

User Guide Underfloor Heating Alarm



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The English language is used for the original instructions. Other languages are a translation of the original instructions. (Directive 2006/42/EC)



1 Introduction

Underfloor heating elements are strong but they can be damaged during installation & tiling. We recommend the FWC Alarm to monitor your mats during every installation step.

When connected to the underfloor heating mats, the alarm will sound when continuity is lost between the two heating conductors or if continuity develops between the ground wire or shield and one of the heating conductors.

If alarm sounds, stop work and check troubleshooting page in the installation manual.



2 Preparation

- 1. Open the battery compartment cover and insert two AAA size batteries (included). Make sure the batteries are installed correctly (*see figure 1*).
- 2. Replace the battery compartment cover and switch the unit "ON".
- 3. The alarm should sound and the red light should be lit when there are no connections to an underfloor heating mat or loose cable. If these things do not occur, inspect the battery connection or replace the batteries.
- 4. During normal use (once the mat or cable is connected to the unit), the green light indicates that FWC Alarm is monitoring the mat or cable for damage. Should the green light go out, replace the batteries before continuing work.



Fig. 1



3 Operation

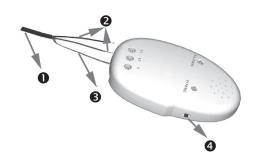
Make sure the mats and /or cables to be monitored are not connected to a power source.

Connect the system leads at beginning of the installation (see Figure 2).

The FWC Alarm is designed to monitor the mats or cables individually. However, by making a temporary "series" connection of multiple mats or cables, it can monitor up to three products at one time.

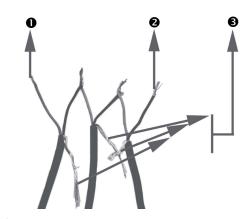
- 1. FOR A SINGLE MAT OR LOOSE CABLE REEL: Strip the insulation around the tip of the cold cable and separate the sheath earth wire. Insert each lead wire of the cold cable into the L1 and L2 terminals with the earth wire inserted into the E terminal. Tighten the terminal screws onto the wires (*as shown in Figure 2*).
- 2. FOR UP TO THREE MATS OR CABLES: Connect one lead wire (not the earth wire) from one mat or cable into the L1 terminal. Connect one lead wire (not the earth wire) from a DIFFER-ENT mat or cable into the L2 terminal. Now connect the remaining lead wires so that the mats or cables are in "series" with one another. If this is not done properly, the FWC Alarm may not correctly monitor the mats or cables. Finally, connect all the earth wires from the mats or cables together to the E terminal (*see Figure 3*).
- 3. Set the switch to the "ON" position.
- 4. A green light indicates FWC Alarm is operating.
- 5. Place the FWC Alarm where it can be seen and heard during the installation of the underfloor heating.
- 6. A red light and alarm indicate lead wires have come loose from terminals or that the underfloor heating elements have been damaged.

Please note: For added protection, we recommend all mats be tested with an actual OHM's meter for more specific readings.



- 1. Cold cable.
- 2. Lead wire.
- 3. Earth wire.
- 4. Switch.





1. To L1.

2. To L2.

3. Connect all earth wires to E

Fig. 3

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