

Heating Room Thermostat

User Guide

Model: UTR 10B



Welcome

Your new thermostat will provide years of reliable service. Using this digital thermostat will provide more uniform comfort in your home through the seasons. Thank you for buying the product! Please read this manual for complete instructions on installing and operating your thermostat. If you require further assistance, please feel free to contact us.

In the box you will find

Thermostat	1pc
Screws	2pc
User Guide	1pc
Wall plate	1pc

Service

We offer the warranty of 18 months from the sales day. If it is not the problem of quality or beyond the warranty time, we will charge for the after-sale service.

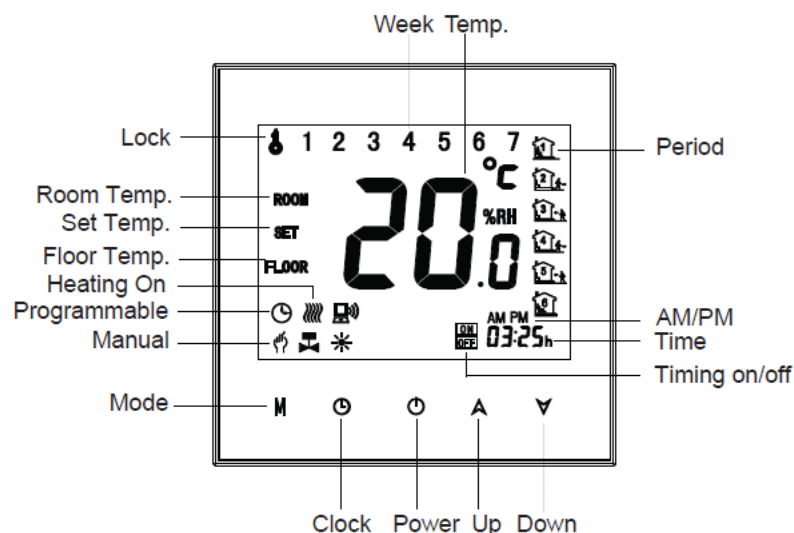
About your thermostat

BHT-1000 is a thermostat, used as controlling floor electric heating or water heating system electric actuators open or close. The thermostat is used in the commercial, industrial, hospital, hotel, hotels, civil buildings and villas for heating control.

Features of your thermostat

Modern design similar as a cell phone. Beautiful Frame CHROME creates elegant life. Acrylic lenses to avoid the finger scratch. Touch Button makes simple operation. Large screen display with backlight is easy to read—even in the dark. 5+2 or 6+1 six periods program schedules maximize comfort and economy. One-touch temp control overrides program schedule at any time. Precise comfort control keeps temperature within 1°C of the level you set. Internal and external sensor selectable is suitable for any place. Data memory when power is off. Easy installation. Suitable for 86mm hidden box and european 60mm round box. RS485/MODBUS communication is optional.

Home screen quick reference



Model definition of your thermostat

GA: Water heating, 3A
GB: Electric floor Heating, 16A
N/A: Internal sensor only
S2: Both internal sensor and floor external sensor
L: Backlight
P: Weekly programmable
N: RS485
P and N could not be compatible at the same time.
For example: BHT-1000 GAS2LP

Technical Data of your thermostat

Sensor: NTC
Accuracy: ±1°C
Room Temp. Range: 5-35°C
Set Temp. Range: 5-99°C
Power Consumption: < 1.5W
Timing Error: < 1%
Power Supply: 95 ~ 240VAC, 50 ~ 60Hz
Current Load: 3A (water heating),
16A (electric heating)
Shell material: PC+ABS (flame retardant)
Dimension: 86x86x13.3mm
Ambient Temp.: 0-45°C, 5-95%RH
(Non-condensing)
Storage Temp.: -5-55°C
Installation Hole distance: 60mm

Operation

1. Setting Power on/off

Press to turn on/off the power.

2. Setting Temperature

Press to set the temperature.

3. Setting the Clock

Press to set minute, hour and week.

Press for adjusting.

Press again to leave time setting.

3. Adjusting program schedules

Press to change manual and weekly programmable.

Press and hold to weekly programmable setting.

12345 will display on the screen.

Press to time setting of the first period.

Press to temperature setting of the first period.

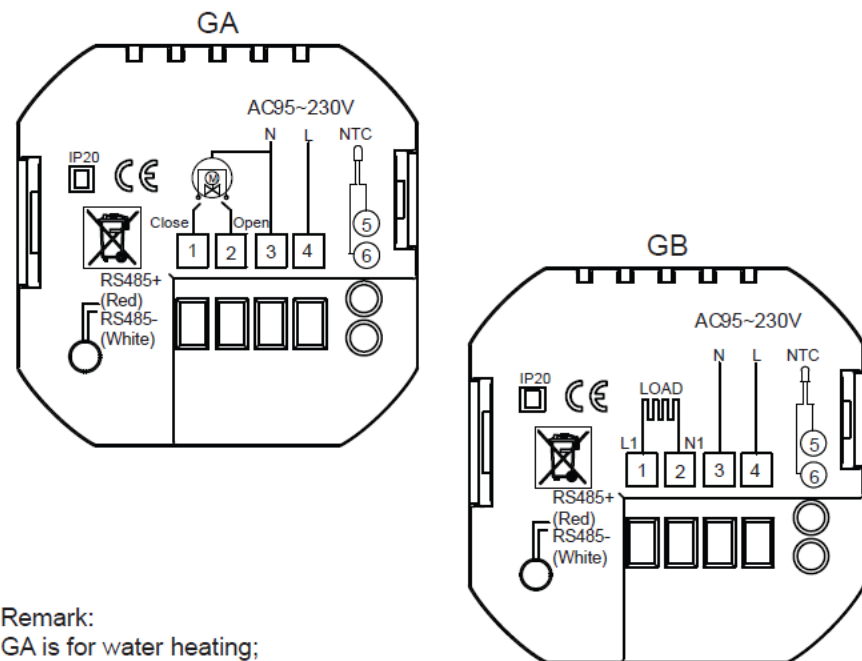
- Press to time setting of the second period.
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- Press to temperature setting of the sixth period.
- Press to Sat. & Sun setting.

