

CASSETTE FAN COIL UNIT

Installation & Operation Manual 8-way Cassette



Please read the manual before installation and operation.
It is recommended to install two-wire electric valve.

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Safety Precautions:

Please read this manual carefully before using. The chapter "Safety Precautions" provides very important safety points. Please follow it to install the unit.

Safety Icons:



WARNING

Any operation mistake may cause serious consequences such as death, injury or accident.



ATTENTION

Any improper use may cause safety accidents, unit damage, or affect the using effect of the unit.

Please read the nameplate and stickers on the unit carefully

Please cut off the electric power immediately if the following unexpected incidents happen, such as abnormal noise, smoke, rise in temperature, leakage of electricity, fire and so on. Then contact with the local customer service staff or dealer. Do not repair the unit by yourself. If necessary, please contact with the local fire and emergency department immediately.



WARNING

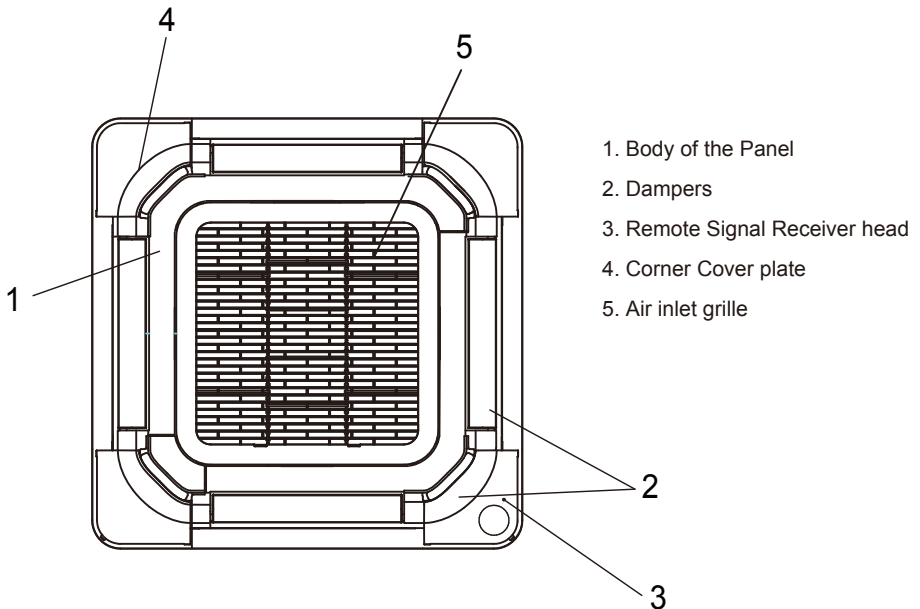
- 1.The unit shall not be installed by users themselves. It must be installed by agents or the authorized professional installation companies. Otherwise it may cause safety accidents and affect the using effect of the unit.
- 2.Non-professionals are not allowed to disassemble the unit unless under the guidance of professionals.Otherwise, unexpected accidents may happen and the unit may be damaged.
3. Using untreated water will cause scaling, corrosion and water-quality deterioration. The company is not responsible for the consequences caused by the poor water quality.
- 4.Do not use or store flammable gas or liquid around or under the unit, such as fixture, paint, gas and so on. Otherwise, a fire accident may happen.
5. The main power switch of the unit should be placed out of children's reach to prevent them from playing with the power switch.
6. Do not spray water or other liquids on the unit, or accidents may happen.
7. Do not touch the unit with wet hands, or you may get electric shock.
8. Use state regulated electric wires, reliable grounding and fixed terminal connection. Do not let the wires be affected by other external force. Do not let the wires be clamped by the control box or sheet metals. Any improper installation will lead to electric shock, fire or other accidents.
9. Please do not lead the condensate drain hose to the drainage tank, which may produce harmful gases such as imitation sulfur. Otherwise, the harmful gases may be led into the room.
10. The drain hose should be installed and insulated according to this manuel. Improper installation may cause water leakage.
11. Please cut off the main power switch of the unit in a thunderstorm. Otherwise, lightning may cause danger or damage to the unit. If the unit would not be in use for a long time, please cut off the main power switch to avoid accidents.

