

# Installation Instructions

Technical helpline - 0345 034 8272

Before proceeding identify a suitable location for the thermostat. It should NOT be located beside a window or door, in direct sunlight or next to a heat generating device such as a radiator or TV. The thermostat can be installed in bathrooms but it MUST be located outside of Zone 2 in accordance with current Wiring Regulations. If it is not possible for the thermostat to be installed in the bathroom then it MUST be located outside the bathroom in an adjacent room. With the thermostat located outside the bathroom the heating must be controlled using the floor sensor only.

## Backplate Installation

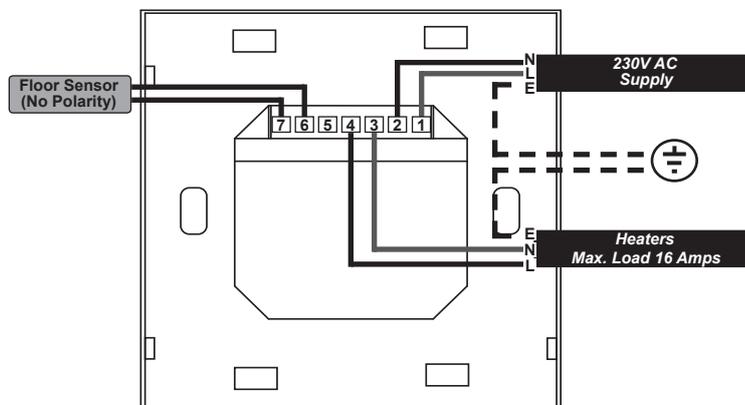
- Separate the backplate from the front face by gently releasing the four clips on the top and bottom of the front face
- Install a 50mm deep (min.) pattress in your preferred thermostat location
- Screw the backplate to the pattress using the two screws provided

## Wiring Connections



Installation should only be carried out by a qualified and competent electrician. The thermostat requires a permanent 230V supply from a 30mA RCD or RCBO protected circuit in accordance with the current edition of the BS7671 Wiring Regulations.

The thermostat and its power supply should be isolated from the mains supply throughout the installation process. Ensure that wires are fully inserted into the terminals and secured. There should be no free strands, as they could cause a short-circuit.



## Technical Specifications

- Operating Voltage: 230V AC +/-15% 50Hz
- Max. Load: 16A (3680W)
- Power Consumption: ≤2W
- Dimensions (H/W/D): 86 x 86 x 44mm
- Sensors: Air (internal) & Floor (external)
- Sensor Type: NTC10K (can be extended to 50m)
- Ambient Temperature Limits: -5 - 50°C
- Ambient Humidity Limits: RH < 85% (Non Condensing)
- IP Rating: IP20
- Installation Depth: 50mm back box
- Compatibility: Electric UFH, Hydronic UFH and Central Heating

## Advanced Settings

With the heating switched off **○**, **PRESS** and **HOLD** **▲** and **▼** simultaneously for 3 seconds to enter advanced settings.

**PRESS** **M** to scroll through the function No. Use **▲** and **▼** to adjust the setting

| No. | Function                      | Range  | Default |
|-----|-------------------------------|--|---------|
| 00  | Room sensor calibration       | -10°C - 10°C   | 00      |
| 01  | Floor sensor calibration      | -10°C - 10°C   | 00      |
| 02  | Sensor selection              | 00: Air sensor   01: Floor sensor   02: Both sensors | 00      |
| 03  | Maximum temperature           | 30°C - 60°C  | 35°C    |
| 04  | Minimum temperature           | 5°C - 15°C   | 5°C     |
| 05  | Hysteresis                    | 0°C - 10°C   | 1°C     |
| 06  | Frost protection              | 00: On   01: Off                                     | 00      |
| 07  | Weekly schedule day selection | 00: 5/2 Blocks   01: 6/1 Blocks   02: 7 Days         | 00      |
| 08  | Relay activation delay        | 0s - 10s   | 00      |
| 09  | Floor temperature limit       | 5°C - 60°C   | 35°C    |
| 10  | Holiday temperature           | 5°C - 20°C   | 10°C    |
| 11  | Temperature format            | 00: °C   01: °F                                      | 00      |
| 12  | Reset to factory settings     | 00: No   01: Reset                                   | 00      |

## Troubleshooting

| Code | Fault                                      | Action   |
|------|--|--|
| E1   | Air sensor short circuit or disconnected   | Exchange device or operate using floor sensor only   |
| E2   | Floor sensor short circuit or disconnected | Check the sensor resistance and replace if it is damaged. Expected resistance: 10kΩ at 25°C, 12.1kΩ at 20°C, 14.7kΩ at 15°C. |

## Warranty

This SunStone Touchstat thermostat is backed up by Warmup's team of engineers and is guaranteed against any fault caused by manufacturing defect for a period of 2 years from date of purchase. There is no other warranty, express or implied. No claim can be brought against the manufacturer or its agents for any consequential damages whatsoever. This warranty covers the cost of replacement or repair of the SunStone Touchstat thermostat only, subject to the discretion of the manufacturer. This is the sole warranty, express or implied. The manufacturer or its agents cannot be held liable for any resultant damages. Visit [sunstone.co.uk](http://sunstone.co.uk) to complete the warranty registration. Proof of purchase is needed in the event of a claim, so keep your invoice with this warranty. This warranty is subject to the following conditions:

1. This warranty must be registered online
2. The thermostat must have been installed and used in full accordance with this installation manual.
3. The thermostat must have been earthed and protected by an RCD at all times.
4. The warranty is returned to SunStone within 30 days of purchase of the heater(s).
5. If SunStone or its agents carry out diagnostic or remedial work as a result of a claim being made, agents shall have the right to levy reasonable charges for the work undertaken by them.
6. All electrical regulations are complied with and electrical work is undertaken by a qualified and Part P certified electrician.

