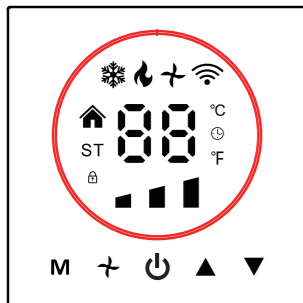# BAC-208 Series WiFi Thermostat

## User Guide



For Fan Coil Unit

## Welcome

Please confirm that this product is suitable for your heating equipment before installation;
*Before installation or maintenance, please make sure to keep the power off;
*Please strictly follow the wiring diagram for wiring installation;
*Installation to the wall, please confirm that the fasteners are suitable for this product;
*Do not pull the cable too hard, otherwise the product will be damaged;
*If a hard plastic wire is used in the installation process, it must be bent to an appropriate angle in advance;
*Please arrange for professionals to install;
*Please contact the after-sales service for equipment failure, please do not try to repair it yourself;
* After installation, please refer to this manual to check again to ensure normal and safe use, and keep this manual properly.

## In the box you will find

| | | |
|---|---|---|
| Thermostat 1pc | Screws | 2pc |
| User Guide 1pc | QC Passed | 1pc |

## ABOUT YOUR THERMOSTATS

BAC-008 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 temp. as reaching the aim of comfort and saving energy.

## MODEL DEFINTION

A: Two pipe; Control Fan Coil Unit and Two Wired Motorized Valve
M: Two pipe; Control Fan Coil Unit and 0-10V Motorized Valve
E: Four pipe; Control Fan Coil Unit and Two Wired Heat Valve and Two Wired Cool Valve.
N : Modbus RTU communication
W : Wifi connection          K : Keycard
W2 : Window                  E : External Sensor
T : Clock                    P : Programmable
For example: BAC-208ALW

## FEATURES

### On Appearance

1. LED display, more friendly interface;. LED matrix light, simple display, energy saving, protect your eyes.
2. Touch buttons to make simple operation.
3. The ultra-thin embedded panel perfectly fits all kinds of walls; The visiable thickenss above the wall is only 13mm.
4. Frameless acrylic panel design, simple and elegant;
5. Classic black/white color scheme, seamlessly integrated.
6. Compatible with standard 86mm square cassettes and 60mm European cassettes to meet all installation environments;
7. Interlock to connect gives you easy installation.

### On Functionality

1. Rich function options, Modbus, WIFI, keycard, etc, to meet all your needs;
2. Strict temperature control accuracy (± 1°C) to provide the warmth you want;
3. Power off protection, save all your settings safely;
4. Preset adjustment of 5+1+1 mode in a week, programmable setting of 6 time periods a day, green energy saving, Less cost, more intelligent and environmental protection;
5. Support the creation of product local groups/shares to achieve unlimited centralized control of the number of products/ multi-terminal control;
6. Perfect access: Tmall Genie, Amazon echo, Google Home, full experience new voice control method;
7. Creat thermostat group to Centralized control.

## DIMENSION Unit: mm
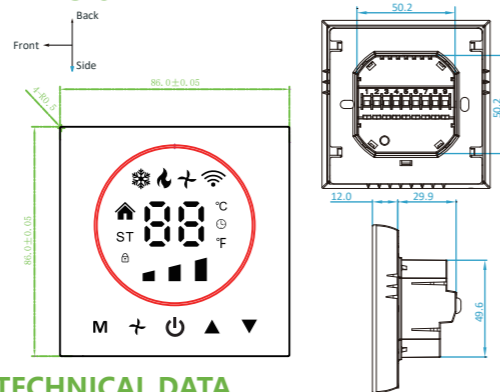


## TECHNICAL DATA

Power Supply: 24V, 50 ~ 60HZ
Fan Relay Amps Resistance: 5A; Inductive: 3A
Valve Relay Amps Resistance: 3A; Inductive: 1A
Sensor: NTC3950, 10K
Set Temp. Range: 5 -35 °C
Accuracy: ±1 °C
Dispaly Temp. Range: 5 ~ 99°C
Ambient Temp.:0~45 °C
Ambient Humidity: 5 ~ 95 % RH (Non Condensing)
Storage Temp.:-5~ 45 °C Timing Error: < 1%
Power Consumption: <1.5W
Shell Material: PC +ABS ( Fireproof)
Installation Box: 86 * 86mm Square or European 60mm Round Box
Wire Terminals: Wire 2 X 1.5 mm² or 1 x2.5 mm²
Protection Class: IP20
Buttons: Capacitive Touch Buttons

## BEFORE WIRING AND INSTALL

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check the rathings given in the instructions and on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced service technician.
4. After installation is complete, check out product operation as provided in these instructions.

