

BHT-009 Smart Knob Thermostat

User Guide



WiFi type

For Water Heating/Boiler/Electric Heating

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 Floor Sensor 1pc (Floor Sensor is Optional)

ABOUT YOUR THERMOSTATS

The BHT-009 range has been developed to control electric underfloor ,water heating or water/gas boiler system. These units are designed for use in commercial, industrial, civil and domestic properties.

MODEL DEFINITION

GA: Water heating, 5A GB: Electric floor Heating,16A
GC: Water/Gas Boiler, 5A L: Backlight
P: Weekly Programmable N: Modbus Communication
W: Wifi
S2: Both internal sensor and floor external sensor
For example: BHT-009 GCLW

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 visible thickness above the wall is only 12.4mm.
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

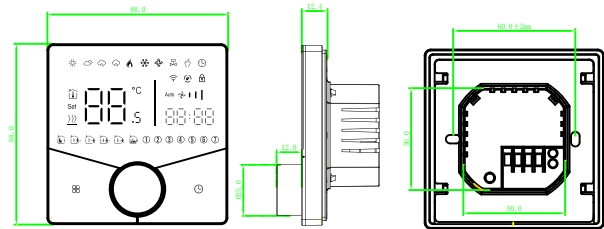
1. Rich function options, Modbus, WIFI, keycard, etc, to meet all your needs;
2. Strict temperature control accuracy ($\pm 1^{\circ}\text{C}$) to provide the warmth you want;
3. Power off protection, save all your settings safely;
4. Preset adjustment of 5+1+1 mode in a week, programmable setting of 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;

TECHNICAL DATA

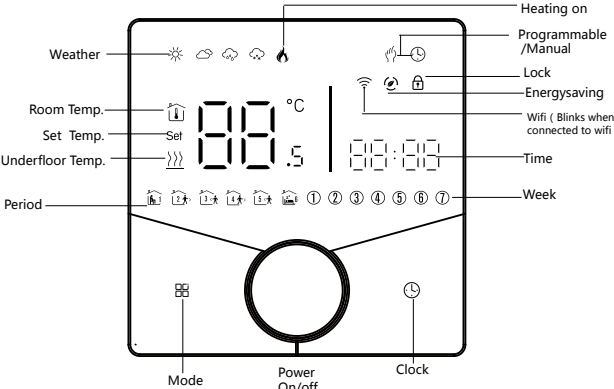
Power Supply:95 ~240 VAC, 50~60Hz or 24V DC/AC,50~60Hz
Please check the information laser printed on the back of the thermostat for the actual voltage.

Current Load: 5A (water heating, water/gas boiler),
16A (electric heating)
Sensor: NTC3950, 10K
Accuracy: $\pm 1^{\circ}\text{C}$
Set Temp. Range: 5-35 $^{\circ}\text{C}$
Room Temp. Range: 5-70 $^{\circ}\text{C}$
Display Temp. Range: 5 ~ 70 $^{\circ}\text{C}$
Ambient Temp.: 0~ 45 $^{\circ}\text{C}$
Ambient Humidity: 5 ~ 95 % RH (Non Condensing)
Storage Temp.: -5~ 45 $^{\circ}\text{C}$
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: Capacitive Touch Buttons

DIMENSION (Unit:mm)



HOME SCREEN QUICK REFERENCE

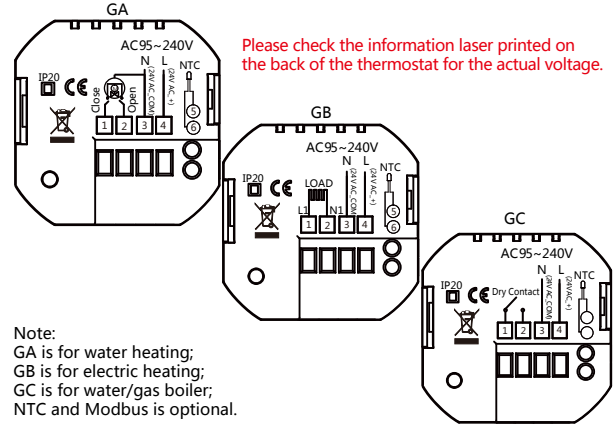


BEFORE WIRING AND INSTALL

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check the 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.

