Heating Room Thermostat

User Guide

Model：BHT-1000 Modbus

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 ensure a suitably qualified person installs your thermostat and complies with all local regulations.

Contents

Thermostat	1pc
Screws	1pc
Installation/programming manual	1pc
Wall plate	1pc
2.5m External (Floor) Sensor (optional)	1pc

Warranty

Your thermostat carries an 18 month warranty from date of purchase. Service outwith the warranty period may incur a charge.
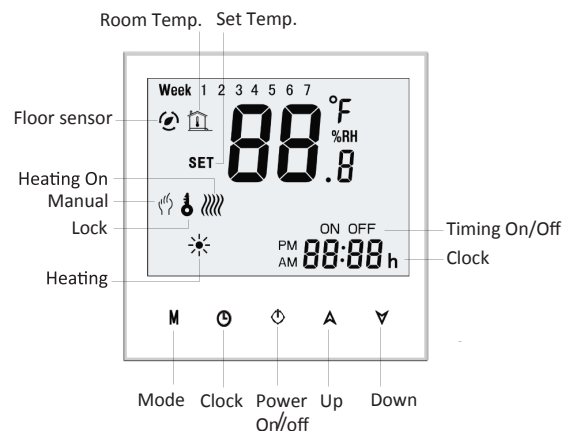
Your thermostat

The THP-1000 range has been developed to control electric underfloor or water heating or water/gas boiler system. These units are designed for use in commercial, industrial, civil and domestic properties.

Features

Simple installation
Acrylic face plate
Large, backlit display
Sleek, contemporary design
Elegant chrome frame
Feather touch control panel
5+2 six period per day programming
Simple, one-touch temperature control over-ride
Pre-set temperatures maintained within +/- 1°C
Internal and external sensors allow control of both air and/or floor temperatures
Suitable for installation in a standard single pattress box or European 60mm round box
RS485/MODBUS communication optional

Home screen quick reference

Technical Data

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

Operation/programming

1. Power on/off

Press ⏻ to turn on/off.

2. Adjusting/setting the temperature
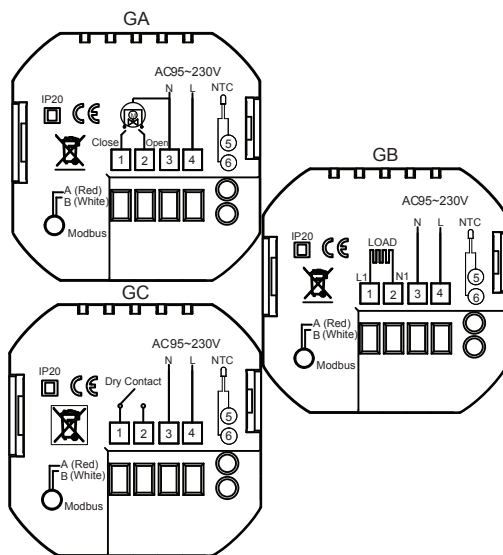
Press ∧ ∨ to set the desired temperature.

3. 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.

4.Locking your thermostat

Press and hold the 🕐 and ∧ arrows for 5 seconds to lock/unlock your thermostat.

GA

AC95~230V

N   L   NTC

IP20 CE

Close Open

1 2 3 4

⑤
⑥

A (Red)
B (White)

Modbus

GB

AC95~230V

N   L   NTC

IP20 CE LOAD

L1 N1

1 2 3 4

⑤
⑥

A (Red)
B (White)

Modbus

GC

AC95~230V

N   L   NTC

IP20 CE Dry Contact

1 2 3 4

⑤
⑥

A (Red)
B (White)

Modbus

Please note:

Do not over-tighten the terminals in your thermostat
as damage may occur.
GA for water heating, GB- for electric heating,
GC for water/gas boiler. External Sensor is optional.

RISK OF ELECTRICAL SHOCK. Disconnect/isolate
power supply prior to making electrical connections.
Contact with high voltage components can cause electrical
shock, severe injury or death.

5. System function settings

With power off, press and hold both M and 🕑 for 5
seconds to enter the System Functions. Press M to
scroll through the available functions, and use the ⋀
and ⋁ arrows to change the available options.
Your thermostat will automatically exit the System
Functions settings after approximately 15 - 20
seconds of inactivity. All settings are automatically

Code	Function	Setting and options	Default
1	Temperature compensation	-7 to +7℃ (for internal sensor)	-2
2	Deadzone temperature	1-5℃	1
3	Botton locking	00: All bottons are locked except power button. 01：All bottons are locked.	1
4	Sensor types	00：Internal Sensor（to control or limit the temperature） 01：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.	1
5	Min. Set Temp.	5-15℃	05
6	Max. Set Temp.	15-45℃	35
7	Display Mode	00：display both set temp. and room temp. 01：display set temp. only	0
8	High temperature protection setting.	25-70℃.	45
9	IP Setting	01-OxFF	01

 Please note:

1."Err" on your thermostat indicates a fault without the external
  (floor) sensor. Your thermostat will be inoperative until the error
  is rectified.
2. When sensor selection is "AL" (option 3 above) the room temp. will
  be displayed on your thermostat by default. The floor temp. can be
  displayed temporarily by pressin g the ⋁ button for three seconds.
  Your thermostat will revert to display the room temperature after
  several seconds.

Your thermostat is suitable for installation within
a standard 86mm pattress box or European 60mm
round pattress box.
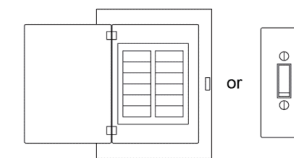Step 1. Keep power off. See Fig 1.

or
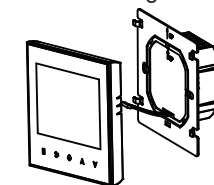
Fig 1

Step 2. Remove the mounting Plate. See Fig 2.

Fig 2

Step 3. Connect power supply, load and external (floor) sensor
into the appropriate terminals if there is external sensor.
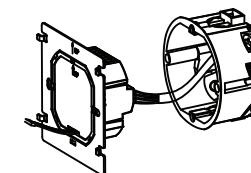(see "Wiring your thermostat" for details and Fig 3).

Fig 3

Step 4. Fix the mounting plate into the wall with screws in
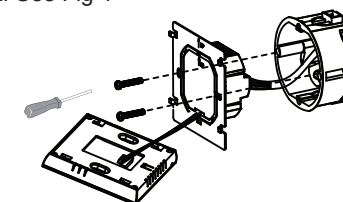the box. See Fig 4

Fig 4

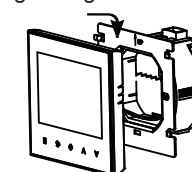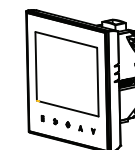Step 5. Fasten body of thermostat and the mounting plate
through the groove. See Fig 5.

Fig 5   Fig 6

Step 6. Installation complete. See Fig 6.