BHT-2000 Series Zigbee 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-2000 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
Z: Zigbee
S2: Both internal sensor and floor external sensor
For example: BHT-2000 GC

FEATURES

On Appearance

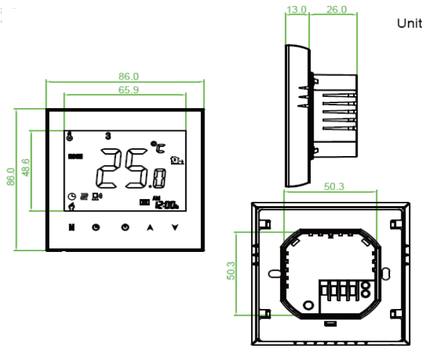
1.Convennient operation creates convenient life.
2.Options of black and white housing.
3.Fashion design blends in with any decor.
4.Touch Screen display with backlight is easy to read ,even in the dark.
5.Bright buttons always remind you the world truely exist.
6.Easy UI interface could be used even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

On Functionality

1. Powerful functions are available such as Modbus /WIFI /Zigbee ect.,
2. 0.5°C Accuracy keeps temperature within the level you set.
3. Data memory when power is off.
4. 5+1+1 four periods programmable maximize comfort and economy.
5. Create thermostat group to Centralized control
6. All setting languages synchronize your time zone, address and language.

DIMENSION

Unit: mm



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℃ or ±1℉
Set Temp. Range: 5 -35℃
Dispaly Temp. Range: 5 ~ 99 ℃
Ambient Temp.: 0 ~ 45 ℃
Ambient Humidity: 5 ~ 95 % RH (Non Condensing)
Storage Temp.: -5 ~ 45 ℃
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: IP20
Buttons: Capactive Touch Buttons

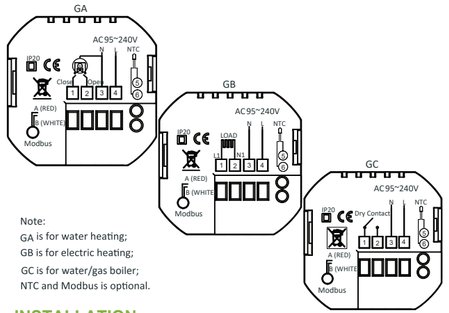
BEFORE WIRING AND INSTALLING...

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.

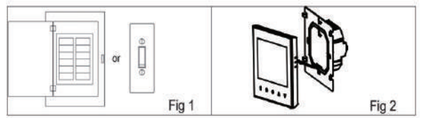
WIRING



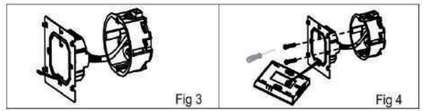
Note:
GA is for water heating;
GB is for electric heating;
GC is for water/gas boiler;
NTC and Modbus is optional.

INSTALLATION

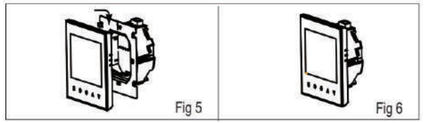
Your thermostat is suitable for installation within a standard 86mm pattress box or European 60mm pattress box.
Step 1. Keep power off. See Fig 1.
Step 2. Remove the mounting Plate by rotating the LCD part. See Fig 2.



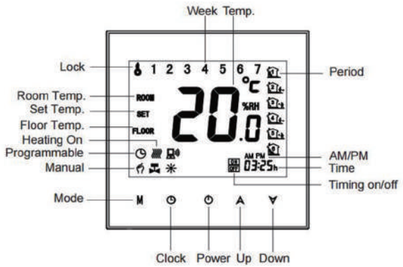
Step 3. Connect power supply, load into the appropriate terminals. (see "Wiring your thermostat" for details and Fig 3).
Step 4. Fix the mounting plate into the wall with screws in the box. See Fig 4.



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 M (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 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 senior options, you can select full lock or half lock.

6. Adjusting/setting the Program Schedules

Method one

Manually set a week of programming settings, specific operations are as follows:

Touch M 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 time (1st period).Press again and use ∧ and ∨ arrows to set the temp.
Press the icon and use the ∧ and ∨ arrows to set the time and temp. (2nd period).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 scteen)		WEEKDAY(MONDAY-FRIDAY) (6 shows on scteen)		WEEKDAY(MONDAY-FRIDAY) (7shows on scteen)	
	TIME	TEMPERATURE	TIME	TEMPERATURE	TIME	TEMPERATURE
Period 1	6:00	20	6:00	24	6:00	19
Period 2	11:30	21	12:00	23	12:30	20
Period 3	13:30	22	14:30	22	14:30	20
Period 4	17:30	23	17:30	21	18:30	21

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

Method Two

Use APP for one week of programming settings, please refer to the second page **"Programming your thermostat"**

7. Checking the Temperature of Floor Sensor

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

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"Smart Life" in Apple Store and download. Alternatively,scan the relevant QR code here(Fig 1-2)
For Android devices, search for "Smart Life" in Google Play and download. 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.

