

BHT-002 Series WiFi Thermostat User Guide



For Water Heating/Boiler/Electric Heating

Thermostat Colors:

002FB: full black
002FW: full white
002BW: black and white
002WB: white and 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 | Floor Sensor (2.5m) | 1pc |
| QC Passed | 1pc | (Floor sensor is Optional) | |

ABOUT YOUR THERMOSTATS

The BHT-002 series range has been developed to control electric underfloor, water heating or water/gas boiler systems. These units are designed for use in commercial, industrial, civil and domestic properties

MODEL DEFINITION

GA: Water heating, 3A GC: Water/Gas Boiler, 3A
GB: Electric floor Heating, 16A
L: Backlight
P: Weekly Programmable
W: Wifi
N: Modbus Communication
B: BACnet Communication
S2: Both internal sensor and floor external sensor

For example: BHT-002 GCLP

FEATURES

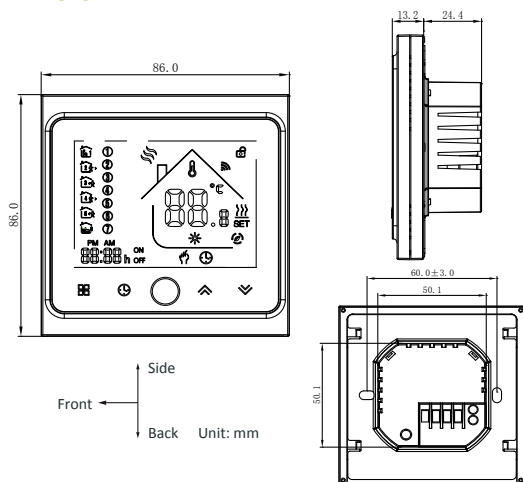
On Appearance

1. Convenient operation creates convenient life.
2. Options of black and white housing.
3. Fashion design blends in with any decor.
4. Touch Screen display with backlight is easy to read, even in the dark.
5. Bright buttons always remind you the world truly exist.
6. Easy UI interface could be used even by child.

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. Data memory when power is off.
4. 5+2 six periods programmable maximize comfort and economy.
5. Create thermostat group to Centralized control
6. Interated with **Amazon Echo, Google Home, Tmall Genie, IFTTT.**
7. All setting languages synchronize your time zone, address and language.
8. No limit to add rooms and support Smart Scene.

DIMENSION



TECHNICAL DATA

Power Supply: 95 ~ 240 VAC, 50 ~ 60HZ
Current Load: 3A (water heating/water boiler/gas boiler)
16A (electric heating)

Sensor: NTC
Accuracy: ±0.5°C or ±1°F
Set Temp. Range: 5 ~ 35°C
Display 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 (flame retardant)
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: IP 20
Buttons: Capacitive Touch Buttons

BEFORE WIRING AND INSTALLING...

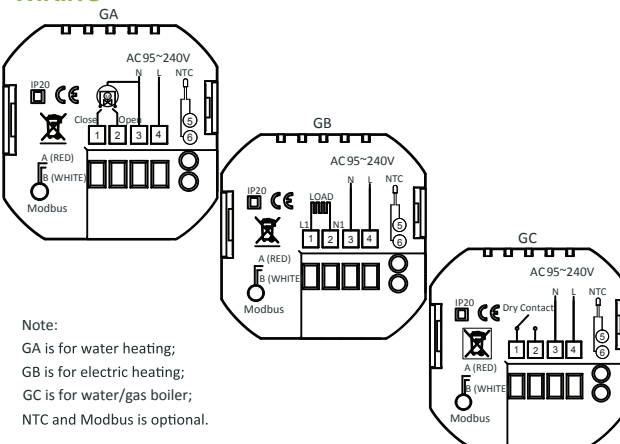
1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check the ratings given in the instructions and on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced service technician.
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



Note:
GA is for water heating;
GB is for electric heating;
GC is for water/gas boiler;
NTC and Modbus is optional.

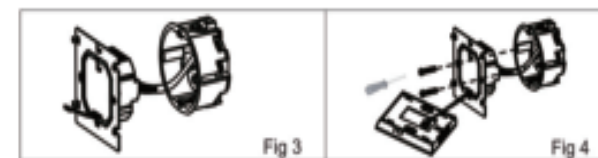
INSTALLATION

Your thermostat is suitable for installation 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 rotating the LCD part. See Fig 2.

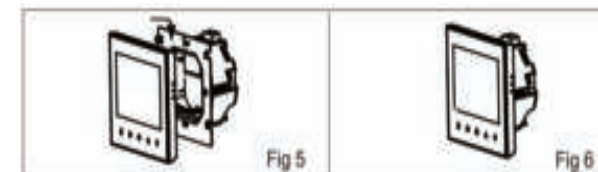


- Step 3. Connect power supply, load into the appropriate terminals. (see "Wiring your thermostat" for details and Fig 3).
- Step 4. Fix the mounting plate into the wall with screws in the box. See Fig 4.