This warranty does not cover heater failure due to incorrect installation or tiling. Please check that the heater is working (as laid out in the installation manual) prior to tiling.

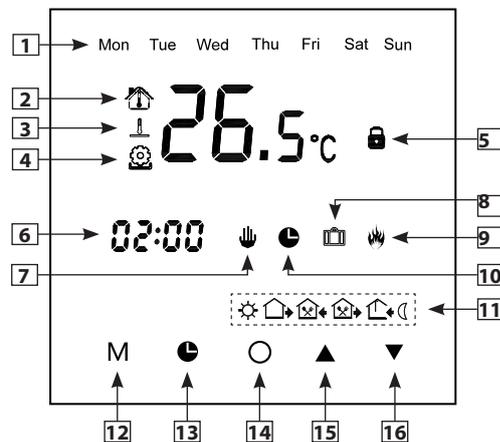
# Operating Instructions

- |          |                       |           |                        |
|----------|-----------------------|-----------|------------------------|
| <b>1</b> | Day                   | <b>9</b>  | Heating Indicator      |
| <b>2</b> | Room Temperature      | <b>10</b> | Program Mode           |
| <b>3</b> | Floor Temperature     | <b>11</b> | Schedule Period        |
| <b>4</b> | Adjustment Indicator* | <b>12</b> | Mode/Menu              |
| <b>5</b> | Key Lock Active       | <b>13</b> | Clock Programming      |
| <b>6</b> | Clock                 | <b>14</b> | Heating On/Off Button  |
| <b>7</b> | Manual Mode           | <b>15</b> | Up Navigation button   |
| <b>8</b> | Holiday Mode          | <b>16</b> | Down Navigation Button |

\* Adjustment indicator is visible whenever an settings are being changed.

**NOTE:** The thermostat will revert to the standby after 20 seconds if no selection is made.

**NOTE:** When both sensors have been configured, the display will automatically cycle between **ROOM** and **FLOOR** temperature (approximately every 10 seconds).



## Setting the Time & Day

- **PRESS** and **HOLD** for 3 seconds until appears
- The minutes will be flashing. **PRESS** or to set the minutes. Once this is set **PRESS**
- The hour will be flashing. **PRESS** or to set the hour. Once this is set **PRESS**
- The day of the week will be flashing e.g. **MON**. **PRESS** or to set the day. Once this is set **PRESS** to exit programming

## Selecting Manual Mode or Heating Schedule

- **PRESS** to switch between schedule and manual mode

Manual mode allows you to set a fixed temperature for the thermostat to maintain

Setting a Heating Schedule allows you to set comfort temperatures at set times throughout the day. The thermostat can be set so that **MON - FRI** is programmed as a block with **SAT** and **SUN** programmed as another block (7/2). It can also be configured for **MON-SAT** as a block and **Sun** individually (6/1). The final option is seven days programmed to the same schedule (7). This can be changed in the advanced settings. Typically when setting a 6 period schedule, periods 1,3 and 5 will be heating periods with periods 2,4 and 6 being setback or "Off". If not all periods are to be used, the unused periods should be set the same as the next on period. See a heating schedule example below;

| Period   | Time  | Temperature | Comment   | Schedule Period |
|----------|-------|-------------|---|-----------------|
| Period 1 | 06:00 | 20°C        | Wake up. Initial heating period of the day          |                 |
| Period 2 | 08:00 | 15°C        | Leaving the house.                                  |                 |
| Period 3 | 17:30 | 22°C        | Back for lunch (Unused period)                      |                 |
| Period 4 | 17:30 | 22°C        | Leave from lunch (Unused period)                    |                 |
| Period 5 | 17:30 | 22°C        | Back home   |                 |
| Period 6 | 22:00 | 15°C        | Go to bed. Final period of the day                  |                 |
| Period 1 | 08:00 | 22°C        | Weekend. Wake up. Initial heating period of the day |                 |
| Period 2 | 23:00 | 15°C        | Weekend. Go to bed. Final period of the day         |                 |

## Operating in Manual Mode

- **PRESS** or to adjust your target temperature

**NOTE:** The target temperature(s) must be above the current air and/or floor temperatures for the heating to be activated.

**NOTE:** To switch the heating off, **PRESS**

## Operating in Schedule Mode

### Setting a Heating Schedule

The weekly schedule can be configured as 7 day, 5/2 days or 6/1 days which can be selected in the advanced settings. To program the periods;

**MON - FRI or MON-SAT Block - Programmed times and temperatures will be the same for everyday of the block e.g. Monday to Friday**

- With the heating switched off , **PRESS** and **HOLD** for 3 seconds until appears and the time begins to flash
- The current schedule period indicator will be displayed, to indicate the period being programmed
- **PRESS** and to adjust the parameters
- **PRESS** when done to move to the next adjustment (temperature/next period)
- Repeat the steps above to program the time and target temperatures for the other periods as required
- After adjusting period 6 for each block, you will be taken to period 1 of the following block, unless set to 7 day in advanced settings
- To exit after completing your changes, **PRESS** the heating ON/OFF button

### Setting a Temporary Override

When the thermostat is set to schedule mode, setting a temporary override allows you to set a temperature you would like the thermostat to reach until the next period. **PRESS** or to set the target temperature. When a temporary override is set and will be displayed.

## Holiday Mode

**PRESS** and **HOLD** for 3 seconds until holiday mode appears. Repeat to switch off holiday mode. See advanced settings for holiday temperature.

## Locking the Thermostat

**PRESS** and **HOLD** for 3 seconds until the lock appears. Repeat to unlock the thermostat.