

BAC-003 Series WiFi Thermostat
User Guide



For Fan Coil Unit

Welcome

Thank you for your purchase.
Your new thermostat will provide uniform and comfortable temperature control throughout every room in your property. We bring together technology, craftsmanship and the highest quality materials to provide you with a safe, reliable product combined with sleek, contemporary design.
Please read this installation/programming manual for comprehensive instructions on installing and operating your thermostat. Please also ensure a suitably qualified person installs your thermostat and complies with all local regulations.

In the box you will find

Table with 4 columns: Item, Quantity, Item, Quantity. Rows include Thermostat (1pc), Screws (2pc), User Guide (1pc), Wall plate (1pc), and QC Passed (1pc).

ABOUT YOUR THERMOSTATS

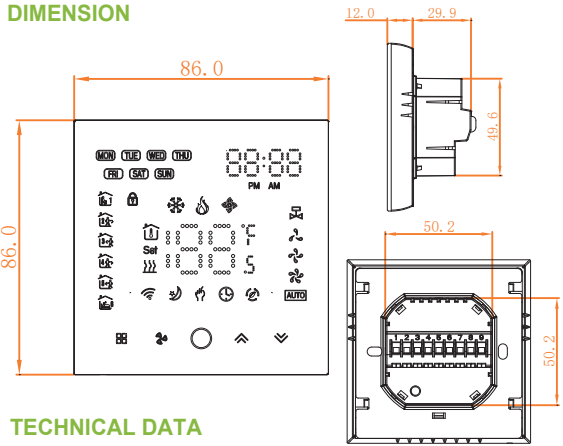
BAC-003 series Modern Round Touch Screen Room Thermostats are designed to on/off control the fans and valves in air conditioner applications via comparison of the room temperature and setting temp. as reaching the aim of comfort and saving energy.

MODEL DEFINITION

- 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
 - B : BACnet communication
 - W : Wifi connection
 - K : Keypad
 - W2 : Window
 - E : External Sensor
 - T : Clock
 - P : Programmable
- For example: BAC-003ALW

- FEATURES
- On Appearance
- 86mm hidden box and European 60mm round box is suitable.
 - Full white appearance, perfectly integrated into your family.
 - LED matrix light, simple display, energy saving, protect your eyes.
 - Touch buttons to make simple operation.
 - Amazing Silver Frame opens your modern life.
 - The visible thickness above the wall is only 12mm.
 - Interlock to connect gives you easy installation.
- On Functionality
- Powerful functions are available such as WIFI/Modbus etc.,
 - 0.5 °C Accuracy keeps temperature within the level you set.
 - °C or °F can be customized.
 - Data memory when power is off.
 - 5+2 six periods programmable maximize comfort and economy.
 - Temporary programmable.
 - All setting languages synchronize your time zone, address and language.
 - No limit to add thermostats in App and support Smart Scene..
 - Create thermostat group to Centralized control.
 - Integrate with Amazon Echo, Google Home, Tmall Genie.
 - Support device sharing.

DIMENSION



TECHNICAL DATA

Power Supply: 95 ~ 240 VAC, 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: ±0.5 °C
Display 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

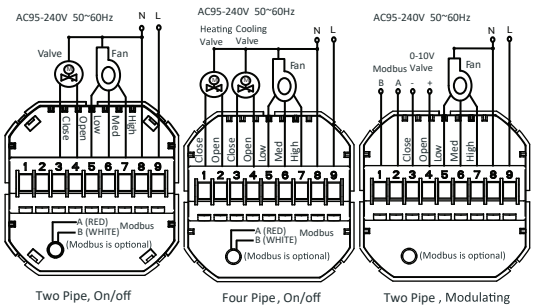
BEFORE WIRING AND INSTALLING...

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



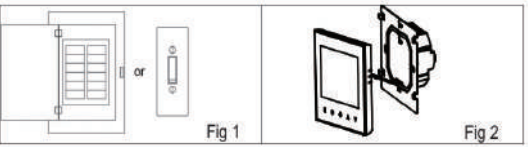
Electrical Shock or Equipment Damage Hazard. Can shock individuals or short equipment circuitry. Disconnect power supply before installation.

WIRING

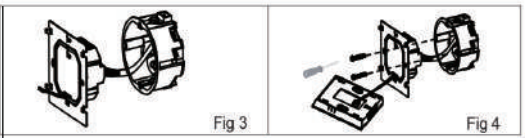


INSTALLATION

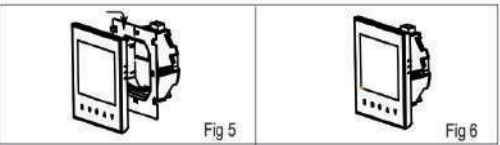
Your thermostat is suitable for installation within a standard 86mm pattress box or European 60mm pattress box.
Step 1. Keep the electricity off. See Fig 1.
Step 2. Remove the mounting Plate by rotating the LCD part. See Fig 2.



