Check if the ground wire is reliably connected or broken. Do not connect the ground wire to gas tanks, water pipes, lightning rods, or telephone lines.
- The main power switch of the air conditioner should be placed out of reach of children.  
**Prevent children from playing with the main power switch to avoid accidents and ensure it is not obstructed by flammable items such as curtains.**
- When refrigerant leaks occur, smoking is strictly prohibited.  
**If the air conditioner cannot cool or heat properly, it may be due to refrigerant leakage. Contact the dealer or a professional immediately. The refrigerant used in the air conditioner is safe and typically does not leak. In the event of refrigerant leakage indoors, contact with heaters/electric furnaces/fireplaces can easily cause a fire. First, turn off the air conditioner power switch, extinguish the burning appliance, ventilate the room by opening windows and doors to ensure that the concentration of leaked refrigerant in the room does not exceed the critical level, keep away from the leakage point, and promptly contact the dealer or a professional.**



After repairing refrigerant leaks, operate the machine only after the repair personnel confirm that the leak has been repaired effectively.

- Exposure of the unit to water or other moisture before or after installation may lead to short-circuiting of electrical parts.

**DO NOT store the unit in damp basements or expose it to rain or water.**

- Make sure that the installation base and suspension are firm and reliable. **Insecure installation bases may cause the air conditioner to fall and lead to accidents. Consider reinforcing the installation to withstand strong winds, typhoons, and earthquakes.**

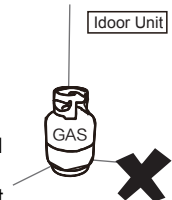
Make sure that the drainage pipe can drain smoothly.

**Improper piping installation may lead to water leakage, which can damage furniture, appliances, and carpets.**

After installation is complete, check for refrigerant leaks.

- Avoid installing in places where flammable gases are likely to leak. **In case of flammable gas leakage, it is easy to cause fire if it is trapped around the indoor unit.**

Ensure that an air filter with a mesh size ranging from 30 to 80 is installed at the air return grille to filter out dust, maintain cleanliness in the air duct of the air conditioner, and prevent blockages.



### [Note]

Indoor units, outdoor units, power lines, and connecting wires should be at least 1m away from high-power radio equipment to prevent electromagnetic interference and noise. (Some electromagnetic waves may still cause noise even if they are more than 1m away.)

In rooms with fluorescent lamps (rectifier or quick start type), the signal transmission distance of remote controllers (wireless type) may not reach the preset value. It is advisable to install indoor units away from fluorescent lamps.

Avoid touching the fins of the heat exchanger, as improper handling can cause damage.

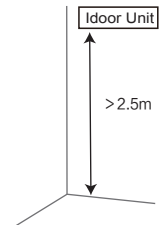
For safety reasons, please dispose of packing materials properly.

**Packaging materials such as nails may cause bodily injury or other harm. Tear open plastic bags used for packaging properly to prevent suffocation accidents caused by children playing with them.**

DO NOT immediately cut off the power when the indoor unit stops running.

**Components such as the indoor unit valve body and water pump are still running, so wait at least 5 minutes before cutting off the power to avoid water leakage and other malfunctions.**

Place the indoor unit at a height unreachable by children, at least 2.5m above the ground.



## ■ Prohibited Locations

### ⚠ [Warning]

DO NOT install or use the air conditioner in the following locations:

- ✗ Places filled with mineral oil or where oil smoke or mist is prevalent, such as kitchens.  
**Plastic parts may deteriorate, and the heat exchanger may become clogged, eventually leading to poor cooling/heating efficiency or water leakage.**
- ✗ Places with corrosive gases, such as acidic or alkaline gases.  
**Copper pipes and solder joints may corrode, leading to refrigerant leakage.**
- ✗ Places exposed to flammable gases or where volatile flammable gases such as solvents or gasoline are used.  
**Electronic devices inside the air conditioner may ignite surrounding gases.**
- ✗ Places with machines that emit electromagnetic radiation.  
**The control system may malfunction, and the air conditioner may not operate properly.**
- ✗ Places with high salt content in the air, such as coastal areas.
- ✗ Places where explosions may occur.
- ✗ Places such as inside the cabin of a vehicle or ship.
- ✗ Places with significant fluctuations in power supply voltage, such as factories.
- ✗ Other special environmental conditions.