Parts of the panel and their functions

ATTENTION

1. Do not put your hands or foreign objects into the air inlet and air outlet of the unit, otherwise the high speed running fan may endanger your safety.
2. Do not damp the inside of the unit. Otherwise, it may cause short circuit or damage the unit.
3. After cleaning the air filter, please install and close the air inlet grille in place. Do not keep it open for a long time, or it may cause danger.
4. In order to use the unit better, please operate it according to this manual. Otherwise, it may cause water leakage and affect the using effect of the unit.
5. Please set a proper temperature, especially when there are old people, children and patients in the room.
6. Lightning or electromagnetic radiation may affect the unit. If it does, please cut off the main power supply and then restart the unit.
7. Do not block or cover the air outlet and air inlet of the unit.

1. Parts of the panel



2. Remote signal receiver and receiver board:

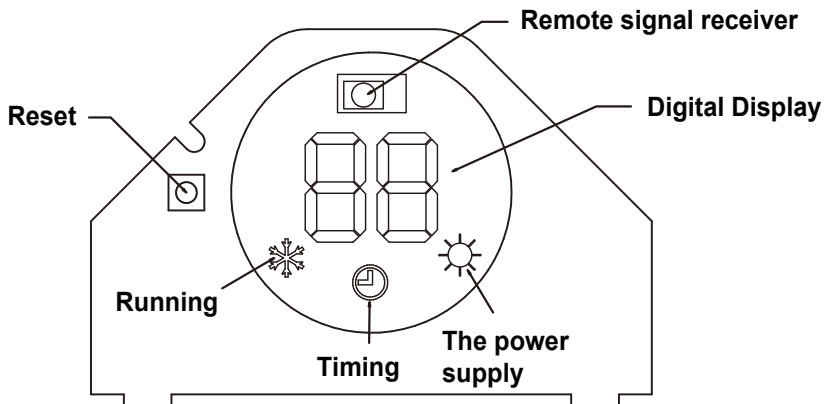
Remote signal receiver head: to receive the signal from the remote control.

In order to make the operation of the remote control faster and more effective, please aim the remote control transmitter at the remote signal receiver head.

Buzzer: When it is the first time to connect the power, or to operate the unit by the wireless remote control or tact switch, the buzzer rings if any of these actions is received by the remote signal receiver head.

When the unit breaks down, the intelligent identification system of the unit will automatically identify the failure type and show the fault codes in the display board. Please refer to "Fault detection" in this manual.

Stickers on the receiver board



Reset button:

1. When the unit is off, press the "reset" button once to enter into the cooling mode. Press it again to enter into the heating mode. Press it 3 times to turn off the system.

2. When pressing the reset button to enter into the cooling mode or heating mode, the unit will run at the preset temperature of 24°C as default. It can automatically adjust the fan speed in high, medium or low and its dampers swing continuously. But there's no timer setting and it is not in the sleep mode.

Maintenance

1. How to get the best effects

1) Clean the air filter frequently

A clogged air filter will reduce air circulation and influence the cooling or heating effects. If the air filter is too dirty, it will cause malfunction. Please clean the air filter at least once every two weeks.

If the unit would not be in use for a long time, the air filter should be cleaned before reuse.

2) Set a comfortable room temperature

At cooling mode, it is the most comfortable temperature when the difference between indoor and outdoor temperature is less than 5°C. The temperature set too cold will harm your health and waste electricity. You can save about 10% of electricity by increasing the temperature by 1°C.

3) Try to avoid the heat source

During cooling, the curtains in the room should be closed to block direct sunlight. Close doors and windows, and avoid opening them frequently.

4) Ventilate the room regularly

Introduce fresh air into the room by opening windows occasionally. This will help maintain fresh air in the room

2. Maintenance



WARNING Remember to cut off the power supply when cleaning or repairing the unit.