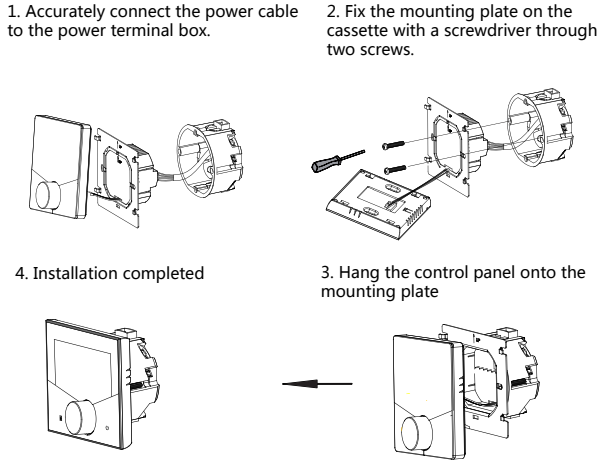
WIRING



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 pattern box or European 60mm pattern box.



OPERATION

During Power On

1. Power On/off: Press the knob to turn the thermostat on/off.
2. Manual & Programmable: Touch to change between manual mode and programme mode . In manual mode, will show on the display, In programmable mode, will show on the display.
3. Setting Temperature: In the programming mode, the temperature setting and time setting will be locked. If the user wants to adjust, he must first adjust the thermostat to manual mode by pressing the key. In the manual mode, the desired temperature can be set by turning the knob.
4. Adjusting/Setting the Clock: Press to set minute, hour and weekday. and adjust the values by turning the knob. Press once more to confirm and exit.

5. Locking your Thermostat: Press and hold the and 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 Programmable Schedules: Press icon four times in a row. You can see "MON TUE WED THU FRI" and , and the minutes of time are flashing.

Turning the knob to set the minutes;
Press the icon again, the hour of the time will flash, set the hour by turning the knob ;
Press the icon again, the temperature setting will flash, set the temperature turning the knob ;
This completes the setting of periods1.

In the same way, complete the settings of periods2, 3, 4, 5 and 6. Press the icon once more to enter the Saturday schedule settings (you will see the SAT of the screen). Repeat the above process to set the period and temp. and Sunday schedule. Press the icon once more to confirm and exit.

Default settings for program schedule

Time display	MON.-FRI. (①②③④⑤ shows on screen)		SAT. (⑥ shows on screen)		SUN. (⑦ shows on screen)	
	TIME	TEMP.	ON TIME	TEMP.	ON TIME	TEMP.
Period 1	6:00~8:00	20	6:00~8:00	20	6:00~8:00	20
Period 2	8:00~11:30	15	8:00~11:30	20	8:00~11:30	20
Period 3	11:30~13:00	15	11:30~13:00	20	11:30~13:00	20
Period 4	13:30~17:00	15	13:30~17:00	20	13:30~17:00	20
Period 5	17:00~22:00	22	17:00~22:00	20	17:00~22:00	20
Period 6	22:00~6:00	15	22:00~6:00	15	22:00~6:00	15

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. If no external sensor is connected, the thermostat will display "Er". **Note: Do not use third-party external sensors, the temperature will be incorrect.**

8. Setting the Functions and Options: During power off, Press and hold and for 8 sec. in the order to reach system function. Then press to scroll through the available functions , and use turning the knob to change the available options. All settings are confirmed automatically.

