

1. Introduction

The Heatmiser DS1-EL dial type thermostat is designed specifically for electric underfloor heating.

This thermostat incorporates the following functions;

- Adjustable Switching Differential
- Digital LCD
- 230v AC, 13A Switching

2. Installation

IN ORDER TO AVOID ANY RISK OF ELECTRIC SHOCK, CUT THE POWER TO THE HEATING SYSTEM.

1. Remove the old thermostat to access the wires
2. Identify each cable and label
3. If necessary, strip the end of each wire (max 6mm)
4. Following the diagrams below, connect the wires to the Heatmiser DS1-EL terminals
5. Screw the DS1-EL back plate to the back box
6. Plug the DS1-EL thermostat front onto the back plate

RT+ - N N L LOAD

Live Connection	L
Neutral Connection	N
Electric Heating Mat Connection	Across LOAD and N terminals
Floor Sensor	RT+ and -

3. Icons Explained

Heating ON

Keypad Locked

4. Setting the Temperature

In normal mode, the display shows the actual room temperature. To change the set point, rotate the dial until the digital LCD displays the new set temperature.

5. Lock Facility

The Heatmiser DS1-EL has a lock facility. To lock the thermostat, press and hold down the dial for 10 seconds.

You will see a lock symbol appear. To unlock, repeat the steps above.

6. Sensor Option

The thermostat has three modes of operation. These are explained below. Select the desired mode, and then set the DIP switches according to the table. The DIP switches can be accessed from the back of thermostat.

Air Sensor: Uses the built in air sensor only

Air Sensor & Floor Limiting Sensor: Uses the built in air sensor but also uses the remote floor sensor to ensure the floor temperature doesn't overheat.

Floor Sensor: Uses the remote floor sensor only

Air Sensor	Switch 3 and 4 OFF
Air & Floor	Switch 3 ON and Switch 4 OFF
Floor Sensor	Switch 3 OFF and Switch 4 ON

7. Floor Limit Temperature

This setting is only required when the sensor option is set to Air and Floor mode. The setting is used to protect the floor surface from overheating. It can be set to 20,28 or 40°C

To set the required floor limit temperature, set the DIP switches according to the table. The DIP switches can be accessed from the back of thermostat.

20°C	Switch 5 and Switch 6 OFF
28°C	Switch 5 ON and Switch 6 OFF
40°C	Switch 5 OFF and Switch 6 ON

Should the floor temperature be achieved (even if the desired room temperature has not) the heating will turn off. The Heat Active Icon will flash in this case.

8. Switching Differential

The Heatmiser DS1-EL offers 1,2 and 3°C switching differential.

With A 1°C switching differential the heating will switch on 1°C below the set temperature and will turn off when the set temperature is reached.

A 2°C will turn the heating on 2°C below the set temperature

3°C will switch the heating on 3°C below the set temperature.

To set the differential, you should set the DIP switches according to the table below. The DIP switch can be accessed from the back of the thermostat.

1 °C Switching	Switch 1 & 2 OFF
2 °C Switching	Switch 1 ON and Switch 2 OFF
3 °C Switching	Switch 1 OFF and Switch 2 ON