

AUPU

AUPU Bathroom Fan with Heater N50-ML

—— AUPU Electrical Appliance ——
· Installation and user Manual ·

· Preface ·

Dear users:

Thank you for choosing AUPU products. We believe your choice will bring you a pleasant life experience. Please read this instruction manual carefully before installation and operating to avoid danger or unnecessary damages.

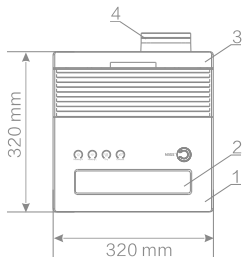
· Packing List ·

Model	Fan unit	Installation & User Manual	Accessory	Remote control
N50-ML	×1	×1	×1	×1

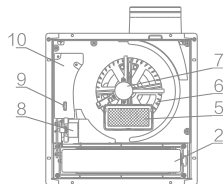
· Main parameters ·

Model	Rated voltage (V)	Rated frequency (Hz)	Rated power (W)	Frequency band(s)	Maximum radio- frequency power transmitted
N50-ML	220~240~	50~60	2400	433.92MHz	6dbm

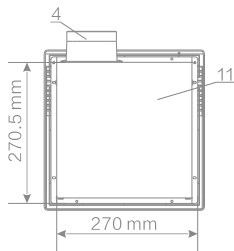
· Schematic diagram of main components of the product ·



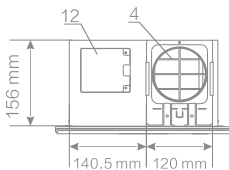
Front of the product (with grille)



Front of the product (without grille)



Back of the product



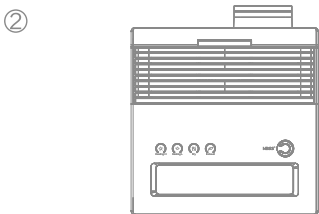
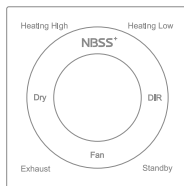
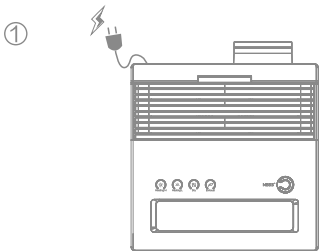
Side View

1	Grille	2	Louver	3	Filter handle
4	Ventilation outlet	5	Deodorization module	6	Blower
		7	Stepper motor	8	Louver stepper motor
10	Power board cover	11	Fan Body	9	Display panel connection cable socket
				12	Terminal Cover

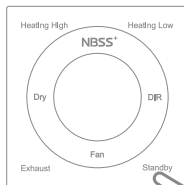
• Instructions •

This product is a household bathroom fan with heater with functions such as fan, ventilation, drying, and NBSS+ (deodorization and sterilization).

Switch pairing, the pairing of the fan unit and the switch is completed at factory at factory. If re-pairing is required, please connect the power of the fan unit and the switch at the same time. When you hear the "di-di-di" sound, press the "Standby" for more than 3 seconds within 10 seconds. If you hear three quick "di-di" sound, it means the pairing is successful. If the code pairing fails, turn on the power again and repeat the above steps.



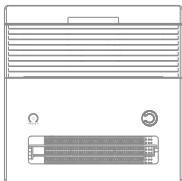
"di-di-di" → quick "di-di"



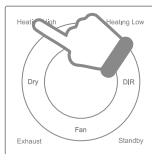
II. Functions

1. Heating High:

Press "Heating High" once, the heating high indicator lights up, the louver opens, and the heating high function is turned on; press "Heating High" again, the heating high indicator goes off, the louver closes, and the heating high function is turned off; the default working time of heating high is 90 minutes, and it can be turned off using the "Standby" button in the middle.



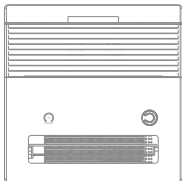
"Heating High" mode, diagram of the indicator light of the bathroom fan with heater



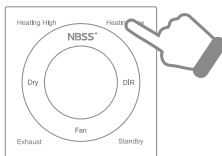
"Heating High" mode
Recommended for use in late winter or cold weather

2. Heating Low:

Press "Heating Low" once, the heating low indicator lights up, the louver opens, and the heating low function is turned on; press "Heating Low" again, the heating low indicator goes off, the louver closes, and the heating low function is turned off; the default working time of heating low is 90 minutes, and it can be turned off using the "Standby" button in the middle.



