

POWRMATIC®

AIRCO290/H

Installation and User Manual

Issue 2.1 Nov 2025



AIRCO290H

Certificate Of Guarantee

POWRMATIC® Certificate of Guarantee

This is to certify that this Air Conditioner is guaranteed for a period of 12 months, parts only from the date of original installation.

To make a claim

In the first instance you must contact your appliance supplier, or installer and provide:-

1. The appliance type and serial number.
2. The original Warranty Registration form. As much detail as possible on the fault.
3. Your supplier, or installer, will then contact Powrmatic to make a guarantee claim on your behalf.

Conditions of Guarantee

1. The Air Conditioner must have been installed by a competent installer, and in accordance with the manufacturer's instructions and any building regulations and local regulations.
2. A copy of the Warranty Registration form, must be returned to Powrmatic.
3. The Air Conditioner has been maintained on a yearly basis by a competent and qualified servicing company.
4. The Air Conditioner has been used in accordance with the manufacturer's instructions.
5. The correct specification voltage has been used.
6. No unauthorised repairs or modifications have been made. Powrmatic 'General Conditions of Sales' have been observed.
7. Except for the obligation of Powrmatic Ltd to perform warranty repairs during the guarantee period, Powrmatic will not be liable in respect of any claim for direct or indirect consequential losses, including loss of profits or increased cost arising from loss of use of the heater, or any event arising there from.

Exclusions

Consumables such batteries are all excluded from guarantee.

Powrmatic Ltd, Hort Bridge, Ilminster, Somerset, TA19 9PS
Tel: 01460 53535 Fax: 01460 52341
Web: www.powrmatic.co.uk e-mail: warranty@powrmatic.co.uk

Important: This certificate must be retained

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SAFETY INSTRUCTIONS



**IMPORTANT:
AIR CONDITIONERS MUST ALWAYS BE
STORED AND TRANSPORTED UPRIGHT,
OTHERWISE IRREPARABLE DAMAGE MAY
BE CAUSED TO THE COMPRESSOR; IF IN DOUBT WE
SUGGEST WAITING AT LEAST 24 HOURS FOLLOWING
INSTALLTION BEFORE STARTING THE UNIT.**



- Carefully read the instructions before installing and/or operating the unit.
- This appliance is for indoor use only.
- This unit must be only connected to a 220-240 V / 50 Hz earthed outlet.
- Installation must be in accordance with regulations of the country where the unit is used.
- If you are in any doubt about the suitability of your electrical supply have it checked and, if necessary, modified by a qualified electrician.
- This air conditioner has been tested and is safe to use. However, as with any electrical appliance – use it with care.
- Disconnect the power from the appliance before dismantling, assembling or cleaning.
- Avoid touching any moving parts of the appliance.
- Never insert fingers, pencils or any other objects though the guard.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities. It is also not intended for use by those with a lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety.
- Do not leave children unsupervised with this appliance.
- Do not clean the unit by spraying it or immersing it in water.
- Never connect the unit to an electrical outlet using an extension cord. If an outlet is not available, one should be installed by a qualified electrician.
- Do not operate the unit unless it has been fully installed following the guidance provided within this manual.
- Never operate this appliance if the cord or plug is damaged. Ensure the power cord is not stretched or exposed to sharp objects/edges.
- A damaged supply cord should be replaced by the manufacturer or a qualified electrician in order to avoid a hazard.
- Any service other than regular cleaning or filter replacement should be performed by an authorised service representative. Failure to comply could result in a voided warranty.
- Do not use the appliance for any purpose other than its intended use.
- Avoid restarting the air conditioner unless 3 minutes have passed since being turned off. This prevents damage to the compressor.
- Never use the mains plug as a switch to start and turn off the air conditioner. Use the provided ON/OFF button located on the control panel.
- The appliance should not be installed in laundry or wet rooms.
- The appliance must be installed in a room without sources of ignition (for example: open flames, an operating gas appliance or an operating electric heater).
- The unit must be installed on a solid vertical wall by a competent person. The electricity supply must only be connected after installation is complete.
- R290 refrigerant gas complies with European environmental directives.
- R290 has a low GWP (Global Warming Potential) of 3.
- The air conditioner contains about 290g of R290 refrigerant gas.
- Do not install or store in an unventilated space with an area smaller than 15 m² per unit. The room must be such as to prevent stagnation of possible leaks of refrigerant gas as there could be a danger of fire or explosion hazard should the refrigerant come into contact with electric heaters, stoves or other sources of ignition.
- If the appliance is installed, used or stored in an unventilated room, the room must be such as to prevent stagnation of possible leaks of refrigerant gas as there could be a danger of fire or explosion should the refrigerant come into contact with electric heaters, stoves or other sources of ignition.
- Refrigerant gas may be odourless.
- Do not use the product and contact the retailer for advice, if damage has occurred to the unit which may have compromised the refrigerant system.
- Any repairs or maintenance must only be carried out on the unit by a suitably qualified engineer. Before opening and servicing the unit the authorized engineer must be in possession of a copy of the manufacturer's service manual and must follow the safety information contained within it to ensure all hazards are minimized.
- The refrigerant system should not be perforated or punctured.

Energy Saving and Unit Safety Protection Tips

- Do not cover or restrict the airflow from the outlet or inlet grills.
- Keep the filters clean. Under normal conditions, filters should only need cleaning once every three weeks (approximately). Since the filters remove airborne particles , more frequent cleaning maybe necessary, depending on the air quality.
- For the initial start-up set the fan speed to maximum and the thermostat to 4-5 degree lower than the current temperature . After, set the fan switch to low and set the thermostat to your desired setting.
- To protect the unit, we recommend not using the cool mode when the ambient temperature is higher than 35.

