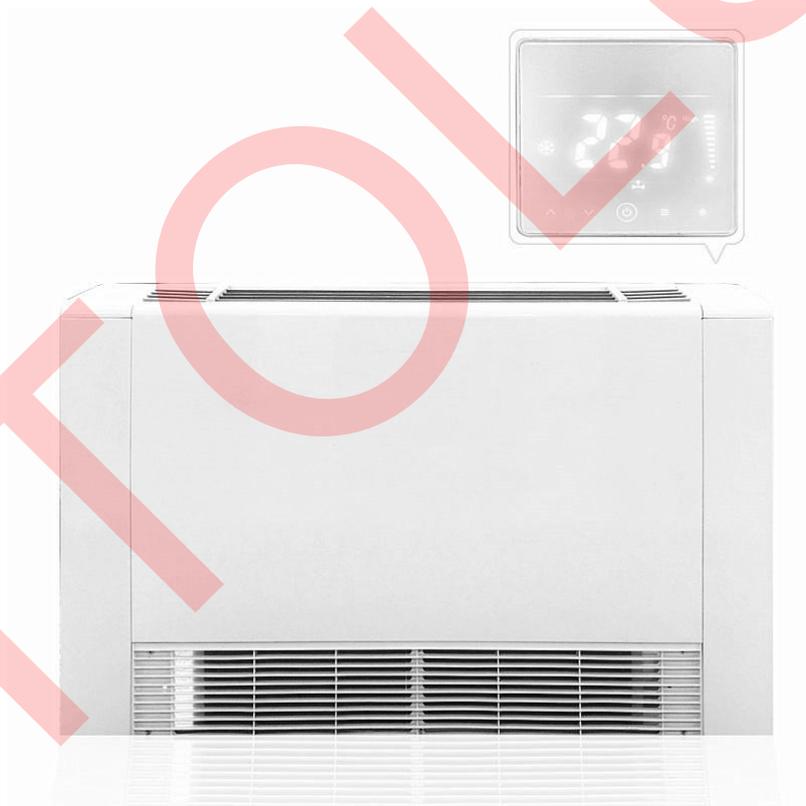




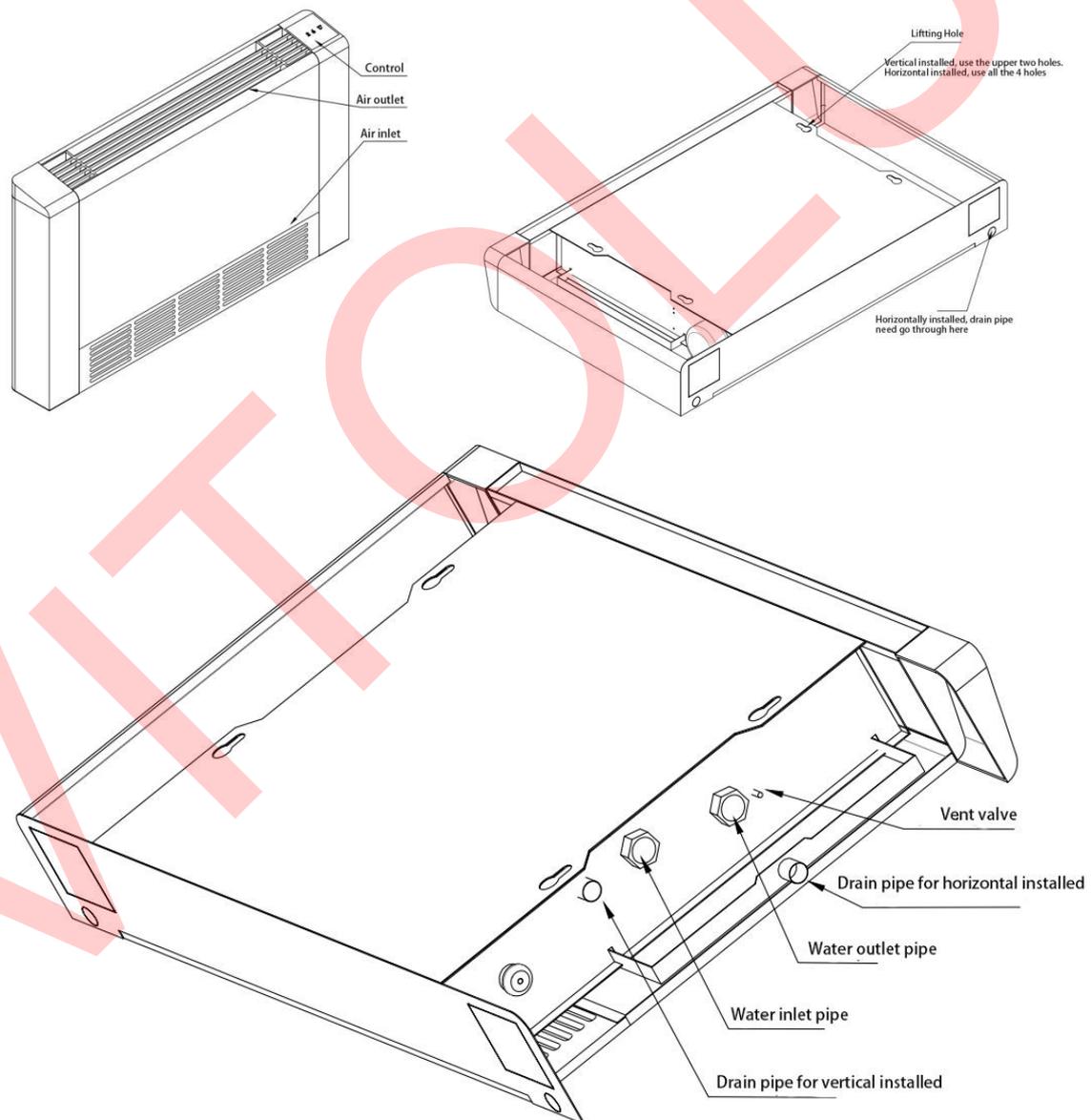
# Operation Manual

Ultra-thin FCU



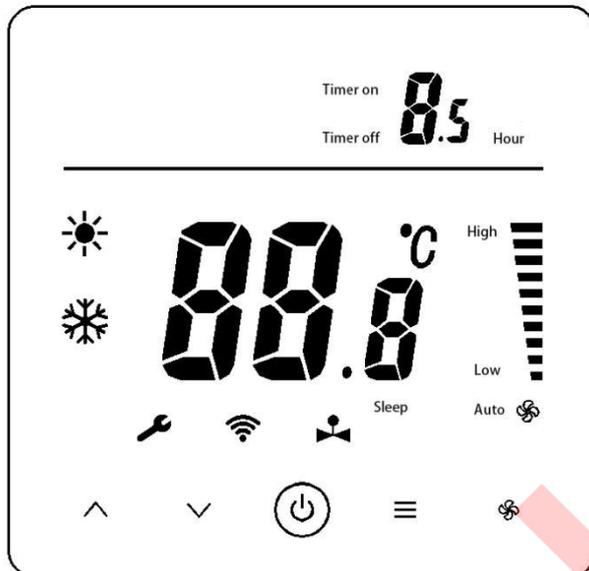
# 1. Brief Introduction

This product adopts intelligent LED digital display controller and microcomputer control technology. This product uses the force of wind and the thermal conductivity of pure copper pipes to heat up the indoor environment more efficiently and quickly, saving the heating energy used. Due to the ultra-low mute, ultra-thin body design, taking up very small space and easy and quick installation, It is an ideal terminal product.