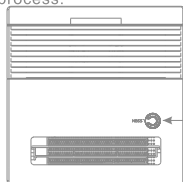
"Heating Low" mode, diagram of the indicator light of the bathroom fan with heater



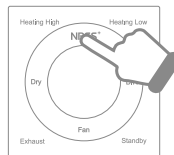
"Heating Low" Mode
Recommended for use in early spring and late autumn when the temperature is mild

3. NBSS+ (deodorization and sterilization)

Press "NBSS+" once, the breathing light on the fan unit lights up, and the deodorization and sterilization functions is turned on; press the "NBSS+" again, the breathing light on the fan unit goes off, and the deodorization and sterilization functions is turned off; the default working time of deodorization and sterilization is 60 minutes, and it can be turned off by using the "Standby" button during the process.



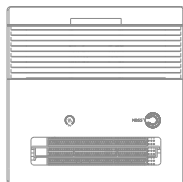
"Deodorization and Sterilization" mode, diagram of the indicator light of the bathroom fan with heater



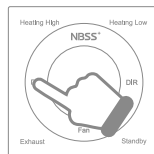
"Deodorization and Sterilization" mode
Recommended for use after using the toilet
or when there is odor in the bathroom

4. Drying:

Press "Drying" once, the drying indicator light lights up, the louver opens, and the drying function is turned on; press the "Drying" again, the drying indicator light goes off, the louver closes, and the drying function is turned off; the drying function will work in heating high mode for 25 minutes and in ventilation mode for 5 minutes, and will automatically shut down after 4 cycles of 120 minutes, and it can be turned off by using the "Standby" button during the process.



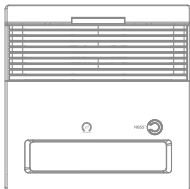
"Drying" mode, diagram of the indicator light of the bathroom fan with heater



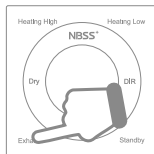
"Drying" mode
Recommended for use after bathing
or when the bathroom is humid

5. Exhaust

Press "Exhaust" once, the exhaust indicator lights up, and the exhaust function is turned on; press "Exhaust" again, the exhaust indicator light goes off, and the exhaust function is turned off; the default working time for exhaust is 30 minutes, and it can be turned off by using the "Standby" button during the process.



"Exhaust" mode, diagram of the indicator light of the bathroom fan with heater

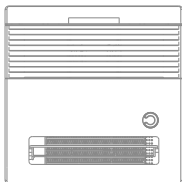


"Exhaust" mode

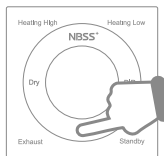
Recommended for use after using the toilet or when there is an odor in the bathroom

6. Fan

Press "Fan" once, the louver opens, and the fan function is turned on; press "Fan" again, the louver closes, and the fan function is turned off; the default working time for fan is 30 minutes, and it can be turned off by using the "Standby" button during the process.



"Fan" mode, diagram of the indicator light of the bathroom fan with heater



"Fan" mode

Recommended for use in hot summer weather

7. DIR

Press "DIR" once to start swinging louver; press it again to stop the swinging louver (this function can be enabled in "Fan", "Heating High", "Heating Low" and NBSS+ (deodorization and sterilization) modes; in drying mode, the blowing direction function is turned on by default and cannot be stopped).

8. Standby

Press "Standby" to turn off all functions.

Note: ① When the drying mode and Heating High mode or Heating Low mode are turned off or changed to other modes, in order to extend the service life of the product, the automatic blowing function will be turned off or changed to other modes after 30 seconds; (Note: After the heating function is turned off, the louver is in a semi-closed state, and the louver will be fully closed after 30 seconds)

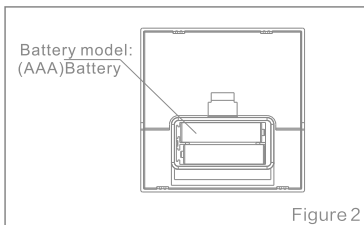
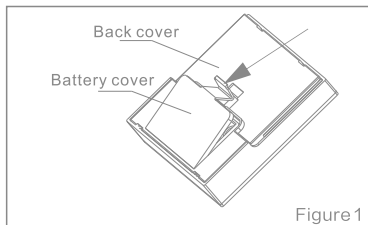
② Function interlock: Exhaust, fan, Heating High, Heating Low, drying, NBSS+ (deodorization and sterilization) function interlock works according to the last set mode and cannot work at the same time;

③ Grille status display: After the fan unit function is turned on, the corresponding status indicator of the grille lights up (there is no status indicator under fan mode);

④ Other than the 4~6 minute after NBSS+ mode is on, blowing direction can be controlled.

