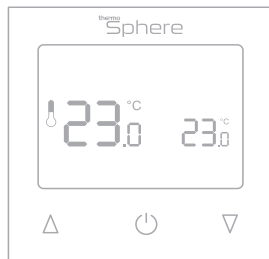


# thermo Sphere

**CONTROL** | TOUCH  
SINGLE MANUAL



Excellence in heating **solutions.**

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# Compatibility

This thermostat is compatible with ThermoSphere NTC 10K floor sensor probes.

NTC 10k $\Omega$  @ 25°C

If you have an existing floor probe from another thermostat that is not compatible, set your thermostat to ambient temperature sensing mode.

(Not advisable for timber or other temperature sensitive floors).

Replacing an existing thermostat?

Contact the manufacturer's technical department and ask for the rating of the floor sensor at 25°C.

# What's in the box?

Check you've got everything:

- Thermostat
- Floor sensor probe (3m)
- Floor sensor conduit (2m)
- Fixing screws
- Installation guide and warranty information

You will also need:

- Electrical screwdriver
- Deep electrical back box
- Electrical test meter

# Before you start

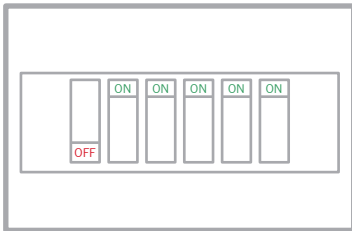
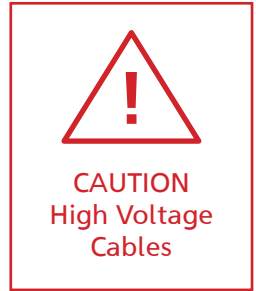
Your thermostat should be:

- Installed 1.2 - 1.5m from the floor
- On an internal wall
- Outside any wet zones (IP30)
- Installed on an RCD protected circuit
- Away from drafts or heat influences
- Installed so that the floor sensor probe can be laid in a heated area of the floor
- Installed by a professional, in line with current electrical regulations and relevant local standards

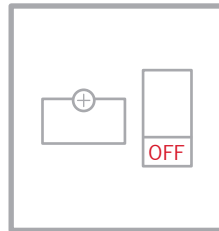
# Installing your thermostat

## 1. Switch off mains power

You will be installing your thermostat as part of a high voltage mains electrical circuit. To ensure your safety and to protect the thermostat, switch off the mains power and remove fuse from the spur before you start the installation.



Fuse Box



Fused Switch

# Installing your thermostat

## 2. Installation location

At this stage it is likely that an RCD protected electric underfloor heating system has been installed and a back box is already in place.

The underfloor heating cold tail should be pulled up through the back box, and the sensor probe installed (in the conduit provided) within the wall cavity or pre chased channel in a solid wall.

# Installing your thermostat

## 3. Maximum distances

Your thermostat can be installed up to 50m away from the underfloor heating system it is controlling, provided that the floor sensor is used to control the temperature.

Underfloor heating cold tails and floor sensor probes can be extended up to 50m.

Connect multiple heaters in parallel.

