# BAC002 Series WiFi Thermostat User Guide





# For Fan Coil Unit

### Thermostat Colors

002FW: full white 002BW: black and white 002WB:white and black 002FB: full black

# 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

Thermostat	1pc	Screws	2pc
User Guide	1pc	Wall plate	1pc
QC Passed	1pc		

# ABOUT YOUR THERMOSTATS

BAC-002 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 : Kevcard T : Clock W2: Window P: Programmable E : External Sensor For example: BAC-002ALW

# **FEATURES**

#### On Appearance

- 1. 86mm hidden box and european 60mm round box is suitable.
- 2. White, black or mix-color housing creates your colorful life.
- 3. White backlight protect your eyes
- 4. Touch buttons to make simple operation.

## **On Functionality**

- 1. Powerful functions are available such as Modbus/WIFI etc,.
- 2. 0.5°C Accuracy keeps temperature within the level you set.
- 3. Clock memory when power is off.
- 4. 5+2 six periods programmable maximize comfort and economy.
- 5. Create thermostat group to centrally control.
- 6. Integrated with Amazon Echo, Google Home, Tmall Genie, IFTTT.
- 7. Support Device Sharing to your family or friends.
- 8. All setting languages synchronize your time zone, address and language
- 9. No limit to add thermostats in App.
- 10. Support Smart Scene.

#### 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 Accuracy: ±0.5 °C Set Temp. Range: 5 -35 °C Dispaly Temp. Range: 5 ~ 99 °C Ambient Temp.: 0 ~ 45 °C Ambient Humidity: 5 ~ 95 % RH (Non Condensing) Storage Temp.: -5 ~ 45 °C Power Consumption: <1.5W Timing Error: < 1% 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 x 2.5 mm2 Protection Class: IP20 **Buttons: Capactive Touch Buttons** 

### **BEFORE WIRING AND INSTALLING...**

- 1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
- 2. Check the ratings 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 shock individuals or short equipment circuitry. Disconnect power supply before installation.

## WIRING





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





# **OPERATION During Power On**

2. Manual & Programmable

Press and hold 🔀, 🖞 will flash. Press 🐟 to select manual and press ★ to select weekly programmable.

#### 3. Setting Temperature

In the mode of manual, press  $\otimes \otimes$  to set temperature.  $\langle 0 \rangle$  will display on the bottom of the screen

4. Locking Your Thermostat Press and hold the ★♥ for 5 seconds to lock/unlock your thermostat. In item 3 of high senior options, you can select full lock or half lock.

### 5. Selecting System Mode

fan runs.

6. Setting the Fan Speed

# 7. Restore Manufacturer Defaults

Press the Restore Manufacturer Defaults, 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.

Step 5. Fasten body of thermostat and the mounting plate See Fig 5

# HOME SCREEN QUICK REFERENCE

# **1. Power On/off:** Press O to turn the thermostat on/off.

Press 🏽 to change the system mode HEATING, COOLING and VENTILATION. In the mode of VENTILATION, the valve is off but the

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

weekday (1 = Monday, 2 = Tuesday etc.) by using the  $\Leftrightarrow$   $\heartsuit$ arrows, after 3 seconds the value will be confirmed automatically.

### 9. Adjusting the Weekly Programmable

Press 🖁 to do the adjustment of weekly programmable. Then press ☐ to change the different items. Press or 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 **H** (mode) to change between manual mode

and programme mode. In manual mode, "I will show in the bottom left of the screen.Touch the icon **B** for four times until the weekday schedule settings appear (1 2 3 4 5 will show along the left of the screen).

Use the  $\Leftrightarrow$  and  $\Leftrightarrow$  arrows to adjust the time for the 1st (Comfort) period Press the icon  $\mathbb{H}$  and use the  $\Leftrightarrow$  and  $\Leftrightarrow$  arrows to set the temp. for the 1st period. Repeat this process for periods 2 – 6. Press the icon 🎛 once more to enter the weekend schedule settings (6 & 7 will show along the left of the screen). Repeat the above process to set the weekend schedule. Press 🖁 once more to confirm and exit.

#### Default settings for program schedule

Time display	WEEKDAY (MONDAY – FRIDAY) (12345 shows on screen)		WEEKEND (S (6 shows o	ATURDAY) n 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 <sup>°</sup> C	11:30	20 <sup>°</sup> C	11:30	20 <sup>°</sup> C
Period 4	13:30	15 <sup>°</sup> C	13:30	20°C	13:30	20 <sup>°</sup> 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 programmable, set temp., time could not be adjusted.

#### **During Power Off**

#### Setting the Functions and Options

When power is off, press and hold **H** and **a** at the same time for 5 sec. in order to reach system function.

Then press **H** to change the different items.

Press  $\Leftrightarrow$  and  $\Leftrightarrow$  arrows to adjust the relative valve.

All settings willbe confirmed 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 turn to low speed	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.	5 to 35 °C	35
7	12/24 hours	00:12h 01:24h	01
8	Display Mode	<ul><li>00: Display both set temp. and room temp.</li><li>01: Display set temp. only</li></ul>	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
В	Cooling Economy Temp.	10 to 30°C	26
С	Deadband Temp.	1 to 5°C	1

# **ABOUT WIFI**

#### **WI-FI CONNECTION**

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

#### Step 1 Download your APP (Fig 1-1)



For IOS devices, search for My BecaSmart in Apple Store and download. alternatively, scan the relevant QR code here (Fig 1-2)

For Android devices, search for My BecaSmart in Google Play and download.Alternatively,scan the relevent QR code(Fig 1-3).

