# BHT-1000 Series 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 gualified person installs your thermostat and complies with all local regulations.

# In the box you will find

1pc Screws 2pc Thermostat User Guide 1pc Floor Sensor (2.5m) 1pc (Floor sensor is Optional) QC Passed 1pc

### **ABOUT YOUR THERMOSTATS**

The BHT-1000 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 GB: Electric floor Heating, 16A GC: Water/Gas Boiler, 3A L: Backlight P: Weekly Programmable N: Modbus Communication **B: BACnet Communication** W: Wifi S2: Both internal sensor and floor external sensor For example: BHT-1000 GCLP

#### **FEATURES** On Appearance

- 1. Negative black screen will bring you to a secret world.
- 2. 51mm round display area helps to protect your eyes.
- 3. Glass or Acrylic Lens is for your selection.
- 4. Touch buttons to make simple operation.
- 5. Amazing Silver Frame opens your modern life. 6. The visiable thickenss above the wall is only 11mm.
- 7. Rotation to connect gives you easy installation.
- 8. 86mm hidden box and european 60mm round box is suitable.
- 9. White, black or gold housing creates your colorful life.
- 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. Creat 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: NTC3950, 10K Accuracy: ±0.5 °C or ±1 °F 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: IP 20 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.





Electrical Shock or Equipment Damage Hazard. Can shock individuals or short equipment circuitry. Disconnect power supply before installation.



### 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.



Lock

Room Temp. Set Temp. Floor Temp. Heating On Programmable Manual

Mode -

# **OPERATION**

## **During Power On**

AC 95~24

# 2. Manual & Programmable

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

# 4. Adjusting/Setting the Clock

Touch the icon  $\bigcirc$  to set minute, hour and weekday (1 = Monday, 2 = Tuesday etc.) by using the  $\land \forall$  arrows. Press  $\bigcirc$  once more to confirm and exit. 5. Locking your Thermostat

# 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

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 M to change between manual mode and programme

mode. In manual mode, 🖞 will show in the bottom left of the screen. In programme mode, touch the icon () 4 times until the weekday



Step 6. Installation complete. See Fig 6.

### HOME SCREEN QUICK REFERENCE



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

In the mode of manual, press  $A \forall$  to set the desired temperature.

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

your thermostat (NOT via your smartphone/tablet) simply follow the

schedule settings appear (1 2 3 4 5 will show along the top of the screen). Use the  $\land$  and  $\forall$  arrows to adjust the on time.

Press the icon  $\bigcirc$  and use the  $\land$  and  $\lor$  arrows to set the time (1st period).

Press the icon  $\bigcirc$  and use the  $\land$  and  $\forall$  arrows to set the temp.

Repeat this process for periods 2,3, 4, 5 and 6.

Press the icon  $\bigcirc$  once more to enter the Saturday schedule settings (6 will show along the top of the screen).

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

Press  $\bigcirc$  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 <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(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 Reatore 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 **M** and  $\bigcirc$  at the same time for 5 sec. in order to reach system function. Then press M to scroll through the available functions, and use the A and  $\forall$  arrows to change the available options. All settings are confirmed automatically.

Code	Function	Setting and options	Default
1	Temperature compensation	-7 to + 7 $^{\circ}$ (for internal sensor)	
2	Deadzone Temperature	1~5℃	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
А	Economy Mode	00: Non-energy saving Mode 01: Energy saving mode	0
в	Economy Temp.	0-30 <sup>°</sup> 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 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.



Fig 2-3

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

With power off, press and hold the  $\forall$  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

Fig 2-4

With power off, press and hold the  $\forall$  arrow for eight (8) seconds. The backlight will be on and the icon 🛜 will flash one time per sec.. Press and hold the Y 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-CE4A 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 begining 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".
- C Econony button, in this mode, the temperature will be keep 20 degree. 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 ② and vice-versa.
- \* Slide the yellow button backwards or forwards to manually adjust the temperature, the temperature will show in the centre

# 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 prefered schedule. \* You can set 6 periods - time and temp. (Fig 5-3)

schedule has been saved.

Beca Smi	wt
đ	beca-2 > Turnet on
ut KBack	1.27 19
all.	1.27 19
ut ≮Baci	1.27 19
of KBack Work Days	1.27 19
ut Cack Cack Work Days	1.27 19
er KBack Work Days C C C C C C C C C C C C C C C C C C C	Programming
4 (Back Work Days 1 1 2 4 3 4 4 4	1.27 19
er KBack Work Days C C C C C C C C C C C C C C C C C C C	1.27 19
4 (Bad) Work Days (C) (C) (C) (C) (C) (C) (C) (C) (C) (C)	1.27 19

# 1 12+

tena Tatabarn

Modify Device Name Check The Network painted: Third painty C 0 . apparents Bangatha Device Sharing Device Info

Create Group

Feedback

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

\* 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



#### 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 botton 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.	$\ensuremath{^*}$ 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.