

This TS700 Programmable touch screen thermostat is designed to control electric underfloor heating systems, electric heating devices or on/off valve actuators used in water heating systems. The TS700 can be fully programmed to automate your heating cycle to suit your life style or can be used in a simple manual mode. With a built in air sensor and external floor sensor the TS700 is a modern, stylish easy to operate thermostat with high functionality suitable for multiple uses.

Technical data:

Voltage	AC230V 50~60Hz
Max Load	16Amps
Power consumption	2VA
Setting range	5°C...90°C
Limitation range	5°C...60°C (factory setting:35°C)
Accuracy of temperature	0.5~10°C Adjustable, factory setting±1°C
Ambient temperature	-5~50°C
Protective housing	IP20
Housing material	Anti-flammable PC

5 - Programming: Event time and temperature

The below table shows the default settings for the TSL700 5/2 day mode.

Key	Event	Symbol		Default Value	
Week Days	1	☀	06:00	20°C	Set programmed temperature
	2	🏠➡	08:00	15°C	
	3	🏠➡	11:30	15°C	
	4	🏠➡	12:30	15°C	
	5	🏠➡	17:00	22°C	
	6	🌙	22:00	15°C	
Weekend	1	☀	08:00	22°C	Set programmed temperature
	2	🌙	23:00	15°C	

(Note: When automating your heating you are not turning the thermostat or heating 'on' and 'off' during the day but simply changing the time and temperature 6 times during a 24 hour cycle. The thermostat will then automate the heating according to the set times and temperatures you have input to suit your lifestyle).

1 – Power "⏻"

Press power key to turn TR700 unit ON and OFF. Also used to accept and exit program and advanced settings pages.

2 – Up "▲" and Down "▼"

Use the "▲" and "▼" keys to increase and decrease the temperature, (please note the screen will revert to the original screen after 3 seconds of inactivity when changing manual temperature) or to set values required in each individual program or setting.

Lock Screen "🔒" Hold the "▲" and "▼" keys simultaneously for 10 seconds to lock the screen, (after 10 seconds "🔒" symbol will appear at bottom of screen). To unlock repeat this process for 10 seconds to unlock the screen.

3 – Time and Day Setting "🕒"

Hold "🕒" key for 10 seconds until the time, (minutes) start flashing. Use the "▼" and "▲" keys set the correct minutes. Once the minutes are correct press the "🕒" key and the hours will start flashing. Again use the "▲" and "▼" keys to set the correct hours / time. Once the hours and time are correct press the "🕒" key again and the days will start flashing. Please note the days are represented by numbers 1 – 7. Monday = 1, Tuesday = 2, Wednesday = 3, etc etc. Use the "▲" and "▼" keys to set the correct day of the week. Press the "🕒" key once more and the thermostat will revert to the home screen and the new time and day should be as per your settings.

4 – Mode selection Key / automated program set up. 📖

When the unit is on press the 📖 key to change between "manual" 🖐 and "automatic" 🕒 modes. Each time the 📖 key is pressed the unit will change between modes.

Program your TS700.

There are 3 automated modes to select from, (see advanced settings). These instructions explain how to set the default 5/2 day mode. The 5/2 option sets days 1-5, (Monday – Friday) all the same and days 6-7, (Saturday – Sunday) both the same. The same setting principles below should be used to set 6/1 and 7 day modes.

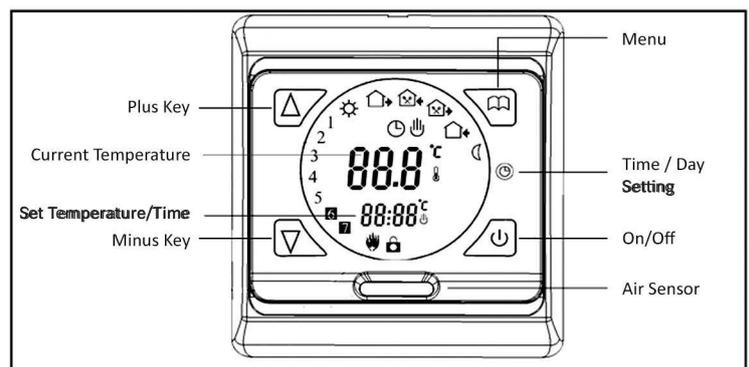
To set up the automatic programming, hold the 📖 key for 10 seconds. Once the screen changes to show only the time and day numbers on left hand side, use the "▲" and "▼" to set Event time. This time should be when you first want the heating to change temperature, (ie the time when you get up in the morning). Once the time is correct press 📖 and then again using the "▲" and "▼" keys set Event 1 temperature you require at this time. You have now set Event 1 time and temperature set points in your daily Schedule. The thermostat will now hold this setting until you set the next time and temperature setting For Event 2 in the next stage.

