

DEVI underfloor heating systems

A trouble shooting guide

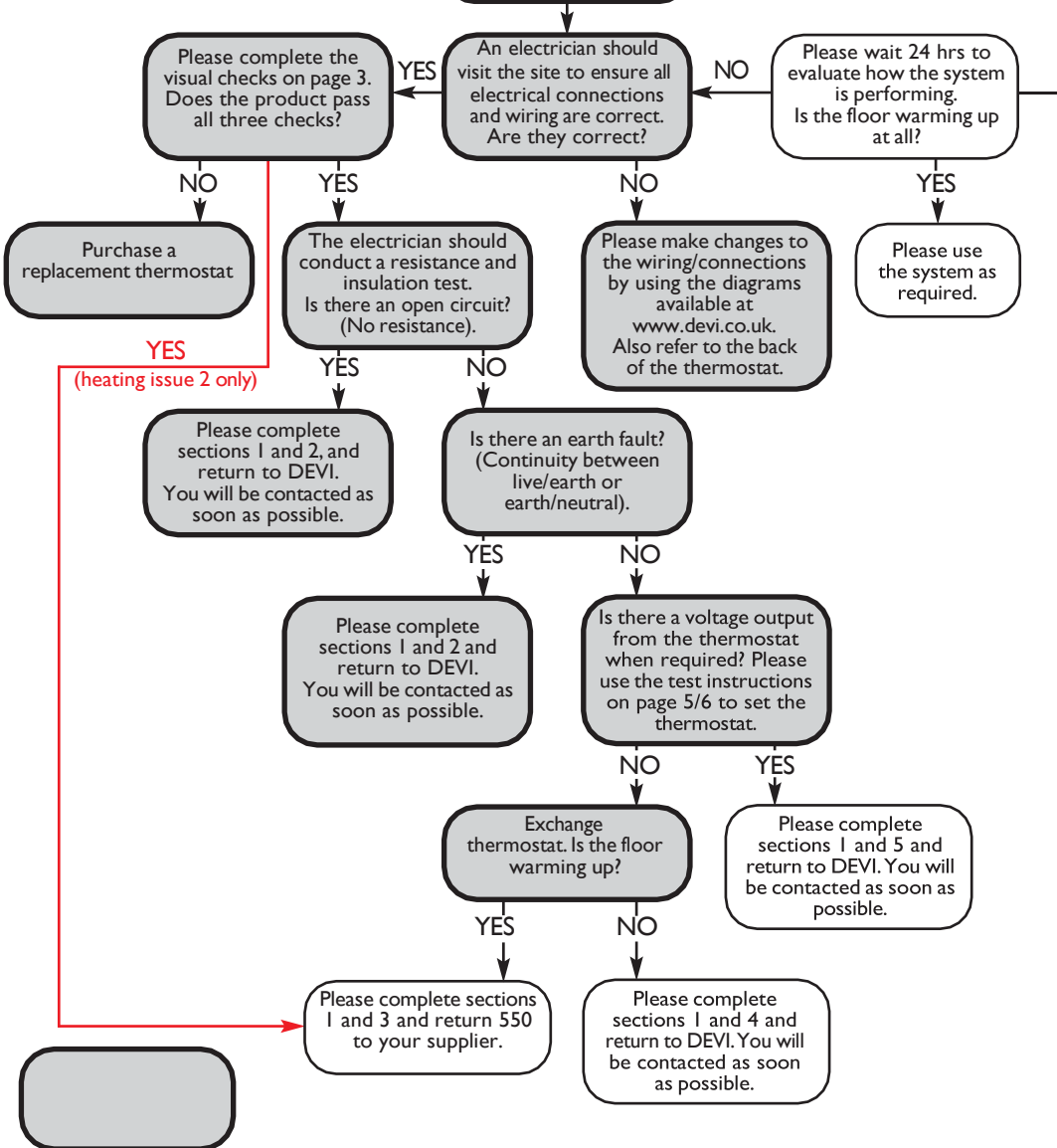
Please follow the step-by-step instructions and

HEATING ISSUE 1

The RCD trips out when the system is turned on.