III. Battery replacement

1. Slide the remote control upwards from the base;
2. Open the battery cover on the back cover of the remote control (Figure 1);
3. Take out the old battery and replace it with a new one (Figure 2);
4. Replace the battery cover and insert the remote control into the dock.



· Safety precautions ·



Notice

- During use, do not touch the surface of the bathroom fan with heater to avoid burns caused by high temperature;
- If any abnormality is found during use, the power supply should be disconnected immediately and the local agent or authorized maintenance service of AUPU should be notified to handle the problem;
- Please do not turn the switch on and off frequently during use, and disconnect the main power supply when not in use for a long time;
- The elderly, children and people with limited mobility should use this product under the supervision and guidance of their family members;
- Do not use gasoline or corrosive chemicals to clean machine parts, and do not use hot water above 60°C to wash plastic parts;
- The appliance is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction;
- Children being supervised not to play with the appliance;
- Ensure that the fan is switched off from the supply mains before removing the guard;
- If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent;
- The installation instructions for fixed heaters likely to be used in a bathroom shall state that the heater is to be installed so that switches and other controls cannot be touched by a person in the bath or shower.

· Common troubleshooting methods ·

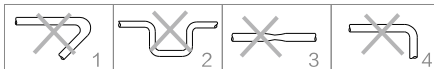
Fault	Solutions
Motor does not rotate	① Turn on the power supply; ② Replace the motor; ③ Replace the capacitor.
The motor is noisy	① Tighten the screws; ② Replace the blower; ③ Replace the motor; ④ Repair the circuit (professional electrician).
Poor heating effect	① Replace the damper and stepper motor; ② Replace the blower; ③ Replace the motor; ④ Repair the circuit (professional electrician).

· Installation safety precautions ·



Notice

- Keep the product at least 250mm from the wall;
- The warm air outlet of this product should be installed as far away from combustible materials such as curtains and electrical products as possible to avoid danger; the switch of this product should be installed away from the bathtub and shower room where it can be directly touched;
- This product can only be installed on horizontal surface;
- The damper is fixed on the wall. Please keep the "Upwards" mark facing upwards, otherwise it will lose its function. For users on the second floor and above, the damper should be fixed on the ventilation hole from the inside to the outside;
- Since the length of the ventilation pipe is 1.5m, the distance from the center of the product installation position to the ventilation hole should be considered to be within 1.5m when opening the ventilation hole, otherwise, you need to purchase a separate ventilation pipe from the dealer;
- The ventilation pipe should not be connected to the same flue as the exhaust of the gas water heater to prevent dangerous gases from seeping into the bathroom. The direction of the ventilation pipe should be kept as smooth as possible;
- The ventilation pipe should be as long as needed to avoid increasing noise and affecting the exhaust effect; the direction of the ventilation pipe should be kept as straight as possible, and please do not make the bends shown in the illustration;
- Installation and wiring must be completed by professionals;
- The fan unit power cable must be able to withstand a load of more than 16A;
- The fixed wiring connected to the appliance must be equipped with a full-pole disconnect device in accordance with the wiring rules, the contact spacing of which provides full disconnection under overvoltage level III conditions;



- Keep the power cable away from the box;
- The product should be grounded reliably;
- It must be connected to a fixed wire clamp, the cable must be placed in a suitable wiring trough, and the cable diameter must be 1.5mm and above.
- This product must not be installed in places with severe water seepage;
- This product must not be installed under power socket.



Prohibition

· Installation ·

I. Preparation before installation

1. Determine the product installation location

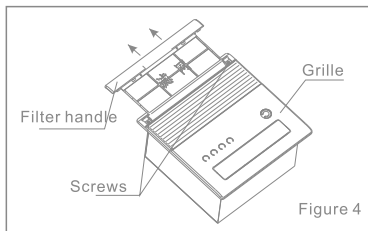
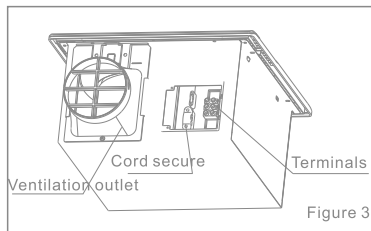
To achieve the best heating and ventilation effects, the warm air outlet should avoid the bathing position to prevent the warm air from blowing directly onto the human body. After installation, the optimal height of the grille from the ground should be more than 2.3m. The height of the suspended ceiling space shall not be less than 160mm.