Event 2. Press 📖 again and the ☀ symbol at the top of the screen will change to 🏠➡. Using the "▲" and "▼" keys change the time to when you want the temperature to change again, (ie when you leave the house for work). Once the time is set press 📖 and the again using the "▲" and "▼" keys change the temperature you require at this time. You have now completed Event 2.

Repeat the above process for (🏠➡, 🏠➡, 🏠➡, 🌙) the remaining events 3-6. Once you have set up events 1 – 6 (☀, 🏠➡, 🏠➡, 🏠➡, 🌙) press 📖 and the weekend setting will appear for days 6-7, (Saturday and Sunday). Again set the time using "▲" and "▼" and press 📖. Now set temperature with "▲" and "▼" and press 📖. You will now see the event symbol has changed from ☀ to 🌙 (Note: There are only two events on weekend setting, (ie temperature is turned up in the morning ☀ and down in the evening 🌙). Complete the weekend time and temperature settings. By pressing 📖 again you can go back over your settings for each event to check over them and make any changes using "▲" and "▼" keys if required. Once you are happy with your settings press "⏻" to confirm these settings and return to the main/home page. (Note: For the thermostat to run your new settings the 🕒 symbol must be highlighted. When on the home page, If 🕒 is not showing press 📖 once and 🕒 will appear).

Display symbols :

- 🖐 Manual mode
- 🕒 Automated program mode
- ☀ Wake-up, event 1
- 🏠➡ Leave (am), event 2
- 🏠➡ Return (am), event 3
- 🏠➡ Leave (pm), event 4
- 🏠➡ Return (pm), event 5
- 🌙 Sleep, event 6
- 🔥 Heating on
- 1 Monday
- 2 Tuesday
- 3 Wednesday
- 4 Thursday
- 5 Friday
- 6 Saturday
- 7 Sunday
- 🔒 Lock icon

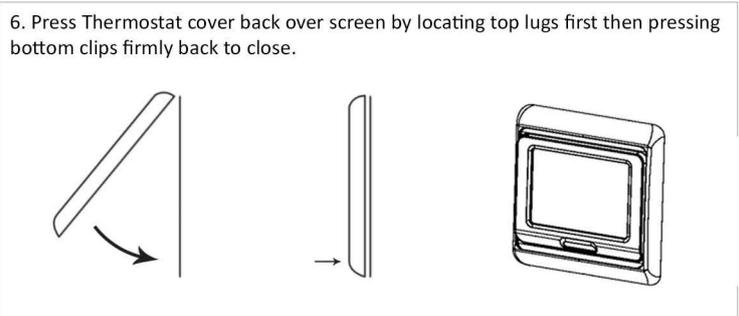
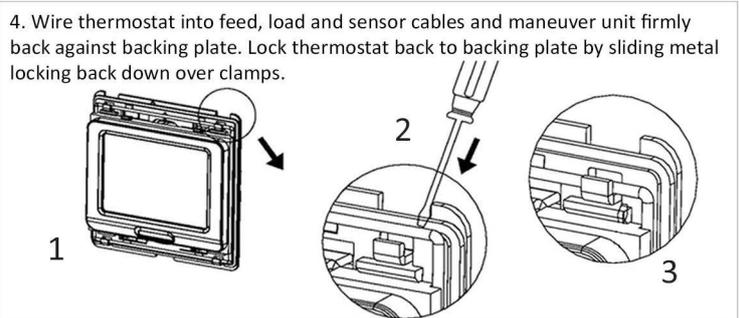
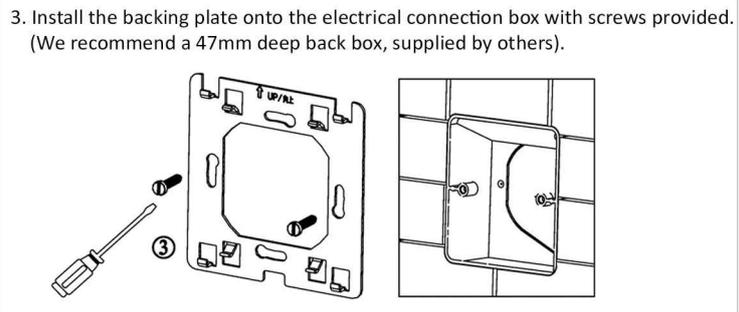
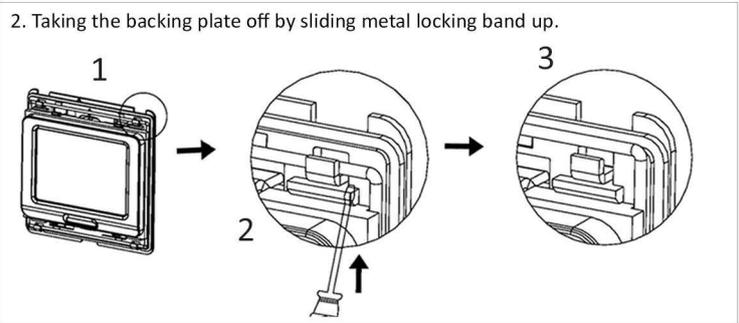
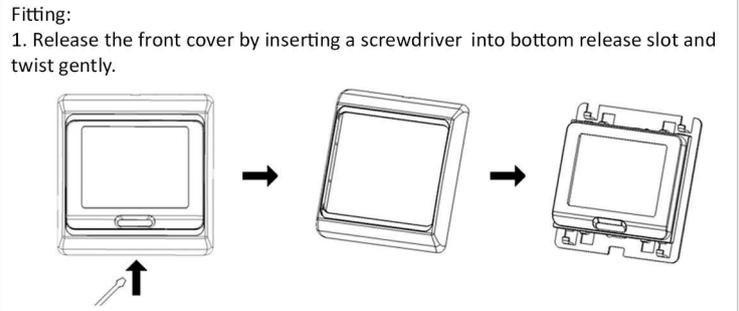
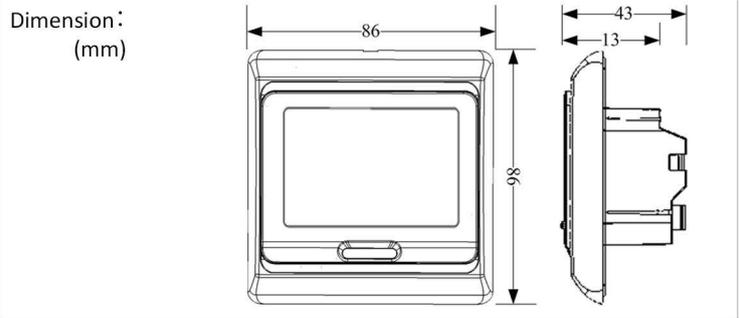