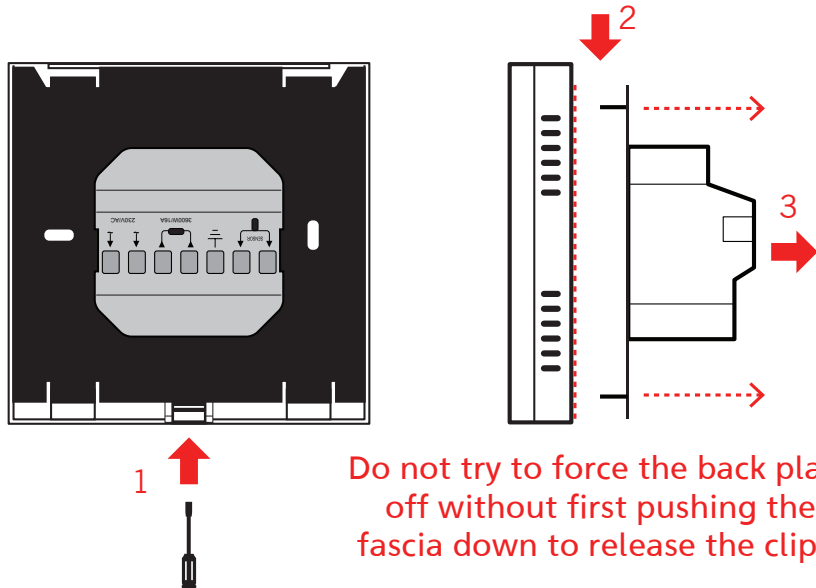




# Installing your thermostat

## 4. Release mounting plate

Use a flat screwdriver to press is the catch and push the fascia down as shown to release the clips holding the back plate and the thermostat fascia together. Disconnect the white ribbon cable.



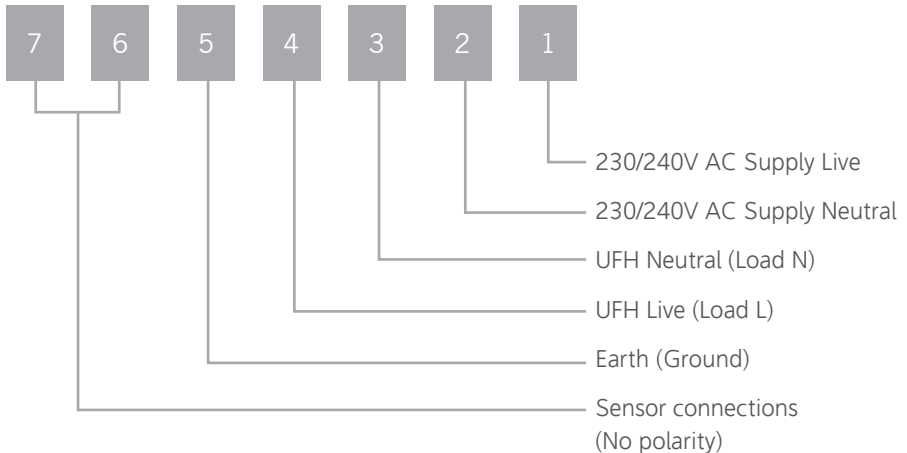
**Do not try to force the back plate off without first pushing the fascia down to release the clips!**

# Installing your thermostat

## 5. Wiring diagram

Connect the Thermostat to the underfloor heating (UFH) cold tail, power supply and floor temperature sensor.

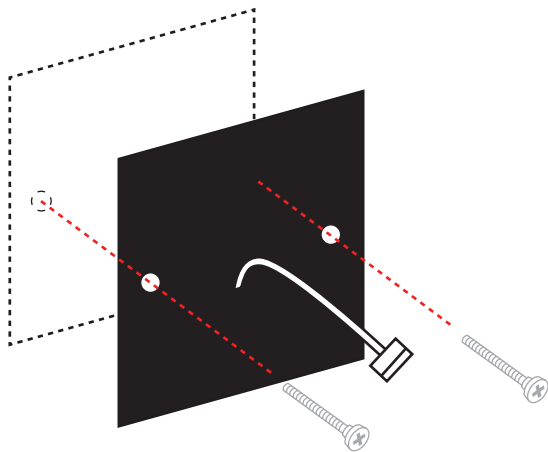
The floor temperature sensor is not polarity sensitive.



# Installing your thermostat

## 6. Fix mounting plate in position

Use a cross-head screwdriver to fix the mounting plate to the back box in the wall. Now you can connect the white ribbon cable to the fascia.



# Installing your thermostat

## 10. Switching on your system

It is important that all adhesives and grouting is dry and fully cured before you switch on your underfloor heating.

Most adhesives take between 7 to 10 days to cure. Follow manufacturer guidelines.