1) Clean the air filter

- a. Take out the air filter
- b. Vacuum the air filter or wash it with water
- c. Put the air filter in a cool dark place after washing. Do not parch it.

2) Clean the unit

- Method 1. wipe it with a clean, soft and dry cloth
- Method 2. remove oil stains or fingerprints with a neutral household cleaner such as dish soap

3) Maintenance at the season finishing when the unit would not be in use for a long time

- a. Turn on the unit and set it to air ventilation mode. Keep it running for 3 to 4 hours to dry the internal parts of the unit.
- b. Turn off the unit and cut off the dedicated power supply for the unit.
- c. Clean the air filter and unit thoroughly.
- d. Remove the batteries from the remote control.

4) Inspect the unit at the beginning of the using season

- a. Check whether the water inlet and outlet of the unit are blocked
- b. Check for the drain hose to see if it is clogged, internal kinks, raised end, etc.
- c. Check if the air filter is installed properly.

5) During the season when the unit is not operating, the coil shall be filled with water during the summer to reduce corrosion. However, it must be drained during the winter to avoid freezing and busting of the copper pipe.

Installation

Please read the "Safety Precautions" before intallation

Please follow the instructions in this manual to install the unit.

Please read the nameplate and stickers on the unit carefully before installaion.

WARNING

The unit should be installed by dealers or authorized professionals. Users are not allowed to install it by themselves.

Any structural modification of the building due to installation must comply with the requirements of local building standards.

The unit must be installed on the ceiling capable of supporting its weight.

Use a specified or compliant cable to connect to it.

According to local regulations and the instructions in this manual, all electrical work must be done by a certified technician.

Please pay attention to personal safety during installation.

Do not start the power supply before installation is done.

ATTENTION

After installation, the installer should explain the correct use and maintenance methods to the users according to the manual, and ask them to read the manual and take care of it.

The unit should not be installed in areas with high volatile oil or sulfuric acid mist, otherwise it would severely reduce the performance of the unit or damage its internal components.

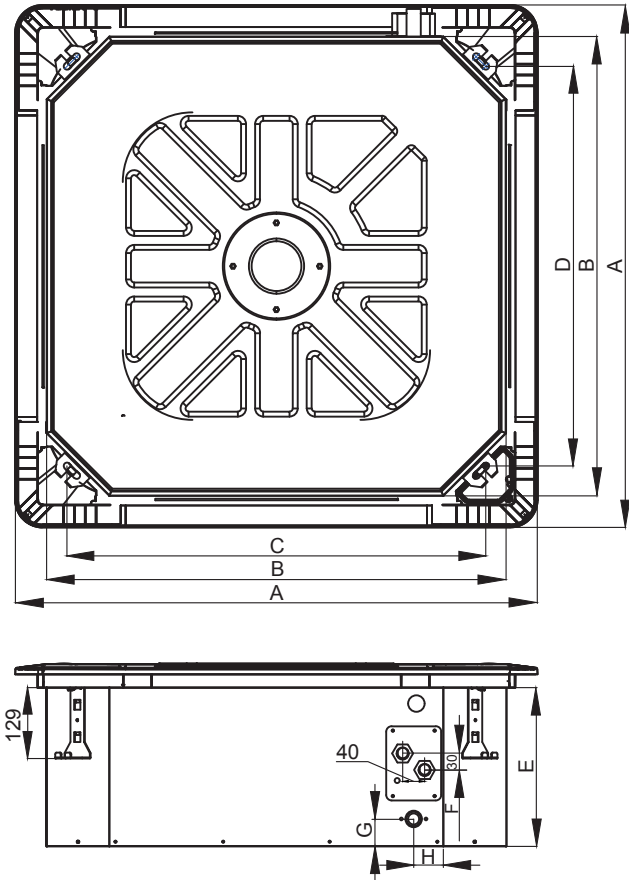
Use a fuse whose capacity is greater than or equal to the specified one.