⚠ CAUTION **Electrical Shock or Equipment Damage Hazard. Can shockindividuals or short equipment circuitry. Disconnect power supply before installation.**
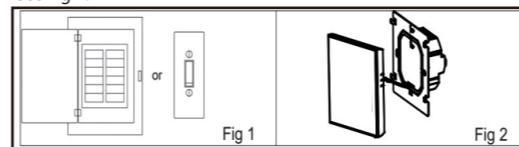
## WIRING



Four Pipe , On/off
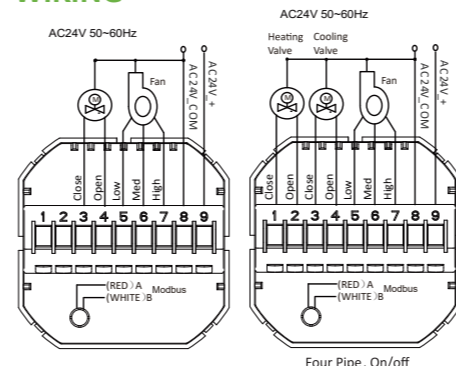
## INSTALLATION

Your thermostat is suitable for istallation within a standard 86mm pattress box or European 60mm pattress box.

Step 1. Keep power off. See Fig 1.
Step 2. Remove the mounting plate by pushing the LED assembly. See Fig 2.



Step 3. Connect power supply, load into the appropriate terminals.
(see "Wiring your thermostat" for details and Fig 3).
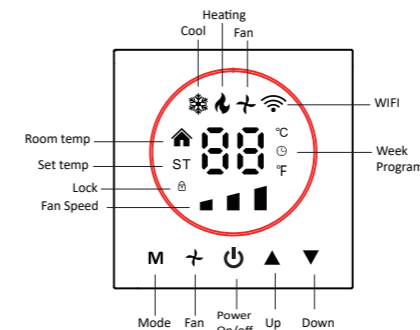Step 4. Fix the mounting plate into the wall with screws in the box. See Fig 4.
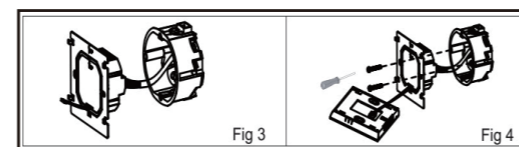


Step 5. Fix the thermostat body and the mounting plate by the lower button. See Fig 5.

Step 6. Installation complete. See Fig 6.
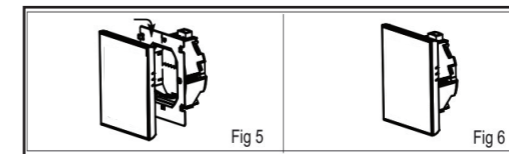


## HOME SCREEN QUICK REFERENCE



## OPERATION

### During Power On

1.Power On/off: Press ⏻ to turn the thermostat on/off.
2.Manual & Programmable
   Press and hold M , 🕐 will flash. Press ▲ to select manual and press ▼ to select weekly programmable.
3.Setting Temperature
   In the mode of manual, press ▲▼ to set temperature.
4.Locking your Thermostat
   Press and hold the ▲▼ for 5 seconds to lock/unlock your thermostat.
   In item 3 of high seniòr options, you can select full lock or half lock.
5.Selecting 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.
6.Setting the Fan Speed
   Press ✛ go to select the fan speed AUTO, HIGH, MED, LOW.
7.Adjusting the Weekly Programmable
   Press M to do the adjustment of weekly programmable.
   Then press M to change the different items. Press ▲▼ to set the relative values.
Please know: there will be a 34-second delay in the output of the cooling and heating function.

