

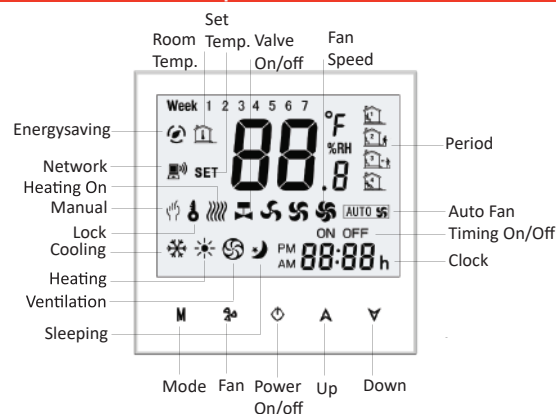


BAC-1000 series Modern Touch Screen Room Thermostats are designed to on/off control the fans and valves in air conditioner applications via comparison of the room temperature and setting temperature as reaching the aim of comfort and saving energy. BAC-1000 are microprocessor based thermostat with LCD display.

Features of your thermostat

Modern design similar as a cell phone.
Beautiful Frame CHROME creates elegant life.
Acrylic lenses to avoid the finger scratch.
Touch Button makes simple operation.
Large screen display with backlight is easy to read—even in the dark.
Four periods program schedules maximize comfort and economy.
One-touch temp control overrides program schedule at any time.
Precise comfort control keeps temperature within 0.5°C of the level you set.
Internal and external sensor selectable is suitable for any place.
Easy installation.
86mm hidden box and european 60mm round box is available.

Home screen quick reference



A1: Two pipe; Control Fan Coil Unit and Two wired Motorized valve.(when room temperature reaches the setpoint, both will turn off)
A2: Two pipe; Control Fan Coil Unit and Two wired Motorized valve.(when room temperature reaches the setpoint, valve will turn off but fan will turn to low speed)
B: Two pipe; Control on/off Motorized Damper
C: Two Pipe; Control Fan Coil Unit and Three wired Motorized valve
M: Two pipe; Control 0-10V Motorized Valve
E: Four pipe; Control Fan Coil Unit and Two wired Heat and Cool Motorized valve.
T: Clock
L: Backlight
P: Weekly Programmable
N: RS485/MODBUS RTU communication
K: Keycard
E: External sensor
P and N could not be compatible at the same time.

For example: BAC-1000A1LN

Operation

1. Setting the temperature

a. In the mode of programmable, set temperature, time and timing on/off could not be adjusted. If the user want to change, please reprogram.
b. In the mode of manual, press **▲ ▼** to set temperature. will display in the left corner of screen.

2. Setting Lock (optional function)

Press and hold **▲ ▼** for 3 sec. to lock the screen. The icon will display on the screen.
Press and hold **▲ ▼** again for 3 sec. to unlock the screen.

3. Setting the fan

Press to select the fan speed AUTO, HIGH, MED, LOW.

Welcome

Your new thermostat will provide year of reliable service. Using this digital thermostat will provide more uniform comfort in your home through the seasons. Thank you for buying the product! Please read this manual for complete instructions on installing and operating your thermostat. If you require further assistance, please feel free to contact us.

In the box you will find

Thermostat	1pc	Screws	2pc
User Guide	1pc	Wall plate	1pc
External Sensor	1pc		

Service

We offer the warranty of 18 months from the sales day. If it is not the problem of quality or beyond the warranty time, we will charge for the after-sale service.

Technical Data of your thermostat

Sensor: NTC Accuracy: $\pm 0.5^{\circ}\text{C}$
Temp. Range: 5 ~ 35°C Power Consumption: <1.5W
Timing error: <1% Power Supply: 110V~240V, 50~60Hz
Current Load: 5A for fan and 3A for valve
Shell Material: PC (Fireproof)
Dimension: 86x86x13.3mm
Installation box: 86*86mm or European 60mm
Ambient Temp.: 0 ~ 45°C, 5 ~ 95%RH(Non condensing)
Storage Temp: -5~ 55°C

4. Setting the system mode

Press **M** to change the system mode HEATING, COOLING and VENTILATION. In the mode of VENTILATION, the valve is off but the fan runs.

5. Setting the Clock

Press and hold **M** to set the clock.

Press **A** **▼** to adjust the relative value.