Make sure to install an earth leakage circuit breaker.

Make sure to install a ground wire.

If this unit is installed on the metal part of the building, the electrical insulation work must be done well, and must comply with the relevant technical standards for electrical equipment.

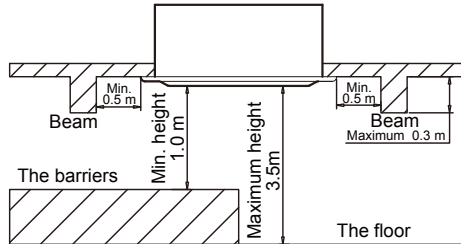
Dimensions (unit with drain pump)



Air Flow Volume of the unit, cfm	A	B	C	D	E	F	G	H
200cfm, 300cfm, 400cfm, 470cfm	750	660	578	542	200	85	34	62
500cfm, 600cfm, 700cfm	750	660	578	542	290	140	50	50
800cfm, 1000cfm	850	760	678	642	290	140	50	50
1200cfm, 1400cfm	950	836	763	727	290	140	50	54

Installation of the body

(It is recommended that the installation height should be less than 3.5 meters)



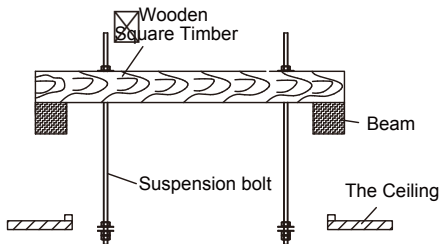
1. Determine the size of the ceiling opening according to the installation size.
2. Choose the Installation base

For safety, the suspension base must be of a solid and reliable wooden frame, steel frame or reinforced concrete structure. It must be strong enough to bear the weight of more than 200 kilograms. It should also withstand a certain amount of vibration, and maintain its structure stability and load-bearing capacity for a long period of time.

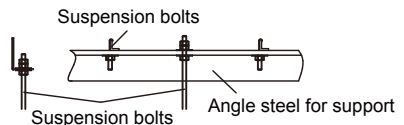
Please consult or obtain approval from the builder and interior decorator before installation.

3. Fixing of the suspension bolts

Wooden Frame Base

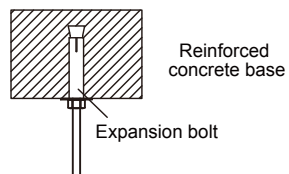


Steel Frame Base



- a. The suspension bolts should be made of high quality carbon steel with zinc plating or other anti-rust surface treatment, or stainless steel.
- b. The suspension bolts must be tightened firmly and reliably

Reinforced Concrete Base

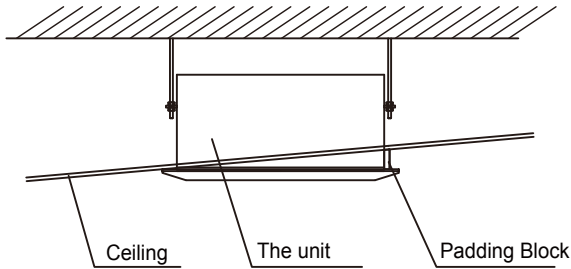


Installation of the body

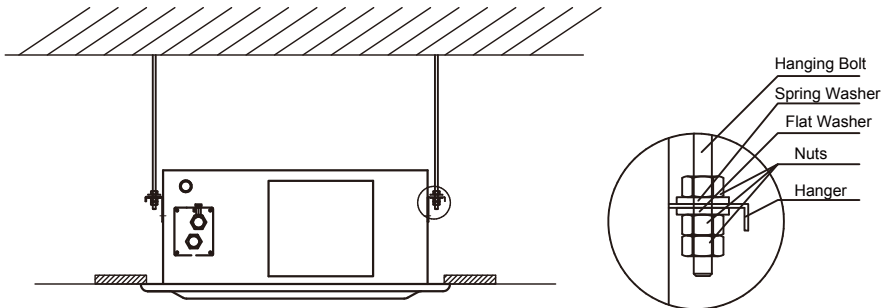
4. Fixing up the unit

When the unit is installed on a ceiling, please note that the ceiling should be horizontal. In order to prevent it from vibration, please reinforce the ceiling.