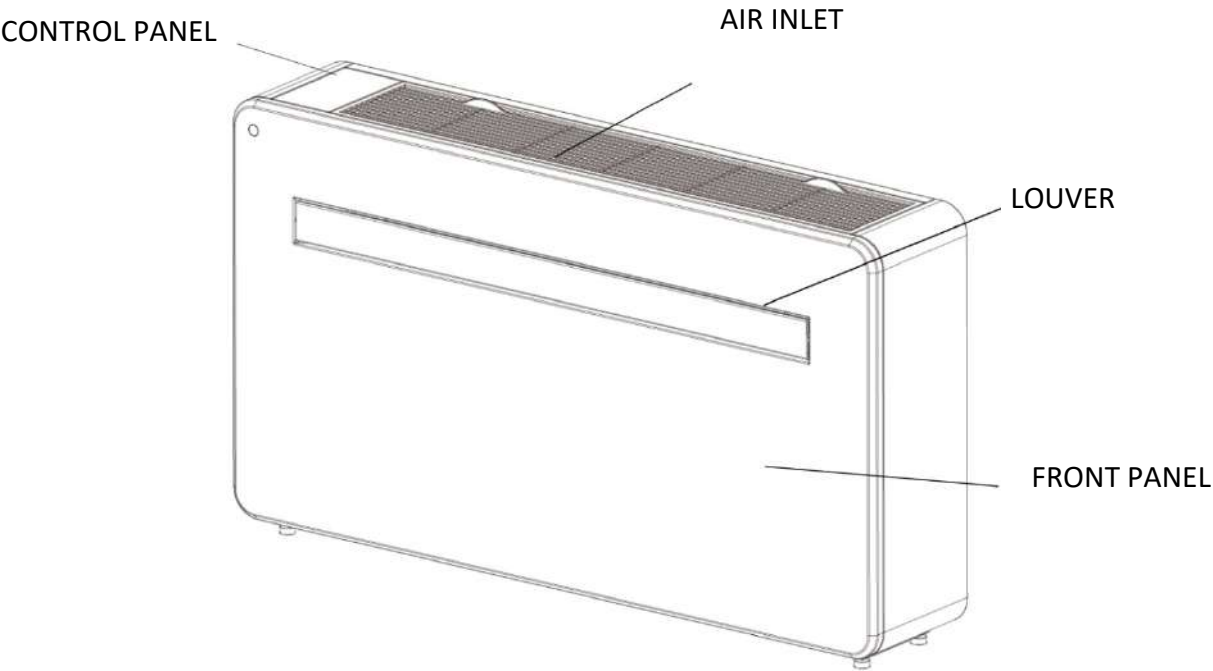


NOTE : Some pictures and information may vary from the final product. This is due to continual product improvement.

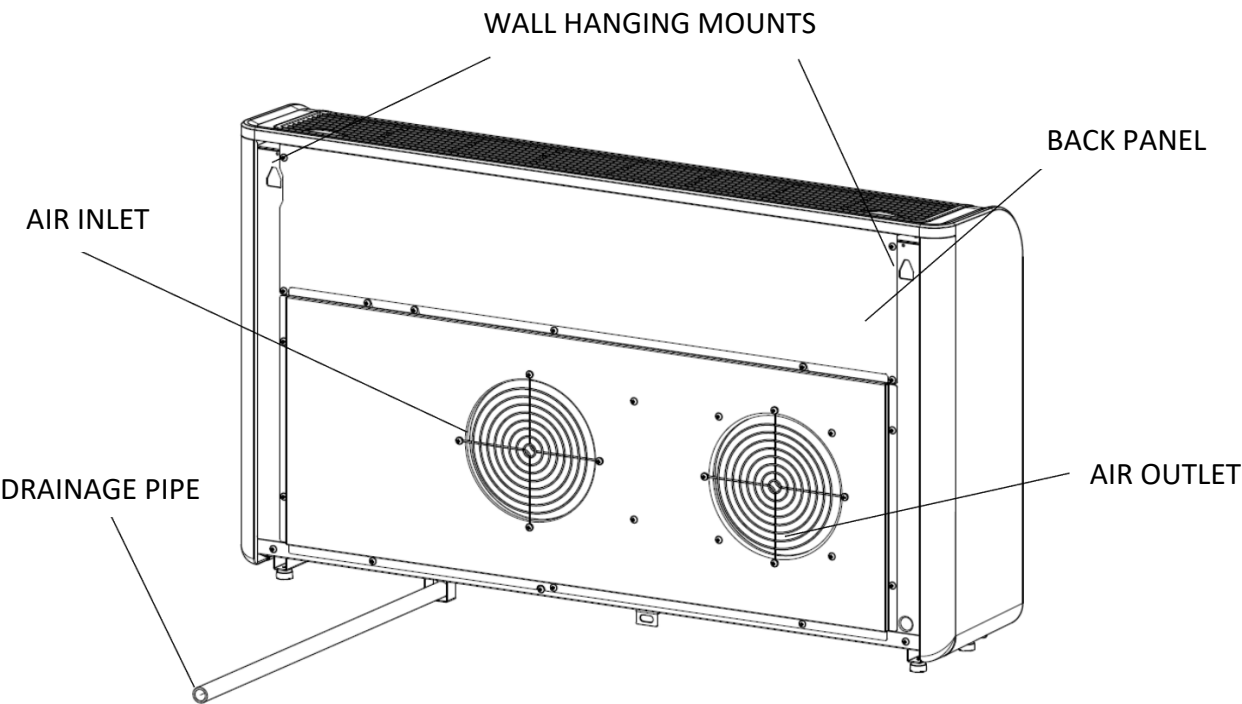
PRODUCT OVERVIEW

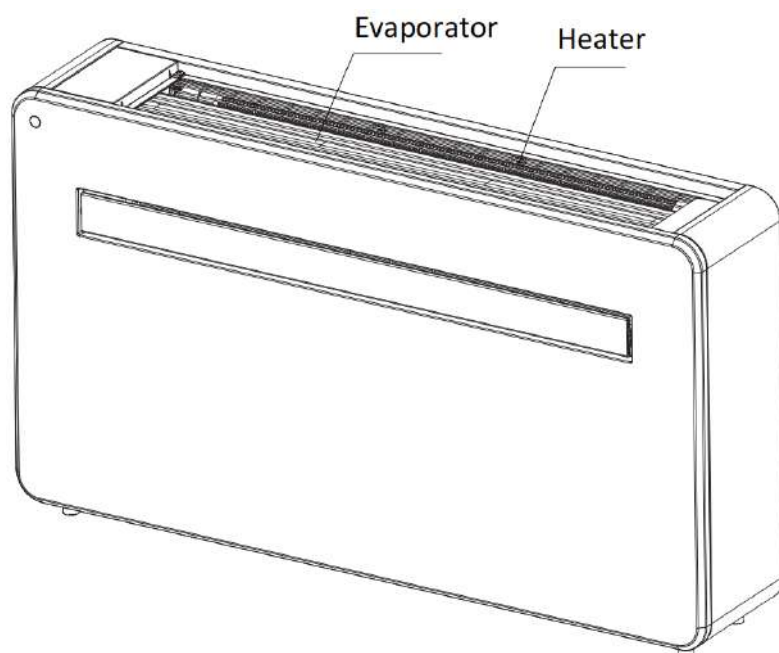
PRODUCT DIAGRAM

FRONT



BACK





After the filter opened, it's PTC heater and evaporator assembly, please don't touch the PTC heater and evaporator assembly in case been cut or scalded.