### 💡 [Prompt]

This series of air conditioners are for comfort, and should never be used in machine rooms and special places where precision instruments, food, plants and animals, and works of art are stored.

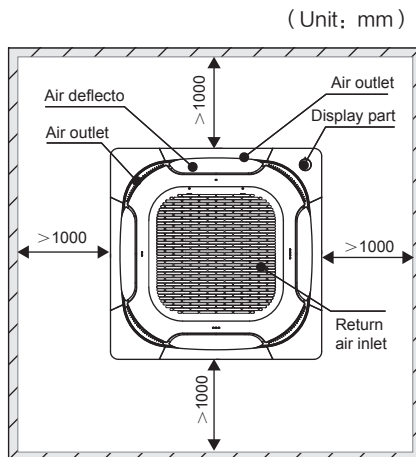
## ■ Recommendations for Installation Locations

It is recommended to follow the design drawings of the HVAC engineer for construction. The selection principles for the installation location are as follows:

- ✓ Ensure proper organization of airflow in and out of the indoor unit to create air circulation indoors.
- ✓ Ensure adequate maintenance space for the indoor unit.
- ✓ The closer the drainage pipe and copper pipe to the outdoor unit, the lower cost of materials required for construction.
- ✓ Prevent the airflow of air conditioning from blowing onto the body directly.
- ✓ Wiring closer to the power cabinet would reduce the wiring costs.
- ✓ Air conditioning return air should be away from direct sunlight exposure in the room.
- ✓ Be careful not to interfere with facilities such as lamp troughs, fire pipes, and gas pipes.
- ✓ DO NOT suspend the indoor unit in places such as load-bearing beams or columns that affect the structural safety of the building.
- ✓ The wired controller and the indoor unit should be installed in the same location; otherwise, the wired controller sampling point setting needs to be changed.

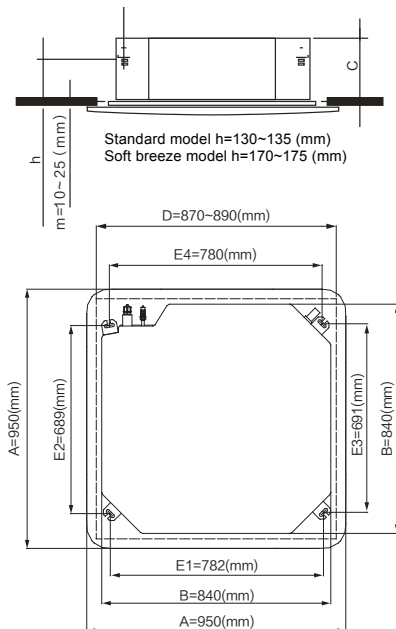
Select a location for installing the air conditioner that fully meets the following conditions and user requirements:

- ✓ Provides sufficient space for installation and maintenance. (Refer to the figure on the right)
- ✓ The ceiling is horizontal and the construction is adequate to support the weight of the indoor unit. Reinforcement measures should be taken if necessary.
- ✓ Unobstructed airflow in and out with minimal external air influence.
- ✓ Airflow can reach any position indoors.
- ✓ Easy access for connecting pipes and drain pipes.
- ✓ No direct radiation from heat sources.
- ✓ Avoid installation in small spaces with high noise requirements.
- ✓ The indoor unit should be installed at a height of more than 2.5m and less than 4.5m from the ground.
- ✓ Condensate water can be discharged smoothly.
- ✓ The length of the piping between the indoor unit and the outdoor unit is within the allowable range. (Refer to the outdoor unit installation manual)



# Installing Indoor Unit

## Indoor unit dimensions and installation dimensions



The letters indicated in the figure represent respectively:

A: Panel size

B: Mainframe size of indoor unit

C: Mainframe height of indoor unit  
(The height of the machine is 245mm for Capacity 1800-9000W, and 290mm for Capacity 10000-16000W)