Press to register a new account (Fig 2-1), you will receive a notification (Fig 2-2), Press "**Agree**" to enter the registration page (Fig 2-3), enter your mobile phone number, Press "**Get Verification Code**" ", waiting for the verification code information.

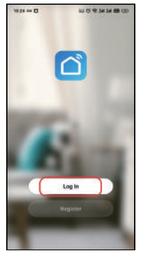


Fig 2-1

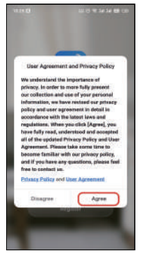


Fig 2-2

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

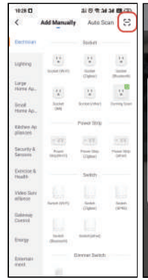


Fig 3-1-1

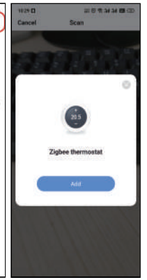


Fig 3-1-3

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:
Press "**Add subdevice**".

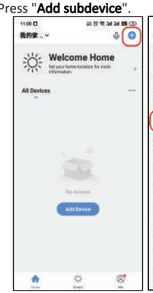


Fig 3-1

Fig 3-2

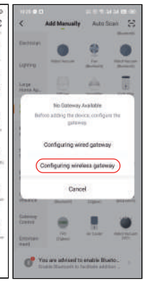


Fig 3-3

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).

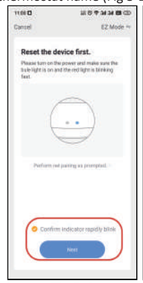


Fig 3-4

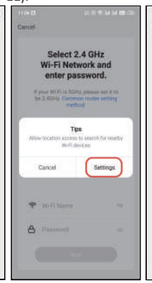


Fig 3-5

Fig 3-6

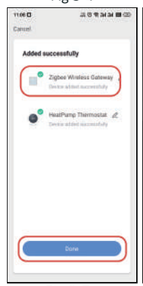


Fig 3-7

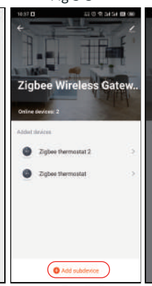


Fig 3-8

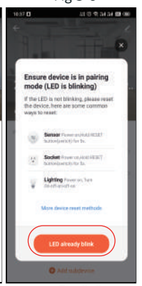


Fig 3-9

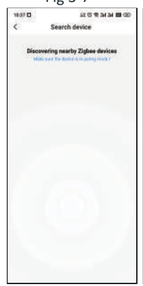


Fig 3-10

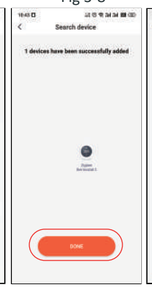


Fig 3-11

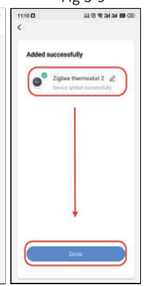


Fig 3-12

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

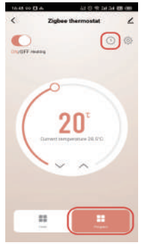


Fig 4-2

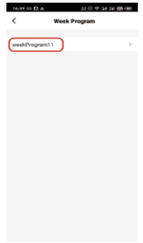


Fig 4-3

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).

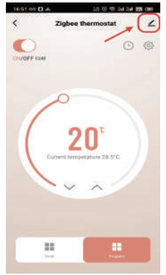


Fig 5-1

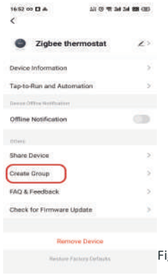


Fig 5-2

How to Create Group

Press icon (Fig. 5-1), then press "Share Device"(Fig. 6-1)to "Add Home Menber" (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.

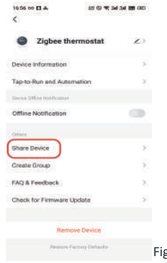


Fig 6-1

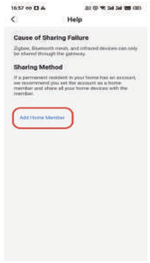


Fig 6-2

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.