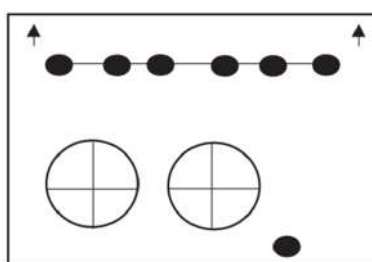
FEATURES

- ◆ Simple operation.
- ◆ Self-evaporative function with energy saving technology.
- ◆ Sleek design that seamlessly fits into any style home.
- ◆ Bright LED screen-indicates temperature and current mode.
- ◆ On / off timer function-allows you to choose when the unit operates.
- ◆ WIFI App control providing additional functionality.
- ◆ Three fan speeds.
- ◆ Four modes to suit your every need including: Cooling / Heating / Fan / Dry
- ◆ Silent running option, perfect for a restful nights sleep.
- ◆ Wall mounted air conditioner.

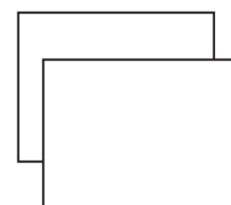
WHAT'S INCLUDED



AIR CONDITIONER



WALL TEMPLATE



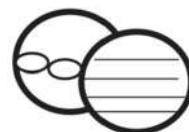
**PLASTIC DUCTING
SHEET (X2)**



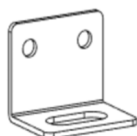
WALL BRACKET



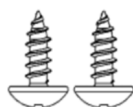
REMOTE CONTROL



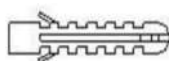
VENT COVER ASSEMBLY (X2)
(CHAIN, INDOOR RING AND
OUTDOOR COVER)



FIXED PLATE



2PCS TAPPING SCRE
(4x10mm)



7PCS WALL PLUGS
(8x40mm)



7PCS SCREWS (5x60mm)

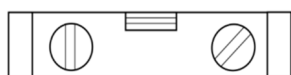
Sealing strip



* DIAGRAMS FOR ILLUSTRATIVE PURPOSES ONLY

INSTALLATION

TOOLS REQUIRED



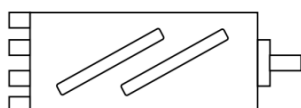
SPIRIT LEVEL



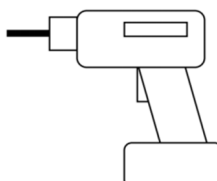
TAPE MEASURE



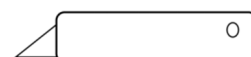
PENCIL



180mm CORE



DRILL



SHARP KNIFE



8mm MASONRY DRILL BIT

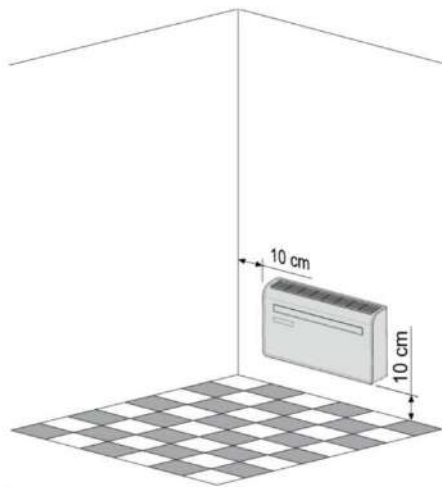


25mm MASONRY DRILL BIT

BEFORE STARTING INSTALLATION, PLEASE ENSURE YOU HAVE ALL SUITABLE EQUIPMENT AVAILABLE AND UNDERSTAND THE STEPS INVOLVED IN INSTALLATION. IF IN ANY DOUBT, PROFESSIONAL ADVICE SHOULD BE SOUGHT.

THE INSTALLER MUST ENSURE THAT THE PLANNED POSITION OF THE AIR CONDITIONER IS SUITABLE, AND THAT THERE ARE NO CABLES AND PIPES INSIDE THE WALL, AND NO OTHER OBSTRUCTIONS FIXED ON THE WALL, WHICH WOULD PRESENT A DANGER AND/OR PREVENT COMPLETION OF INSTALLATION.

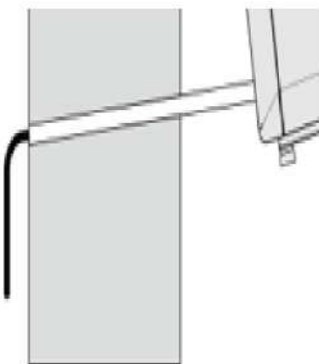
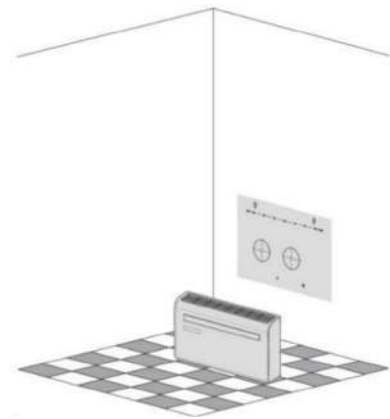
INSTALLATION



This unit must be installed on an external wall, as it vents directly out of its rear and ensure the wall is flat, solid and reliable.

Leave at least 10 cm of space to the left, right and base of the machine. At least 20cm of space must be left above the unit to help air flow smoothly and stay away from curtains, plants, faucets, furniture and others appliances etc.

Paste the supplied installation template paper in position on the wall, ensuring that the reference line is level using a spirit level.



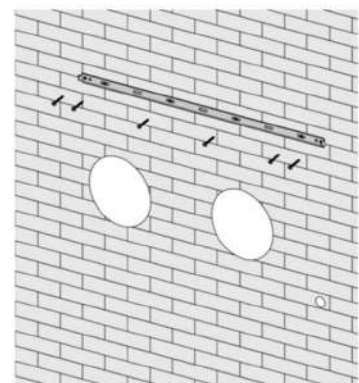
Use a 180mm core drill to drill the two holes for the units ventilation, ensuring that both the holes are aligned with the template. ensuring that the holes are at a downward angle (min 5 degrees) and aligned with the template.

The hole for the drainage pipe must be drilled using a 25mm Drill bit. Ensure the hole is at a downward angle (min 5 degrees) so that the water will drain correctly.

Use the template to mark the position of the screws for the hanging rail, using a spirit level to ensure it is straight and level.

