TR3100 Thermostat Instructions

ver 1.4

Buttons and LCD symbols

Buttons	Short Press	Press and Hold for 3 seconds
P	Power button (Turning on/off thermostat), with thermostat turned off, you will only see temperatrue display on LCD. With thermostat turned on, you will see more detailed information on LCD, such as time,day,mode, etc.	Setting the schedules(programmes) while thermostat is turned on.
M	M button,Mode selection(Auto mode / manual mode)	Setting the menus(with thermostat turned off)
✓	Confirmation button, accept the set values	Set the time and week days
△	Up arrow button, increase the set value	Show floor temperature in AF model
▽	Down arrow button, decrease the set value	Bring up vacation mode
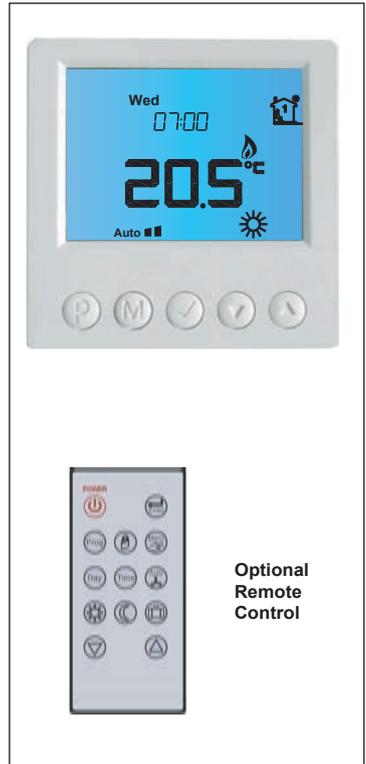
Symbols	Description	Symbols	Description
🔒	The buttons are locked.	❄	Frost protection activated
🔥	Heating is turned on	SET	Set temperature
▂▃▄▅	The difference between set temperature and room temperature, more bars means more difference.	🏠1	Programmes number
✍	Manual mode	RT	Room temperature
AUTO	Auto mode	FT	Floor temperature
☀	Comfort temperature	override	Temporary temperature override
☾	Economy temperature	AF/F/A	Model
🛄	Vacation mode	LO	Room or floor temperature is below 0°C
Err	meaning that floor sensor is short-circuit or broken.	HI	Room or floor temperature is greater than 50°C

Optional Remote Control

Configuration Menu

To enter into menu settings, follow below 2 steps,

Step 1, Turn the thermostat off by pressing P button;   Step 2, Press and hold button M for 3 seconds until you see Menu 01 on LCD

Then by each press of button M will cycle the thermostat through available menus as below. Use up or down arrow button to change the setting for each menu, press button M to accept and proceed to the next menu. To store the menu settings and exit, press button P.

Menu #	Features description	Features Explanation	Adjustment (press up or down button to adjust)
01	Model (model selection)	This thermostat is a combination model allowing you to choose between 3 different models. A, AF and F model. A model: air only, with built in sensor AF model: air & floor, with both built in and remote sensor F model: floor only, with remote sensor	A, AF, F
02	Sd (switching differential)	The numbers of degree difference before switching. The default is 1°C which means the thermostat will switch the heating on 0.5°C below the set temperature and will turn it off 0.5°C above the set temperature. With a 2°C differential, the heating will switch on 1°C below the set temperature and will switch off 1°C above the set temperature.	1 = 1 degree(default), 2 =2 degrees.........
03	ATC (air temp calibrate)	This is to calibrate air temperature if required.	-1 = decrease 1 degree, 1 = increase 1 degree...
04	FTC (floor temp calibrate, AF, F model only)	This is to calibrate floor temperature if required.	-1 = decrease 1 degree, 1 = increase 1 degree...
05	PTD (program time delay)	This gives more time for user to set the programmes before reverting back to standard display	5s , 10s , 15s ,20s (default) , 25s, 30s.
06	TR (Temperature readout, AF model only)	This gives option to choose to show air temperature, floor temperature or to show both floo& air in interval.	A= to show air temperature only, F=to show floor temperature only, A--F = to show both in 5 second intervals
07	MAXFT (set maximum floor temperature in AF model)	This is to protect the floor surface.	40 °C by default, setting range 20°C ~ 40°C
08	BL (backlight turning-on time setting)	This is to set the backlight turning-on time. User can also set the backlight always on or off.	30 seconds(default) On= always on, OFF= always off
09	TF (temperature format)	This alows users to select between °C or °F.	°C or °F
10	CLOCK	12/24 HOUR clock system selection	24 (default), 12- hour or 24-hour clock system
11	FP(Frost protection)	This is to avoid room temperature goes below 5°C	ON = activated; OFF = deactivated
12	SC(setpoint configuration)	This allows user to select 2 kinds of default setpoints	4 means 4 independent setpoints, 2 means: setpoint 1 is the same to setpoint 3 , setpoint 2 is the same to setpoint 4
13	MD(model display)	To display model A/AF/F on LCD	ON= activated, OFF= deactivated
14	AL(Auto lock)	To lock the buttons automatically after 20 minutes of no operation on buttons.	ON= activated, OFF= deactivated

Remarks: Not all menus are visible in certain models. For example, if you set the thermostat to A or F model, menu 6 and menu 7 will not be visable.

