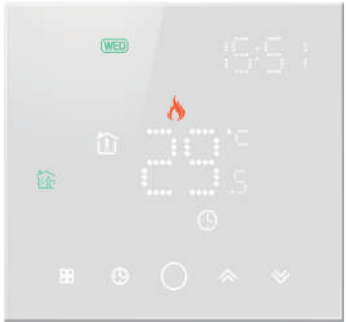


BHT-003 Series Zigbee Thermostat

User Guide



For Water Heating/Boiler/Electric Heating

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-003 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-003 GC

FEATURES

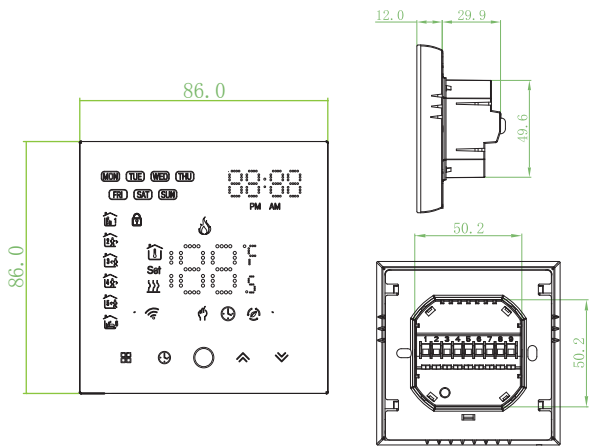
On Appearance

- 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 /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



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
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 (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...

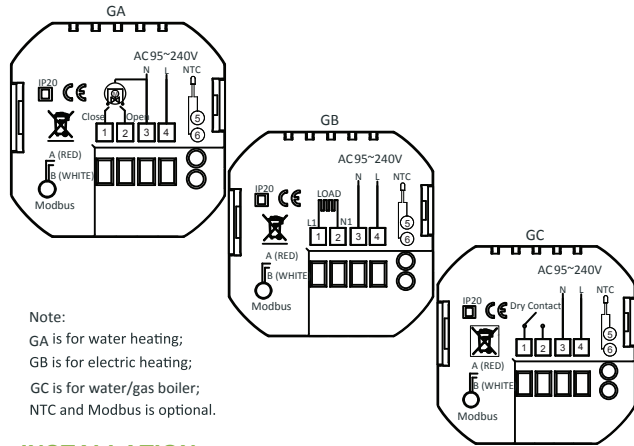
- 1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
- 2. Check the ratings given in the instructions and on the product to make sure the product is suitable for your application.
- 3. Installer must be a trained, experienced service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

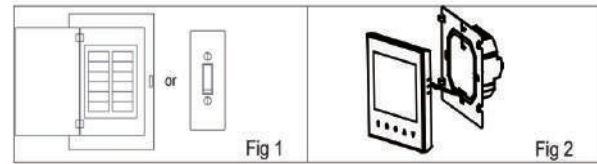


Note:
GA is for water heating;
GB is for electric heating;
GC is for water/gas boiler;
NTC and Modbus is optional.

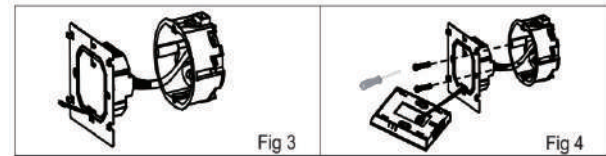
INSTALLATION

Your thermostat is suitable for installation within a standard 86mm pattress box or European 60mm pattress box.

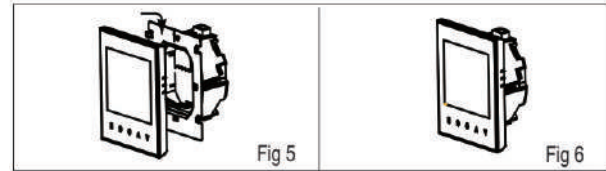
- Step 1. Keep power off. See Fig 1.
- Step 2. Remove the mounting Plate by rotating the LCD part. See Fig 2.



