



FLOOR TOUCH™

Touchscreen Thermostat User Manual

IMPORTANT:

Ensure the mains supply is isolated prior to installation.

All heating mats and cables must be earthed.

Electrical work which is subject to Part P Building Regulations must be carried out by a qualified electrical engineer.

All work must conform to BS7671 and the latest 17th Edition wiring regulations.

GENERAL

- Weekly programming adopting the latest single-chip computer control technology.
- The clock continues after a power failure and the scheduled time settings will not be affected.
- Designed for electric underfloor heating. According to the pre-set temperature and time, the thermostat will automatically start and stop the floor heating.
- Multiple schedule settings available: 5+2 / 6+1 / 7 days. FLOOR TOUCH supports different temperature settings accordingly with 6 time modes daily.
- Users are free to choose manual and full automatic mode for operation.
- Keypad lock function.
- Flame retardant, safe and easy cleaning.

Wiring details: These are printed on the back of the thermostat casing.

The floor sensor is connected to terminals T1 & T2 (please note there is no polarity and the twin core sensor cable can be connected either way). The 230V electrical supply connects to terminals L (Live) & N (Neutral). The heating mat(s) connect to terminals L1 (Live) & N1 (Neutral). Earth connections are made with the back box. When the thermostat is powered for the first time you may see "OFF" on the screen in the lower sub-display.

Press ON / OFF symbol to activate and turn on your thermostat.

Keypad Lock - Press Clock symbol and Menu at the same time for 2 seconds.

Repeat to unlock. LCD display will show the temperature value when keypad is locked.

Technical Parameters

Power supply: 230VAC 50/60 Hz

Maximum switch power: 16A / 3,600 watts

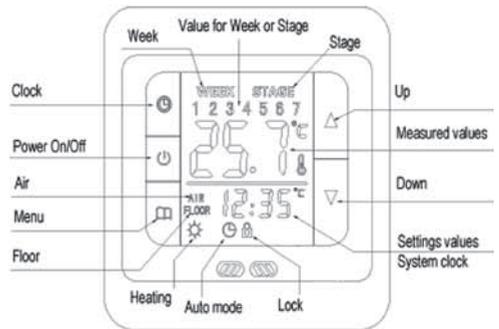
Internal Sensor: Setting Range 5°C ~ 35°C

External Sensor: Setting Range 5°C ~ 95°C

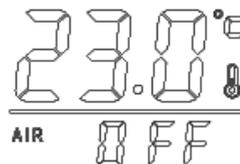
Sensor: NTC3380, 10Kohms @ 25°C

Temperature setting steps: 0.5°C

Display type: LCD **Display area:** 60 x 45mm



Press the power ON/OFF key to turn the thermostat ON or OFF. The display will be as below when turning OFF.



Three types of Temperature Control and Display

The thermostat can be set to operate in three different modes; **IN:** Internal, **OUT:** External, **ALL:** combined internal and external. The default setting is **IN**. Enter the advance functions to change the mode setting.

Internal control (IN): Based on built-in sensor temperature measurement & suitable for detection of air or room temperature only.

External control (OUT): Based on external temperature

measurement & suitable for floor temperature control only.

Dual temperature control (ALL): Temperature control based on built-in internal temperature sensor and external temperature sensor (over temperature protection). Suitable for detection of room temperature and floor temperature monitoring. If the external sensor is over temperature, the thermostat will shut down the heater.

When the setting is **IN** or **ALL** the main display shows air or room temperature. When the thermostat is set in **OUT** mode, the floor icon will be lit and the main screen will display floor temperature.

Press Menu to choose between Manual Mode and Automatic Mode.

Manual mode: The schedule programme is overridden and the temperature can be adjusted to your individual requirements. The system will control at this temperature without any change.

Automatic mode: System will control temperature according to the preset temperature values in different time settings. The Auto symbol will show, which means the system is running under Automatic mode.

In the Automatic mode, the main display area will alternately display the day of the week (**WEEK**) and the daily schedule stage (**STAGE**).

In the sub-display it will show the set temperature and time alternately.