D: Opening size of the ceiling

E: Distance between indoor unit hooks

h: Distance from hook to ceiling bottom

m: Thickness of panel sealing sponge

## Installation of Indoor Unit

1. Determine the opening size of the ceiling as shown in the diagram above.

2. Selection of suspension base:

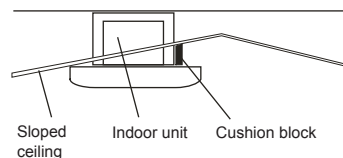
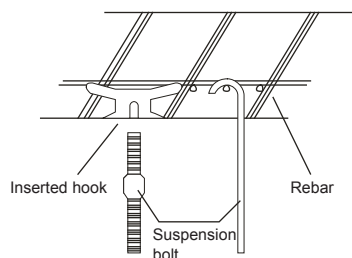
The suspension base must be sturdy, reliable, capable of bearing a weight of over 200kg, and made of wood or reinforced concrete structure. The selected suspension base must be able to withstand a certain amount of vibration and maintain its structural strength and load-bearing capacity for a long time. Consultation with the builder and interior decorator is necessary prior to installation.

3. Fixing of suspension bolts:

Secure the suspension bolts using the illustrated method or install them using iron or wooden frames. When installing the ceiling, ensure that it must be kept horizontal, and the ceiling base plate must be reinforced to prevent the ceiling from vibrating.

4. If installing the main unit on a sloped ceiling, add a pad between the ceiling and the air outlet panel to ensure that the main unit is installed horizontally.

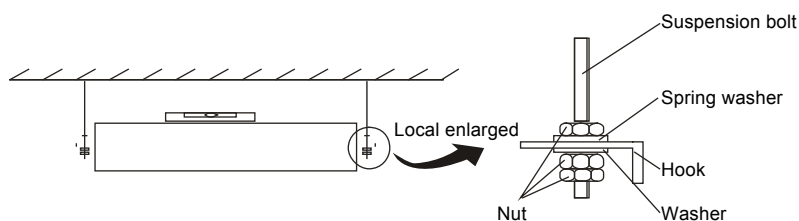
Refer to the diagram on the right:



## ■ Hanging Indoor Unit

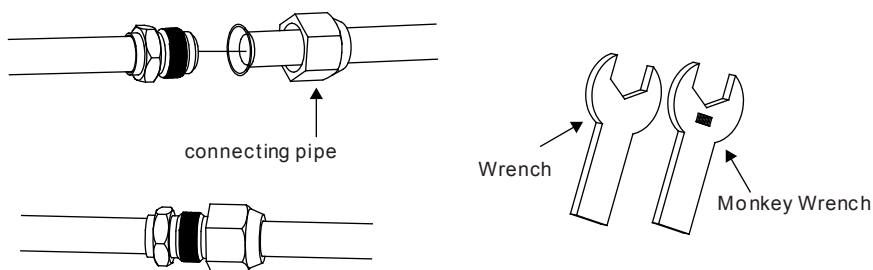
Hang the indoor main unit as shown in the diagram below:

1. Adjust the position of the hook on the suspension bolt to ensure that the main unit remains level in all directions. Upon installation, use a spirit level to check the position of the indoor main unit to prevent water leakage or air leakage;
2. Tighten the nuts to ensure that the four mounting hooks are in close contact with the nuts and washers, with no loose hanging;
3. Make sure that the main unit does not shake or move after installation;
4. Make sure that the center of the indoor main unit is approximately aligned with the center of the ceiling opening;

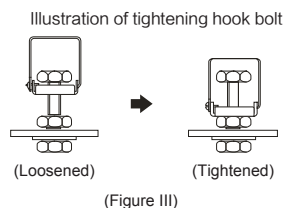
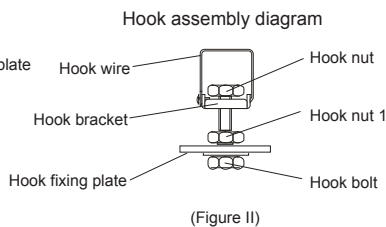
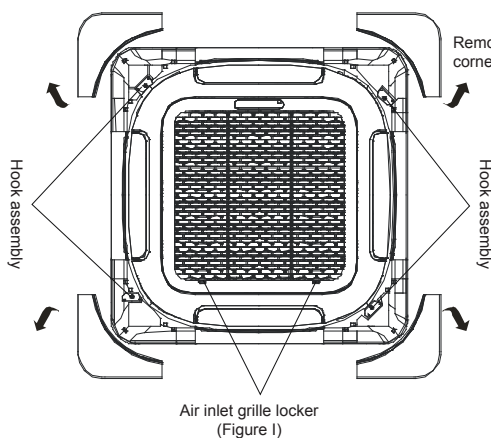