Suspended ceiling height measurement method:

Integrated ceiling: the distance from the upper surface of the triangular keel to the top of the cement.

2. Powered-on test

First take the fan unit out of the packaging box, remove the terminal cover (Figure 3), connect the wire clamp according to the wiring diagram in the manual (refer to Figure 20), tighten the terminal, and test the machine with power on according to the instructions to check whether the fan unit is working properly. After confirming that the fan unit is working properly, loosen the terminal and remove the wire clamp. If it is installed in B drywall ceiling installation method, finally unscrew the the screws that fix the ventilation outlet and remove the ventilation outlet (Figure 3).



3. Remove the grille

Remove the filter handle in the direction shown in Figure 4, unscrew the two screws that fix the grille with a cross screwdriver, and slowly lift the grille (Figure 5), unplug the damper stepper motor plug and the display panel connecting wire plug on the grille (Figure 6), and remove the grille.

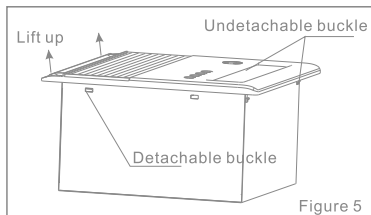


Figure 5

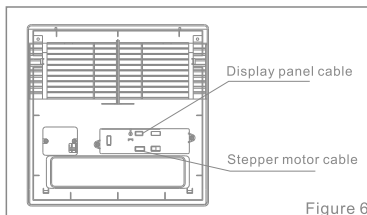


Figure 6

4. Open ventilation holes

Determine the location of the ventilation hole on the wall (the center of the ventilation hole should be about 70mm higher than the upper surface of the keel or the inside of the gypsum board), and open a circular hole with a diameter of about 100mm at this location according to different installation methods.

5. Ventilation damper installation instructions

After the vent holes are drilled, please refer to the following method to install the damper:
Take out the torsion spring and butterfly nut provided with the damper, pass the torsion spring through the through hole in the center of the damper as shown in the direction of Figure 7, screw the butterfly nut on the other end of the torsion spring (Figure 7), then extend one end of the torsion spring into the hole in the wall, make sure that the torsion spring is firmly stuck in the hole in the wall, then rotate the butterfly nut and adjust it to ensure that the damper body is close to the wall surface and will not fall off, then fix the damper to the wall with screws (Figure 8), then put the 100mm diameter ventilation pipe into the round hole of the damper and insert the steel wire into the damper groove. (Figure 9)

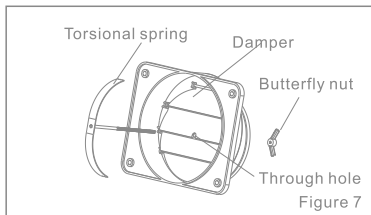


Figure 7

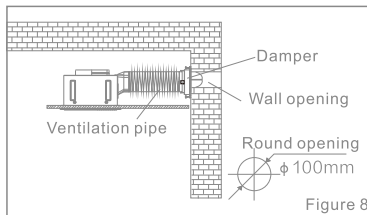


Figure 8

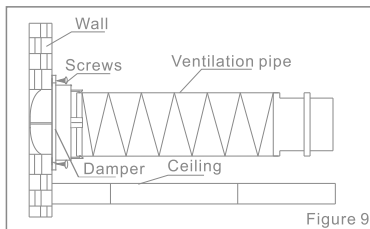


Figure 9

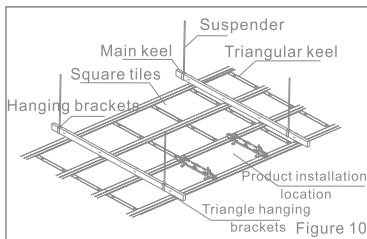


Figure 10

II. Install the fan unit

A. Dropped/Grid Ceiling Installation

Method (Applicable for 300*300mm, 300*600mm integrated ceiling)

1. Install ceiling and tiles

Lay the keel horizontally (the net height of the vacancy above suspended ceiling is not less than 160mm), install the tiles, and temporarily do not install the tiles near the electrical installation.

