

HOWLER HEATING MAT WIRE MONITOR - INSTRUCTIONS

The Howler Wire Monitor is designed to monitor Heatlay’s HL series mat systems during installation. Read this entire instruction sheet before using this device. Recommended for users with a basic understanding of electrical circuitry.

Heatlay mats are designed for the normal rigors associated with residential installation. The heating wire on the mat can be damaged to the point where the mat will not work if subjected to aggressive impacts or severe compression. Often this damage is not recognizable to the naked eye and for this reason we recommend using the Howler Wire Monitor to monitor the integrity of the heating wire during installation. The Howler will sound a loud noise and turn on the integral red alarm LED if the heating wire is shorted or goes to an open circuit. If the alarm sounds stop installation activity and troubleshoot the problem.

WARNINGS

1. **Do not** connect line voltage power to the Howler Wire Monitor; doing so will damage the monitor.
2. **Do not** connect line voltage power to the Howler Wire Monitor when connected to the heating mats, doing so will damage the monitor and could result in the risk fire or electrical shock.
3. **Do not** use with any other heating mat or cable systems other than Heatlay HL series mats.
4. **You must** still do the electrical tests indicated in the mat installation instructions; use of the monitor does not replace other testing or inspection requirements outlined in those instructions.

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 move the switch to the "ON" position, the Howler is now in monitoring mode.
3. With no mat connected the monitor should be sounding a loud alarm and the red LED should be lit. If the alarm and LED are not functioning inspect the battery connections or replace the batteries.

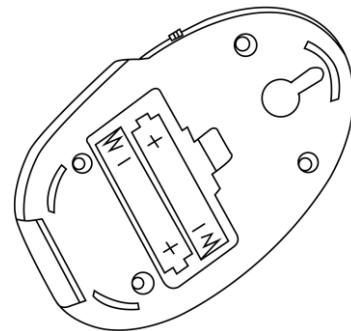


Figure 1 – Howler battery compartment

WIRING REFERENCE

Each Heatlay HL mat has one lead comprised of two conductors and one ground braid. See figure 2.

<u>120VAC</u>	<u>240VAC</u>
E - Ground Braid	E - Ground Braid
L1 – Black	L1 – Black
L2 – White	L2 – Red

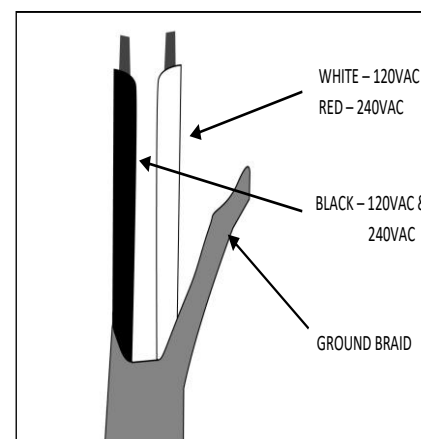


Figure 2– HL Mat Leads

CONNECTION

The Howler is designed to monitor single or multiple mat systems simultaneously. To monitor multiple mats temporarily connect the leads (see figure 2) from each mat in “series”. Wiring diagrams for single and multiple mat connections are shown in figures 3 – 5.

IMPORTANT: *When monitoring is completed disconnect the wires from their temporary “series” connections and wire in accordance with the thermostat instructions.*

1. Ensure that the Heatlay mats are not connected to the line voltage.
2. Connect the mat(s) to the monitor as per the appropriate wiring diagram. Use jumper wires as necessary.
3. The Howler should be placed where it can be easily seen and heard during the mat installation.
4. Ensure all marrette connections are secure and that the terminal screws are tightened down on the wire connections.