## ■ Connection of Pipes

1. Align the expansion of the copper pipe with the center of the threaded joint, and fully tighten the expansion nut as shown below:



2. Use two wrenches at the same time to secure and tighten the expansion nuts.
3. The Angle of pipe bending should not be too small, otherwise the pipe may break. When the installation personnel bend the pipe, please use a pipe bender.
4. Wrap the pipes and connectors that are not insulated with sponge and wrap them tightly with plastic tape.
5. Corrugated pipes are recommended if the diameter of the gas pipe is  $\geq 15.9\text{mm}$  to avoid problems.



1. As shown above (Figure I), remove the four cover plates on the bottom of the panel;
2. Loosen the hanging hook bolts on the four corners of the panel counterclockwise, presenting the hanging hook components in a loose state as shown in (Figure III);
3. Bring the panel close to the main body of the indoor unit and hang the four hooks on the panel onto the hooks at the four corners of the indoor unit respectively;
4. Adjust the position of the panel to ensure proper coordination with the main body of the indoor unit;
5. Tighten the hanging hook bolts on the four hanging hook components of the panel clockwise, presenting the hanging hook components in a tight state as shown in Figure III;
6. Open the air inlet grille, connect the swing motor wire, remote control receiver board wire, or wired controller respectively to the corresponding wire plugs in the electrical control box of the indoor unit, and tidy up the connected wires;
7. Reinstall the air inlet grille and cover the panel with the cover plates.

## ■ Installation of Drain Pipe



[Note]

Before installing the condensate drain pipe, determine its direction and elevation to avoid crossing with other pipelines, to ensure a smooth slope.

The highest point of the drain pipe should have an exhaust port to ensure smooth drainage of condensate water. The exhaust port must face downwards to prevent debris from entering the pipeline.

It is strictly prohibited to connect the drain pipe to sewage pipes, soil pipes, or other pipes that may produce corrosion or odor, to prevent corrosion of the indoor unit (especially the heat exchanger) and room odors, which severely affects heat exchange efficiency and user experience. Consequences resulting from improper installation shall be borne by the installer.

After the pipeline connection is completed, water and full water tests should be conducted to check for unobstructed drainage and any leaks in the pipeline system.

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

Avoid situations such as slopes, convex pipes, and concave pipes to prevent airflow obstruction and ensure smooth drainage.

All drain pipes should be evenly wrapped with insulation to prevent condensation.

Please follow the method below to connect the drain pipe. Improper installation of pipes may lead to leakage, causing damage to furniture and property.

All interfaces of the drain system must be sealed to prevent leaks.

## ■ Connection of Drain Pipe

1. The drain pipe can be made of rigid PVC pipe (outer diameter: 20mm). Users can purchase suitable lengths of drain pipes from dealers or local service outlets based on actual installation conditions when purchasing the unit, or directly from the market.

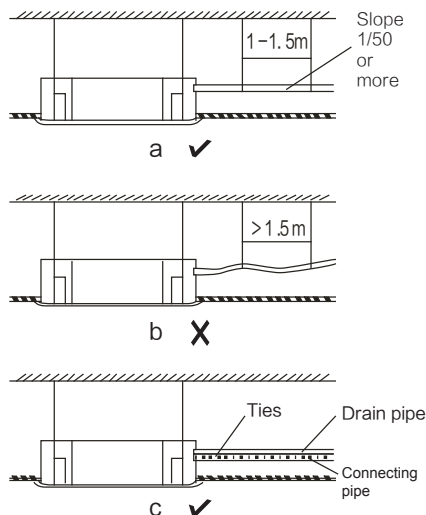
2. Insert the drain pipe into the base of the main drain pipe and tighten both ends with clamps, and insert the outlet pipe insulation sleeve.

◆ Do not exert excessive force to prevent the water drain connector from breaking.

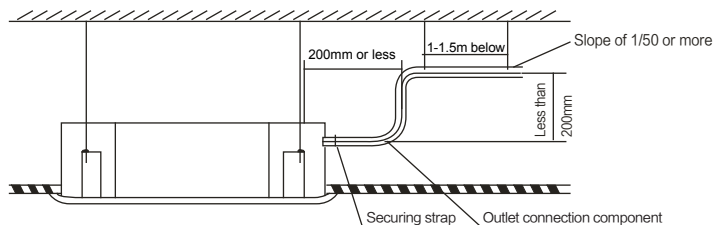
◆ The main drain connection of the main body and the drain pipe (especially the indoor part) must be uniformly wrapped with insulation sleeves and tightened with clamps to prevent air from entering and causing condensation.