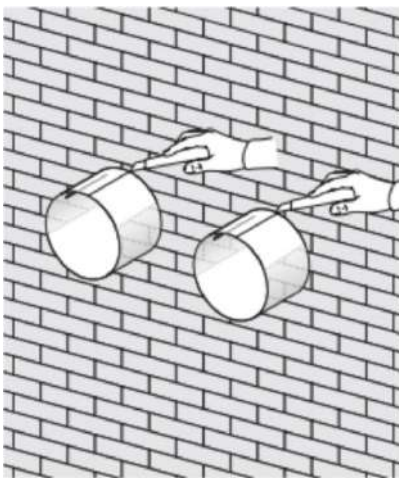
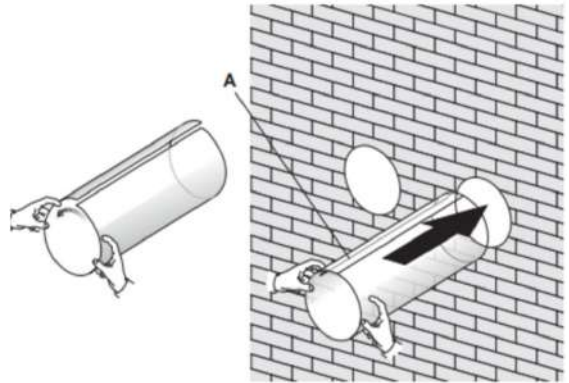
Drill the marked holes using a suitable 8mm drill bit and insert wall plugs. Line the hanging rail with the holes and fix the rail into position using the supplied screws.

Ensure that the hanging rail is securely fastened onto the wall, and that there is no risk of the unit tipping or falling.



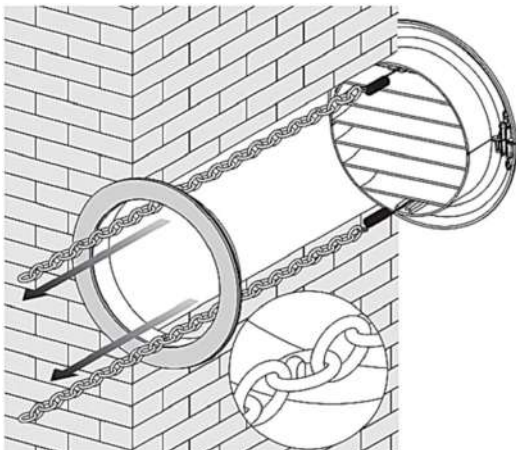
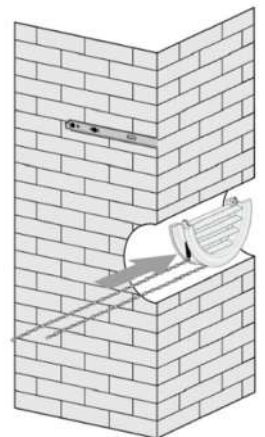
Note: The machine performs best when it is installed on a wall with a thickness not exceeding 240mm.

Roll the plastic vent sheets into a tube and feed them from the inside into the holes previously made. Ensure the tubes sit flush to the interior wall.



Go outside and trim off the excess vent tube using a sharp knife, keeping the edge as neat as possible.

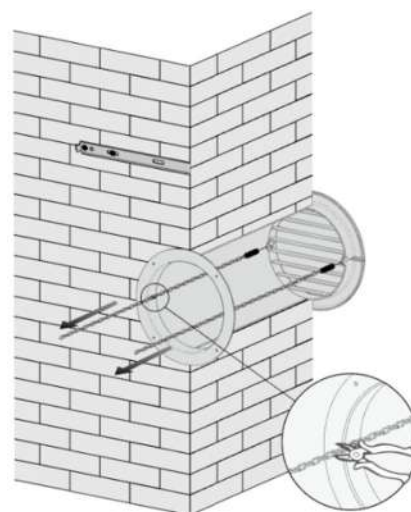
Insert the indoor fixing ring from the vent cover onto the indoor side of the air vent. Then fold the external vent cover in half. Attach the chains to each side of the vent cover, before sliding the cover outside through the vent hole.



Expand the external cover, before tightly fixing the chains by hooking onto the indoor fixing ring. This will hold the external cover firmly in position. Repeat for the second vent.

Installation

Once the chains are fitted and secure, any excess chain should be removed by cutting the chain.



Paste the sealing strip in the accessories along the edge of the back for whole circle of the machine, cut off the excessive length if needed.

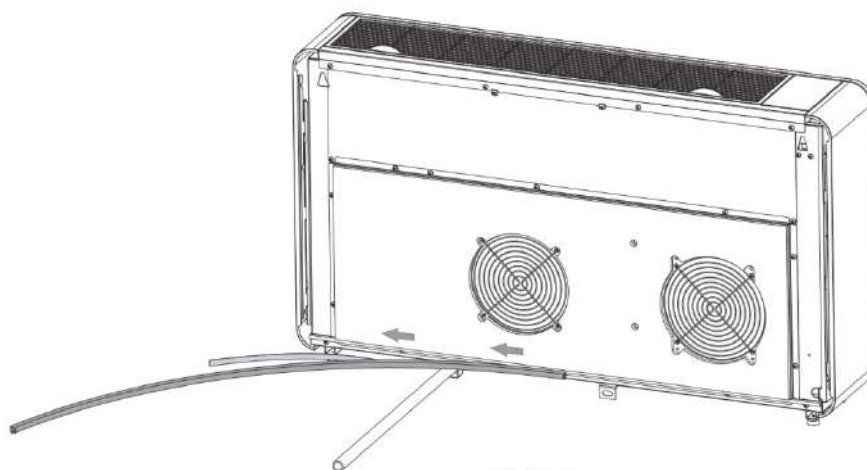


Figure 1

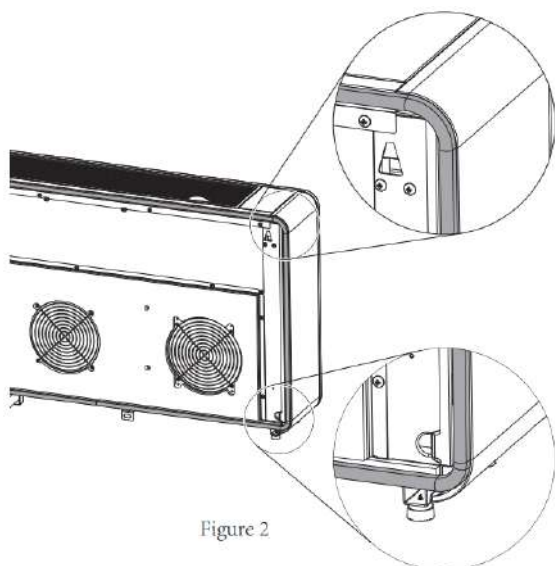
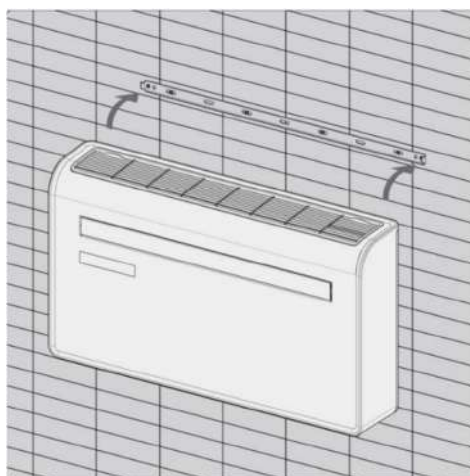


Figure 2

Note:

1. The sealing strip should be pasted along the edge of the machine, as shown in Figure1.
2. Please peel the striping layer on the sealing strip gradually while pasting.
3. Paste from the bottom of the machine first.
4. The position of the corner should be pasted as shown in Figure 2.
5. Improper pasting may cause extra noise.



