

# P-Stat + Programmable Thermostat

## EN - INSTALLATION INSTRUCTIONS

### Technical Specifications

- Model - P-Stat +
- Operating Voltage - 100 - 240 V AC 50/60 Hz
- Max. Load - 16 A (3840 W)
- Dimensions - (H/W/D): 81 x 81 x 25 mm (from wall surface)
- Sensors - Air & Floor
- Sensor Type - 2.5m NTC 100K (can be extended to 50 m)
- Insulation Class - II
- IP Rating - IP21
- Installation Depth - Min 35mm Pattress
- Compatibility - eUHF
- Er-P Class - I
- Standards - EN60730-1 & EN60730-2-9

### Safety Information

**IMPORTANT INFORMATION:** Installation should only be carried out by a qualified and competent electrician. The P-Stat + requires a permanent power supply from a 30mA RCD protected circuit in accordance with the current edition of the 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, with no bare wire visible and secured. Any free strands should be trimmed, as they could otherwise cause a short-circuit.

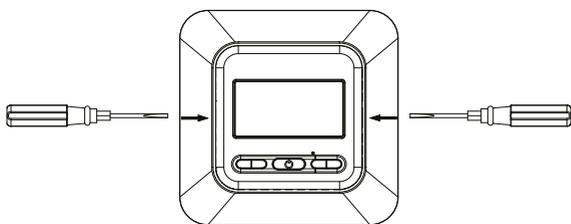
### Installation

#### Step 1 - Identify Suitable Location

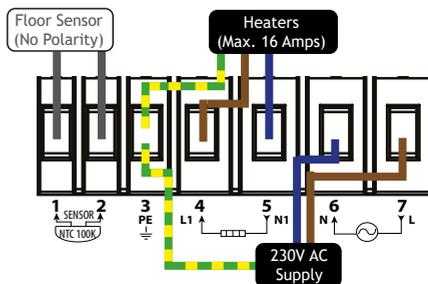
Before making any permanent fixtures it is recommended identifying your preferred location for the thermostat. It should be located in an area with good ventilation. It should not be beside a window/door, in direct sunlight or above another heat generating device (e.g. radiator or TV).

**BATHROOM INSTALLATIONS:** When installing the thermostat within a bathroom it MUST be mounted outside of Zone 2 in accordance with Wiring Regulations. If it is not possible to identify a suitable location outside of Zone 2 within the bathroom, then it is recommended that the thermostat is installed in the adjacent room and set to control the heating by floor temperature only. When installed in this way, it is not possible to directly control the heating based on the room air temperature, only the floor surface temperature.

#### Step 2 - Installation and Wiring Connection



Gently press a flat head screwdriver into the plastic release clips highlighted above and pull face outwards, unclipping from the base. Place the frame and thermostat face somewhere safe.



Wire as shown above and install to a 35mm deep (min.) pattress

- 1 & 2: NTC100K Floor Sensor (No Polarity)
- 3: PE - Supply and Load Earth
- 4: L1 - Load Live
- 5: N1 - Neutral Live
- 6: N - Supply Neutral
- 7: L - Supply Live

## Advanced Settings

To access advanced settings, **PRESS** and **HOLD** ▲ and ▼ simultaneously for 5 seconds.

**PRESS SET** to navigate through the different advanced settings. Use ▲ or ▼ to adjust the setting. **PRESS OK** to exit advanced settings

Display	Function	Range		Default
CL	Display temperature calibration	-4 °C - + 4 °C		0
bL	Backlight	1 = (OFF) 2 = (ON) 3 = (Always ON)		2
AF	Sensor selection	A = Air sensor	F = Floor sensor	AF = Air with floor limit**
AH	Set maximum settable temperature for floor sensor (F), air sensor (A) and air sensor with floor limit (AF)	Floor Sensor (F) + 18 °C - + 45 °C Air Sensor/Air Sensor with Floor Limit (A/AF) + 18 °C - + 35 °C		F = (45 °C) A = (35 °C) AF = (35 °C)
FL	Minimum floor temperature limit	Floor Sensor (F) + 5 °C - + 20 °C		10 °C
FH	Maximum floor temperature limit	Floor Sensor (F) + 25 °C - + 50 °C		50 °C
PS	Weekly schedule day selection	3 = (1-5 Block, 1 + 1)	7 = 7 Days	3
CS	No. of programs per day	P4 = 4 Programs per day / P6 = 6 Programs per day		P4
CF	Select °Celsius / °Fahrenheit	C = °Celsius / F = °Fahrenheit		°C
CO	Set 24hr / 12hr Clock	24h / 12h		24h
LD	Set heating load*	HH = (16 - 12 A), H = (11 - 8 A), L (≤7 A)		H
SE	Sensor Selection	100 = 100K / 10 = 10K sensor		100
To reset advanced settings to factory default <b>PRESS</b> and <b>HOLD</b> ▼ for 3 seconds when the thermostat is idle and the heating schedule mode is displayed,  . ConF will flash, <b>PRESS OK</b> to accept.				