◆ To prevent water from flowing back into the air conditioner during shutdown, the drain pipe should incline towards the outside (drainage side) with a downward slope of at least 1/50, to avoid protrusions and water accumulation (see Figure a).

◆ When connecting the drain pipe, do not pull forcefully to avoid exerting force on the main body. Support points should be set every 1 to 1.5m to prevent the drain pipe from bending (see Figure b); alternatively, the drain pipe can be tied to the connecting pipe to fix it (see Figure c).



- ◆ When connecting an extended drain pipe, protect the indoor part with a protective sleeve to prevent the extended drain pipe from loosening.
- ◆ When the outlet of the drain pipe is higher than the main body's drain connection, the drain pipe should be vertically raised as much as possible, and the rising part of the outlet connection component should have a vertical bend, with the rising height less than 200mm. Otherwise, excessive backflow during shutdown may cause overflow (as shown in the figure below).



- ◆ All interfaces of the drain system must be sealed to prevent leaks.
- ◆ The end of the drainage pipe should be more than 50mm above the ground or the bottom of the drain gutter and should not be submerged in water. When discharging condensate water directly into the stinking ditch, the drain pipe must bend upward into a U-shaped trap to prevent odors from entering the room through the drain pipe.

## ■ Testing of drainage pipes

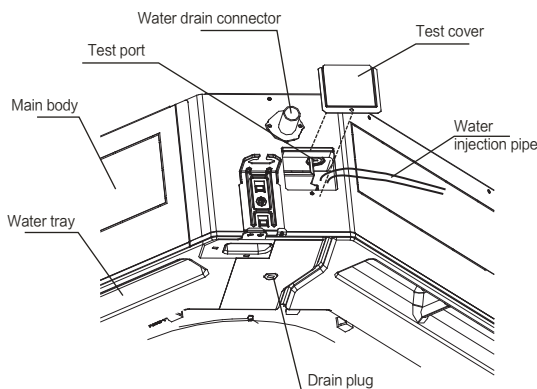
- ◆ Make sure that the drain pipe is smooth before testing, and check whether all interfaces are sealed.

- ◆ New rooms should be tested for drainage prior to laying ceilings.

① Remove the test cover through the test water port, and use the water injection pipe. Inject approximately 2000ml of clean water into the water tray.

② Switch on the power and run the air conditioner in cooling mode.

Check the operating sound of the draining pump, simultaneously check whether the drainage outlet is draining properly (depending on the length of the drain pipe, it may take about 1 minute to start draining), and inspect each interface for leaks.



## —— Remove malfunctions, if any, in a timely manner.

- ③ Stop the air conditioner, and check for any abnormalities after 3 minutes. If the drain pipe is improperly arranged, excessive backflow will cause the control box alarm indicator to flash, or even water overflow from the water tray.
  - ④ Continue adding water until the alarm is triggered by a high water level, and check whether the drainage pump immediately drains the water. If the water level does not drop below the alert level within 3 minutes, the unit will shut down. At this point, turn off the power and remove the accumulated water to resume normal operation.
  - ⑤ Turn off the power, remove the accumulated water, and reinstall the test water cover.
- ◆ The drain plug at the bottom of the main body is used to remove accumulated water from the water tray during maintenance in case of a malfunction. Also, ensure that this plug is securely in place during use to prevent leaks.