Lift the unit onto the wall, align the hanging holes with the hooks on the hanging rail and gently rest the unit into place.

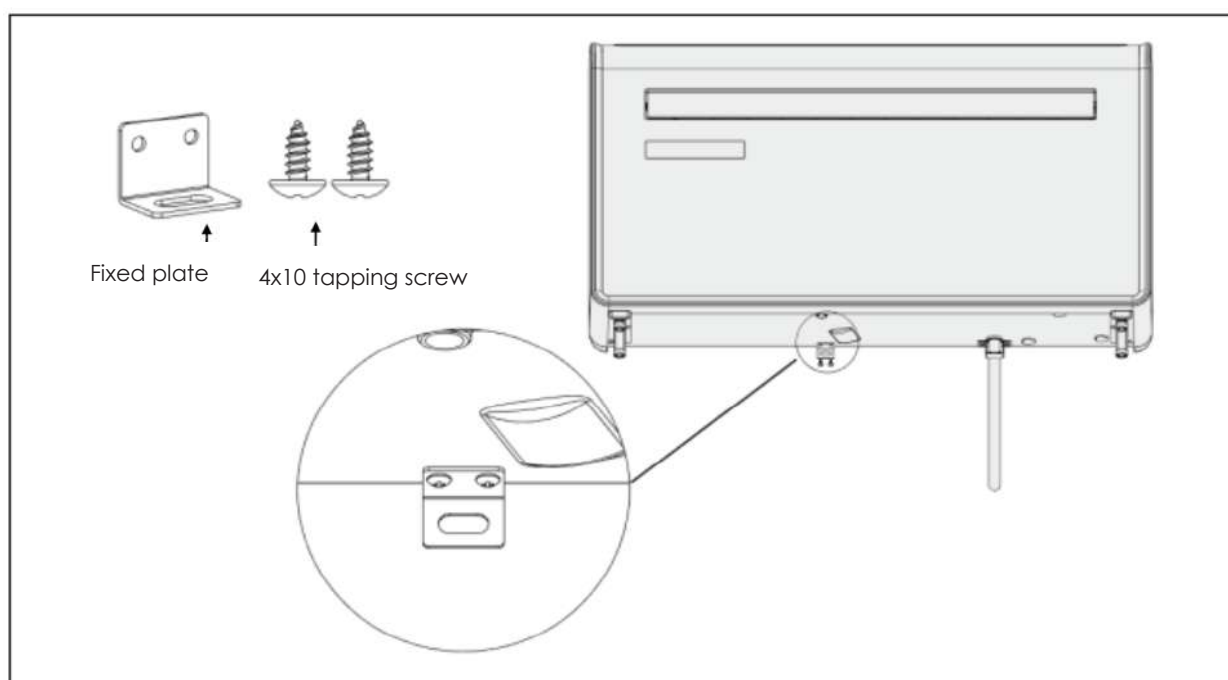
At the same time, slide the drain pipe through the drainage hole.

NOTE:

1st: please ensure that the backside of product is tightly attached on the wall to avoid additional vibration and noise.

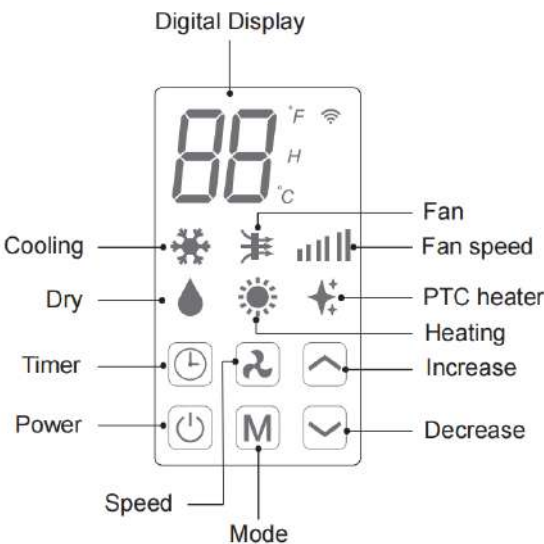
2nd : The end of the external water pipe must be placed in an open space or drain. Avoid damage or constriction to the drainage pipe to ensure the unit drains.

3rd : The rubber foot pad is only intended to protect the bottom of unit from any abrasion before the unit installed on the wall.



OPERATION

CONTROL PANEL














REMOTE CONTROL



The air conditioner can be controlled with the remote control. Two AAA-batteries are required.

NOTE: Further details of the functions can be found on the following page.

POWER	Press the POWER button to turn the machine on or off.	
MODE	Press the MODE button to switch between cooling, heating, fan and dry modes.	
FAN	Press the FAN button to change between high, medium and low fan speeds	
LED	Press the LED button to open or close the LED background light of unit, it can be a choice for sleep condition.	
	Press the UP button to increase the desired temperature or timer duration	
	Press the DOWN button to decrease the desired temperature or timer duration	
PTC	Press the PTC button to turn the PTC electric heater on or off. (only activated in heating mode)	
SILENT	Press it for silent mode, In Silent mode, noise will be lower, fan works in low speed, frequency is low.	
SWING	Press to turn the louver swing function on and off (only activated by the remote control & APP)	
TIMER	Press the TIMER button to set the automatic switch on/off.	

