# **Digital Touchpad Thermostat Technical Manual**

## **Product Specifications**

☆ Power: AC 200-240Vac 50/60HZ

☆ Range of temperature display:: 0~99°C
 ☆ Probe sensor:: NTC(10k)1%

☆ Display accuracy:: 0.5°C

☆ Contact capacity: 16A

## **Before installation**

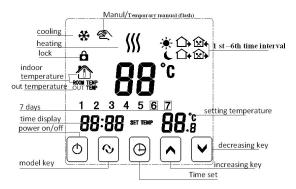
- Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
- 2. Check the ratings given in the instructions and on the product to make sure it is suitable for your application.
- 3. Installer must be a trained and qualified Electrician
- 4. After installation is complete check operation as per these instructions



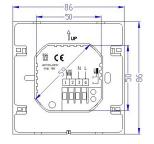
#### CAUTION

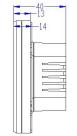
Disconnect power supply before installation to avoid electrical shock or equipment damage.

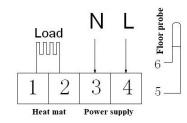
## **Display**



## **Wiring Diagram**







Connect the heating mat to 1 & 2, connect the power supply to 3 & 4 and connect the floor probe to 5 & 6. If you connect it incorrectly, there will be a short circuit and the thermostat may become damaged and the warranty will be invalid.

You must always install the floor probe sensor. If you are installing the thermostat in a bathroom or wet room, then the thermostat needs to be placed outside the room and the floor probe needs to be inside. Always check that the temperature limit for the floor probe is set to a suitable temperature for your flooring (typically 27°C). This can be done in the advanced setting menu 2 (OSV)

Always test the floor probe before installing. Use a multi meter or mega tester with the setting turned to kOhms. The reading should be between 10-12 Ohms.

#### Description of icon

"
Manual control when hand is solid, temporary manual control when flashing.

"\" System is heating

\*\*" Frost mode active

"- 1st time schedule active

" 2<sup>nd</sup> time schedule active

1 4<sup>th</sup> time schedule active

"C" 6<sup>th</sup> time schedule active



Child lock

#### Operation Key

NO	symbols	represent
Α	Ф	Turn ON/OFF: Short press to turn on/ turn off
В	Ð	Short press to switch between automatic mode and manual mode
		2. Turn on thermostat then long press for 3-5 seconds to enter settings
С	(1)	1. Short press it to set time
		2. Confirm key
		3. hold for 5-10 seconds to lock the thermostat
D	^	1 Decrease key
E	>	1 Increase key

## **Step 1: Setting time and date**

When you turn on the thermostat for the first time you will need to set the time and the number that corresponds to the current day of the week (1-7 starting from Monday). This can be done by following the steps below:

- 1. Press the  $\oplus$  button and the time in the left corner will start flashing.
- 2. Press ∧ or ∨ to get to the desired minute and then press ⊕
- 3. Press or ✓ to get to the desired hour and then press ⊕
- 4. Press o or ✓ to change the day number. 1=Monday 2=Tuesday 3=Wednesday 4=Thursday 5=Friday 6=Saturday 7=Sunday Once you have selected the day press ⊕ to confirm
- 5. You will now be ready to set the temperature. This can be done by pressing ∧ or ∨. The set temperature is displayed in the right corner.

To protect the flooring it is recommended to start out at a low temperature and increase the temperature  $1^{\circ}$ C a day until you reach a comfortable heat. This only needs to be done once.

Step 2 - Programming heating schedule

		<b>○</b> +		<b>X</b> +		<b>₩</b>		<b>□</b> +			
Warm up		Cool down		Warm up		Cool down		Warm up		Cool down	
6: 00	20°C	8: 00	15°C	11: 30	15°C	12:30	15°C	17:00	22°C	22:00	15°C

Above is the default settings for the time schedules.

Each day is divided into 6 periods. Wake up, sleep and 4 periods in between. When you are at home, set the period at a "comfort" temperature (typically 18C-21C). When you are out of the property or asleep, set the temperature of the period much lower (typically 15C-16C). This will help to reduce your energy costs.

It is recommended that you set the thermostat to come on 30 minutes prior to your required time in order to give it time to heat up the system.

#### To programme the timings do the following:

- 1. When power is on, long press  $\mathfrak{S}$  for 5-10 seconds to enter programming mode.
- 2. "Loop" will appear on the bottom of the screen. Press  $\, \Im \,$  to enter the settings
- 3. The temperature will now flash. Press ♥ and ∧ to adjust temperature.
- 4. Press the  $\, ^{\bigcirc}$  and the hour will now flash. Press  $\, \stackrel{\checkmark}{\checkmark} \,$  and  $\, \stackrel{\wedge}{\land} \,$  to adjust the hour.
- 5. Press the ⊕ and the minutes will now flash. Press ✔ and ∧ to adjust the minutes.
- 6. Once you have set the time and temperature press  $\circ$  to go to the next set of times and repeat steps 3-5 for each of the 6 time periods
- 7. When you have set all the time periods press  $\, \Im \,$  to return to the main screen

<u>Important:</u> Please note after about 10 seconds it will automatically exit so this process needs to be done relatively quickly.

## Sensor fault display

Please choose correct setting of built-in and external sensor, if chosen wrongly or if there is a sensor fault (breakdown) then error "E1" or "E2" will be displayed on the screen. Thermostat will stop heating until the fault is eliminated. If this occurs ask the electrician to redo the probe tests to ensure the cable was not damaged during installation.

#### Advanced options

When the thermostat is off, press  $\bigcirc$  +  $\bigcirc$  for 3-5 seconds to access advanced setting. Short press  $\bigcirc$  to choose the option, and adjust data with  $\checkmark$  and  $\land$ , short press  $\bigcirc$  to switch to the next option.

NO	Setting Options	Data Setting Function	Factory Default
SEN	Sensor Selection	0: Air sensor only (do not use) 1: Floor probe only 2: Air sensor and Floor probe	2
osv	Floor probe temperature limit	5-99°C	27°C
dIF	Floor probe switching differential	1-9°C	2°C
SVH	Upper temperature limit	5-99°C	35°C
SVL	Lower temperature limit	5-99°C	5°C
Adj	Temperature measuring accuracy	Measure temperature and calibrate.	0.1°C Precision
FrE	Anti-freezing function	00: Anti-freezing function shut down 01: Anti-freezing function open	00
POn	Power on memory	00: Power on no need memory 01: Power on need memory	00
FAC	Reset to factory default	00: Restore to default 08: No meaning just display purposes	08

# Warranty

We offer the warranty of 12 months, from the day of purchase. Beyond the warranty period we will charge for the after-sale service.