# Application Control

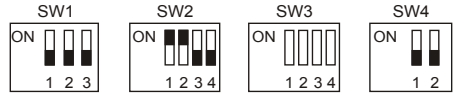
## DIP Switch Settings

● Set the DIP switches on the PCB board of the indoor unit electrical control box according to their purposes. Ensure to cut off the main power switch before setting the DIP switches, and turn the power back on after setting. The set function cannot be executed without turning the power back on. " ■ " shows the DIP switch positions, which have been preset at the factory. Non-professionals should not tamper with them.

| Definition of DIP (SW1) |                                                                                   |                                     |                                                                                   |                            |
|-------------------------|-----------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------|----------------------------|
| Function                | DIP position                                                                      | Description                         | DIP position                                                                      | Description                |
| Selection of fan speeds |  | Static pressure 1 (Factory default) |  | Static pressure 2          |
|                         |  | Static pressure 3                   |  | Static pressure 4          |
| Door detection          |  | Enabled                             |  | Disabled (Factory default) |

| Model DIP              | Model DIP (SW2)                                                                   |
|------------------------|-----------------------------------------------------------------------------------|
| 360° DC ceiling series |  |

| Definition of DIP (SW4) |                                                                                   |                            |
|-------------------------|-----------------------------------------------------------------------------------|----------------------------|
| Model DIP               |  | Reserved (factory default) |



| Definition of Q8 Ceiling Cassette AC Capacity DIP (SW3) |       |       |       |       |
|---------------------------------------------------------|-------|-------|-------|-------|
| SW2_1                                                   | SW2_2 | SW2_3 | SW2_4 | Model |
| OFF                                                     | OFF   | OFF   | OFF   | 18/22 |
| OFF                                                     | OFF   | OFF   | ON    | 25/28 |
| OFF                                                     | OFF   | ON    | OFF   | 32/36 |
| OFF                                                     | OFF   | ON    | ON    | 40/45 |
| OFF                                                     | ON    | OFF   | OFF   | 50/56 |
| OFF                                                     | ON    | OFF   | ON    | 63    |
| OFF                                                     | ON    | ON    | OFF   | 71    |
| OFF                                                     | ON    | ON    | ON    | 80    |
| ON                                                      | OFF   | OFF   | OFF   | 90    |
| ON                                                      | OFF   | OFF   | ON    | 100   |
| ON                                                      | OFF   | ON    | OFF   | 112   |
| ON                                                      | OFF   | ON    | ON    | 125   |
| ON                                                      | ON    | OFF   | OFF   | 140   |
| ON                                                      | ON    | OFF   | ON    | 160   |

## Electrical Requirements

### Power cable size and fuse capacitance

| Model                              | Power supply                   | Air switch capacity (A) | Indoor/outdoor connection wire | Power cord             |
|------------------------------------|--------------------------------|-------------------------|--------------------------------|------------------------|
| Without electric auxiliary heating | Indoor unit:<br>220~240V ~50HZ | 16                      | 2 × 0.5mm <sup>2</sup>         | 3 × 1.5mm <sup>2</sup> |

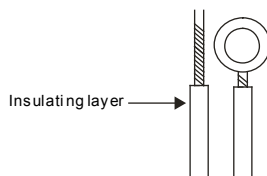
### Note

- The breaker specifications in the above table are based on an ambient temperature of 40°C when the breaker is working. If the operating conditions differ, please adjust according to the breaker specifications.
- The power cable specifications in the above table are derived based on an operating environment of 40°C and multi-core copper cables with a working condition of 90°C in a cable duct (GB/T 16895.15-2002). If the operating conditions differ, please adjust according to national standards.
- The external static pressure at the test site for the air conditioner is 0MPa.

## ■ Connection Between Cable and Patch Board

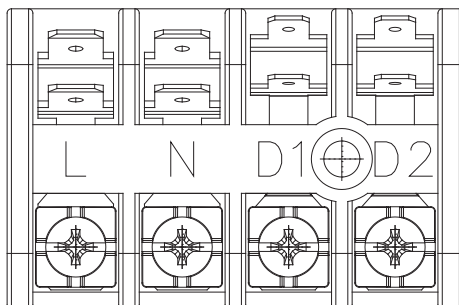
### 1. Single branch connection (as shown below):

- 1) Use wire strippers to strip the end insulation layer of the single branch line about 25mm, exposing the single core wiring.
- 2) Remove the wiring screws from the wiring panel with a screwdriver.
- 3) Bend the core of the single branch line to the right with the pliers and wind it into a ring the size of the screw.
- 4) Screw through the ring wound by the wire core and screw it tightly to fix it on the patch board.



### 2. Power cable connection

- 1) Open the cover of the outdoor unit electrical box.
- 2) Route the power cable through the cable clamp under the power patch panel.
- 3) Connect the ring formed by winding the communication cable through the wire core to the Terminal L and Terminal N of the 4-bit terminal block of the indoor unit, as shown in the figure.