FUNCTIONS

 POWER	Press "POWER" to turn the unit On or Off.	
 MODE	Press to change between the 4 different modes. The display will show the symbol for the mode currently selected.	
	 COOLING	The cooling function allows the air conditioner to cool the room and at the same time reduces air humidity. The desired temperature can be adjusted using the increase and decrease button between 16°C and 30°C. The fan speed can also be adjusted using the speed button.
	 DRY	Dry mode will extract moisture from the air, which will be drained outside using the installed drain pipe. the fan speed cannot be adjusted in dry mode.
	 FAN	In fan mode the appliance will recirculate the air within the room, and will not cool, heat or dehumidify. The fan speed can be adjusted using the Speed button, But the desired temperature can not be set.
	 HEATING	The heating function allows the air conditioner to heat the room. The desired temperature can be adjusted using the increase and decrease button between 16°C and 30°C. The fan speed can also be adjusted using the speed button.
SL SILENT		Silent mode can be activated from APP or the remote control, It can also be activated by pressing "⏸" + "⬆" on unit control panel at the same time. It will only operate in cooling or heating modes, the fan speed will change to low and noise will be lower.
 FAN SPEED		Press to change the fan speed between Low, Medium and High. The fan speed cannot be adjusted in Dry or Silent modes.
 TIMER	The air conditioner contains a 24 hour timer, which can be used to either set a delayed start, or a set period of operation.	
	SHUTDOWN TIMER: While the unit is running press the timer button, the display will flash "0" 5 times. After the 5th flash, use the up and down buttons to adjust the duration in 1 hour increments between 1 to 24 hours. When the timer has elapsed, the unit will shutdown automatically.	
	DELAYED START TIMER: With the unit in standby, press the timer button, the display will flash "0" 5 times. After the 5th flash, use the up and down buttons to adjust the duration in 1 hour increments between 1 to 24 hours. After the timer has elapsed, the unit will start up in the same mode with the same settings as when it was turned off.	
 INCREASE AND DECREASE	Used within cooling and heating modes to adjust the desired temperature 16-30°C. Also used while setting the timer to adjust the duration.	
SWING MODE	After machine turns on, press the "SWING" button, louver will swing continuously up and down; by pressing the button again the movement will stop and the louver remain in that position. Swing mode can only be adjusted from the remote, and will initially be turned on by default. the louver will close automatic once switch OFF the product.	
COMPRESSOR PROTECTION	There is a 3 minutes delay on power on. In order to protect the life of the compressor and electronic components please do not switch on the unit for at least 5 minutes after you turned the unit off.	

<div data-bbox="178 250 233 313" data-label="Image"> </div> <p data-bbox="140 331 272 439">PTC electric heating function</p>	<p data-bbox="312 250 1423 358">The unit has an additional PTC electric heating element. When the weather conditions outside are bad, you can press the PTC button on the remote control to turn on the electric heating function to increase the heat. The heat power of the PTC is equal to 1000W.</p> <p data-bbox="312 414 443 439">PTC turn on</p> <ol data-bbox="312 454 1423 1422" style="list-style-type: none"> 1. Only in the heating mode, press the PTC button on the remote control to send the turn-on command to the unit. At this time, the remote control and the unit display  lights up at the same time. 2. After the unit receives the remote-control command, the system will carry out self-testing, PTC will work when the following points are satisfied at the same time. Otherwise, PTC cannot work.: <ol data-bbox="343 701 1423 974" style="list-style-type: none"> a. Unit is in heating mode. b. $T_w < 25^{\circ}\text{C}$ (outdoor temperature keeps lower than 25°C for 10 seconds). c. $T_s - T_r \geq 5^{\circ}\text{C}$ (The Set temperature is more than 5 degrees higher than the Room temperature). d. Room temperature $T_r \leq 18^{\circ}\text{C}$. e. Coil Temperature of evaporator $T_e \leq 48^{\circ}\text{C}$. f. Compressor is keep working for 3minutes. g. Aboved data is collected from 20S's continuous working. 3. PTC will stop working when the system self- testing detects one of the following points: <ol data-bbox="343 1070 1423 1422" style="list-style-type: none"> a. Outdoor temperature keeps higher than 28°C for 10 seconds b. The room temperature is greater than the setpoint; c. Room temperature $T_r \geq 23^{\circ}\text{C}$. d. Compressor stop working. e. The ventilation stops or the fan is faulty. f. 4-way valve get disconnected. g. Coil Temperature of evaporator $T_e \geq 54^{\circ}\text{C}$ or sensor error. h. Unit didn't work in heating mode. i. Unit is in defrost function. <p data-bbox="312 1478 446 1503">PTC turn off</p> <p data-bbox="312 1518 1423 1585">Presses the PTC button again or change to other mode to turn off PTC function, the  lights on remote control and the unit display will be off at the same time.</p> <p data-bbox="312 1641 383 1666">NOTE:</p> <ul data-bbox="312 1682 1423 1792" style="list-style-type: none"> ● The unit will work without PTC function as a default until the "PTC" button on remote control is pressed. ● If unit is turn off, the PTC setting will be cleared, it need to be set again.
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WIFI SETUP AND SMART FEATURES

WIFI SETUP

BEFORE YOU START

- Ensure your router provides a standard 2.4ghz connection.
- If your router is dual band ensure that both networks have different network names (SSID). The provider of your router / Internet service provider will be able to provide advice specific to your router.
- Place the air conditioner as close as possible to the router during setup.
- Once the app has been installed on your phone, turn off the data connection, and ensure your phone is connected to your router via WIFI.

DOWNLOAD THE APP TO YOUR PHONE

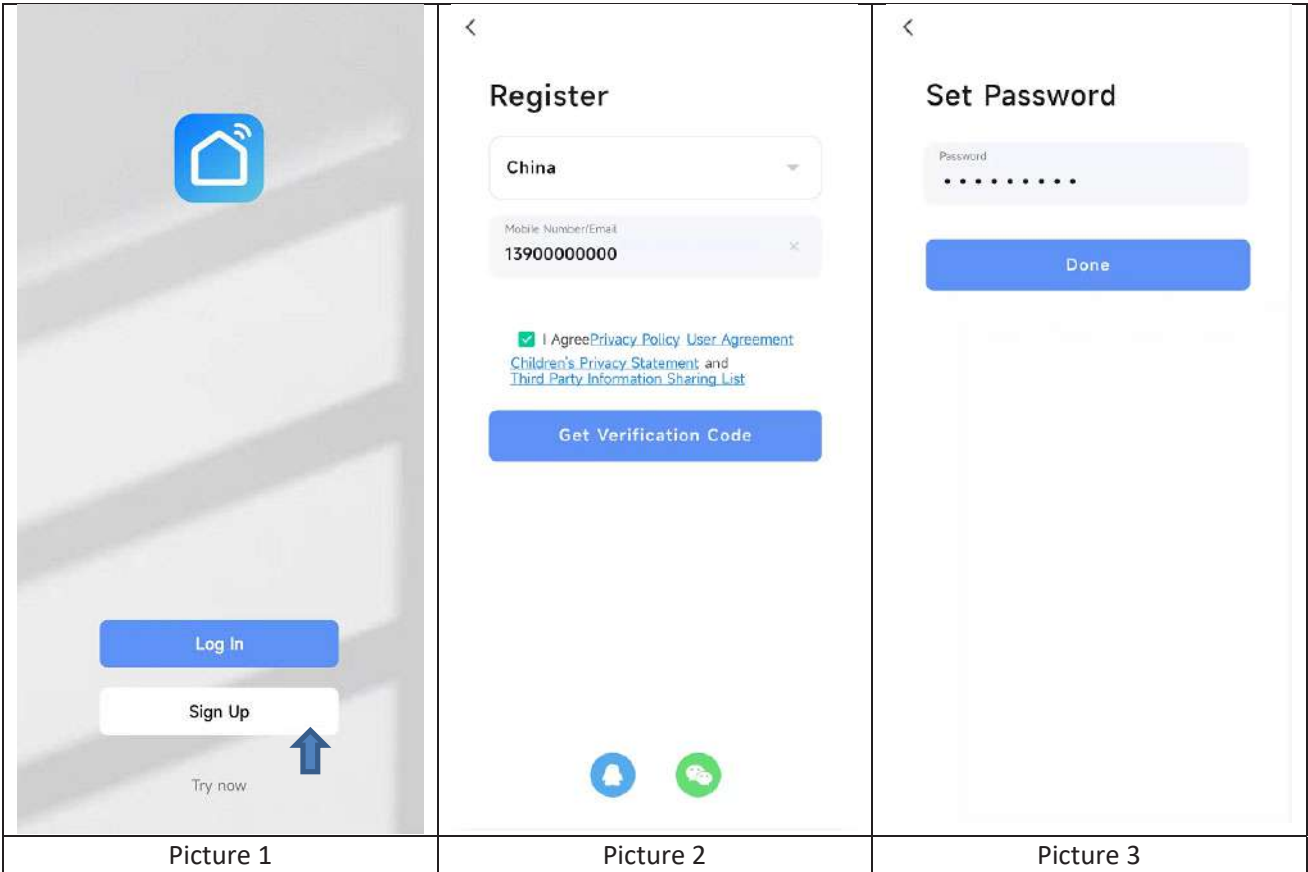
Download the "SMART LIFE" app, from your chosen app store, using the QR codes below, or by searching for the app in your chosen store.