Code	Function	Setting and options	Default
1	Temperature compensation	-9 to 9 $^{\circ}\text{C}$ (for internal sensor)	-3
2	Deadzone temperature	1-5 $^{\circ}\text{C}$	01
3	Button locking	00: All buttons are locked except power button. 01: All buttons are locked.	01
4	Sensor typer	In: Internal sensor (to control the temp.) Ou: External sensor (to control the temp.) AL: Internal/External sensor (internal sensor to control the temp., external sensor to limit the temp.)	AL
5	Min.set temp.	5-15 $^{\circ}\text{C}$	05
6	Max.set temp.	15-45 $^{\circ}\text{C}$	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 $^{\circ}\text{C}$	00
9	High temperature protection setting.	25-70 $^{\circ}\text{C}$	45
10	Economy mode	00: Non-energy saving mode 01: Energy saving mode	00
11	Economy temp.	0-30 $^{\circ}\text{C}$	20
12	Brightness at night (22:00-6:00)	0-8 When set to 0, the device will run for 10 seconds after inactivity. The screen will go completely off with no display.	03
13	Brightness at night (22:00-6:00)	0-8	01
14	Screen line standby brightness	1-5	01
15	Reset	00: No factory reset; 01: Factory reset	00
16	Version number		U1

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 "Smartlife" in Apple Store or Google Play or use a browser to scan the QR code above (Figure 1-2), 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 (Press and hold the ⏻ key for 8s when the thermostat is off), see the following tutorial to complete the connection and settings.

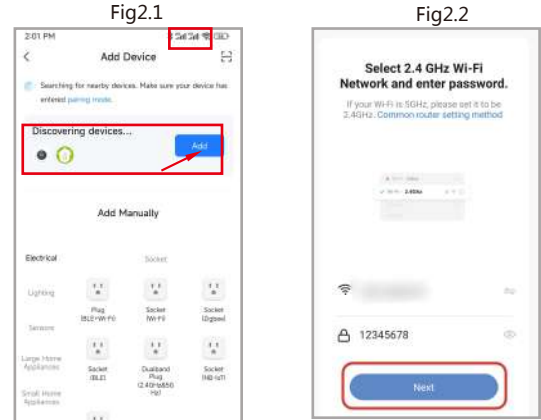
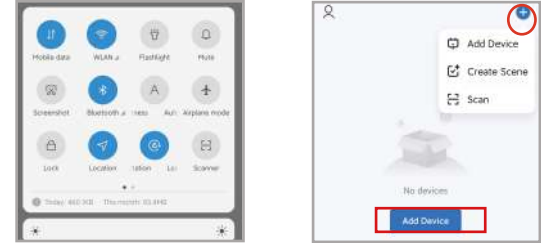


Fig2.3 Fig2.4

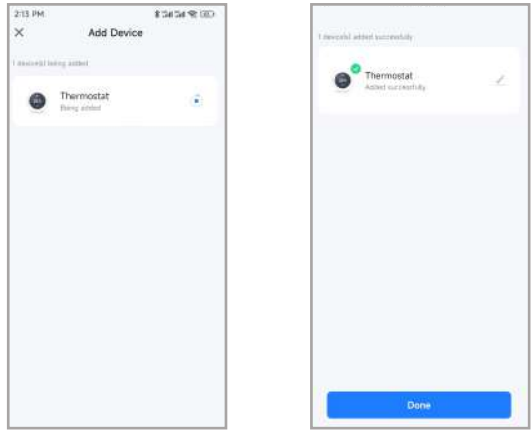


Fig2.5 Fig2.6

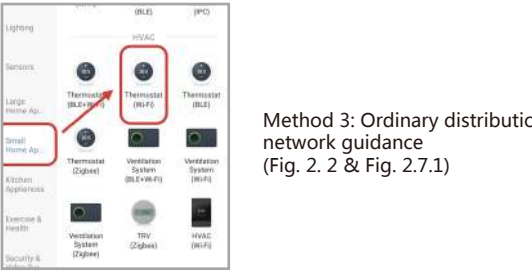


Fig2.7 Fig2.7.1

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

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).