### 3. Connection of communication lines

- 1) Open the cover of the indoor unit electrical box.
- 2) Pass the communication wire through the wire rubber ring.
- 3) Connect the ring formed by winding the communication cable through the wire core to the Terminal D1 and Terminal D2 of the 4-bit terminal block of the indoor unit, as shown in the figure, regardless of polarity.

# Inspection and Trial Operation upon Installation

## ■ Check upon Installation

| Check upon Installation                                                                   | Possible Issues due to Improper Installation           |
|-------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Are the items to be checked securely installed?                                           | The unit may fall, vibrate, or make noise              |
| Is the indoor unit installed horizontally?                                                | This may cause water leakage from the indoor unit      |
| Has an air leak test been conducted?                                                      | Insufficient cooling (heating) capacity may occur      |
| Is the unit adequately insulated?                                                         | This may cause condensation or water dripping          |
| Is the drainage smooth?                                                                   | This may cause condensation or water dripping          |
| Is the power voltage consistent with the product nameplate?                               | The machine may malfunction or parts may burn out      |
| Are the wiring and piping installed correctly?                                            | The machine may malfunction or parts may burn out      |
| Is the unit safely grounded?                                                              | There is a risk of electric shock                      |
| Are the wire types compliant with regulations?                                            | The machine may malfunction or parts may burn out      |
| Are there any obstructions at the air inlets and outlets of the indoor and outdoor units? | Insufficient cooling (heating) capacity may occur      |
| Have the refrigerant pipe length and refrigerant charge been recorded?                    | The amount of refrigerant charge cannot be determined. |

## ■ Trial Operation

### • Preparation for trial operation

1. DO NOT turn on the power until all installation work is complete.
2. Ensure that the control circuit is correctly connected and all wires are securely fastened.
3. Open the gas valves and liquid valves.
4. Remove all loose objects, especially metal scraps and wire ends, from the unit.

### • Method for trial operation

1. Turn on the power and press the "ON/OFF" button on the remote control to start the air conditioner.
2. Press the "Mode" button to select cooling, heating (single cooling unit does not have this function), sweeping mode, etc., and observe whether the operation is normal.

### [Note]

### • Operate according to the trial operation method of outdoor unit.

1. Check each indoor unit individually to ensure normal operation, cooling or heating capacity, and absence of vibration and abnormal sounds.
2. Check for any vibration and abnormal sounds during the operation.
3. Determine whether the generated wind, noise, and condensate water affect neighbors.
4. Whether there is any refrigerant leakage.

## Precautions for use

### ■ Normal phenomena not related to air conditioner malfunctions

The following phenomena are normal if they occur during the use of air conditioning and can be solved by following the instructions below or may not need resolution.

- **Indoor unit emits white mist**

- ① When operating in "cooling" mode in a high-humidity environment, the large humidity and temperature difference between the inlet and outlet may produce white mist.
- ② After the air conditioner switches to "heating" mode following the "defrosting" operation, the water generated during defrosting is released as steam from the indoor unit.

- **Dust blowing from the indoor unit**

If the unit has not been used for a long time or is being used for the first time, it is recommended to clean the filter; otherwise, dust inside the indoor unit may be blown out.

- **Odors from the indoor unit**

The indoor unit absorbs odors from the room, furniture, or cigarettes, and emits them during operation. It is recommended to have the unit professionally cleaned and maintained regularly.

- **Water droplets on the air conditioner surface**

When the indoor humidity is high, water droplets or slight water blowing may appear on the surface of the air conditioner. This is normal, so please close doors and windows.

- **"Ice formation sound during "Self-Cleaning"**

During the self-cleaning stage, there may be a slight "crackling" sound lasting about 10 minutes, indicating that the indoor unit is forming ice, which is normal.

- **Low noise from the air conditioner**

- ① When the air conditioner operates in "auto", "cooling", "dehumidifying", or "heating" mode, a low continuous "hissing" sound may be heard, which is the sound of refrigerant flowing between the indoor and outdoor units.
- ② A "hissing" sound may be heard shortly after stopping operation or during "defrosting" mode, which is the sound of refrigerant stopping or changing flow.
- ③ When the air conditioner is operating in "cooling" or "dehumidifying" mode, a low continuous "rustling" sound may be heard, which is the sound of the draining pump operating.
- ④ When the air conditioner starts or stops operation, "creaking" or "clicking" sounds may be heard due to thermal expansion and contraction of parts or surrounding materials. These sounds will disappear during normal operation.