## 2. Controls

1)



★ Cooling	☼	★ Timer on/off
★ Heating	☼	★ Sleep
★ Fan speed	🌀	★ Fault display
★ Room Temp. Show		★ Elec. valve
★ Setting Temp. Show		

### 2) Technical specification:

Temperature sensor: NTC thermistor

Power supply voltage: AC190~250V, 50/60Hz

Temperature control accuracy:  $\pm 1^{\circ}\text{C}$

Self-consumption power: <1 W

Temperature setting: 5~35 $^{\circ}\text{C}$

Load current: 2 A (resistive load), 1 A (inductive load)

Display range: 0~50 $^{\circ}\text{C}$

Wiring terminal: can connect 2 $\times$ 1.5 mm<sup>2</sup> or 1 $\times$ 2.5 mm<sup>2</sup> wire

Working environment: 0~45 $^{\circ}\text{C}$

Display: LED

Humidity: 5~95% RH (non-condensing)

Installation hole distance: 60 mm (standard)

Press key: touch screen

Protection level: IP 30

### 3) Key Description

»**On/Off:** Press the "⏻" key once to turn on, then press again to turn off, and at the same time turn off the fan coil and electric valve. [Long press when power on, adjust the display brightness to 1-3 levels].

»**Temperature setting:** When powering on, press the "▼" key to decrease the set temperature, press the "▲" key to increase the set temperature, and the temperature changes by 1 $^{\circ}\text{C}$  every time you press the key.

The temperature setting range is 16-32 degrees. When setting, the

decimal part of the temperature is not displayed.

»**Mode selection:** In the power-on state, if it is a "heating and cooling type", press the "≡" key to switch, the display "❄" means cooling, and "☀" means heating.

»**Wind speed selection:** When powering on, press the "⚙" key to select the wind speed of the fan: wind gear 1-5 and automatic, level 1 is silent, and level 5 is strong wind; in automatic mode, the wind speed on the right side lights up successively from bottom to top, and then goes out.

»**Temperature calibration:** In the shutdown state, press the "≡" and "⚙" keys at the same time and hold for 2 seconds, the buzzer will sound once and display "XX°C",

Press the "^" or "v" key to adjust to the correct temperature value, press the power button to confirm and exit, or automatically confirm after 5 seconds.

»**Alarm view:** In the power-on state, long press the ≡ + ⚙ button to enter the alarm information query interface, the main screen position displays "E -", and press the "⚙" button to display 1-5 in the upper right corner of the loop to indicate the alarm query sequence. If there is no corresponding alarm, only "E-" will be displayed

E- No fault

E - 1 means communication reception failure

E - 2 indicates that the temperature sensor is faulty

E - 3 means fan failure

E - 4 means communication transmission failure

»**Sleep setting:** When powering on, press the "^ + v" key for 2 seconds, the buzzer will sound, and the "sleep" symbol will light up; press the "^ + v" key again for 2 seconds to cancel the sleep.

Sleep execution: When cooling, the set temperature will increase by 1 degree every hour, and it will increase by 2 degrees after 2 hours and shut down after 3 hours.

[Shut down if the temperature conditions are met]

When heating, the set temperature will decrease by 1 degree every hour, and after 2 hours, it will decrease by 2 degrees, and then shut down after 3 hours.

[Shut down if the temperature conditions are met]

»**Timer switch:** Press the "v" + "≡" key at same time to enter the timing power-on setting when it is turned off, and then press the "≡" key to enable or

cancel the timing function. When the timing function is enabled, press the ^

or v button to set the timing time in 0.5 hour steps. After setting, press the "⚙" key to confirm, or automatically confirm without operation for 3 seconds.

Press the "v" + "≡" key at same time to enter the timing shutdown setting when turning on, the operation is the same as turning on timing.

### »Lock Screen

The thermostat automatically locks the keyboard when

▲ For example, if no one operates for 60 seconds, the screen is locked and the lock sign is displayed. At this time, the screen is displayed in the darkest light, and only the on-off key and the lock key are displayed.