If needs to install the unit on an inclined ceiling, then a padding block should be placed between the ceiling and panel to ensure the unit is on a horizontal position.

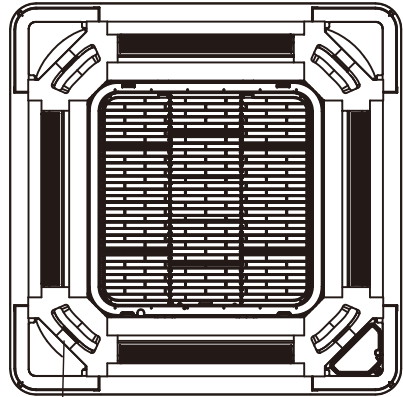
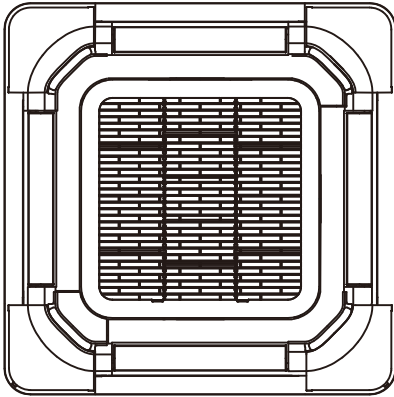


Hang the unit as shown below. Use a levelling instrument to adjust the unit under horizontal position in all directions (screw down or unscrew the two nuts to adjust their position). Make sure that there is interspace neither between the ceiling and panel nor unit body and panel. Check with a tape measure to make sure the unit is in the centre of the ceiling opening. After that, tighten the upper and lower nuts of the suspension bolts to fix up the unit.



Install the Panel Assembly

1. Panel Assembly

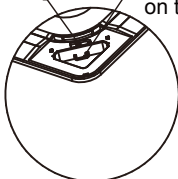


Mounting Hook for panel assembly

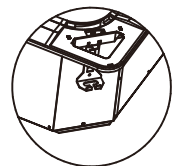
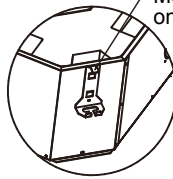
Installation of the panel

1. Adjust the location and direction of the panel to make the panel outlet match the air passage and the drain pan.
2. Connect the step motors and receiver board to the corresponding wirings drawn from the electrical box. Then arrange these wires.
3. Hook up the mounting hook to the mounting bracket. Lock the hook screws and the corner cover plate.
4. Install and fix up the air inlet grille.

