## TNTRL / TNTRLB Touchscreen Thermostat Installation & User Guide

## **Installing the Thermostat**

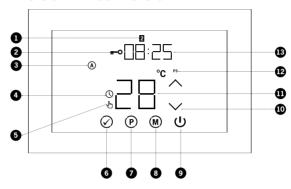
Carefully separate the front half of the thermostat from the back plate by placing a small flat head terminal driver into the slots on the bottom face of the thermostat. Carefully unplug the cable connector which is plugged into the front half of the thermostat. Place the thermostat front half somewhere safe. Follow the wiring diagram to connect the floor heating cold leads, remote temperature sensor and electrical supply to the appropriate terminals. Screw the thermostat back plate on to the electrical mounting plate. Re-connect the thermostat cable and clip the two halves together.

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## **Technical Data**

Supply voltage	220 - 240VAC
Maximum load	18A (15A + 3A)
IP Rating	IP20
Warranty	2 Years
Width	120mm
Height	80mm
Depth	45mm (27mm in wall)
Temperature Range	5°C - 35°C
Floor Sensor Resistance at 25°C	10ΚΩ
Orientation	Landscape

## **User Interface**



- 1. Day indicator
- 2. Key lock icon
- 3. Air/Floor sensoring mode
- 4. Schedule mode icon
- 5. Manual mode icon
- 6. Confirm settings
- 7. Program button
- 8. Mode button
- 9. Power button
- . . . . . . .
- 10. Up & down arrows
- 11. Temperature indicator
- 12. Program period
- 13. Time

## Setting the date and time

Press ⊘ and the time will begin to flash. Use ∧ ∨ to select the correct time.

Press ⊘ to save the settings.

## **Heating Modes**

When the unit is on, press @ to switch between manual and schedule modes.

#### Manual Mode &

In the manual mode press the  $\wedge$   $\vee$  to set the desired temperature in the thermostat setting or ON/OF in the towel rail timer setting.

#### **Schedule Mode** ①

In the schedule mode the unit will follow the heating schedule that is set.

By pressing  $\wedge$   $\vee$  the arrows it will override the current programmed temperature until the next programmed period.

## **Advanced Settings**

To access the advanced settings, turn the unit off by pressing  $\phi$ 

Press @ to display setting 01. Use the  $\wedge \vee$  to adjust the settings

Menu	Description	Range	Default
01	Sensor Mode	A=Air Sensoring Only F=Floor Sensoring AF=Air & Floor Sensoring	A= Air Sensoring Only
02	Switching Differential	1°C, 2°C10°C	1°C
03	Air Temp Calibration	-5°C - 5°C	0°C
04	Floor Temp Calibration	-5°C - 5°C	0°C
05	Auto Exit Time	5 – 30 seconds	20 Seconds
06	Temperature Display Mode	A: Display air temp only F: Display floor temp only  AF: Display air & floor temp alternatively	A: Display air temperature only
07	Max Floor Temp Limit	20°C - 40°C	40°C by default
08	Backlight Timer	0, 10, 20, 30, 40 50, 60, ON	20 Seconds
09	Clock Format	12/24 Hour	24 Hour
10	Frost Protection	00 = not activated 01 = activated	00 = not activated
11	5+2 or 7 day Programming	01= 5+2 day program 02 = 7 day program	01 = 5+2 day program
12	Screen saver	ON = activated OF = not activated	OF= not activated

# Set up your heating schedule (For 5+2 Day Program)

Turn the unit on by pressing  $\boldsymbol{\psi}$ 

The time for P1 will flash. This is the first ON period for the day.

Use the \to voto adjust the time to when the underfloor heating will turn on in the morning.

Press no and the temperature will flash.

Using the \shape\select the desired heating temperature for P1(Recommended between 22-28°C).

Press ⊕ to set period 2, which is when the underfloor heating will turn off. Use the ∧ ∨ to adjust the time.

Press ⊕ and the temperature will flash. Using the ∧ ∨select the off temperature for P2 (Recommended between 15-18°C).

Repeat above steps for P3 and P4 and then press ⊘

(Note: P3 is turning the underfloor heating on in the evening and P4 is turning it off in the evening)

If the underfloor heating is only required to be on once a day set a lower temperature for both P3 and P4 and ensure that the time set for P3 and P4 is after the time set for P2.

When Monday-Friday has been set press no go onto the Saturday and Sunday schedule.

The time for P1 will flash. This is the first ON period for Saturday and Sunday.

Use the \to voto adjust the time to when the underfloor heating will turn on in the morning.

Press<sup>®</sup> and the temperature will flash.

Using the ✓ ✓ select the desired heating temperature for P1(Recommended between 22-28°C).

Press⊕ to set period 2, which is when the underfloor heating will turn off. Use the ∧ ∨ to adjust the time.

Press $\odot$  and the temperature will flash. Using the  $\wedge$   $\vee$  select the off temperature for P2 (Recommended between 15-18°C). Repeat above steps for P3 and P4 and then press  $\oslash$ 

For Saturday and Sunday if you want to clear the time period of P2 and P3, press ⊘ during programming. Press ⊘ again to cancel.

## Set up your heating schedule (For 7 Day Program)

Change the advanced menu option 11 to setting 02 (7 Day Program) as per instructions in advanced settings section.

The 7day program option means that all 7 days can be programmed to the same schedule or all 7 days can be programmed individually.

Press @until the day display flashes. If programming all 7 days individually use the  $\wedge$   $\vee$  to select the day to program first.

If programming all 7 days to the same schedule, press and hold the \schrot button for about 5 seconds to select all 7 days.

To set up the heating schedule press (P)

The time for P1 will flash. This is the first ON period for the day.

Use the \to voto adjust the time the underfloor heating will turn on in the morning.

Press and the temperature will flash.

Using the \squares select the desired heating temperature for P1(Recommended between 22-28°C).

Press to set period 2, which is when the underfloor heating will turn off. Use the \times to adjust the time.

Press 
and the temperature will flash. Using the 
select the off temperature for P2 (Recommended between 15-18°C).

Repeat above steps for P3 and P4 and then press (P)

(Note: P3 is turning the underfloor heating on in the evening and P4 is turning it off in the evening)

If programming all 7 days to the same schedule, the program is now set up.

If programming all 7 days individually, press 
and use the 
to select the next day to program.

## **Key Lock**

To lock the key pad, press and hold the  $\Theta$  for 5 seconds or until the  $\multimap$  displays. To unlock press and hold the  $\Theta$  until the  $\multimap$  displays.

## Temporary override

# Other Settings & Factory Reset

Press  $\odot$  to turn the timer off

Press and the hold @ until 13 is displayed. Use  $\wedge \vee$  to adjust the settings. Press @ to advance to the next setting.

Menu	Description	Range	Default
13	Minimum Set Temperature	5 - 20°C	5°C
14	Maximum Set Temperature	40 - 90°C	40°C
15	Factory Reset		

To perform a factory reset, press and hold  $\checkmark$  for approx. 5 seconds. +E5 will display on the screen and then the timer has been reset. Turn the timer back on to setup the program.