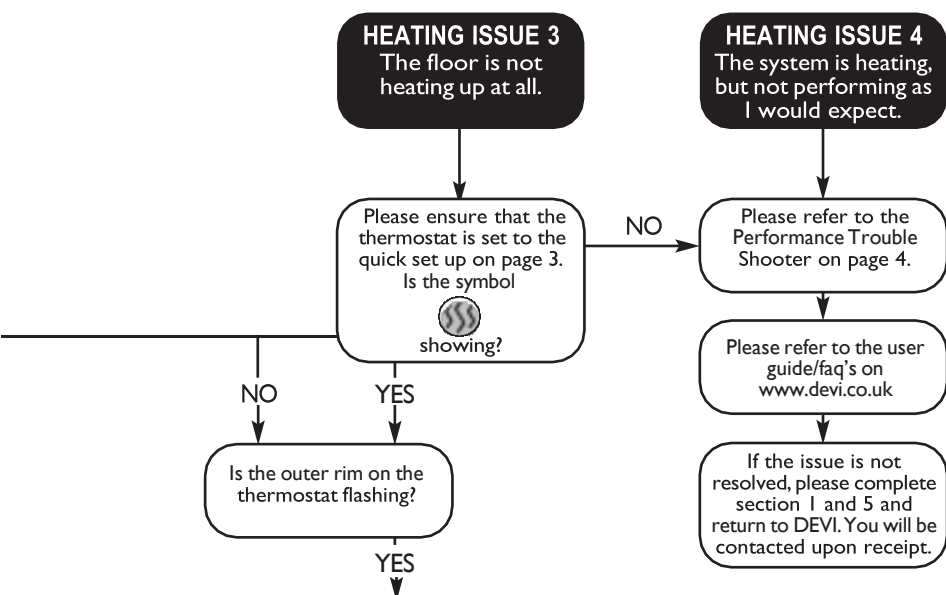
HEATING ISSUE 2

There is no display on the thermostat.



*A qualified electrician must carry out all instructions within a shaded box.

complete the applicable forms where required

















Read the following fault number on the thermostat and follow instructions.

No	Error	Action
2	Configured as a master, but another master is detected	Thermostat incorrectly set during configuration, see step 2, on page 5 and 6. Set to ALO.
3	Configured as a slave but cannot find any master unit	Thermostat incorrectly set during configuration, see step 2, on page 5 and 6. Set to ALO.
4	The thermostat has switched itself off, due to overheating	Call an electrician, (let the thermostat cool for a period then enter basic set-up to leave error mode). Check all wiring, (diagrams on back of thermostat and on www.devi.co.uk) and the visual checks on page 4.
5	Sensor fault. Floor sensor short circuit	Call an electrician (Have an authorised electrician check the floor sensor wiring and obtain a resistance reading of 10K - 24K Ohms). The floor sensor may have to be re-wired or replaced.
6	Sensor fault. Floor sensor short circuit	Call an electrician (Have an authorised electrician check the floor sensor wiring and obtain a resistance reading of 10K - 24K Ohms). The floor sensor may have to be re-wired or replaced.
7	Clock is not set	Set the clock (see page 11 of the devireg 550 user guide, This can be downloaded on www.devi.co.uk).

If the error persists, please complete sections 1 and 5 and return to DEVI.

devireg 550 test instructions for the devimat floor warming system or areas where the thermostat is situated outside of the room (ie. wet areas)




















Please follow these instructions to ensure that the thermostat is set-up correctly in order to provide power to the heating elements. NB. If the thermostat is displaying CODE initially you will ONLY be presented with step 1 and step 4; set these as described below. Once you have either completed steps 1 and 4, or the controller is displaying something other than CODE, you must press and hold the button until the word CODE is displayed and follow the steps below. To reset the thermostat, press and hold the button until CODE is displayed. **Please note that the setup for older versions can be seen in RED.**