Press UP & DOWN arrows to adjust temperature settings and other settings.

Setting the time and day of the week

Press the Clock symbol for 5 seconds to enter into time adjustment. The number representing the day of the week will flicker. Press UP or DOWN to select the day of the week, 1 = Monday, 2 = Tuesday and so on. Press Clock again and the hours will flicker. Use UP or DOWN to set the correct hour

then press clock again, the minutes flicker. Press UP or DOWN to set the correct minutes. Press Clock again to confirm.

To check the floor temperature when the thermostat is set in **ALL** mode, press Clock and DOWN at the same time. Then the large main display will show the floor temperature. The label FLOOR icon will appear in the lower sub-display.

Schedule Settings

Press Menu for 5 seconds to enter the schedule settings mode. The display will show the featured week e.g. 5 + 2 / 6 + 1 or 7 days. Each period can be set for the desired time and temperature. Six periods can be set P1, P2, P3, P4, P5 & P6. Use UP or DOWN to adjust the hours then press Menu, the minutes flicker. Press UP or DOWN to adjust the minutes. Press Menu then the large temperature displayed will flicker. Press UP or DOWN to adjust to the desired temperature in period P1. Press Menu to move onto the settings for P2. Repeat this procedure through P1 to P6. You can press the Clock icon to

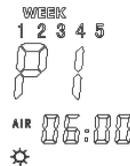
go back to previous settings. Finally, press ON/OFF twice to confirm.

If you want to turn off a period, then in the temperature setting for the period press DOWN until OFF is displayed in the temperature screen then press Menu to confirm.

To quickly return to the original display press ON/OFF twice.

The system default is 5 + 2 and the default settings are as the following table. For example, when the system time is Friday 08:20 under Automatic mode the display would show as **STAGE 2** and the set temperature value would be 15°C.

5+2 mode	ID	P1	P2	P3	P4	P5	P6
Monday to Friday	Start time	06:00	08:00	11:30	12:30	17:00	22:00
	Set value	22°C	15°C	15°C	15°C	22°C	15°C
Saturday to Sunday	Start time	06:00	08:00	11:30	12:30	17:00	22:00
	Set value	22°C	15°C	15°C	15°C	22°C	15°C



Temperature Override Facility – Manual Mode Only

This allows you to override the temperature setting at any time. For example, you arrive home early and want the heat on. Press Menu to enter Manual mode. Assume the set point in the schedule was 15°C and the room temperature is

actually 18°C. The heating will not be energised in this setting. Press UP or DOWN to adjust the temperature above 18°C. Let's say 22°C, and the heating symbol will appear and the heating is now ON.

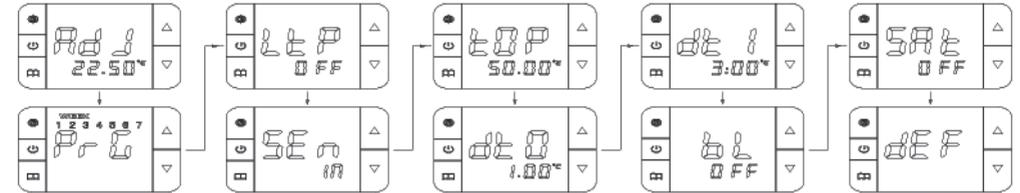
ADVANCED FUNCTION SETTINGS

Press ON/OFF until the sub-display shows OFF, press ON/OFF again, then immediately press Menu. You are now in the Advanced Function Settings. **The first display will be Adj.** Press Menu to navigate through the menu items. Use UP or DOWN to change the settings.

To save the data go through the functions then exit at any time by pressing the menu key.

WARNING: The settings are used to set some important parameters of the system and the thermostat has already been debugged and tested by professionals, there is no need to reset.

Do not make any improper modifications and permit changes only by a qualified person.