Remark: all values please press **A** for the adjustment.
 Factory default setting of period time and temperature

Time display	Weekday (Mon-Fri)		Weekend (Sat & Sun)	
	time	temperature	time	temperature
	06:00 get up	20°C	06:00 get up	20°C
	08:00 work	15°C	08:00 out	20°C
	11:30 afternoon rest	15°C	11:30 afternoon rest	20°C
	13:30 work	15°C	13:30 out	20°C
	17:00 off work	22°C	17:00 go homek	20°C
	22:00 rest	15°C	22:00 rest	15°C

The above is the 5+2 weekly programmable.
 The 6+1 weekly programmable please refer to the above setting. Please change 5+2 or 6+1 in the high senior options 7.

Wiring your thermostat



Remark:
 GA is for water heating;
 GB is for electric heating;
 NTC and RS485 is optional.

8. Setting functions and options

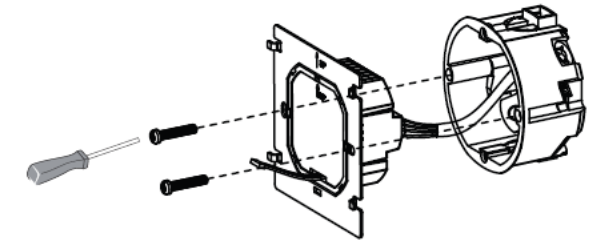
During power off, press and hold M and at the same time for 5 sec. to system functions. Then press M to change the different items. All the settings will confirm automatically when power is on. Press **A** to confirm, to cancel.

Code	Function	Setting and options	Default
1	Temperature compensation	-9 to +9°C (for internal sensor)	0
2	Deadzone Temperature	1 ~ 5°C.	1
3	Sensor types	In: Internal Sensor (to control or limit the temperature) Ex: External Sensor (to control or limit the temperature) AL: Internal/ External Sensor (Internal sensor to control temperature, external sensor to limit temperature) Remark: Please make sure the right sensor. If choose the wrong or bad one, LCD will display Err, the thermostat will stop working until the failure is solved.	In
4	Low temperature protection setting.	5-10°C. When up to Max. 10°C, press A . When display "- -", cancel this function. When the detecting temp. is lower than the low temperature protection setting, heating equipment will be forced to open.	5
5	High temperature protection setting.	35-70°C. When down to Max. 35°C, press . When display "- -", cancel this function. When the detecting temp. is higher than the high temperature protection setting, heating equipment will be forced to close.	45
6	Button locking	0: All buttons are locked except power button. 1: All buttons are locked.	0
7 (1)	Weekend setting (optional)	0: Two-day Weekend: 12345 and 67 1: One-day Weekend: 123456 and 7. This function is just available for programmable thermostat.	1
7 (2)	Communication Protocol (optional)	0: The equipment could not be controlled by computer (communication protocol) 1: The equipment could be controlled by computer (communication protocol). This function is just available for RS485/Modbus thermostat.	0
8	12/24 hours	12h: 12 hours 24h: 24 hours	24h
9	Backlight Time	3-99 seconds	10
10	Intelligent Recovery	00: Programmable on time 01: Intelligent recovery. (system starts 30min. early when setpoint is reached by start of program period).	00
11	Return to factory setting	Press A to adjust rst0 to rst9. Press A again return to factory setting.	
12	485 Communication IP high address (optional)	00-FF	00
13	485 Communication IP low address (optional)	01-FF	01

Remark: 1. When the sensor type is AL, room temp. and floor temp. could be changed by pressing and holding **A** for 3 second.
 2. Press and hold **A** for 5 sec. to lock/unlock the button.

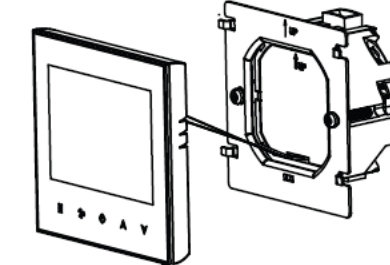
Installing your thermostat

This product is suitable for standard 86mm wall box or european 60mm round box.



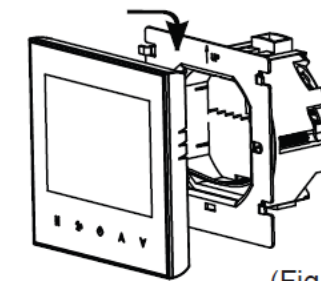
(Fig 1)

1. Connect the line of power and valve into the terminals. Fix the wall plate into the wall box by a screwdriver.

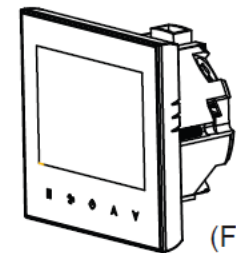


(Fig 2)

2. Connect the lines with the LCD board.



(Fig 3)



(Fig 4)

4. Finished.

3. Connect the LCD board into the wall plate.

WARNING: Please arrange the professional technician to install this product according to installation drawing and instruction.

RISK OF ELECTRICAL SHOCK. Disconnect power supply before making electrical connection. Contact with components carrying hazardous voltage can cause electrical shock and may result in severe personal injury or death.instruction.