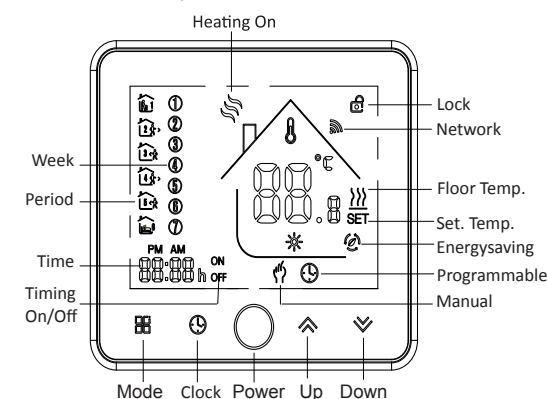


- Step 5. Fasten body of thermostat and the mounting plate through rotating. See Fig 5.

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**

Touch (mode) to change between manual mode and programme mode. In the manual mode, will display in the bottom of the screen. In programmable mode, the period icon will show in the left side.

3. Setting Temperature

In the mode of programmable, set temperature, time and timing on/off could not be adjusted. If the user want to change, please go to manual mode or programmable mode.

In the mode of manual, press to set the desired temperature.

4. Adjusting/Setting the Clock

Touch the icon to set minute, hour and weekday (1 = Monday, 2 = Tuesday etc.) by using the arrows. Press once more to confirm and exit.

5. Locking your Thermostat

Press and hold the for 5 seconds to lock/unlock your thermostat. In item 3 of high sensor options, you can select full lock or half lock.

6. Adjusting/setting the Program Schedules

When Wi-Fi connection is made, your thermostat will automatically accept the program schedule made via the APP on your device (see below for detailed instructions) To set the program schedules through your thermostat (NOT via your smartphone/tablet) simply follow the instructions as below:

Please note: Setting the programme schedule through your thermostat can only be carried out if there is no Wi-Fi connection between your thermostat and smartphone/tablet.

Touch to change between manual mode and programme mode. In the manual mode, will display in the bottom of the screen. In programme mode, touch and hold the icon until the weekday schedule settings appear (1 2 3 4 5 will show along the left of the screen). Use the and arrows to adjust the on time.

Press the icon and use the and arrows to set the off time (2nd period).

Press the icon and use the and arrows to set the temp.

Repeat this process for periods 3 4 and 5 6.

Press the icon once more to enter the Saturday schedule settings (6 will show along the left of the screen).

Repeat the above process to set the period and temp. and Sunday schedule.

Press 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(1+2) | 17:00 | 22°C | 17:00 | 20°C | 17:00 | 20°C |
| Period 6(3+4) | 22:00 | 15°C | 22:00 | 15°C | 22:00 | 15°C |

A separate schedule may be set for weekdays (Mon – Fri) and for weekends (Sat or Sun).

7. Checking the Temperature of Floor Sensor

Press and hold the arrow for 5 seconds to display the temp. of floor sensor.

8. Return To Factory Default

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**.

During Power Off

Setting the Functions and Options

When power is off, press and hold and at the same time for 5 sec. in order to reach system function. Then press to scroll through the available functions, and use the and arrows to change the available options. All settings are confirmed automatically.

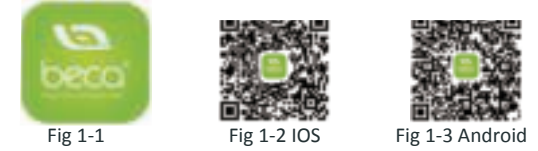
| Code | Function | Setting and options | Default |
|------|--------------------------------------|--|---------|
| 1 | Temperature compensation | -7 to +7°C (for internal sensor) | -1 |
| 2 | Deadzone Temperature | 1 ~ 5°C | 1 |
| 3 | Button locking | 00: All buttons are locked except power button. 01: All buttons are locked. | 01 |
| 4 | Sensor types | In: Internal Sensor (to control or limit the temp.) Ex: External Sensor (to control or limit the temp.) Ou: Only external sensor AL: Internal/ External Sensor (Internal sensor to control the temp., external sensor to limit the temp.) | AL |
| 5 | Min. Set Temp. | 5-15°C | 05 |
| 6 | Max. Set Temp. | 15-45°C | 35 |
| 7 | Display Mode | 00: Display both set temp. and room temp. 01: Display set temp. only | 00 |
| 8 | Low temperature protection setting. | 0-10°C | 00 |
| 9 | High temperature protection setting. | 25-70°C | 45 |
| A | Economy Mode | 00: Non-energy saving Mode 01: Energy saving mode | 0 |
| B | Economy Temp. | 0-30°C | 20 |

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 relevant QR code (Fig 1-3).