1	Setup code	Rotate button to select code 0044 and then press button once.																
2	Operating mode	Rotate button to select ALO and then press the button																
3	Temperature readout Adaptive mode	Rotate button to select °C and then press button Rotate button to select AdAP and then press button																
4	Sensor selection	Rotate button to select 'FS' to activate the floor sensor, then press button. This is a floor sensor only selection.																
5	Maximum floor temperature selection	At 'nt' rotate button to select either of the following temperature selection, maximum floor temperatures, then press button. <table border="1" data-bbox="305 732 726 804"><tr><td>System</td><td>Floor construction</td><td>Tiles</td><td>Timber</td><td>Carpet</td></tr><tr><td>devimat</td><td>Timber base</td><td>29-32°C</td><td>27-32°C</td><td>29-32°C</td></tr><tr><td>devimat</td><td>Concrete base</td><td>40-45°C</td><td>29-32°C</td><td>40-45°C</td></tr></table>	System	Floor construction	Tiles	Timber	Carpet	devimat	Timber base	29-32°C	27-32°C	29-32°C	devimat	Concrete base	40-45°C	29-32°C	40-45°C	
System	Floor construction	Tiles	Timber	Carpet														
devimat	Timber base	29-32°C	27-32°C	29-32°C														
devimat	Concrete base	40-45°C	29-32°C	40-45°C														
6	Off periods	LO should be displayed, you should rotate the dial to select -30°C then press the button.	  															
7	Clock display	Rotate the button to select clock display as either 24 hours or 12 hours AM/PM.	 															
8	Save settings	Press button once.																
9	Setting the clock	Press and hold button. The display now shows the time and day (number 1 represents Monday, number 7 is Sunday). Rotate the dial to show the correct time and day of the week and then press the button to save the correct time setting.	 															
10	Manual mode	Press the button so there is a black circle around the outside of the digital display. The thermostat is now in manual mode.																
11	Test temperature	For test purposes, turn the setting up to 10 until is displayed. This may take a few minutes to display. This ensures that the thermostat is sending output to the heating element. This temperature setting is simply for test purposes. When it is apparent that the floor is heating, lower the temperature immediately. This should be evaluated over a 24 hour period).																

NB. If the thermostat is flashing at any time, please revert to the Trouble Shooter on page 2.

devireg 550 test instructions for the deviheat total heating system

Please follow these instructions to ensure that the thermostat is set-up correctly in order to provide power to the heating elements. If the thermostat is displaying CODE initially you will ONLY be presented with step 1 and step 4; set these as described below. Once you have either completed steps 1 and 4, or the controller is displaying something other than CODE, you must press and hold the button until the word CODE is displayed and follow the steps below. To reset the thermostat, press and hold the button until CODE is displayed. **Please note that the setup for older versions can be seen in RED.**

1	Setup code	Rotate button to select code 0044 and then press button once.	 															
2	Operating mode	Rotate button to select ALO and then press the button once.	 															
3	Temperature readout Adaptive mode	Rotate button to select °C and then press button. Rotate button to select AdAP and then press button																
4	Sensor selection	Rotate button to select rFS to activate the floor sensor, then press button. This is a room and floor sensor selection.	 															
5	Maximum floor temperature selection	At nt rotate button to select either of the following temperature selection, maximum floor temperatures, then press button. <table border="1"><thead><tr><th>System</th><th>Floor construction</th><th>Tiles</th><th>Timber</th><th>Carpet</th></tr></thead><tbody><tr><td>Cable</td><td>Cable screed</td><td>40-45°C</td><td>36°C</td><td>40-45°C</td></tr><tr><td>Cable</td><td>Timber suspended</td><td>36°C</td><td>36°C</td><td>36°C</td></tr></tbody></table>	System	Floor construction	Tiles	Timber	Carpet	Cable	Cable screed	40-45°C	36°C	40-45°C	Cable	Timber suspended	36°C	36°C	36°C	 
System	Floor construction	Tiles	Timber	Carpet														
Cable	Cable screed	40-45°C	36°C	40-45°C														
Cable	Timber suspended	36°C	36°C	36°C														
6	OFFS	This should be set to 0.0, if this is the case, press the button to continue. If not, adjust setting and continue.																
7	Off periods	LO should be displayed, you should rotate the dial to select -15 degrees C then press the button.	  															
8	Clock display	Rotate the button to select clock display as either 24 hours or 12 hours AM/PM	 															
9	Save settings	Press button once.																
10	Setting the clock	Press and hold button. The display now shows the time and day (number 1 represents Monday, number 7 is Sunday). Rotate the dial to show the correct time and day of the week and then press the button to save the correct time setting.	 															
11	Manual mode	Press the button. A black circle around the outside of the digital display should be displayed. The thermostat is now in manual mode.																
12	Test temperature	 For test purposes, turn the temperature up to 35°C until is displayed. This may take a few minutes. This ensures that the thermostat is sending output to the heating element. This temperature setting is simply for test purposes. When it is apparent that the floor is heating, lower temperature immediately. This should be evaluated over a 24 hour period).																