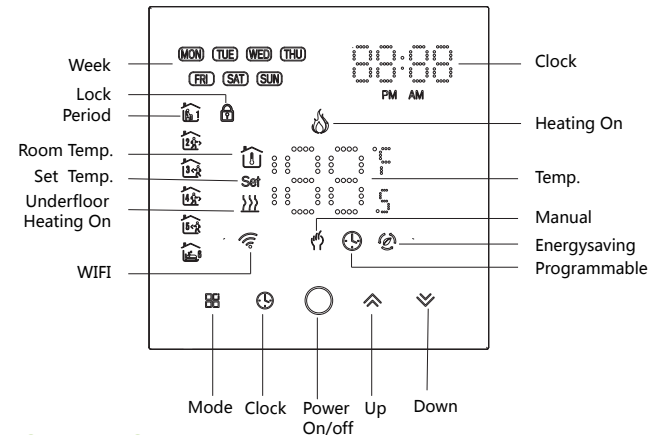
- Step 3. Connect power supply, load into the appropriate terminals. (see “Wiring your thermostat” for details and Fig 3).
- Step 4. Fix the mounting plate into the wall with screws in the box. See Fig 4.



- 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 [Power On/off] to turn the thermostat on/off.

2. Manual & Programmable

Touch [Mode] (mode) to change between manual mode and programme mode. In the manual mode, [Heating On] will display in the bottom of the screen
In programmable mode, the period icon [Period] 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 [Up/Down] to set the desired temperature.

4. Adjusting/Setting the Clock

Touch the icon [Clock] to set minute, hour and weekday (1 = Monday, 2 = Tuesday etc.) by using the [Up/Down] arrows. Press [Confirm] once more to confirm and exit.

5. Locking your Thermostat

Press and hold the [Lock/Unlock] 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

In programme mode, touch and hold the icon [Schedule] until the weekday schedule settings appear (1 2 3 4 5 will show along the left of the screen).
Use the [Up/Down] and [Left/Right] arrows to adjust the on time.
Press the icon [Clock] and use the [Up/Down] and [Left/Right] arrows to set the time (1st period).Press [Confirm] again and use [Up/Down] and [Left/Right] arrows to set the temp.

Press the icon [Clock] and use the [Up/Down] and [Left/Right] arrows to set the time and temp. (2nd period).Repeat this process for periods 3 4 and 5 6.
Press the icon [Clock] 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 [Confirm] once more to confirm and exit.

Default settings for program schedule

Time display	MON.-FRI. (①②③④⑤ shows on screen)		SAT. (⑥shows on scteen)		SUN. (⑦shows on scteen)	
	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 [Down] arrow for 5 seconds to display the temp. of floor sensor.

During Power Off

Setting the Functions and Options

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

Code	Function	Setting and options	Default
1	Temperature compensation	-9 to 9 °C (for internal sensor)	-3
2	Deadzone Temp.	1-5°C	1
3	Button Locking	01:All buttons are locked except power button. 01:All buttons are locked.	1
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°C	5
6	Max.Set Temp.	15-45°C	30
7	Temp. display	00:Display set Temp. and Room Temp. 01:Only display set Temp.	00
8	Low temp. protection setting.	0-10°C	0
9	High temp. protection setting.	25-70°C	45
A	Daytime display brightness (6:00-22:00)	0-8	1
B	Brightness display brightness (22:00-06:00)	0-8	1
C	Reset	00: No factory reset; 01: Factory reset	00
D	version number		U1

About ZigBee

ZigBee CONNECTION

Step 1 Download your APP (Fig 1-1)