▲ Unlock: touch the key part of the screen with your hand, first light up all the keys, then press and hold the down key "∨" for 5 seconds to unlock

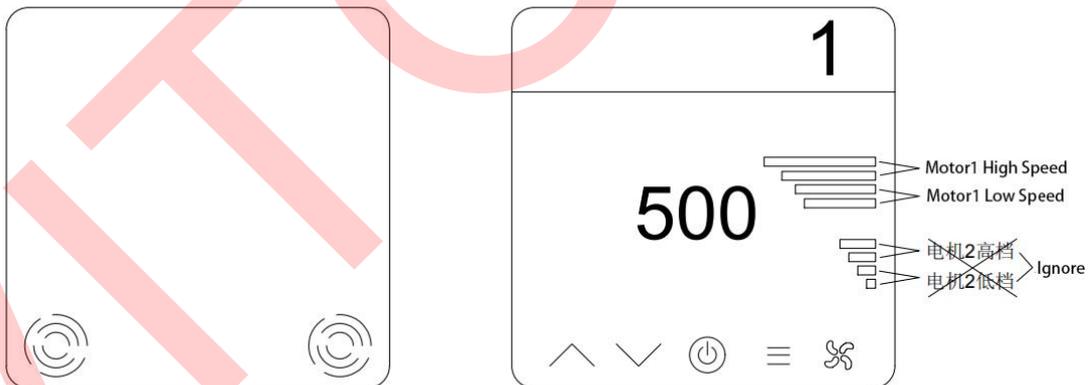
### »Fan speed setting

▲ In the shutdown state, long press the left and right down corners of the screen display area (dotted line area) at the same time, as shown in the left figure, until the screen lights up like the picture displayed as the right picture.

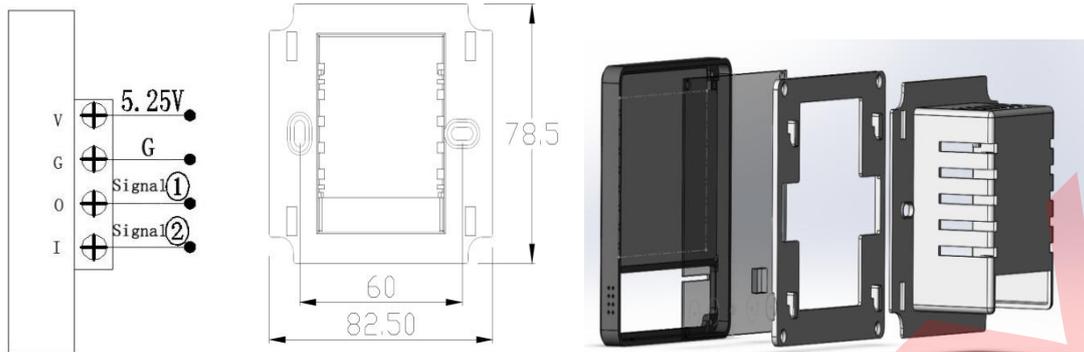
▲ Set the high speed of motor 1 first, and change the value by 5 each time you press the " ^ " or " ∨ ", the range is 200-2200. The figure on the right picture shows 1500rpm, and the upper right corner shows thousands.

▲ Pressing the mode key " ≡ " to adjust the low speed of fan.

▲ Shut down to restore, wait for about 5 seconds to turn on again.