Lock Screws
Mounting hook
on the panel

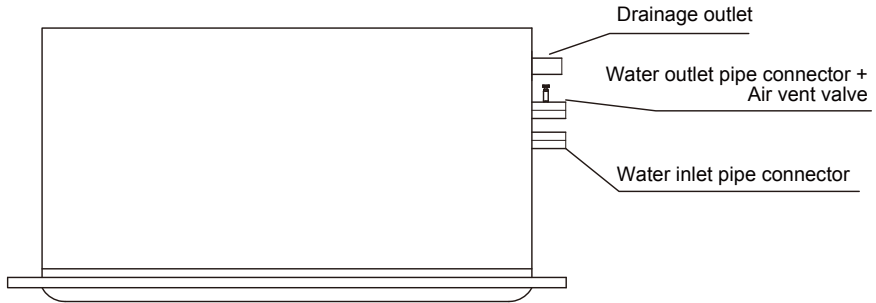


Mounting bracket
on the unit body



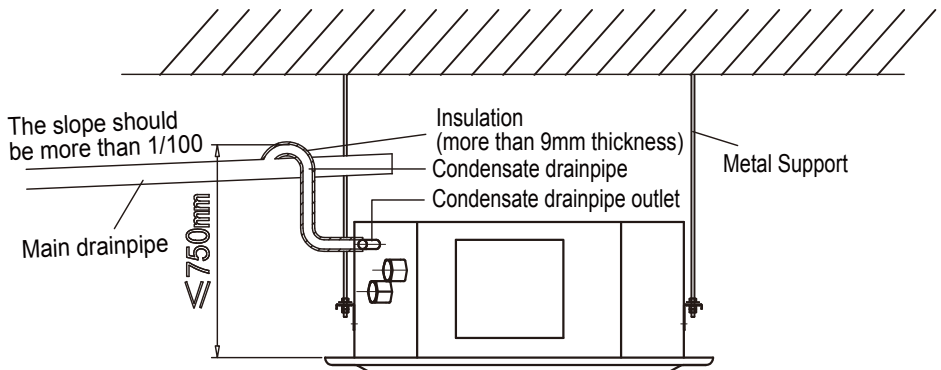
Connection of Distributors

Connect the chilled water pipes with the water inlet & outlet pipe connectors of the coil by DN20 male thread. Use thermal insulation material to insulate them after connection. The coil inlet and outlet pipe connectors are shown below.



Installation of the drain hose

- 1) Connect one end of the drain hose with the water outlet of the unit, the other end with a 20mm hard PVC pipe.
- 2) Drains must be set downwards, sloping at an angle of 1% or more.
- 3) Use insulation sleeves to bind up the hard PVC pipe to prevent condensation from precipitating on the surface.
- 4) The joints must be tightened in case of water leakage.



Trial Operation

1.The preparation before trial operation

Before trial operation, please carefully check if the previous installation work (electrical connection, pipe connection, pipe insulation, etc.) is complete and reliable.

2. Coil exhaust

When filling the water into the piping system for the first time, there will be some air remaining in the coil and staying at the top of the coil. To address this issue, a manual air vent valve is installed at the coil distributor joint. Turn on the the air vent valve to exhaust the air until there is steady water flowing out, and then tighten the air vent valve.

3.Trial operation

- a. Turn on the power and press the controller to turn on the unit.
- b. Adjust the high/medium/low speed of the fan and check for abnormal noise.
- c. If there is hot or chilled water circulation in the system, observe whether there is hot or cold air blowing out from the air outlet of the unit. If the unit is working at the cooling mode, observe whether there is condensate water discharge after it has run for a period of time.
- d.If there is electrical valve installed at the water inlet connector, please use the controller to set the unit running at cooling or heating mode to see if the electrical valve can work normally and if there's hot or cold air blowing form the air outlet.
- e. Press the swing button of the controller to observe whether the louver can swing normally.
- f. After confirming the unit operates normally, press the on-off button to stop the trial operation.

Faulty detection

Item	Green LED light On
Indoor coil sensor 2 failure	Blink 2 times, stop 3 sec
Air return sensor failure	Blink 3 times, stop 3 sec
Indoor coil sensor 1 failure	Blink 4 times, stop 3 sec
ndoor coil low temperature protection	Blink 5 times, stop 3 sec
Indoor coil over heat protection	Blink 6 times, stop 3 sec
Water pump failure	Blink 7 times, stop 3 sec
Fan failure	Blink 9 times, stop 3 sec

Wireless Remote Control

Temperature Setting

Press the up or down button to increase or decrease the room temperature. Press them at the same time to switch between °F and °C. The two buttons are unavailable in Fan mode.

Mode

Press it to select the operation mode:
Cool-Dry-Fan-Heat-Auto

* In Auto mode, both cooling and heating icons will be displayed on the remote controller at the same time. Furthermore, this mode is only available for 4-pipe system.

Fan

Press it to select the fan speed:
Auto-Low-Medium-High

* In fan mode, only low, medium or high fan speed is available.