REGISTER THE APP

If you don't have an App account, register an account or sign in with verification code by SMS. This page describes the registration process.

1. Press on the "Sign Up" button at the bottom of the screen, as shown in the picture 1.
2. The system automatically recognizes your country/ area. You can also select your country code manually. Enter your mobile phone number/ email address and tap "Get verification code", as shown in picture 2.
3. If you choose the mobile number option, then enter the verification code in the message sent to you by SMS. Set a password as prompted and press "Done" to finish your registration. as shown in picture 3.

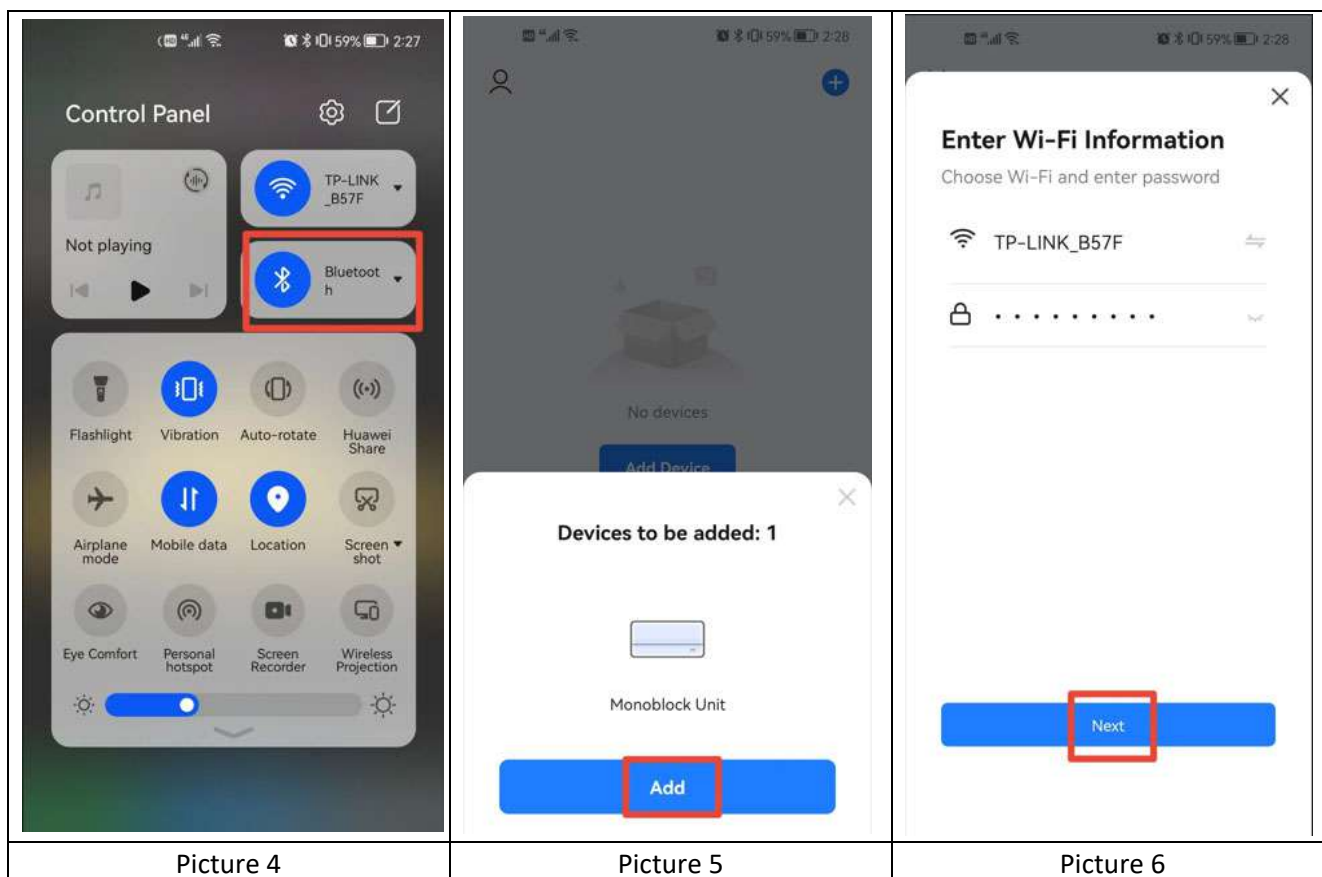


CONNECTING USING BLUETOOTH & WIFI

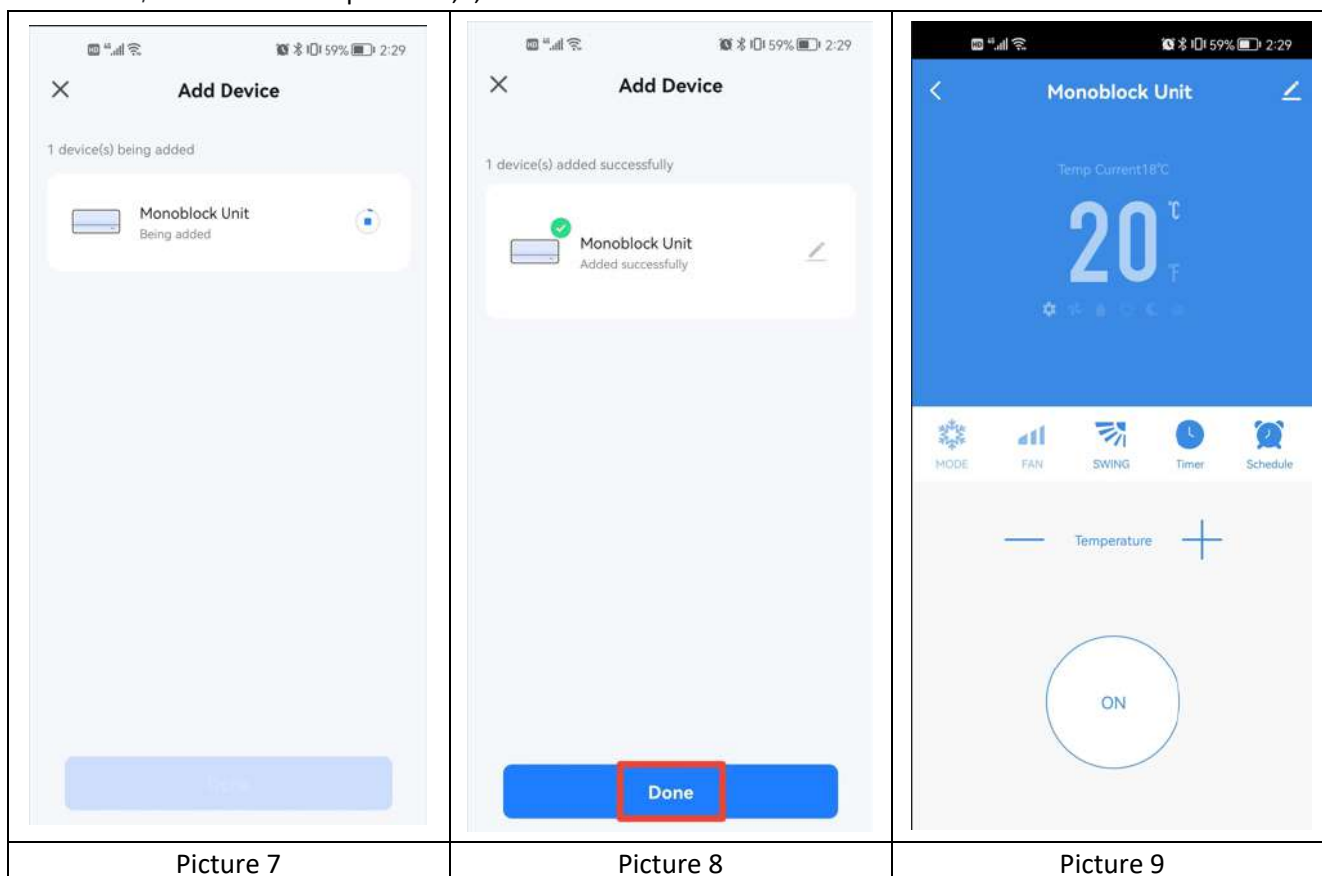
Before initiating the connection, make sure the unit is in standby mode and the phone connected to the wifi network.

1. Press the “Fan” button for 3s, you will hear prompt tone and the WiFi indicator will flash.
2. Open the Bluetooth of your phone, as shown in picture 4.
3. When the device is powered on and to be connected, the connected Bluetooth device will pop up automatically after opening the App for a moment. Click "Add" button for connection, as shown in picture 5.
4. Enter the Wi-Fi information interface, enter the password and click "Next" to continue the operation, as shown in picture 6.

***Due to continuous development of the app, the layout and available features may be subject to change.**



5. Enter the device connection interface after the progress bar is finished and the device is successfully connected, as shown in the picture 7,8,9.



TROUBLESHOOTING

Do not repair or disassemble the air conditioning. Unqualified repair will invalidate the warranty and may lead to failure, causing injuries and property damage. Only use it as directed in this user manual and only perform operations advised here.

Problem	Reasons	Solutions
The air conditioner does not work	There is no electricity.	Check the unit is plugged in, and the socket is working normally.
	The ambient temperature is too low or too high.	Only use to use the machine with a room temperature between -5 and 35°C.
	In cooling mode, the room temperature is lower than the desired temperature; in heating mode, the room temperature is higher than the desired temperature.	Adjust the desired room temperature.
	In dehumidification (dry) mode, the ambient temperature is low.	Ensure that the room temperature is above 17°C for dry mode.