### 4) Wiring diagram and installation drawing



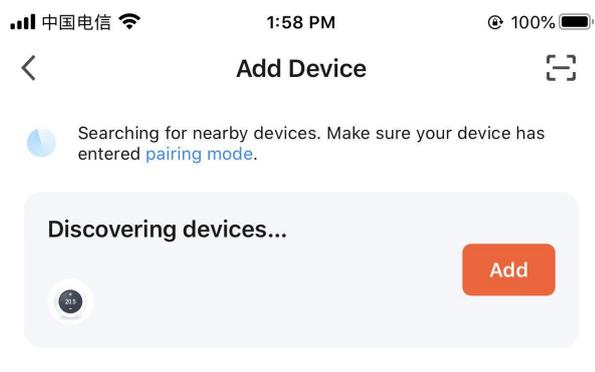
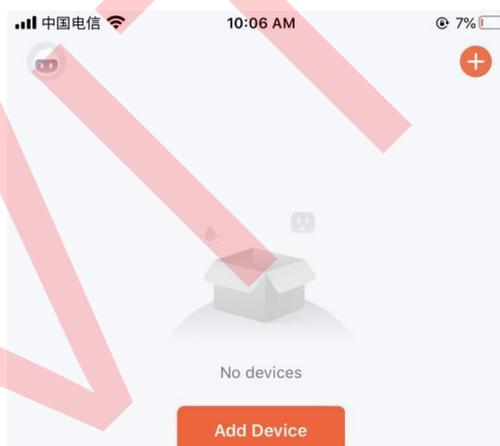
Attention: The wiring must be correctly wired in accordance with the electrical wiring diagram, and do not let water, mud and other impurities enter the thermostat, otherwise it will cause damage to the device!

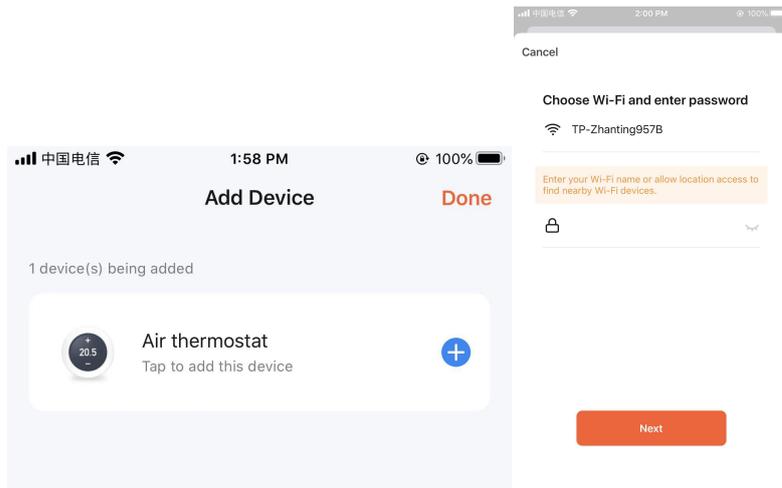
### 5) WIFI Connection (only for the WIFI type)

Wifi settings: In the shutdown state, press and hold the "∨" and "∧" keys for 2 seconds, the buzzer will sound once, enter the WiFi settings, and register this thermostat to the Tuya APP.

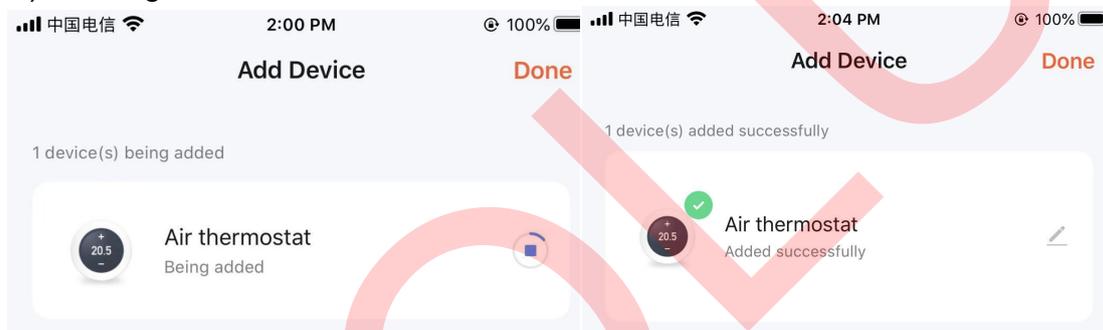


A) Turn on WiFi and Bluetooth on your phone, open the Tuya APP, and click the red "+" symbol in the upper right corner. There will be a new device found prompt, click to add, enter the WiFi password and confirm, the device will start to add.