(Figure 10)

Note: As shown in Figure 11, the edge of the tiles that matches the N50-ML grille must not have protruding shapes, which may affect the installation of grille.

2. Installation of the mounting bracket

First loosen the screws on both sides of the mounting bracket, separate the mounting buckles and mounting strips by an appropriate distance, clamp the sliding slot on the keel according to the product installation position and tighten the screws so that the distance between the two mounting brackets is about 310mm. (Figure 12)

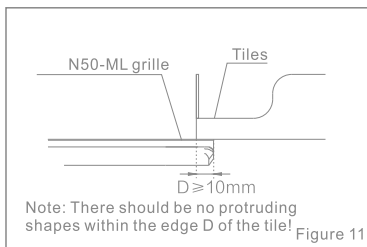


Figure 11

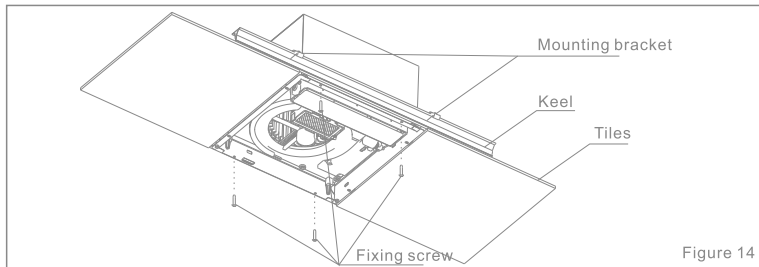
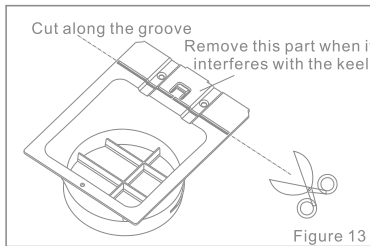
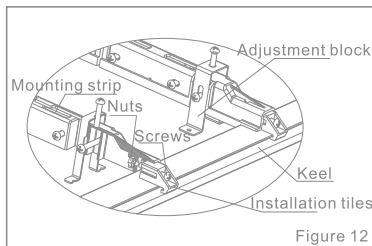
3. Power connection

First pull the fan unit power cable out from above the ceiling, connect the power cable according to the wiring diagram (Figure 20), press the cable with wire clamp and install the terminal cover.

4. Install the fan unit and connect the air duct

(1) Install the ventilation outlet on the fan unit (the part below the keel needs to be cut off when installing the ventilation outlet).

Note: When cutting the ventilation outlet, please use tools (diagonal pliers, large scissors, etc.) as shown in (Figure 13) to cut the outlet along the pressure groove to facilitate the installation of the fan unit.



(2) Push the fan unit upward from the bottom between the two mounting brackets, and fix the fan unit on the mounting bracket with four ST3.9X16 self-tapping screws (Figure 14). Then adjust the mounting bracket to a suitable position, and then tighten the fixing screws and locking screws of the mounting bracket; extend the ventilation duct to one end of the room, put it on the ventilation outlet, and tighten it with a clamp (tighten the clamp).

Note: Adjust the upper and lower positions of the adjustment block of the mounting bracket so that the flange plane of the fan unit is 6mm higher than the arc surface of the triangular keel.

5. Install the grille

Install the buckle plate near the fan unit, plug in the grille and the damper stepper motor plug and the display panel connecting wire plug (arrange the wires to prevent them from falling into the blower), first snap the grille's fixed buckle into the fan body (Figure 5), then snap the grille's detachable buckle into the fan body (Figure 5), fix the grille on the fan unit with the two removed screws, and finally insert the filter handle into the grille (Figure 4).

B. Drywall Ceiling Installation Method (Applicable for long tiles, plastic tiles, plaster boards)

1. Cut installation hole on the fan unit

Cut a 280×280mm square hole at suitable position of the suspended ceiling, and use wooden blocks with a cross-sectional area of 30×30mm to lay fixed frames with an inner spacing of 280×280mm. The net height of the space about ceiling formed by the suspended ceiling and the top of the house should be ≥160mm. (Figure 15)

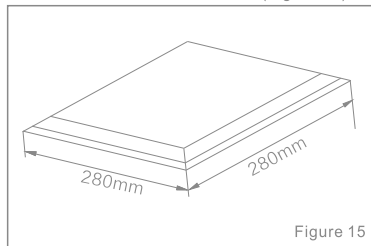


Figure 15

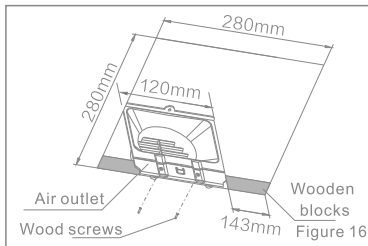


Figure 16

2. Install the air outlet

Extend the ventilation duct to one end of the room, put it on the ventilation outlet, and tighten the duct with a clamp; then fix the ventilation outlet to the wooden block with two 4×20mm screws as shown in (Figure 16).