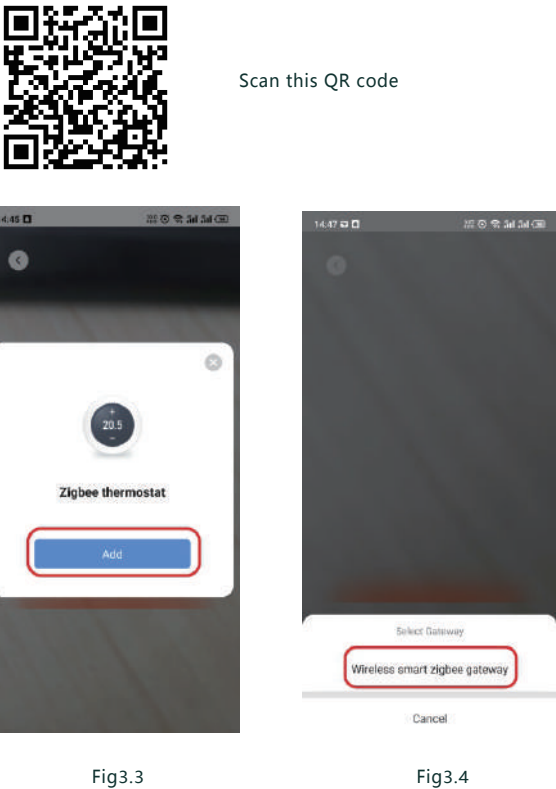
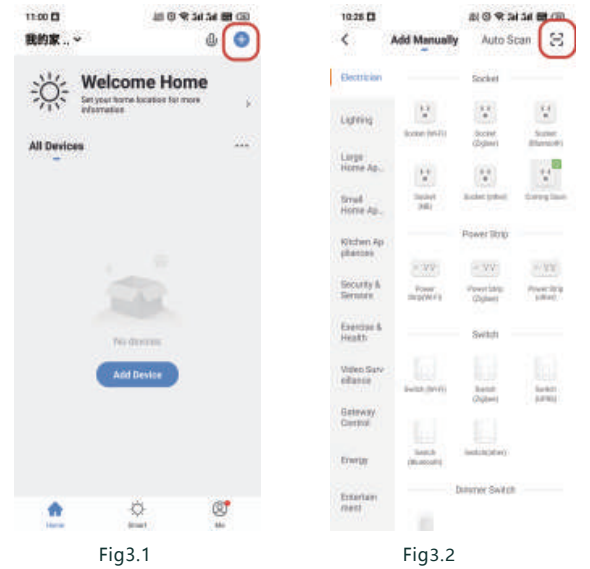
Search for "Smartlife" in Apple Store or Google Play or use a browser to scan the QR code above (Figure 1-2), and complete account registration and installation according to the guidance of the APP.



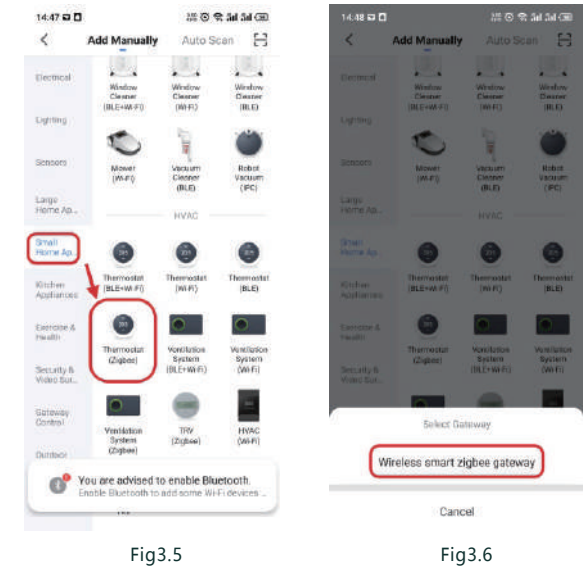
Step 2. The second step is to confirm that you have connected to the Tuya zigbee wired or wireless gateway. For the gateway connection process, please refer to the manual of the gateway you purchased; the following process is based on the "wireless smart zigbee gateway".

Step 3. Connect the thermostat
Check the tutorial below to complete the connection and setup.

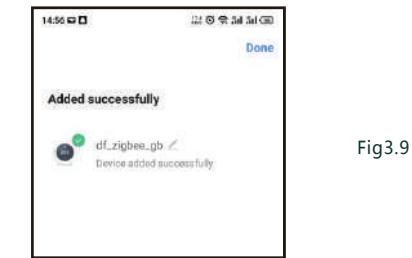
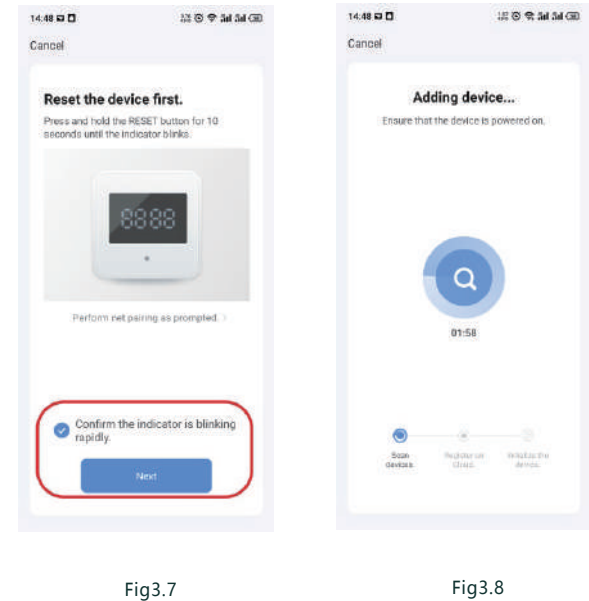
Method 1: Scan the QR code to configure the network guide (Fig 3.1-Fig 3.4)