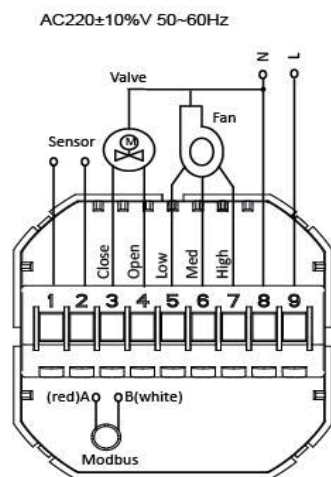
Press **M** to set minutes of the time;

Press **M** to set hours of the time;

Press **M** to set week of the time;

After that, all will be confirmed automatically.

Wiring your thermostat



- Note:**
1. Please cut off the electricity when you want to pull out the external sensor.
 2. When the external temperature sensor is not connected, the thermostat uses the built-in temperature sensor to detect the room temperature; when the external temperature sensor is connected, the thermostat uses the external temperature sensor to detect the room temperature, and does not use the built-in temperature sensor;

6. Setting functions and options

During power off, press and hold **M** **3s** at the same time for 5 sec. to system functions. Then press **M** to change the different items.

Press **A** or **▼** to set the relative values.

All the settings will confirm automatically when power is on.

No.	Function	Settings & Options	Default
1	Temp. Calibration	-9 to 9 °C	-2
2	Fan Control	00: When room temp. reaches the setpoint, the fan will turn off. 01: When room temp. reaches the setpoint, the fan will turn to low speed.	00
3	Lock	00: All the buttons are locked except POWER 01: All the buttons are locked	00
4	Heating/Cooling	00: Cooling only 01: Heating/Cooling 02: Heating only	01
5	Min. Set Temp.	5-15 °C	5
6	Max. Set Temp.	5-35 °C	30
7	Time Display	00: 12hours 01: 24hours	01
8	Display mode	00: Display both set temp. and room temp. 01: Display set temp. only	00
9	Deadzone Temp.	1-5 °C	1
A	Modbus IP address	0x00-0xFFFF	1
B	Baud Rate Setting	1: 9600 2: 14400 3: 19200 4: 38400 5: 56000 6: 57600 7: 115200	1
C	Modbus version		402

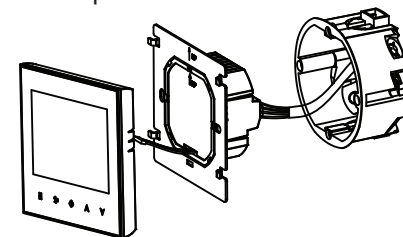


WARNING: Please arrange the professional technician to install this product according to installation drawing and instruction.

RISK OF ELECTRICAL SHOCK. Disconnect power supply before making electrical connection. Contact with components carrying hazardous voltage can cause electrical shock and may result in severe personal injury or death. instruction.

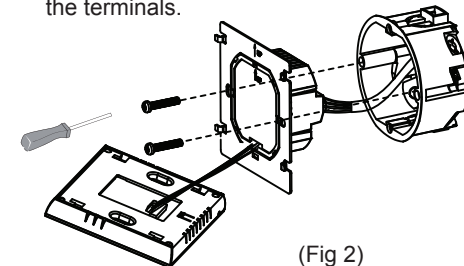
Installing your thermostat

This product is suitable for standard 86mm wall box or european 60mm round box.



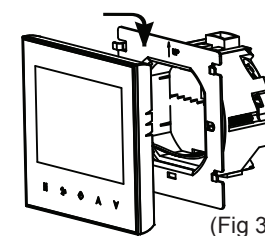
(Fig 1)

1. Connect the wire of power and other equipment into the terminals.

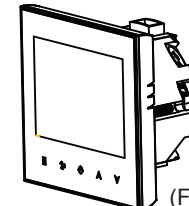


(Fig 2)

2. Fix the wall plate into the wall box by a screwdriver.



(Fig 3)



(Fig 4)

4. Finished.

3. Connect the LCD board into the wall plate.

SIMPLE EXCEPTION HANDLING

No.	Phenomenons	Handling
1	Power is on but without display.	* Check if the terminals between LCD panel and Power Unit Box is loosen.
2	Without output but display works.	* Use a new LCD panel or new Power Unit Box to replace the old one.
3	Room Temp. Is a little different from the actual.	* Do temperature calibration in item 1 of high senior options