Floor Heating Thermostat

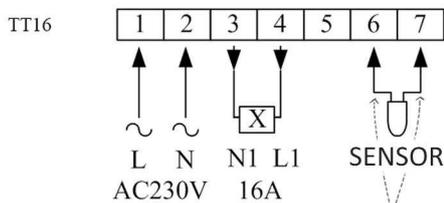
6 - Advanced setting

To access the advanced settings menu you must first turn the unit off by pressing the "⏻" key. Once off press and hold the "📖" key, followed by pressing the "⏻" key. This will bring up *IRdJ* (menu 1). You can scroll through the 10 different menu settings by pressing the "📖" key use the "▲" and "▼" keys to make any changes required to each menu setting. Please see table below for advanced setting menu information.

Menu	Symbol	Setting	Recommended Setting	▲ Or ▼
1	<i>IRdJ</i>	Temperature calibration	0.0	Adjust measured temperature
2	<i>25EN</i>	Sensor mode	0.0t	IN: built-in air sensor OUT: floor sensor ALL: both air & floor sensors
Under Wood Laminate & Carpet Floor Sensor Mode Must Be Set To OUT Only				
3	<i>3LI F</i>	temperature Limitation	28.0	Adjust limitation value, Limitation range:5°C~90°C
4	<i>4dl F</i>	Switching differential	1.0	Adjust switching differential
5	<i>5LrP</i>	Antifreeze function	OFF	Turn on/off Anti-frozen function
6	<i>6PrG</i>	Set vacation mode	1, 2, 3, 4, 5	2: 5/2 day mode 1: 6/1 day mode 0: 7 day mode
7	<i>7rLE</i>	Potential-free output	00	00: in same way 01: For Water Heating
8	<i>8dLY</i>	Potential-free output delay	0	Change the delay time
9	<i>9HI F</i>	Max. Temperature	28.0	Max. Limitation temperature set point (99°C)
10	<i>RFAC</i>	Reset to factory settings	-	Programming parameters will be reset to factory settings when symbol " - " appears (Hold Down "▲" key for 10 seconds)



Connecting Diagram



Floor Sensor (Supplied in box with thermostat)