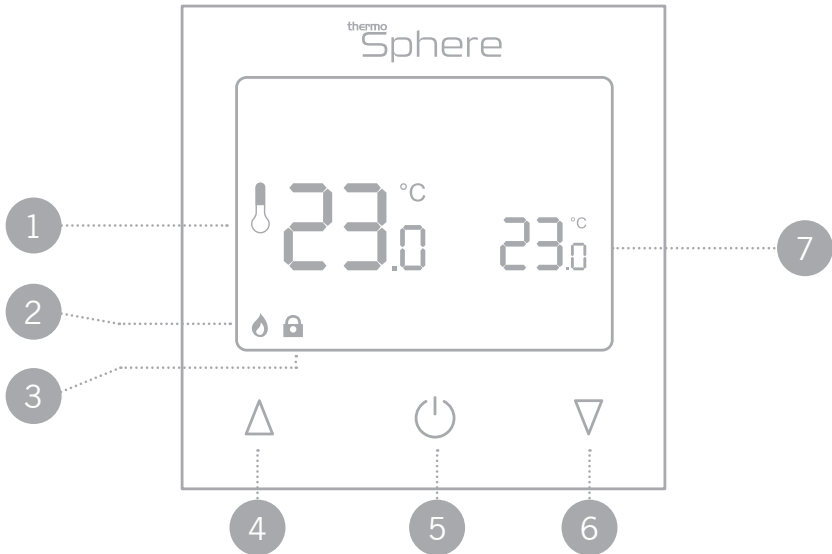
The temperature of your underfloor heating should be increased gradually to avoid thermal shock in the floor. Start at 15°C and work up to your desired temperature 2-3°C per day.

Observe any maximum temperature guidelines from your floor manufacturer.



Wait for  
7 - 10 Days  
before you  
switch on


# User interface



1. Measured temperature
2. Heating on icon
3. Lock icon
4. Up arrow
5. Power button
6. Down arrow
7. Set temperature

# Advanced settings

## Adjusting the advanced settings


To access the settings, switch the unit off by pressing .

Press and hold  and  together for 7 seconds.

Press  to cycle between settings.

Use  and  to adjust the settings.

When you're finished leave the control idle for 30 seconds to save your settings. It will then switch off automatically.

Switch the unit on by pressing  to use the control with your new settings.

# Advanced settings

MENU	DESCRIPTION	RANGE	DEFAULT
01	Temperature calibration	-8°C ~ 8°C	0°C
02	Maximum set point	5°C ~ 80°C	35°C
03	Minimum set point	5°C ~ 80°C	5°C
04	Sensor mode	IN (Ambient), OUT (Floor), ALL (Ambient with floor limit)	OUT
05	Frost protection	5°C ~ 15°C or - (Off)	5°C
06	Floor temperature display	(ALL sensor mode only)	
07	Temperature limit	10°C ~ 80°C (ALL mode only)	35°C
08	Status after power failure	LA: On as before, OF: Off after power failure	LA
09	Software version	5215: 7021 V1.1 5216: 5101 V1.1	
10	Factory reset	rE (yes)	
11	Backlight timer	10 secs - 300 secs (5 mins)	20s
12	Backlight brightness level	1 (min), 2, 3, 4 (max)	4



# Technical data


Supply voltage	230V 50/60Hz
Maximum load	16A
Backup storage	EEPROM
Temperature range	5 ~ 80°C (0.5°C increments)
Accuracy	±0.5°C
Sensor rating	NTC 10kΩ @ 25°C
Consumption	2W
Warranty	3 years
IP rating	IP30
Width	85mm
Height	85mm
Depth	46mm (31mm in wall)





# Factory reset & key lock

## Locking the keys

To lock the keys press and hold  and  together for 7 seconds.

The  icon will appear when the keys are locked and the keys will not function.

To unlock the keys press and hold  and  together for 7 seconds.

## Factory reset

Find menu item 10 in the advanced settings.

Press  and then press .

The thermostat will switch off and reset to factory settings after 10 seconds. This will totally erase any adjusted settings.

# Notes

# Notes

thermo  
Sphere

S-MAN-H-01

ThermoSphere  
Pattenden Lane  
Marden  
TN12 9QJ

0800 019 5899  
hello@thermosphere.com  
thermosphere.com

Excellence in heating solutions.