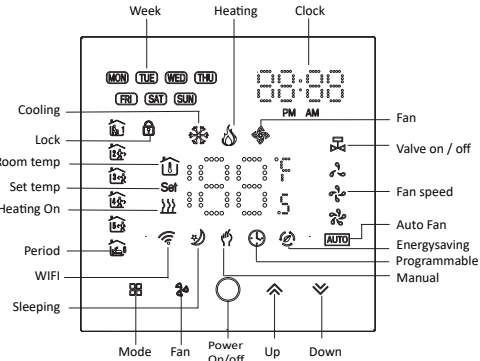
Step 3. Connect power supply, load into the appropriate terminals. (see "Wiring your thermostat" for details and Fig 3).
Step 4. Fix the mounting plate into the wall with screws in the box. See Fig 4.



Step 6. Installation complete. See Fig 6.



HOME SCREEN QUICK REFERENCE



OPERATION

During Power On

- Power On/off: Press the power button to turn the thermostat on/off.
- Manual & Programmable: Press and hold the menu button, the screen will flash. Press the up arrow to select manual and press the down arrow to select weekly programmable.
- Setting Temperature: In the mode of manual, press the up/down arrows to set temperature. The temperature will display in the middle of the screen.
- Locking your Thermostat: Press and hold the lock/unlock button for 5 seconds to lock/unlock your thermostat. In item 3 of high senior options, you can select full lock or half lock.
- Selecting System Mode: Press the mode button to change the system mode HEATING, COOLING and VENTILATION. In the mode of VENTILATION, the valve is off but the fan runs.
- Setting the Fan Speed: Press the fan speed button to select the fan speed AUTO, HIGH, MED, LOW.
- Restore Manufacturer Defaults: Press the restore button, you can reset thermostat. Steps: Open your app - go into your room - click menu on the top right corner - move to the end - Press Restore Manufacturer Defaults. Adjusting/Setting the Clock: Press and hold the clock button, the screen will flash. Press the mode button to set minute, hour and weekday. By using the up/down arrows, after 3 seconds the value will be confirmed automatically.

8. Adjusting the Weekly Programmable

Press the mode button to do the adjustment of weekly programmable. Then press the mode button to change the different items. Press the up/down arrows to set the relative values.
Your thermostat provides six scheduled heating and cooling periods each day – three Comfort periods - 1, 3 & 5 (the temperature required when room is occupied) and three Economy periods – 2, 4 & 6 (the temperature required when room is unoccupied). You can set both the time and temperature for each of these six daily periods. Adjusting/setting the schedules can only be carried out when in program mode; Touch M (mode) to change between manual mode and programme mode. In manual mode, the screen will show in the bottom left of the screen. Touch the icon for four times until the weekday schedule settings appear (1 2 3 4 5 will show along the top of the screen). Use the up/down arrows to adjust the time for the 1st (Comfort) period. Press the mode button and use the up/down arrows to set the temperature for the 1st period. Repeat this process for periods 2 – 6. Press the icon for once more to enter the weekend schedule settings (6 & 7 will show along the top of the screen). Repeat the above process to set the weekend schedule. Press the mode button once more to confirm and exit.

Default settings for program schedule

Time display	WEEKDAY (MONDAY – FRIDAY) (1 2 3 4 5 shows on screen)		WEEKEND (SATURDAY) (6 shows on screen)		WEEKEND (SUNDAY) (7 shows on screen)	
	TIME	TEMPERATURE	TIME	TEMPERATURE	TIME	TEMPERATURE
Period 1	06:00	20 °C	06:00	20 °C	06:00	20 °C
Period 2	08:00	15 °C	08:00	20 °C	08:00	20 °C
Period 3	11:30	15 °C	11:30	20 °C	11:30	20 °C
Period 4	13:30	15 °C	13:30	20 °C	13:30	20 °C
Period 5	17:00	22 °C	17:00	20 °C	17:00	20 °C
Period 6	22:00	15 °C	22:00	15 °C	22:00	15 °C

In the mode of program, set temp., time could not be adjusted.

During Power Off

Setting the Functions and Options

When power is off, press and hold M and the power button at the same time for 5 sec. in order to reach system function. Then press M to change the different items. All the settings will confirm automatically when power is on.