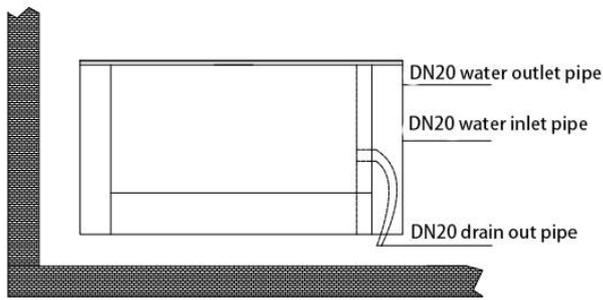
### B) Waiting for the connection



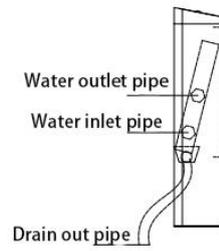
C) After adding the room and selecting the room, the device list will appear, click on the corresponding device to enter the device control interface. You can remotely control the device.



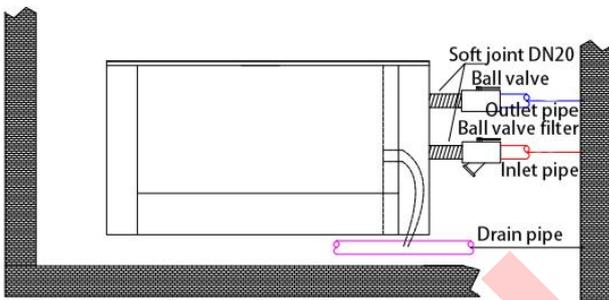
## 3. Installation instruction



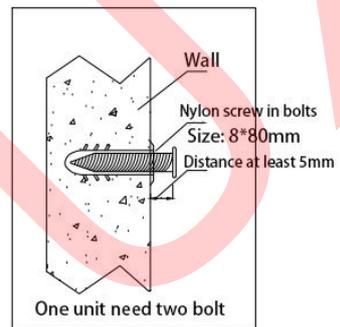
Wall hanging installation front view



Wall hanging installation side view

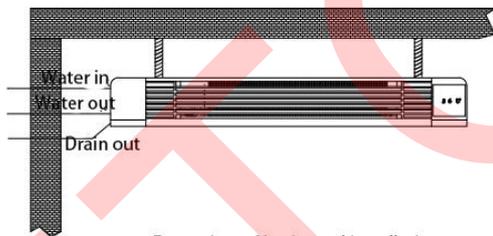


Water pipe connection

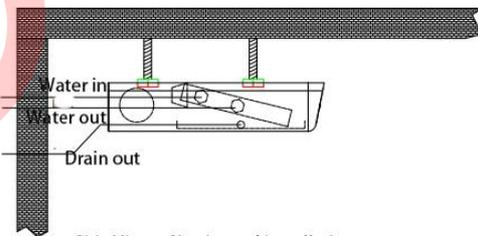


Wall hanging installation drawing

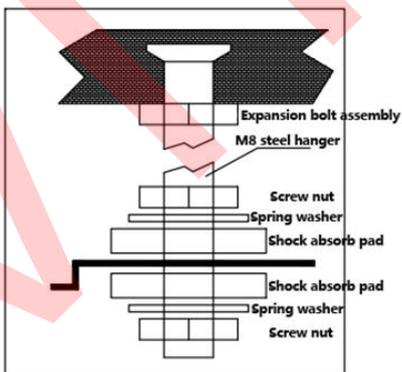
### Vertical installation



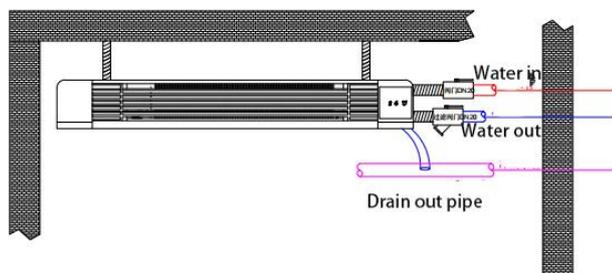
Front view of horizontal installation



Side View of horizontal installation



Installation anchor bolt



Water connection of horizontal installation

### Horizontal Installation

1. The four lifting points of the unit must keep the same level when horizontally installed so as not to affect the effect of the machine.
2. The machine should be installed with water connection pipe according to the pipeline installation diagram. The main condensate pipeline should be slightly lower than the machine to facilitate drainage and prevent backflow.
3. The inlet and outlet pipes should be equipped with soft joint and valves to facilitate adjustment of water flow and maintenance. The water inlet pipe should be installed with a filter valve to filter impurities in the water to avoid blockage of the internal pipeline of the unit.
4. Be sure to note that the effective diameter of the inlet and return pipes is greater than the inner diameter of the machine interface.
5. Power supply for the unit: AC85~260v, 50/60Hz. Note that the voltage is within a safe range, and a safety grounding wire should be installed on the shell of the unit.
6. When the unit uses the condensate drain pipe, pay attention to whether the installation method of the machine and the drain pipe used are correct.

## 4. Precaution for use and maintenance

- 1). The unit has a three-gear adjustment switch. When starting the machine, you should start the machine before adjusting other gears.
- 2). If the unit is difficult to start, be sure to check whether the power supply is normal, whether the blade is in contact with the turbine, and whether other substances are sucked into the blade.