- **Switching to Fan-Only Mode during "Cooling"/"Heating" (not available in single cooling unit)**

When the indoor unit reaches the set temperature, the air conditioner compressor will automatically stop and switch to fan-only mode. When the room temperature rises (in "cooling" mode) or falls (in "heating" mode) to a certain level, the compressor will restart to resume cooling or heating operation.

- **The heating effect may be reduced when the outdoor temperature is very low in winter**

- ① In heating mode, a heating/cooling type air conditioner absorbs heat from the outdoor air and releases it indoors to heat the air in the room, following the heat pump heating principle.
- ② When the heat pump starts, the outdoor unit blows out cold air, and as the outdoor temperature drops, the heating capacity decreases. It is recommended to use additional heating devices to assist heating when the outdoor temperature is very low.

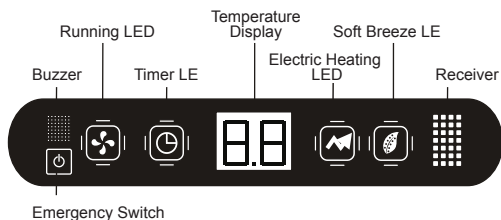
- **No choice of heating or cooling**

In the same AC system, the indoor units can only operate in cooling, heating, or other modes simultaneously. When multiple indoor units operate in inconsistent modes, a mode conflict may occur. The indoor unit that starts later cannot switch operation modes. All indoor units must be turned off before switching operation modes, and ensure that all indoor units operate in the same mode.

## Precautions for use

### LED display:

1. When powered on normally and no faults in Manual or Auto mode, the operation LED is always ON; during standby and normal shutdown, the operation LED flashes at 0.5Hz; When there is a fault, the running LED is OFF.
2. When the timer function is active, the timer LED is ON.
3. When the electric auxiliary heating function is ON, the electric heating LED is ON.
4. Fault codes are displayed in the double-8 area when there is a unit fault.
5. For models with the soft breeze function, the soft breeze LED is ON when the function is activated.



### LED fault display:

When there is a LED display fault, the first character displays the letter 'd' or 'b', and the second character displays a number from 1-9 or the letter 'A'.

(For example, d8 is displayed as **d8** ; b8 is displayed as **b8** ; bA is displayed as **bA** )

| Display Code | Definition of Code                   | Display Code | Definition of Code                                                                                                    |
|--------------|--------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------|
| b1           | Ambient temperature sensor error     | d1           | Internal fan protection (PG motor stalling protection, indoor fan overload protection, DC brushless motor protection) |
| b2           | Inlet pipe temperature sensor fault  |              |                                                                                                                       |
| b3           | Middle temperature sensor fault      | d2           | Electric auxiliary heating protection                                                                                 |
| b4           | Outlet pipe temperature sensor fault | d3           | Full water protection                                                                                                 |
| b5           | Humidity sensor fault                | d4           | Anti-freeze protection                                                                                                |
| b6           | Water temperature sensor fault       | d5           | Mode conflict                                                                                                         |
| b7           | Indoor EEPROM fault                  | d6           | Indoor unit IP address abnormality (IP not assigned or IP address conflict)                                           |
| b8           | Swing motor fault                    |              |                                                                                                                       |
| b9           | Indoor unit MAC address abnormality  | d7           | Capacity DIP code error                                                                                               |
| bA           | Model DIP code error                 | d8           | Engineering number conflict                                                                                           |
| bd           | Fresh air fan fault                  |              |                                                                                                                       |



**IMPORTANT INFORMATION FOR CORRECT DISPOSAL OF THE PRODUCT  
IN ACCORDANCE WITH EC DIRECTIVE 2002/96/EC.**

At the end of its working life, the product must not be disposed of as urban waste. It must be taken to a special local authority differentiated waste collection centre or to a dealer providing this service.

Disposing of a household appliance separately avoids possible negative consequences for the environment and health deriving from inappropriate disposal and enables the constituent materials to be recovered to obtain significant savings in energy and resources. As a reminder of the need to dispose of household appliances separately, the product is marked with a crossed-out wheeled dustbin.