PRO DIGITAL THERMOSTAT MODEL TR3100 -



LCD Symbols



Please Note: There is not a red light on the thermostat, it is a red lens covering a receiver for the remote-control function

Thermostat Mode / Sensor Selection

The thermostat has three different modes as it has a built in temperature sensor and a remote floor sensor (must be connected when used with electric underfloor heating). The unit can operate on Air temperature (A mode), Floor temperature (F mode) or Air and Floor temperature (AF mode).

'A' mode should not be used with electric underfloor heating, it can be used to control other heating devices.

'AF' mode for when the underfloor heating is used as a primary heat source, but a floor temperature limit is needed.

'F' mode for when the thermostat is outside the heated room e.g. a bathroom, or when being used as a secondary heat source. Note: These can be changed in 'General Settings' on the last page of these instrauctions.





Drowarm pro digital thermostat 🛛 Model tr3100 🛩

Set the Time and Day

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 the easy steps.

Step 1. Press the button (and the time will flash

Step 2. Use up or down button to change the time (Hold up or down button to change by 15 minutes each time.)

Step 3. Press (button again, the day of the week will flash

Step 4. Use up or down button to change the day of the week

Step 5. Press (button again to accept and exit

Auto / Manual Mode

Press the (M) button to choose between Auto and Manual mode



Auto Mode

In AUTO mode, the thermostat executes the pre-programmed schedules. This is factory default to switch on each day at 07:00, off at 9:30, on again at 16:30 and off at 22:30 with a default temperature of 22deg Celsius. The 'off' temperatures are set to 16 degrees, so if the room temperature drops below this the heating will come on, offering frost and damp protection.

To adjust these schedules, follow the easy steps in 'How to Programme Your Thermostat'

How to Programme Your Thermostat

Please ensure that thermostat is set to AUTO before continuing. (See above if you do not have AUTO displayed)

Programming mode has a time-out limit whereby if no buttons are depressed within a set period of time, it reverts back to the main screen. This time can be adjusted in the menu settings feature number 05.

Step 1. Once in AUTO mode Press and hold the M button for 5 seconds until PROG is displayed with a day of the week flashing.

Step 2. To Select all days of the week press and hold the UP arrow until Mon to Sunday appears. If you want to programme an individual day just tap the UP button until you have selected the day of the week that you want to programme.

Step 3. Press the M button once to display programme 1. Use the Up or Down buttons to set the start time (default 07:00). (Hold Up or Down button to change by 15 minutes each time.)

Step 4. Press the M button once again and use Up or Down button to set the desired temperature to be maintained for programme 1. (Default 22°C)

Step 5. Press the M button once to display programme 2. Use the Up or Down button to set the start time (default 09:30). (Hold Up or Down button to change by 15 minutes each time.)



MANUAL mode is represented by a hand symbol in the bottom left corner of the screen. In manual mode, the thermostat maintains a constant set temperature manually set by the user 24/7 until it is turned off.

If **OVERRIDE** appears, this means that you are in **AUTO** but have manually altered the temperature. To remove **OVERRIDE** press and hold the button for 3-5 seconds and AUTO should appear.



How to use Manual Mode:

To alter the temperature,

1. Press () or () button once, the 'set' temperature starts flashing.

2. Press () or () button again to adjust the set temperature.

3. Wait for 5 seconds to confirm the setting, Now your thermostat will maintain the new set temperature.

Step 6. Press the (M) button once again and use Up or Down button to set the desired temperature to be maintained for program 2. (Default 16°C)

Step 7. Press the M button to bring up programme 3. Use Up or Down button to set the start time (default 16:30). (Hold Up or Down button to change by 15 minutes each time.)

Step 8. Press the (M) button again and use Up or Down button to set the desired temperature to be maintained for programme 3. (default 22°C)

Step 9. Press the M button to bring up the programme 4. Use Up or Down button to set the start time (default 22:30). (Hold Up or Down button to change by 15 minutes each time.)

Step 10. Press the M button again and use Up or Down button to set the desired temperature to be maintained for programme 4.(default 16°C)

STEP 11. Press the M button to accept and exit.

Please Note: It is faster to program the same schedule for the entire week and then to adjust the exceptional days. To erase program 2 and 3 for Saturday and Sunday, see below, In step 1, select Saturday or Sunday. In step 4, instead of using up or down button, using 🐼 button will erase the time.(--:--).

In step 6, instead of using up or down button, using 😭 button will erase the time.(--:--).







View floor temperature

If thermostat is set in **AF** model, and set to show air temperature only, press and hold the **Down** button for 3 seconds, floor temperature will show and it will automatically revert back to air temperature in 5 seconds.

Temporary temperature override

In AUTO mode to temporary override the current set temperature,

1. Press () or () button once, the set temperature starts flashing

2. Press 🔿 or 🛇 button again to adjust the set temperature

3. Wait for 5 seconds to confirm the setting, *OVERRIDE* will display on the LCD.

Now your thermostat will maintain the new set temperature until the next set-point.