	There is direct sunlight.	Use curtains to reduce heat from the sun.
The cooling or heating effect is poor	Doors or windows are open; there are a lot of people; or in cooling mode, there are other sources of heat (e.g. fridges)	Close doors and windows; increase air conditioning power
	The filters screen is dirty.	Clean or replace the filter screen.
	The air inlet or outlet is blocked.	Clear obstructions; make sure the unit is installed as per the instructions
The air conditioner is leaking	The unit is not straight	Use a spirit level to check the unit is horizontal, if not remove from the wall and Straighten.
	The drain pipe is blocked	Check the drain pipe to ensure it is not blocked or constricted.
Compressor does not work.	Overheat protection operational .	Wait for 3 minutes until the temperature is lowered, and then restart the machine.
The remote control does not work.	The remote control is not aligned with the direction of the remote-control receiver.	Let the remote control get close to the air conditioner, and make sure that the remote control directly faces to the direction of the remote-control receiver.
	Batteries poor.	Replace batteries.

If problems not listed in the table occur or recommended solutions do not work, please contact the service centre.

ERROR CODES

Fault Code	Fault Description	Fault Code	Fault Description
F1	Compressor IPM error	P8	Zero-crossing fault detection
F2	PFC/IPM error	PA	Return air sensor temperature abnormal protection
F3	Compressor start error	PC	Coil tube overload protection(outdoor)
F4	Compressor running out of step	PE	Abnormal refrigerant circulation
F5	Location detection loop failure	PH	Exhaust temperature protection
F6	PCB communication error	E0	Sensor on suction pipe error
F7	Coil sensor error (outdoor)	E1	Temperature sensor error
F8	Sensor on suction pipe error	E2	Sensor error on indoor coil tube
FA	Phase current over current protection	E3	DC fan Feedback failure
FE	EE error (outdoor)	E4	Communication error
FL	Water-full protection	E5	Water-splash motor error
P1	Over-heat protection on top of compressor	E6	Temperature sensor error(outdoor)
P2	Dc bus voltage Under voltage protection	E7	Fan motor error(outdoor)
P3	AC Input voltage protection	E8	Fan feedback fault
P4	AC over-current protection	EE	EE error
P5	AC under voltage protection	EA	Reversing fault of four-way valve
P6	Coil tube overload protection	Eb	Fluoride deficiency protection
P7	Defrost protection on coil tube		

Notes:

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