See overleaf for further setting up information

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Setting the clock and day of the week ⏰

This thermostat is fitted with a real time clock. It is essential that the clock time and day are set accurately if you require your programmed events to start on time. Follow below steps,

1) Press and hold button ✓ for 3 seconds and you will see the time flashing.Use the up / down arrow button to change the time.

2) Press ✓ again to accept and proceed to day of the week setting. Now you will see day flashing, use the up / down arrow button to change the day of the week.

3) Now press ✓ again to store and exit.

Save money by setting program schedules

This thermostat is an individual 7-day programmalbe. For each day of the week you are able to have 4 timed set temperature schedules or programmed events. For clarity these events are conveniently named 1,2,3 and 4.

🏠1☀	**WAKE** 07:00	22 °C	Set to the time you would like to wake to and the temperature you want during the morning, until you left for the day.
🏠2🚶	**LEAVE** 09:30	16 °C	Set to the time you leave home and the temperature you wish your home to maintain while you are away at work perhaps.
🏠3	**RETURN** 16:30	22 °C	Set to the time you return home at end of the day and the temperature you want during evening until bed time.
🏠4	**SLEEP** 22:30	16 °C	Set to the time you sleep and the temperature you want overnight(usually a comfortable and energy saving temperature).

Above are default program schedules, to make changes, follow easy steps as below.

Programming your thermostat or setting these daily events is no more complicated than setting the clock. The same buttons are used in the same sequence, using the button 2(button M) to advance to the next step, and the up or down buttons to make changes. The LCD shows only relevant information flashing for the event being adjusted thus reducing possible errors that may be caused by having confusing information displayed on the LCD.

1. To enter the program mode.
   Make sure your thermostat is turned on when you want to set the program schedules.(Use button P to turn on / off the thermostat);
   Make sure your thermostat is set to Auto mode(use button M toselect Auto or manual mode).
   Press and hold button P for 5 seconds. The display will change to show PROG together with Day(for example Mon, Monday) flashing.

2. Using the up or down buttons adjust the day to the day you wish to start programming or to the day you wish to edit an existing event or program. (Press and hold the up button for 3 seconds to select all days of the week, to cancel selecting all days of the week, press and hold up button for 3 seconds again.)

3. Press button P to accept the day and advance to the next step, the LCD will show programme 1(🏠1☀) together with time area flashing. Using the up or down buttons adjust the time you wish the programme 1 event to commence for the currently selected day.

4. Press button P to accept the time and advance to the next step, the LCD will show a temperature value flashing.

5. Using the up or down buttons set the desired heating temperature to be maintained for the programme 1 event.

6. Press button P again to accept the temperature setting and advance to the next step, the LCD will show programme 2(🏠2🚶) together with time area flashing, signifying the second daily event is now being programmed.

7. Using the up or down buttons adjust the time you wish the programme 2 event to commence as described previously.

8. Continue to press button P to accept the time and advance to the next step, the LCD will show a temperature value flashing.

9. Using the up or down buttons set the desired heating temperature to be maintained for the programme 2 event.

10. Repeat step 6,7,8,9 to set program 3(🏠3) and program 4(🏠4) events.

Lock the buttons

To lock the buttons, press and hold the up & down arrow buttons for 3 seconds, you will see a lock symbol 🔒 . To unlock, repeat the steps above and the lock symbol will disappear.

Vacation mode

Press and hold down arrow button until you see 🧳 on LCD. Use same procedure to exit this mode. This mode will maintain a set temperature (default 10°C) all the time. Use up or down arrow button to change the set point.

Reset to Factory setting

With thermostat turned off, press and hold button Ⓜ and ✓ until you can see RESET on LCD.

Temporary temperature override

Using up/down arrow buttons, you can adjust the current set temperature Use button ✓ to accept, and you will see "override" on LCD and thermostat will maintain the new set temperature until the next programmed event(comfort level). To cancel the override setting, just press and hold button Ⓜ for 3 seconds until "override" disappear.

View floor temperature

If thermostat is set to AF model, and set to show air temperature only, press and hold up arrow button for 3 seconds, floor temperature will display and it will automatically revert back to air temperature after 5 seconds.

Installation and Wiring

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 ribbon connector which is plugged in to the front half of the thermostat.

Place the thermostat front half somewhere safe. Terminate the thermostat as shown in the diagrams below.

Screw the thermostat back plate on to the back box

Re-connect the thermostat ribbon cable and clip the two halves together.

⚠ **MAX 16 AMP 3500 WATTS**

This product should be installed by a qualified electrician.

6 L	5 N	4 N	3 L	2	1

Floor Sensor

FEED (220VAC+/-10%)

LOAD (16A)