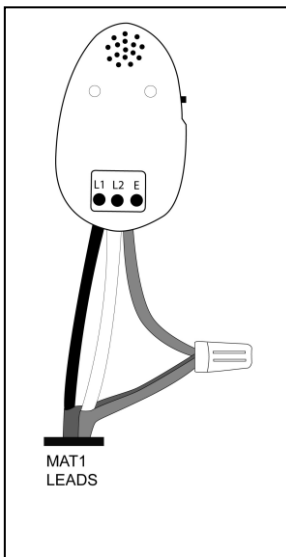


Figure 3 – Single Mat

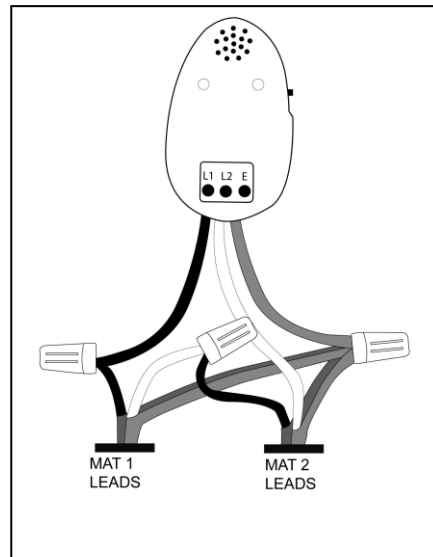


Figure 4 – Two Mats

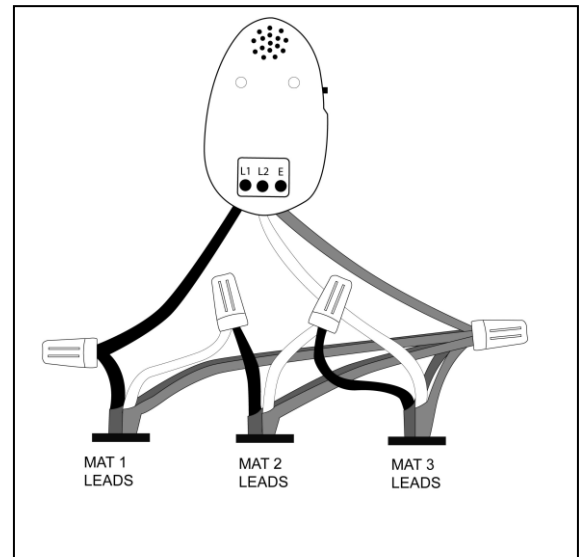


Figure 5 – Three Mats

OPERATION

1. Move the switch to the “ON” position.
2. The green LED light indicates that Howler is operating properly and does not detect damage in the wire.
Note: If the green light turns off during installation check or replace the batteries before continuing with the mat installation.
3. The Howler will sound an alarm and illuminate the red LED when it detects either that the lead wires have come loose from the terminals or damage resulting in an open or short circuit has occurred to the heating wire.

If the alarm sounds and the red LED illuminates during installation stop all work.

1. First check all the terminal and marrette connections to determine if the problem is just a loose wire.
2. If the connections are acceptable search for mat damage.
3. Do not continue with the installation until a resolution for the damage or alarm signal has been determined.

Limited Warranty

Heatlay Ltd. (the company) warrants that if there are any defects in material or workmanship in this product during the first three (3) months after the date of its purchase, we will replace the product with an equivalent model, not including any labor or other installation costs.

The company's obligation to replace the product as described above is dependent upon (a) the installation of the product conforms to the specifications set forth in our installation instructions and (b) the product not having been damaged by unrelated mechanical or electrical activities. A product replacement as described above shall be your sole and exclusive remedy for a breach of this warranty. The following are not covered by this Limited Warranty: any incidental or consequential damage, loss of time, loss of use or loss of income; any labour, materials or freight costs associated with removing, repairing or replacing flooring materials; any investigative costs related to the claim.

Heatlay Ltd. disclaims any warranty not provided herein, including any implied warranty of merchantability or implied warranty of fitness for a particular purpose. Heatlay Ltd. further disclaims any responsibility for extraordinary, incidental, or consequential damages as a result of any breach of this warranty or otherwise, whether or not caused by negligence. Heatlay Ltd. makes no other express warranty regarding any device beyond this document. Any samples shown are merely for demonstration purposes and do not represent the final product. No employee agent or representative of Heatlay Ltd. has any authority to extend or revise this warranty unless such extension or revision is made in writing by the president of Heatlay Ltd.

Any implied warranties that may not be disclaimed, including implied warranties of merchantability or fitness for a particular purpose are limited in duration to three (3) months from the date of purchase, unless prohibited by law, in which case all such implied warranties shall expire at the earliest time permitted by applicable law. Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state or province to province.

To begin the warranty refund process, please return the product with proof of purchase, postage paid, to Heatlay Ltd. at the address noted herein or the point of purchase.

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