Code	Function	Setting and options	Default
1	Temperature compensation	-7 to 7 °C	-1
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 running.	0
3	Button Locking	00: All buttons are locked except power button 01: All buttons are locked.	01
4	Heat/cool	00: Cool only 01: Heat/Cool	01
5	Min. Set Temp.	5 to 15 °C	05
6	Max. Set Temp.	15 to 35 °C	35
7	12/24 hours	00: 12h 01: 24h	01
8	Display Mode	00: Display both set temp. and room temp. 01: Display set temp. only	00
9	Energy saving Mode	00: Non-energy saving Mode 01: Energy saving Mode, set Temp. keep economy Temp.	00
A	Heating Economy Temp.	10 to 30 °C	20
B	Cooling Economy Temp.	10 to 30 °C	26
C	Deadband Temp.	1 to 5 °C	1

About Zigbee

ZigBee CONNECTION

Before using your Zigbee thermostat for the first time,you must conFig the Zigbee signal and settings through your smartphone ortablet .This will allow communication between your connected devices.

Step 1 Download your APP (Fig 1-1)



Fig 1-1



Fig 1-2 IOS



Fig 1-3 Android

For IOS devices, search for BecaSmart in Apple Store and download. Alternatively ,scan the relevant QR code here (Fig 1-2). For Android devices, search for BecaSmart in Google Play anddownload. Alternatively,scan the relevent QR code(Fig 1-3).

Step 2 Register your account

Open your BecaSmart, you will see an interface (Fig 2-1), if you have an account, you can log in directly. If you do not have an account, you need to register a new account.

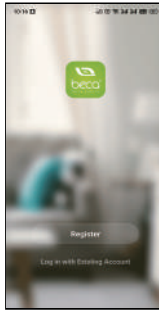


Fig 2-1

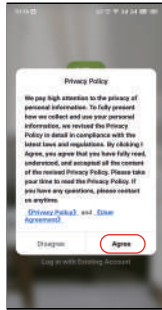


Fig 2-2

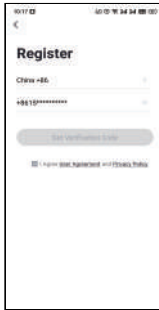


Fig 2-3



Fig 2-4

Step 3 Connect your ZigBee si

If your phone is already connected to ZigBee, please ignore this step. If your phone is connected to ZigBee for the first time, please check the following steps:

First, keep your ZigBee gateway powered on. Long press the button to confirm that the red light flashes quickly and the blue light stays on.

Method one:

Press the plus sign "+" in the upper right corner of the APP (Fig 3-1). Press the plus sign  in the upper right corner of the APP (Fig 3-1-1), scan the QR code below (Fig 3-1-2), and the interface for adding a thermostat will pop up (Figure 3-1-3), Press "Add".



Fig 3-1-2



Fig 3-1-1

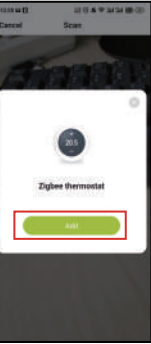


Fig 3-1-3

Method two:

Press the plus sign " + " in the upper right corner of the APP (Fig 3-1), Choose "Small Home Appliances" (Fig 3-2), Select the thermostat (ZigBee) (Fig 3-2).

Choose to "Configuring wireless gateway" (Figure 3-3), Press "Confirm indicator rapidly blink" (Fig 3-4), Please allow "Settings" (Fig 3-5), Enter the wifi password and you will enter the connection gateway (Fig 3-6) to complete the gateway pairing (Fig 3-7). Press "Home" on the APP, find " Zigbee Wireless Gateway", Press it, and enter to add ZigBee device:

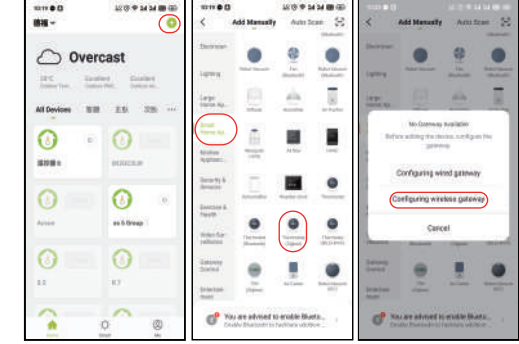


Fig 3-1

Fig 3-2

Fig 3-3

On your Thermostat

When the thermostat is off, press and hold the  for 8 seconds, the screen will be bright, you will see the screen and the icon  will flash quickly.

Press APP "LED already blink" (Fig 3-8), the APP will search for the thermostat "Discovering nearby ZigBee devices" (Fig 3-9), Press "Done" (Fig 3-10), the APP will "Add successfully" will be displayed, you can modify the thermostat name (Fig 3-11).