3. Power connection

First pull the fan unit power cable out from above the ceiling, connect the power cable according to the wiring diagram (Figure 20), press the cable with wire clamp and install the terminal cover.

4. Unit body fixing

Align the slot on the side of the fan body with the ventilation outlet, push the fan body into the square hole in the ceiling, and use four 4×20mm wood screws to fix the fan body to the wooden block of the ceiling (Figure 17).

5. Install the grille

Plug in the grille and the damper stepper motor plug and the display panel connecting wire plug (arrange the wires to prevent them from falling into the blower), first snap the grille's fixed buckle into the fan body (Figure 5), then snap the mask's movable buckle into the fan body (Figure 5), fix the grille to the fan unit with the two removed screws, and finally insert the filter handle into the grill (Figure 17).

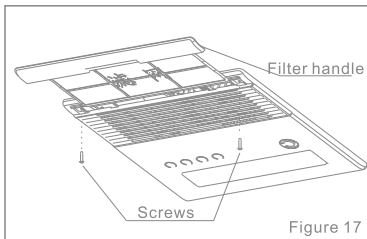


Figure 17

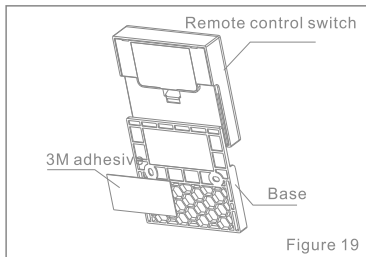
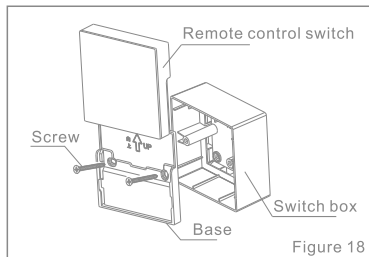
III. Fix switch

1. Switch installation

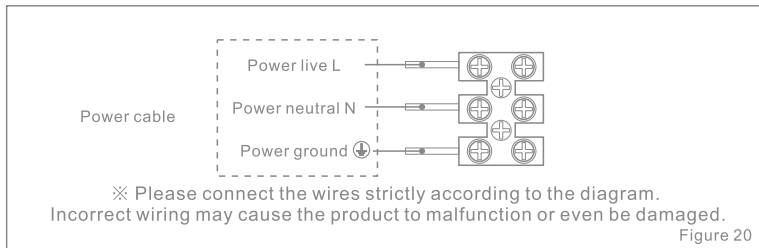
Note: Before installing the switch, be sure to test the signal reception effect at the pre-installation position. If the signal cannot be received normally at this position, please choose another switch installation position or remove the switch from the base when using it and operate it close to the bathroom fan with heater.

① Installation method 1: Use screws to fix the switch base to the switch box (Figure 18), insert the switch into the base, turn on the fan unit, and confirm that all functions of the product are normal.

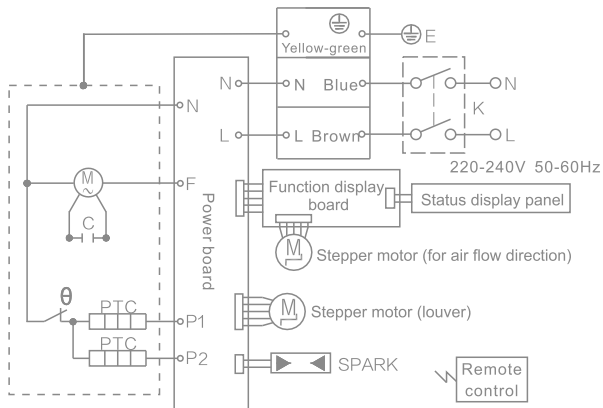
② Installation method 2: stick the 3M adhesive tape into the groove on the back of the base, select a suitable installation location, stick the base to the wall (please ensure that the pasting location is clean and dry before installation, otherwise it will affect the pasting effect), insert the switch into the base, turn on the fan unit, and confirm that all functions of the product are normal (Figure 19).