## 8.Setting the Functions and Options

When power is off, press M and ✛ hold at the same time for 5 sec. in order to reach system function.Then press M to change the different items and press ▲▼ it will show the value and press ▲▼ to adjust it. Press M the value will confirm,press M again will go to next code. All the settings will confirm automatically when power is on.

| Code | Function | Setting and options | Default |
|---|---|---|---|
| 1 | Temperature compensation | -9 to 9 ℃ | -3 |
| 2 | Fan control | 00:When room temp. reaches the set point,the fan will turn off 01:When room temp. reaches the set point,the fan will keep low speed running | 00 |
| 3 | Button Locking | 00:All buttons are locked except power button. 01:All buttons are locked. | 1 |
| 4 | Mode Select Custom | 00:Cooling 01:Cooling / Heating | 1 |
| 5 | Min.Set Temp. | 5-15℃/41-95℉ | 5 |
| 6 | Max.Set Temp. | 15-45℃ | 35 |
| 7 | Display Mode | 00: Display both set temp. and room temp. 01: Display set temp. only | 00 |
| 8 | BrightDutyDay | 1-7 | 1 |
| 9 | BrightDutyNight | 1-7 | 1 |
| 10 | Deadzone Temp. | 1-5 ℃ | 1 |
| 11 | Temp. display | 0: ℃    01: ℉ | 0 |
| 12 | IP | 1-255 | 1 |
| 13 | Baudrate | 1: 9600; 2: 19200; 3: 38400; 4: 56000; 5: 115200 | 1 |
| 14 | Version | | U6 |

## ABOUT WIFI
## WI-FI Connection

Before using your Wi-Fi thermostat for the first time, you must configure the Wi-Fi signal and settings using your smartphone or tablet. This enables communication between your devices.

Step 1 Download your APP    (Fig1-1)

Search for "**Tuya Smart**" in Apple Store or Google Play and complete account registration and installation according to the guidance of the APP.

Step 2. Connect the thermostat
Method 1: Bluetooth network distribution (Fig 2.1-Fig 2.6)
Turn on the Bluetooth switch of the mobile phone and set the thermostat to the WiFi enabled state, see the following tutorial to complete the connection and settings.
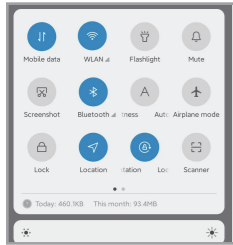
Fig2.1
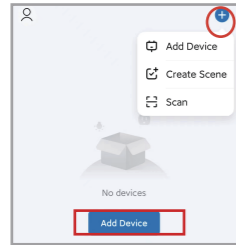
Fig2.2
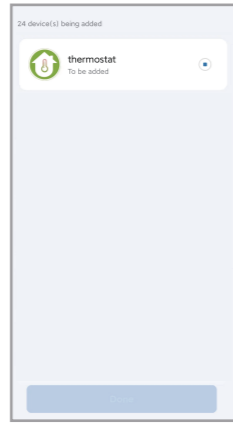
Fig2.3

Fig2.4

Fig2.5
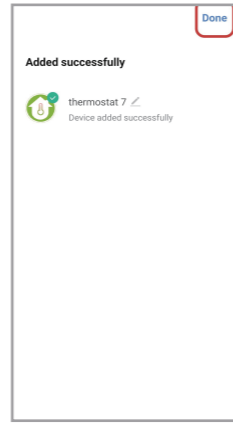
Fig2.6

Method 2: Scan the QR code to configure the network guide (Fig 2.2 & Fig 2.7-Fig 2.8) complete the connection and setup
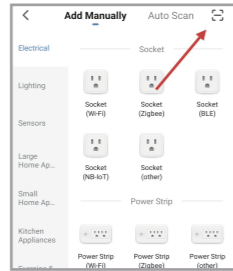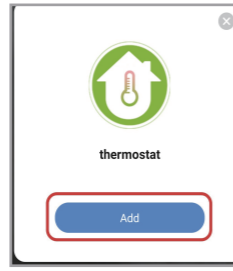
Fig2.7

Fig2.8

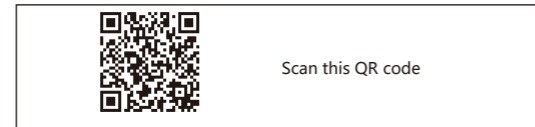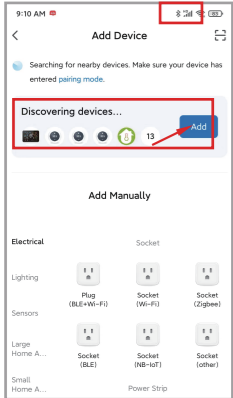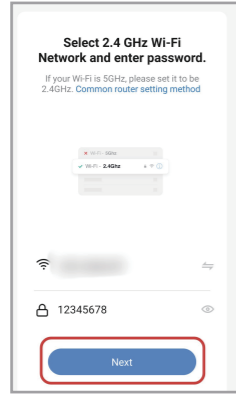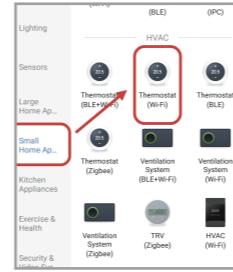Scan this QR code