Fig 3-4



Fig 3-5

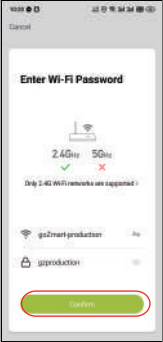


Fig 3-6



Fig 3-7

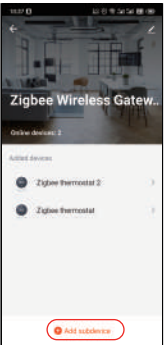


Fig 3-8

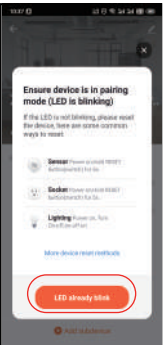


Fig 3-9



Fig 3-10



Fig 3-11

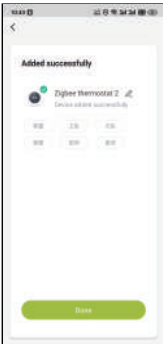


Fig 3-12

Programming Your Thermostat

The thermostat is successfully linked to Zigbee, and the thermostat set by the user will be displayed on the application (Fig. 4-1)

Press the corresponding button below to set up your thermostat.

 ON/OFF key. When there is a digital display on the screen, it means that the thermostat is on; when there is no digital display on the screen, it means that the thermostat is off.

 Setting, Press on the settings "Child lock" "Temperature correction" "High limit temperature ceiling" "Low limit temperature ceiling" "Sensor selection" " State of the valve " and other settings.

 Hold mode, in this mode, the thermostat can control the temperature according to the manually adjusted temperature (that is, without using the preset temperature for temperature control).

 Program mode, in this mode, the thermostat will control the temperature according to the preset heating time period and temperature.

In programming mode, Press the  icon in the upper right corner of the APP (Fig. 4-2) to enter a week of programming settings (Fig. 4-3)

*Weekly program, one week time preset, preset temperature setting for each time period, weekly program is 5+1+1 mode. *You can set 4 time periods - time and temp. (Fig. 4-4). *When your week of programming completes the settings, Press"Save" in the upper right corner, the application will transfer the programming data to the thermostat, and confirm that the plan has been saved.



Fig 4-1

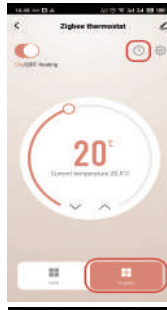


Fig 4-2

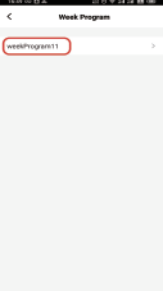


Fig 4-3

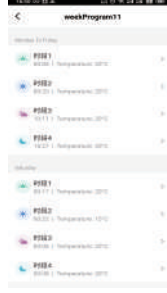


Fig 4-4

How to Create Group

Press  icon (Fig. 5-1), and then press "Create Group"(Fig. 5-2). Select all the rooms you want and confirm. The person who created the group can control all rooms at the same time. Note In addition to creating a group, you can also modify the device name on this menu page, share the device, and obtain device information. (Fig. 5-3).

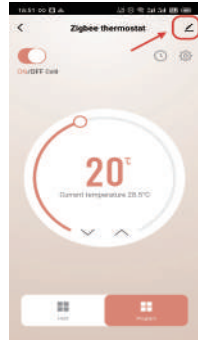


Fig 5-1

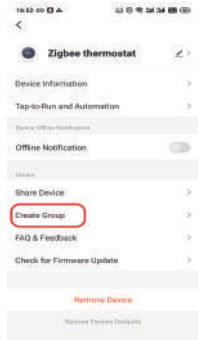


Fig 5-2

How to Create Group

Press  icon (Fig. 5-1), then press "Share Device"(Fig. 6-1)to "Add Home Member" (Fig. 6-2), and then add the account you want to share. You can see the shared account you sent and the device you shared on the sharing page. If you are a shared person, you don't need to do anything.

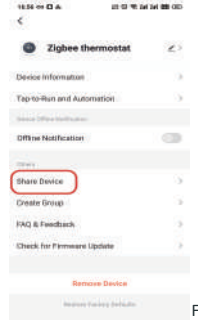


Fig 6-1

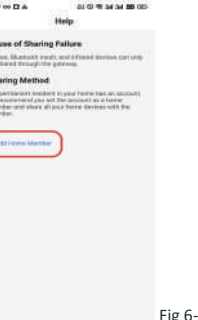


Fig 6-2

NOTE: The room sound could be turned on/off in PROFILE-SETTING-SOUND. The sound is matched with the default of your system .
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

SERVICE

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