#### Step 2 Register your account

Open your BecaSmart, you will get a piece of notificacation (Fig 2-1). Click Allow to go into your page of register (Fig 2-2). Press register and enter your phone no. or email (Fig 2-3) then you can get a verification code. Input your password and confirm (Fig 2-4) to complete your registeration. If you have account, please log in.



#### Step 3 Connect your Wi-Fi signal

#### On your thermostat

With power off, press and hold the  $\bigotimes$  arrow for eight (8) seconds. The backlight will be on and the icon 😤 will flash one time per sec..

#### Then, go back to the home page of your app

Press the + on the upper right corner of the page (see Fig 3-1) to add your device. Click Confirm indicator rapidly blink (Fig 3-2) then select your network and back to your app to enter the password of your wireless router (Fig 3-3) and confirm. The app will connect automatically (Fig 3-4). This may typically takes up to 5~90 seconds to complete. Your room name could be edited when the device is connected (Fig 4-4).



This is EZ mode which provides fast network connection between your app and your device. If your router doesn't support it or your wifi signal is weak or you can not connect by **EZ mode**, press the **AP Mode** on the upper right corner in Fig 3-2.

If you have connected your thermostat successfully, please ignore the AP setting as below.

#### On your thermostat

With power off, press and hold the  $\bigotimes$  arrow for eight (8) seconds. The backlight will be on and the icon 😤 will flash one time per sec.. Press and hold the 🛛 arrow for eight (8) seconds again. The icon will flash one time every (3) seconds.

#### Then, go back to the home page of your app

Click Confirm indicator slowly blink (Fig 4-1) then select your network and back to your app to enter the password of your wireless router (Fig 3-3) and confirm. The app will go into the page in Fig 4-2.

Press Connect now to select the wifi signal Smartlife-XXXX of your thermostat (Fig 4-3).

Go back to your app and click Connect now then the app will connect automatically (Fig 3-4)

This may typically take up to 5~90 seconds to complete. Your room name could be edited when the device is connected (Fig 4-4).



### **PROGRAMMING YOUR THERMOSTAT**

When your room is established successfully, it will display on the home screen (Fig 5-1). The round bution is to turn on/off your room. Click the line into begining programming your thermostat.

Operation Power on/off bution. When the screen is bright, it is power on; when the screen is dark, it is power off.

Mode button. In this mode you can set cooling, heating and ventilation. 🔮 is heating, 🔘 is cooling and 🔞 is ventilation.

**Solution** Fan Speed button. Press this button to select auto, low, med and high speed. 😔 is auto speed, 🖉 is low speed, 🏠 is med speed, and 5 is high speed.

🕙 Manual button. In this mode your heating can be set manually (i.e. (i.e. NOT using the pre-programmed settings)

- Program button. When this button shows, your thermostat is in program mode and will follow any pre-set heating schedule. When in Manual mode, press the 🛞 button to select mode (i) and vice-versa.
- C Econony button In this mode the temperature will be keep at 26 degree. This temperature cannot be changed or adjusted (Fig 5-4).
- B Lock/Unlock button. If button is green, the screen is "locked". If

button is grey, the screen is "Unlocked"

\* Slide the yellow button backwards or forwards to manually adjust the temperature, the temperature will show in the centre will show

settings at the top of the page



Modify Device Name

Check The Network

0

Device Sharing

Device Info

Create Group

Feedback

Other

# How to create a group?

Press the menu button in the red circle (Fig 5-2) then click *Create Group* (Fig 6-1). Select all the rooms you want and confirm.

of the page. After a few seconds the current room temperature

\* When in Program mode, click on the schedule setting (at the bottom of the page) to be taken to the schedule page(See Fig 5-2) where you can simply click on the working days (Mon-Fri) and then the time/Temp. to adjust to your prefered schedule. \* You can set 6 periods - time and temp. (Fig 5-3)

\* Repeat the above after clicking on the Weekend (Sat –Sun)

\* Once your schedule has been set, click on SAVE and the app will send the programming to your thermostat and confirm the schedule has been saved.



The one who create this group can control all the rooms at the same time. Note

Except create the group, in this menu page, you can also modify your device name, share your device, get the information of your device.

## How to share your device with your family member?

Way 1: Mentioned in the above.

Way 2: Click your Profile at the right bottom of your main page (Fig 6-2). Select Device Sharing then add the account you want to share.

You can see the sharing account you have sent and the device you have shared in this sharing page.

You don't need to do anything if you are the one shared. You can add as many as rooms you want.

#### How to connect your device to Amazon Echo or Google Home?

In your profile, click Integration into the using page. Press Use Now > (Fig 7-1) for your Amazon Echo or Google Home or Tmall Genie or IFTTT then you can see the operation steps.

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#### What is your Smart Scene and How to use it?

Customize your own personal scenes to suit your needs. For example, set your home to automatically turn on thermostat on when you back home (Fig 7-2).Press + button into the setting.

Step 1: You can set a condition for Task like Temperature below 20 degree, then click Save. (Condition: Temp., Humidity, Wether, PM2.5, Air Quality, Sunrise/Sunset, Device)

Step 2: Add a task. Press + to Select Device (Power, Set Temp, Lock Mode) to act, then Save. If you want to delete the scene, you can press Delete in the end.

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.	$\ensuremath{^*}$ 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.