NB. If the thermostat is flashing at any time, please revert to the Trouble Shooter on page 2.

Visual checks

These instructions will help to identify whether the fault with your underfloor heating system has been caused due to mis-installation/not following user instructions.

If these VISUAL checks are carried out correctly, the thermostat may not have to be returned to DEVI, which will save you time.



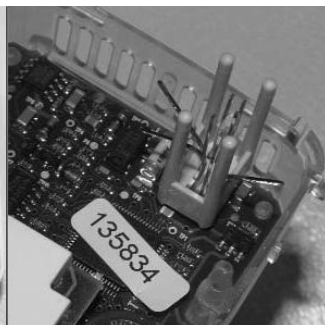
VISUAL CHECK ONE Cracked LCD display

This fault is caused when someone attempts to remove the front cover of the thermostat. This is normally removed by carefully pushing down on the plastic tab in the top central grill. If care is not taken, the implement used to push down the tab slips and damages the display, causing it to crack. This damage can also be caused by over-tightening of the screws.



VISUAL CHECK TWO Blackening at the rear of the thermostat

This fault is caused when the electrics entering the back of the thermostat are stripped back too far, exposing the live conductors. When this happens, if these exposed wires cross, they short and cause the fuse to blow and the back of the controller to be blackened.



VISUAL CHECK THREE Bent pins

Remove the front cover and inspect the back of the LCD display. At the back are a set of gold connector pins, these leave the factory straight, if they are bent or distorted then a heavy hand has been used to plug the display into the base of the thermostat.

In all three examples, the thermostat would not be covered by the DEVI Warranty.
In this case a new thermostat should be purchased.

Performance trouble shooter

HEATING ISSUE	POSSIBLE CAUSES	ACTION
The system is not heating up to the required temperature, or there is no difference in performance between settings 6 and 10.	→ The floor temperature has exceeded the maximum temperature.	→ Check the maximum floor temperature is set correctly, (see step 5 on pages 6 and 7). ↓
	→ With devimat systems there may not be enough output to heat the area.	→ Check the positioning of the floor sensor is correct. (Floor sensor should be completely in the conduit either parallel to deviheat element or directly underneath devimat.) ↓ → Increase the available heating output within the area by adding a supplementary heating source.
The system is heating outside the time period. The time period is indicated by the black segments around the dial. (This may result in high running costs).	→ The temperature has lowered to the set LO amount.	→ Check the LO set-back is set correctly - -15 for deviheat, -30 for devimat. ↓
	→ The system will aim to reach the displayed temperature for the time set. (devireg intelligence based on previous performance).	→ Reduce operating temperatures to the following: deviheat -21°-24°C, and devimat (and all operating on floor sensor only - wet areas, 4-7°C)
	→ The system is in manual mode.	→ Set the timer to come on at the time when the heat is required, (not before). ↓ → Ensure that the time periods required are displayed on the thermostat and all segments that are outside the intended time period are clear.
The floor is heating up at variable temperatures across the whole floor.	→ It is not possible for the element to heat up at variable rates. This is the result of an external influence on the system. Eg. Different underlying floor or different floor covering.	→ Confirm that the floor structure is standard throughout the floor/build. ↓
		→ Confirm that there is a heating element beneath the area in question and that the element has been installed at the same Wm ² density across the floor.
The floor is heating above the temperature required. (This may result in high running costs).	→ The air/floor sensors are not reading the correct temperature.	→ Check the positioning of the sensors. (Floor sensor should be completely within the conduit, either parallel to the heating element or directly underneath the devimat. Air sensor should be positioned away from any external factors that influence the air temperature surrounding the thermostat and therefore causing the system to switch off early.) ↓
	→ This may be a fault caused by a fault with the electrical connections.	→ Check electrical connections to the thermostat (page 11 of the user guide) and complete all visual checks on page 4.
The thermostat will not switch off	→ The thermostat will only switch off in manual mode.	→ Press and hold the button so that all segments around the outside are filled, then quickly turn the dial anti-clockwise.

If you are still encountering a heating issue, please complete section 1 and 5 and then return to DEVI. Please provide description of all checks carried out, eg. position of floor sensor, checking of maximum floor temperature etc. You will then be contacted as soon as possible

