PREMTOOL

BHT-002 Heating Room Thermostat

(002FB: full black   002BW: black and white
002WB: whie and black   002FW: full white)

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 24 months warranty from date of purchase. Service outwith the warranty period may incur a charge.
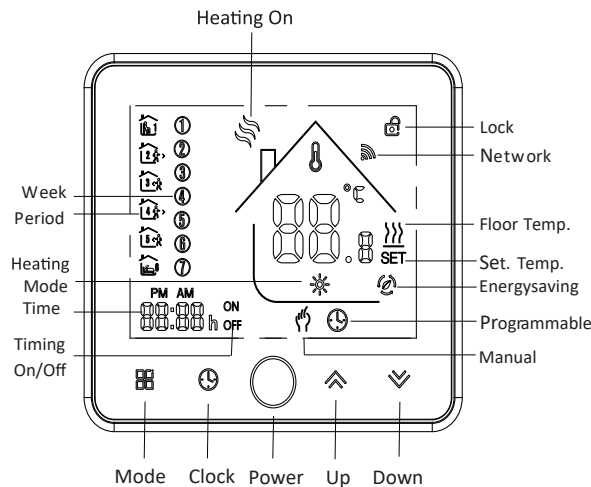
Your thermostat

The BHT- 002 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：5A（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.

5.Adjusting/setting the program schedules

Your thermostat provides six scheduled heating periods each day – three Comfort periods - 1, 3 & 5 (the temperature required when room is occupied) and three Economy periods – 2, 4 & 6 (the temperature required when room is unoccupied). You can set both the time and temperature for each of these six daily periods. Adjusting/setting the schedules can only be carried out when in program mode;

Touch 🔲 (mode) to change between manual mode and programme mode. In manual mode,

🖐 will show in the screen.

Touch the icon 🕐 for four times until the weekday schedule settings appear (1 2 3 4 5 will show along the top of the screen).

Use the ⌃ and ⌄ arrows to adjust the time for the 1st (Comfort) period

Press the icon 🕐 and use the ⌃ and ⌄ arrows to set the temperature for the 1st period.
Repeat this process for periods 2 – 6.
Press the icon 🕐 once more to enter the weekend schedule settings (6 & 7 will show along the top of the screen).
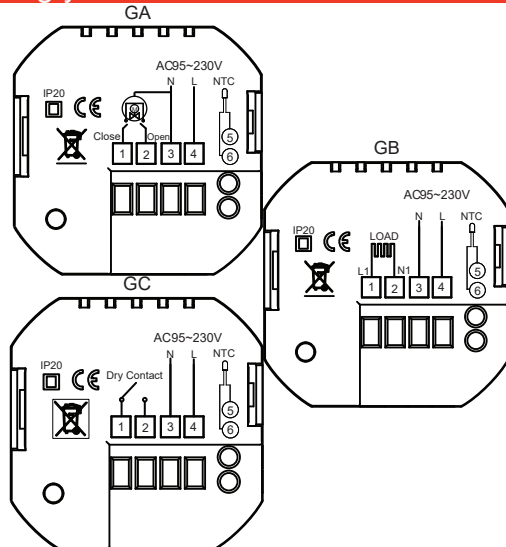Repeat the above process to set the weekend schedule. Press 🕐 once more to confirm and exit.

Default settings for program schedule

Time display	WEEKDAY (MON. – FRI.)		WEEKEND (SAT. – SUN.)	
	TIME	TEMP.	TIME	TEMP.
Period 1 (Comfort)	06.00 waken	24°C	06.00 waken	24°C
Period 2 (Economy)	08.00 leave	15°C	08.00 leave	15°C
Period 3 (Comfort)	11.30 home	15°C	11.30 home	15°C
Period 4 (Economy)	13.30 leave	15°C	13.30 leave	15°C
Period 5 (Comfort)	17.00 home	23°C	17.00 home	23°C
Period 6 (Economy)	22.00 bed	15°C	22.00 bed	15°C

Default settings above assume a 5+2 (day) weekly program.

Wiring your thermostat

GA

AC95~230V
IP20 · CE
Close Open
1 2 3 4 5 6

GB
AC95~230V
IP20 · CE
LOAD
L1 N1
1 2 3 4 5 6

GC
AC95~230V
IP20 · CE Dry Contact
1 2 3 4 5 6

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.

6. System function settings

With power off, press and hold both ⊞ and 🕐 for 5 seconds to enter the System Functions. Press ⊞ 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

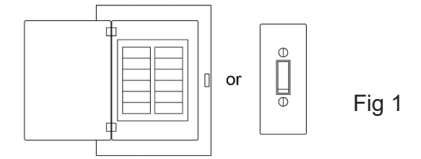| Code	Function	Setting & options	Default
1	Air temperature calibration	Range is -9°C to +9°C for internal sensor	-2
2	Deadzone temperature	1-5℃	1
3	Button locking	0: = All buttons will lock except the Power button 1: = All buttons will lock	1
4	Sensor selection	In = control temperature using the internal sensor Ou = control temperature using the external (floor) sensor Al = control temperature using internal sensor to **control** temperature, and external sensor to **limit** the floor temperature Remark: Please make sure the right sensor. If choose the wrong or bad one, LCD will display Err.	Ou
5	Minimum temperature setting	Range is 5°C - 15°C.	05
6	Maximum temperature setting	Range is 15°C - 45°C.	35
7	12/24 hour clock	0: 12h: = 12 Hour clock 1: 24h: = 24 hour clock	1
8	Display Mode	0：display both set temp. and room temp. 1：display set temp. only	0
9	High temperature protection setting.	25-70℃	45

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 temperature will be displayed on your thermostat by default. The floor temperature can be displayed temporarily by pressing the ⌄ button for three seconds. Your thermostat will revert to display the room temperature after several seconds.
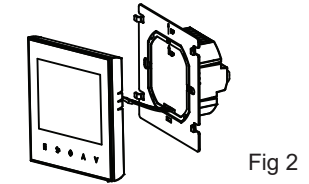
Installing your thermostat

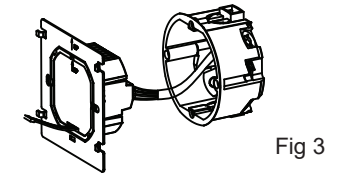Your thermostat is suitable for installation within a standard 86mm pattress box or European 60mm round pattress box.
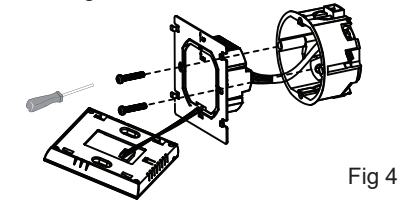
Step 1. Keep power off. See Fig 1.

or
Fig 1

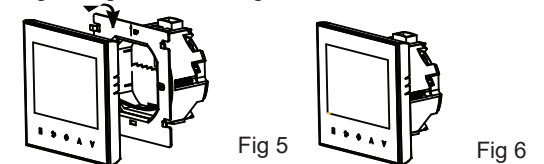Step 2. Remove the mounting Plate. See Fig 2.

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.

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.

Premtool Helpline number: 0800 772 0752