Host terminal wiring diagram



• Installation wiring diagram •



K: Circuit breaker F: Fan P1, P2: PTC heater θ: Heat protector

· Maintenance ·

1. The power supply must be disconnected before cleaning;
2. When cleaning, gently wipe the surface of the mask with a soft cloth soaked with neutral detergent;
3. All electrical components must not come into contact with water.

· Service ·

I . Warranty

Warranty period: This product is guaranteed for three years.

Within three years from the date of purchase, AUPU is responsible for repairing or replacing any spare parts with quality problems.

1. Warranty coverage:

- a. Strictly follow the requirements of the instructions, and there are problems in the installation and correct use of the whole machine;
- b. Problems arising during maintenance and installation by our company or designated professionals.

2. Non-warranty coverage:

- a. Damage caused by non-installation, use or maintenance in accordance with the requirements of the instructions;
- b. Damage caused by not correct wiring according to the wiring diagram;
- c. Damage caused by parts maintenance by non-designated professionals;
- d. Damage caused by force majeure factors.

II . After-sales service

If you have any questions and require consultation or service, please contact the local agent or special maintenance point of AUPU.

For any problems within or outside the warranty period, AUPU will try its best to serve you based on the principle of "customer first".

All illustrations and information in the instructions are for reference only. In order to make the products better adapt to customers, our company will constantly improve and innovate. If the products are adjusted, please refer to the actual product.

· Name and Content of Hazardous Substances in the Product ·

Name	Hazardous Substances					
	(Pb)	(Hg)	(Cd)	(Cr (VI))	(PBB)	(PBDE)
External Parts	○	○	○	○	○	○
Internal parts	○	○	○	○	○	○
Electrical Components	×	○	○	○	○	○
Accessory Parts (switch/battery, etc)	×	○	○	○	○	○

This chart is prepared in accordance with Rohs.

○ : Indicates the content of the hazardous substance in all homogeneous materials of this component is below the limit requirements specified in Rohs.

× : Indicates the content of the hazardous substance in at least one homogeneous materials of this component exceeds the limit requirements specified in Rohs.



The “Environmental Protection Use Period” of this product is 10 years.

This period is determined by our company based on the product's design characteristics.

The “Environmental Protection Use Period” is valid only when the product is used under normal conditions as described in the user manual.

Recycling matters.

1. The products are designed and manufactured with high-quality materials and components, which can be recycled;
 2. Please be familiar with the local futures index, classification and collection mechanisms for electronic and electrical products;
 3. Please follow local rules and regulations and do not dispose of old products with general household garbage;
 4. Proper disposal of products helps to avoid potential negative effects on the environment and human health.
- ▲ The company reserves the right to modify the instructions for use without any notice.

AUPU Appliance Warranty Service Record Card

Name: _____

Tel: _____

Address: _____

Barcode: _____

Model: _____

Purchase Date: _____

Store of Purchase: _____

1.If defects occur within the warranty period, the product or defective components can be repaired or replaced free of charge with a valid purchase receipt.

Store Address: _____

2.If the product is out of the warranty period or beyond the warranty coverage, all repair costs, including material and on-site service fees, are the responsibility of the customer.

Invoice Number: _____

3.This product has a three-year warranty from the date of purchase.

4.This card is used solely for recording repair services.

AUPU Appliance Warranty Service Record Card

Name: _____

Tel: _____

Address: _____

Barcode: _____

Model: _____

Purchase Date: _____

Store of Purchase: _____

1.If defects occur within the warranty period, the product or defective components can be repaired or replaced free of charge with a valid purchase receipt.

Store Address: _____

2.If the product is out of the warranty period or beyond the warranty coverage, all repair costs, including material and on-site service fees, are the responsibility of the customer.

Invoice Number: _____

3.This product has a three-year warranty from the date of purchase.

4.This card is used solely for recording repair services.

Please read this manual carefully before attempting to use.

AUPU Intelligent Technology Corporation Limited.

Add: No.210, 21st Street, Economic and Technological Development Zone, Hangzhou

Tel: 0571-88175176

Web: www.aupu.net

Postal Code: 310018

Hotline: 400-199-1999

V1.0