Method 3: Ordinary distribution network guidance
(Fig. 2. 2 & Fig. 2.7.1)

Fig2.7.1

Network distribution mode:

1. EZ Mode
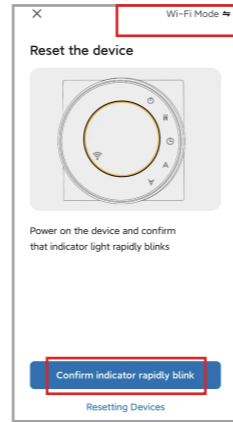Press and hold the " ▼ "until the thermostat screen flashes quickly and displays the " 📶 " icon, and then operate according to the following figure (Fig 2.9-Fig 2.13).
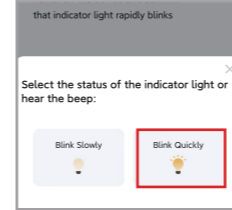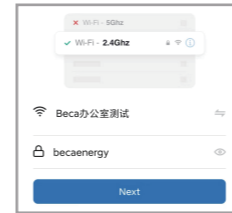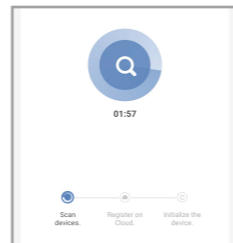
Fig2.9

Fig2.10

Fig2.11

Fig2.12
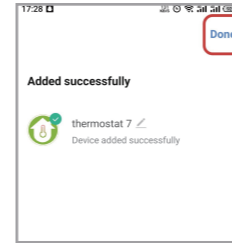
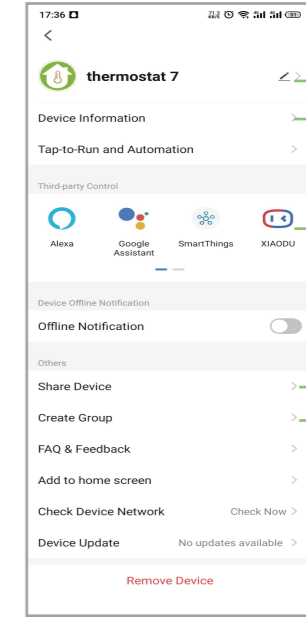Fig2.13

## APP operation interface description (FCU thermostat)
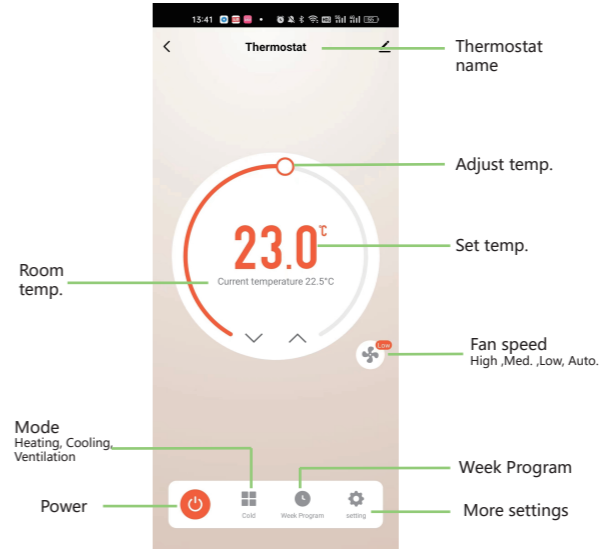
Thermostat name

Adjust temp.

Set temp.

Room temp.

**23.0**℃
Current temperature 22.5℃

Fan speed
High ,Med. ,Low, Auto.

Mode
Heating, Cooling, Ventilation

Power

Week Program

More settings

## Simplement 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 |

## More settings

thermostat 7

Device Information
Tap-to-Run and Automation

Third-party Control

Alexa    Google Assistant    SmartThings    XIAODU

Device Offline Notification
Offline Notification

Others
Share Device
Create Group
FAQ & Feedback
Add to home screen
Check Device Network        Check Now
Device Update        No updates available

Remove Device

Modify the name of the thermostat
View the virtual ID of the thermostat

Connect smart voice audio guide

Share the thermostat with your family
Group multiple thermostats for management

## Service

Your thermostat carries an 24 months warranty from date of purchase. Service out with the warranty period may incur a charge. More detail please contact with us directly.