- 3). The cooling temperature of the unit in summer should not be lower than 7°C, and the hot water supply in winter should not be higher than 80°C. The water source used must be softened in consideration of the water quality of various places.
- 4). The maximum allowable working pressure of the unit is 1.6Mpa.
- 5). The filter of the inlet pipe should be cleaned regularly to prevent impurities from clogging the pipeline and affecting the use effect. Close the pipeline valve before cleaning
- 6). The air inlet of the unit should be cleaned regularly to prevent dust from blocking the air inlet and affecting the service life of the motor
- 7). Do not use the machine in a humid environment to avoid short circuit
- 8). Be sure to drain the remaining water inside the machine when it is out of service in winter to avoid freezing and cracking the internal condenser
- 9). When the machine is out of service, the power plug should be unplugged to prevent lightning strikes from damaging the computer board
- 10). When the unit is repaired and maintained, the power supply must be cut off first.

## 5. General fault causes and solution

Symptom	Cause	Solution
Fan doesn't work when heating	The set temperature is lower than the room temperature	Increase set temperature
Fan doesn't work when cooling	The set temperature is higher than the room temperature	Lower the set temperature
The heating and cooling effect is not satisfactory (Blow cool breeze for heating and hot breeze for cooling)	There is air in the copper tube	Unscrew the air valve to exhaust
	The water inlet filter of the pipe is blocked	Clean the pipe filter
Insufficient air volume	Air inlet net is dirty	Clean the air inlet net
Wind speed selection failure	The internal coil of the motor is broken	Replace with a new motor
Water leakage outside the machine	The machine interface is not in the same level, then water is leaking.	Adjust the level of the machine and reinstall it
	Water leaks inside the machine	Replace the condenser
The LCD remote control does not respond	Poor contact or dead battery	Replace with new battery
The fan does not work	The switch or motor is broken	replace with a new switch or motor
Abnormal noise of the fan	There is the foreign matter in the fan	Check the location of the foreign matter and remove it

## 6. Warranty

The warranty period of this product is 3 years. But you can get our after-sales service all the life time of the unit.