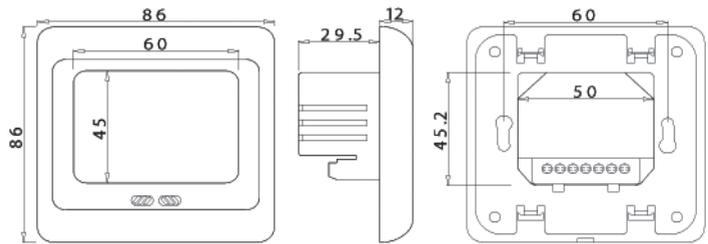
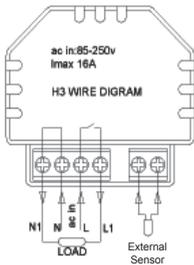
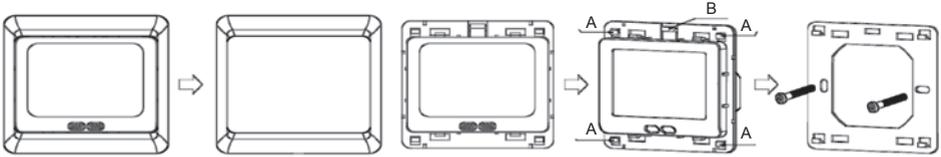


SETTINGS	DISPLAY	ADJUSTMENT RANGE	DEFAULT
Temperature calibration	Adj	-5°C to +5°C	-2.5°C
Schedule mode	PrG	5 + 2 / 6 + 1 / 7 5 + 2: Monday to Friday set the same; Saturday to Sunday set the same 6 + 1: Monday to Saturday set the same; Sunday set individually 7: Monday to Sunday set the same	5 + 2
Antifreeze	LtP	ON: Enable OFF: Disable	OFF
Sensor / Temperature Control mode	Sen	IN – Built-in internal control – room sensor only OUT – External control, floor sensor only ALL – Dual temperature control; internal room temperature sensor and external sensor with overheating protection	IN
External temperature limiter	tOP	40 to 80°C When the sensor mode is set to ALL this sets a temperature limit on the external sensor for overheating protection	50°C
Internal sensor hysteresis	dt0	0.5°C to 4°C - For example, if the internal sensor is set to 20°C with the default set to 1°C, then at higher than 21°C the heater turns off and at lower than 20°C the heater turns on	1°C
External sensor hysteresis	dt1	0.5°C to 5°C	3°C
Backlight status	bL	ON – Always on OFF – Auto turn off after 5 seconds	OFF
Status at re-power	Sat	ON – The same as previous OFF – Off status every time Keep this setting as default - OFF	OFF
Restore factory settings	deF	Restore to factory settings	

INSTALLATION

A: Hook B: Central fixing lug

1. Remove the bezel to start the installation by pushing the bezel away from the main body of the thermostat
2. Pull outwards on the central fixing lug and at the same time lift the whole body assembly so that the hooks on the steel back plate can be released. The steel back plate can then be removed
3. Screw the steel back plate into the back box but not too tight to prevent deformation of the steel plate
4. Make the wire connections into the back of the thermostat as shown in the H3 wire diagram
5. Align the four hooks and with a press down movement click the main body of the thermostat back in position on the steel back plate
6. Replace the bezel and the installation is complete



PROBLEMS AND SOLUTIONS

There is no display

- a) Check power supply to thermostat.
- b) Check the thermostat is wired as the wiring diagram on the back side of the thermostat.

Display ruptured

- a) Display has been subjected to abuse with hard objects or sudden force.

Display a black screen

- a) If the display surface temperature is too high. Please note whether there is a heater nearby and if so, remove.

Displays ER0 or ER1

- a) ER0: Built-in sensor is damaged. Avoid damage to the small black dot sensor which can be found behind the temperature sensing window of the main thermostat panel.
- b) ER1: The system is set in dual Temperature Control mode (**ALL**) and the external sensor is not connected or is damaged.

Missing segments from numbers or letters on LCD

Check whether the steel plate has been deformed during installation. If deformed, correct it.

Large deviation of measured temperature and the actual temperature

- a) The thermostat should be installed in a ventilated room and never in direct contact with sunlight or localised heaters.
- b) Check terminal connections, including the sensor.