To cancel the override setting, press and hold 🕥 button for 5 seconds until **DVERRIDE** disappear.

Factory Reset

Your thermostat has the ability to reset all settings to the factory defaults.

If you are certain you want to do this:

In standby mode (when thermostat is turned off), press and hold button \bigcirc and \bigcirc for 5 seconds until **RESET** is shown on the screen.

Lock the buttons

Press and hold the \bigcirc and \bigcirc buttons for 3 seconds until you see a lock icon appearing, to unlock, repeat the steps above.

Vacation mode

To set vacation mode press and hold the \bigcirc button for 3 seconds

Until appears. Use same procedure to exit this mode.

Vacation mode will maintain a set temperature (default 10°C) all the time.

Press \bigcirc or \bigcirc button to change the set point and wait for 5 seconds to accept and exit.

Installation & Wiring





Screw the thermostat back plate on to



86mm

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







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General Settings

Press 🕑 button to turn the thermostat on/off. When thermostat is turned off, the LCD will only display current temperature reading.

To Access the Settings: With the thermostat in the off position. (It will only display the mode and temperature when turned off). Press and hold the 🕑 button for 3-5 seconds to bring up a configuration menu. In this mode you simply press the 🕑 button to select the different menu numbers. Once you have selected the Menu number you want to change simply use the arrow keys to adjust the settings.

Menu #	Features description	Features Explanation	Adjustment (press up or down button to adjust)
01	Model (Model Selection)	The Thermostat can operate in several modes allowing you to choose between three different variations. 'A', 'AF' and 'F' mode. 'A' mode: Air temperature only using the built in sensor, 'AF' mode: Air and floor temperature using built in sensor and remote floor probe, 'F' mode: floor temperature using the floor probe.	A – Air Temperature AF – Air and Floor Temperature F – Floor Temperature
02	S.D (switching differential)	The number of degrees the temperature has to change before the unit switches on/off. The default is 1 degree so if the temperature is set to 21 degrees the thermostat will switch on at 20.5 degrees and off at 21.5 degrees. 0.5 degrees either side of 21.	1 = 1 degree(default), $2 = 2$ degrees
03	ATC (air temp calibrate)	This to calibrate the Air temperature sensor.	-1 = decrease 1 degree, 1 = increase 1 degree
04	FTC (Floor temp calibrate)	This to calibrate the Floor temperature sensor.	-1 = decrease 1 degree, 1 = increase 1 degree
05	PTD (program time delay)	This is the time the unit allows the user to have a pause/break whilst programming before the thermostat returns to the home screen.	5s, 10s, 15s, 20s (default), 25s, 30s.
06	TR-AF (AF model only) (TR=Temperature readout)	In AF mode the user has the option to see the floor temperature, air temperature or the unit can switch display between both floor and air temperature at 5 second intervals.	A=to show air temperature, F=to show floor temperature, A-F = to show both in 5 second intervals
07	MAXFT (set maximum floor temp in AF model)	In AF mode a maximum floor temperature can be programmed so the floor does not exceed this.	20-40 degree (default 28°C)
08	BL (back light turning-on time setting)	The time that the back light stays illuminated after a button is pressed. Can also be permanently on or off.	10s, 20s, 30s, 40s 50s, 60s, ON or OFF
09	TF (temperature format)	The way temperature format is displayed on the screen.	Degrees Celsius. Degrees Fahrenheit
10	Clock	12 or 24 hours clock format.	12H or 24H
11	FP (Frost protection)	Frost protection allows the thermostat to turn on if the temperature drops below 5 degrees even when it is not programmed to.	on= activated, off= deactivated
12	SC (setpoint configuration)	This allows the user to set between two different programming options.	2 = (default)
♦♦	Please Note: one of the following error messages will appear if one of these problems occur: LO - This error means that the room or floor temperature is below 0°C HI - This error means that the room or floor temperature is greater than 50°C If the floor sensor is short-circuit or broken, the LCD will display " <i>ERR</i> " and the thermostat will cut off output. This product should be installed by a qualified electrician.		 This means throughout one day you can have four programmes but with only two different temperatures. i.e. programme 1 and 3 will have the same temperature as will programme 2 and 4. 4 = You can have four different temperatures, an independent one for each of the 4 programmes.



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Optional Remote Controller Buttons

Optional Remote Controller (Remote control model only)

- 1. Turn on/off thermostat
- 2. Confirm setting
- 3. Program button
- 4. Lock or unlock buttons
- 5. Menu (in OFF mode)
- 6. Set Day
 - Day time
- 7. Set time

- 8. Auto / Manual selection
- 9. View floor temp (AF model only)
- 10. Cancel override
- 11. Vacation mode
- 12. Decrease the set value
- 13. Increase the set value

NEED HELP SETTING UP? Scan to watch thermostat set up