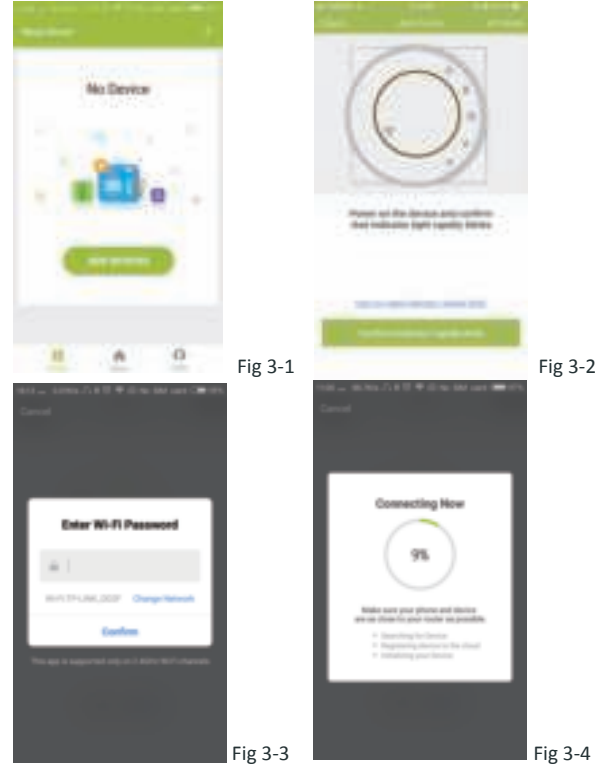
Step 2 Register your account

Open your BecaSmart, you will get a piece of notification (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 registration. If you have account, please log in.



Step 3 Connect your Wi-Fi signal

On your thermostat
With power off, press and hold the 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 take 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 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).



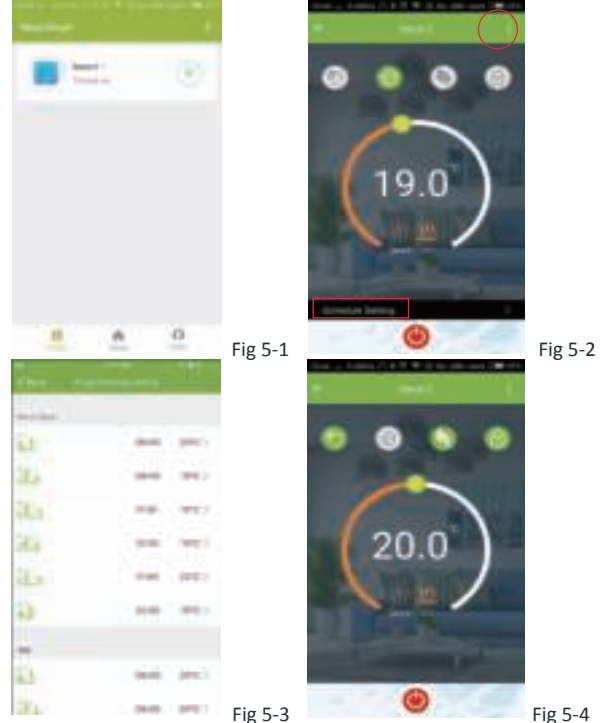
PROGRAMMING YOUR THERMOSTAT

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

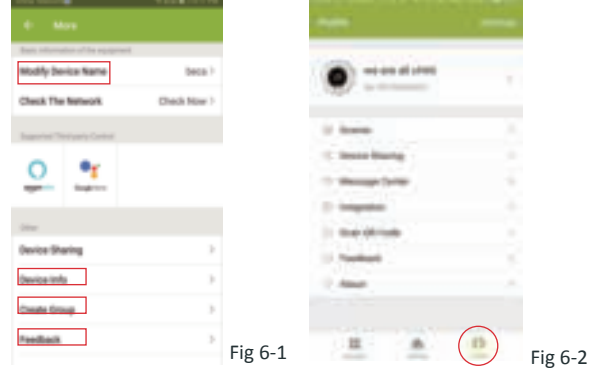
- Power on/off button, press it, turn on the device, press it again, turn off the device
- Lock/Unlock button. If button is green, the screen is "Locked", if button is grey, the screen is "Unlocked".
- Economy button, in this mode, the temperature will be kept 20 degrees. This temperature cannot be changed or adjusted.
- Manual button: In this mode, your heating can be set manually (ie. 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 and vice-versa.

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

of the page. After a few seconds the current room temperature will show.
* 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 preferred schedule.
* You can set 6 periods - time and temp. (Fig 5-3)
* Repeat the above after clicking on the Weekend (Sat-Sun) settings at the top of the page
* 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.

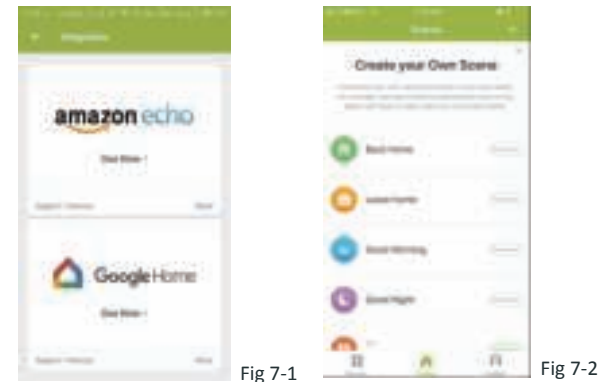


How to create a group?
Press the menu button in the red circle (Fig 5-2) then click *Create Group* (Fig 6-1). Select all the rooms you want and confirm.



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.



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. | * 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.