\* Failing to set the Heating Load correctly will reduce the accuracy of the thermostats air temperature reading

\*\* To view current floor temperature when the thermostat is set to AF (Air with floor limit), **PRESS** and **HOLD** ▲ for 3 seconds

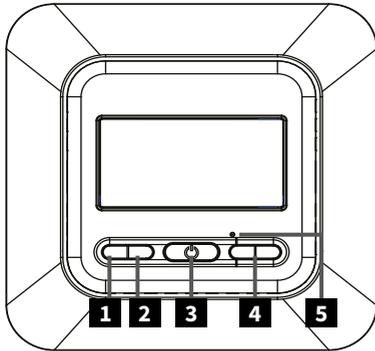
## Troubleshooting

Code	Fault	Action
E1	Floor sensor short circuit in type F or AF	Check the sensor resistance and replace if it is damaged. Expected resistance: 100kΩ at 25 °C, 125.5kΩ at 20 °C, 157.4kΩ at 15 °C
E2	Floor sensor not installed or broken in type AF	Check the sensor resistance and replace if it is damaged. Expected resistance: 100kΩ at 25 °C, 125.5kΩ at 20 °C, 157.4kΩ at 15 °C
E3	Air sensor short circuit	Exchange device or operate using floor sensor only
E4	Air sensor damaged	Exchange device or operate using floor sensor only
E5	Wrong floor sensor installed	Remove floor sensor and install a 100K or 10K floor sensor

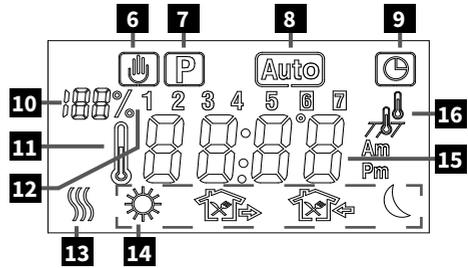
**Open Window Function** - The P-Stat + features open window function which detects when there is a sudden drop in temperature (1.5 °C or more within 3 minutes) when a window is opened and will switch your heating off saving you energy. The heating will reactivate if the temperature increases again (1.5 °C in 30 minutes). **PRESS** any button to return to heating schedule mode.

# P-Stat + Programmable Thermostat

## EN - OPERATING INSTRUCTIONS



- 1 - Set Button
- 2 - OK Button
- 3 - Power Button
- 4 - Navigation Buttons
- 5 - Factory Reset (Insert pin)
- 6 - Manual Mode
- 7 - Displayed When Programming
- 8 - Heating Schedule Active
- 9 - Heating Schedule Mode
- 10 - Advanced Setting Configuration



- 11 - Displays current Floor/Air Temperature
- 12 - 1-7 Days of the Week
- 13 - Heating Indication
- 14 - Schedule Period
- 15 - Temperature (Clock)
- 16 -



### Setting Time/Day

- PRESS SET when the thermostat displays current floor/air temperature.
- PRESS SET again, the minutes will flash. PRESS ▲ or ▼ to set the minutes.
- PRESS SET again, the hour will flash. PRESS ▲ or ▼ to set the hour.
- PRESS SET again, the day of the week will flash (1-7). PRESS ▲ or ▼ to set the day. PRESS SET to finish.

To view the current time PRESS SET while the thermostat is idle. The thermostat will revert to its idle display after 20 seconds or if you PRESS OK.

### Setting Manual Mode or Heating Schedule

- PRESS and HOLD OK for 3 seconds to switch from schedule (clock icon) to manual mode. (hand icon)
- PRESS OK once to return to schedule mode.

**Manual Mode** - Allows you to set a fixed temperature for the thermostat to maintain.

**Heating Schedule** - 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 (1 - 5) is programmed as a block with SAT (6) and SUN (7) programmed individually. Alternatively the thermostat can be set so that you program each day individually, see advanced settings on how to switch between schedule 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". To switch to a 4 period schedule see advanced settings.

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	
Period 4	17:30	22 °C	Leave house after lunch	
Period 5	17:30	22 °C	Back home	
Period 6	22:00	15 °C	Go to bed. Final period of the day	

## Operating in Manual Mode

- PRESS ▲ or ▼ to adjust your target temperature. PRESS OK to finish.

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

## Operating in Schedule Mode

### Setting a Heating Schedule

The weekly schedule can be configured to operate on 3 schedules, (Weekdays, Saturday, Sunday) or 7 schedules, with each day on own. The schedule format can be changed in the advanced settings.

- With the heating schedule mode displayed , PRESS and HOLD SET for 3 seconds until 1 - 5 block begins to flash.
- PRESS SET again to begin setting the start time of the 1st period.
- PRESS ▲ or ▼ to adjust the parameters.
- PRESS SET when done to move to the next adjustment (target temperature / next period).
- Repeat the steps above to program the time and target temperatures for the other periods.
- PRESS OK to finish.

To reset your heating schedule to factory default PRESS and HOLD ▼ for 3 seconds when the heating schedule mode is displayed . ConF will flash, PRESS SET, ProG will flash, PRESS OK to accept.

**NOTE:** If set to 7 day in advanced settings each day will have to be programmed individually.

### Setting a Temporary Override

When the thermostat is set to heating 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 both  and  will be displayed.

The thermostat will resume its normal schedule at the start of the next period, alternatively to cancel a temporary override and return to heating schedule mode PRESS OK.

## Warranty

This SunStone 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 P-Stat + 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.**

## Contact

Technical Helpline - 0345 034 8272  
Warmup Plc, 702 & 704 Tudor Estate, Abbey Road, London, NW10 7UW