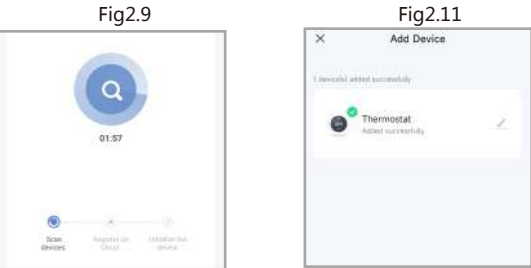
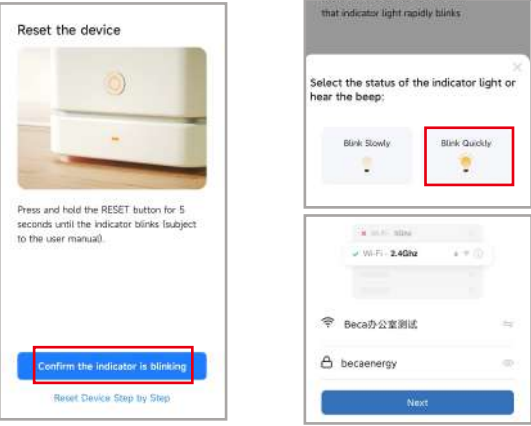


Fig2.12 Fig2.13

2. AP Mode
When the thermostat is off, press and hold the "⏻" until the thermostat screen flashes slowly and the "📶" icon is displayed (if the "📶" icon appears, continue to press the "⏻" until the thermostat screen Flashes slowly and displays the "📶" icon), and then operate according to the following figure (Fig 2.14-Fig 2.19).

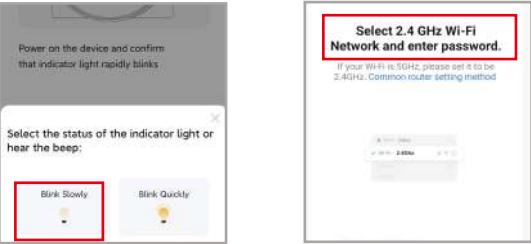


Fig2.14 Fig2.15

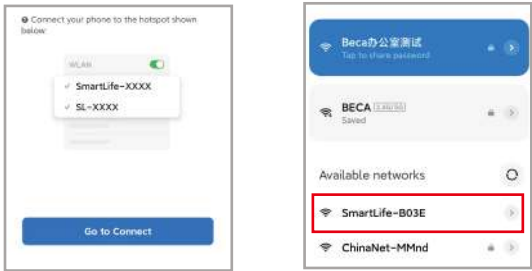


Fig2.16 Fig2.17

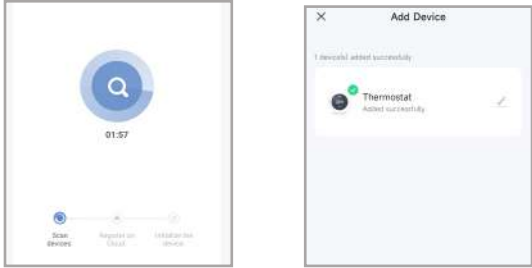
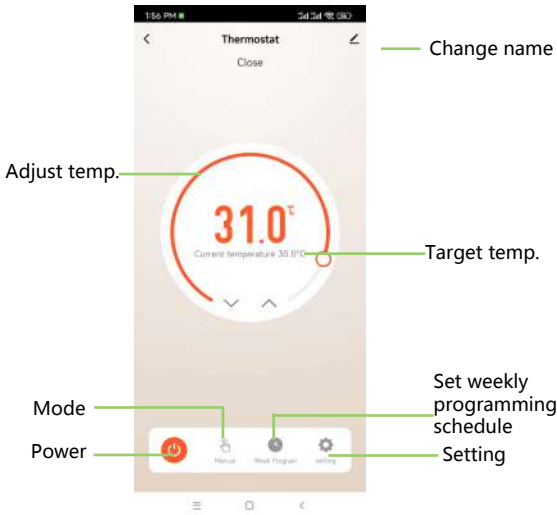


Fig2.18 Fig2.19

APP operation interface description
(heating thermostat)



More settings

setting		
Child lock		
Eco mode		
Temp. compensation	-3°C	>
Max. set temp.	35.0°C	>
Min. setting temp.	5.0°C	>
Output state	Close	
Floor temp.	31.0°C	
Sensor type	AL	>
Dead zone temp.	1°C	>
High protection temp. setting	45.0°C	>
Low protection temp. setting	0.0°C	>
Eco mode temp. setting	20.0°C	>

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