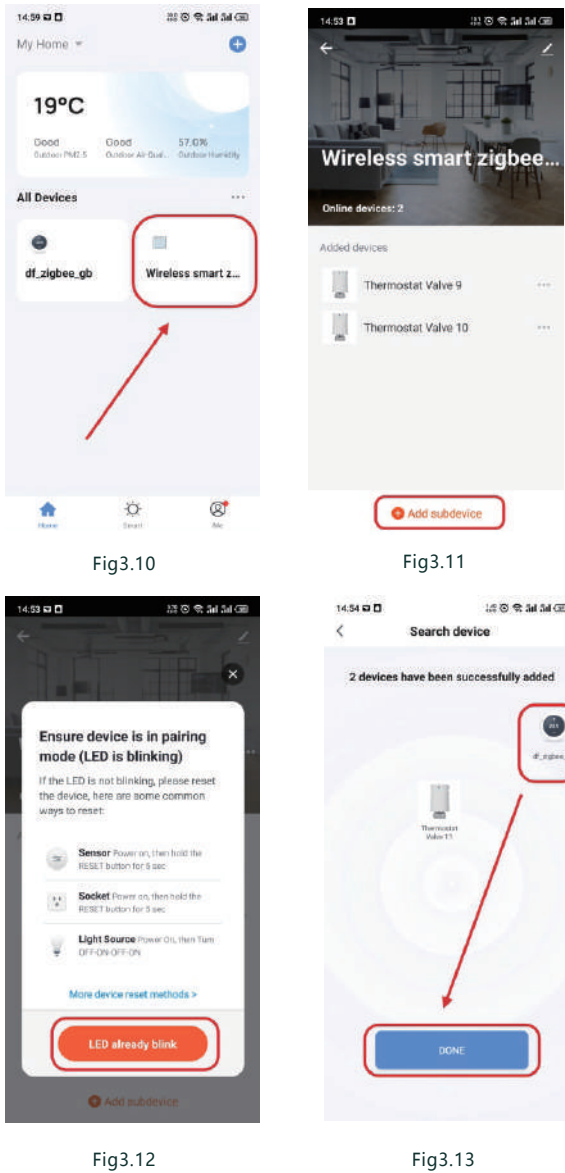
Method 2: Ordinary distribution network guidance (Fig. 3. 5 & Fig. 3.6)



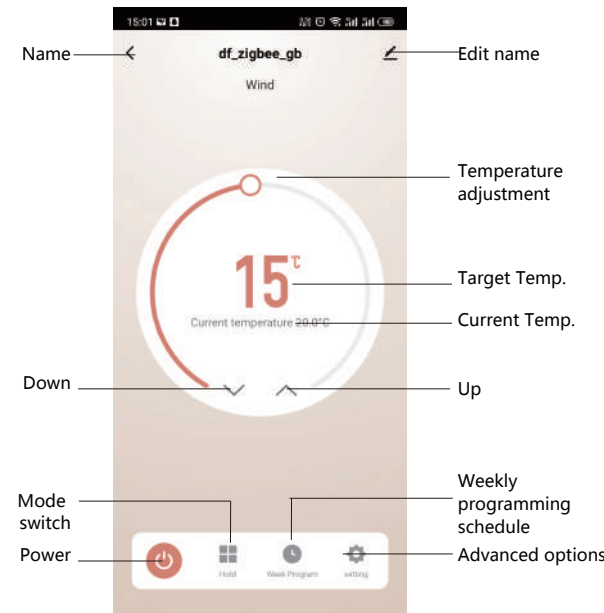
Network distribution mode:
1. Zigbee quick connect
When the thermostat is off, press and hold the "down button" until the thermostat screen flashes quickly and displays the "zigbee" icon, and then operate according to the following figure (Fig3.7-Fig3.8).



2. Zigbee gateway connection
With the thermostat turned off, press and hold the "down button" until the thermostat screen flashes quickly and displays the "zigbee" icon, and then operate according to the following figure (Fig3.10-Fig3.13).



APP operation interface description (heating thermostat)



Simplement 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
24-months warranty since date of purchase
Service beyond the warranty period may need charge.
More details, please contact us.