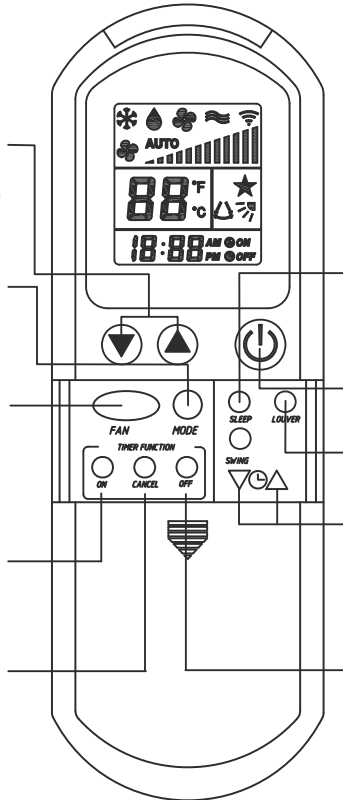
* In dry mode, the fan speed will not be displayed by default.

On Timer

Press the button to display the last timer setting. Press it again to adjust the timer setting. Each interval is 1 minute. Hold the button to speed up the timer setting.

Cancel Timer

Press it to cancel all timer settings.



Sleep Mode

Press the button to enter into the sleeping mode. Use this mode to automatically adjust the indoor temperature for a comfortable sleeping environment, as well as for energy saving. It is particularly suitable to use in the bedroom.

on/off

Press the button to switch on or off the unit.

Louver

Press the button to change the louver angle to a fixed position 1,2,3,4, auto swing or stop.

Clock

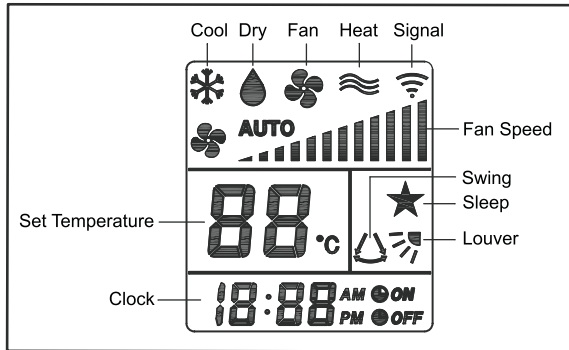
Press and hold the up or down button for 2 seconds to increase or decrease time by 1 minute. Hold down it for 4 seconds to speed up the adjustment. Hold it for 6 seconds to adjust the time at the fastest speed.

Off Timer

Press the button to display the last timer setting. Press it again to adjust the timer setting. Each interval is 1 minute. Hold the button to speed up the timer setting.

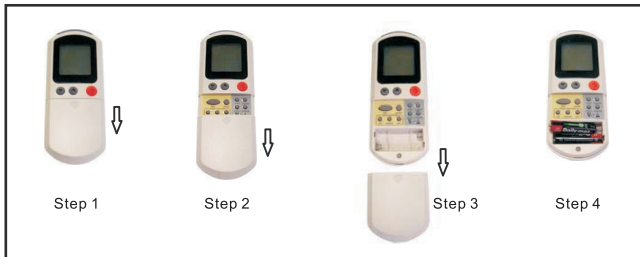
Wireless Remote Control

1. LCD display area of the wireless remote controller



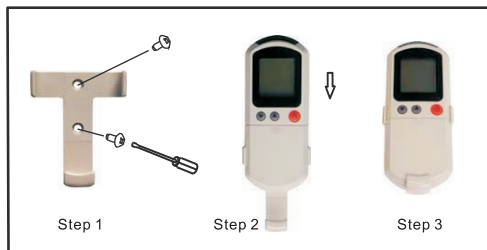
2. Remote controller battery installation

- a. The remote controller uses two AAA 1.5V batteries.
- b. Follow the steps below to install or replace the battery.
- c. Remove batteries if it is not used for a long period.



3. Wall holder of remote controller

- a. Fix the wall holder on the wall with 2 screws.
- b. Insert the remote controller into the wall holder.



Technical data and dimensions shown in this "Installation and Operation Manual" are not binding. The manufacturer has the right to introduce whatever modifications deemed necessary to the improvement of the products at any time.
