

Installation Instructions for Warm Welcome® Step Heating System

Parts List:

Step treads and 6 screws per each
6 cement anchors per step (cement steps only)
Landing heater(s) and 4 screws per each
4 cement anchors per landing heater (cement surfaces only)

Tools Needed:

Phillips head screw driver
Electric drill (cement steps only)
3/16" masonry drill bit (cement steps)

INSTALLATION OVERVIEW:

1. Installing the heated step treads onto the steps.
2. Installing the heated landing tread and its transformer.
3. Installing the transformer(s). (See separate instructions in the lid or box of the transformer.)
4. Run the wiring harness the length of the steps attaching one end to the transformer.
5. Plug in the heated step treads to the wiring harness.

1. INSTALLING THE HEATED STEP TREADS ONTO THE STEPS:

Clean all debris from the step.

Place a heated step tread on the front edge of the first step. Be sure to position it so the nose is snug against the vertical side of the step **and the wiring is as far to one side as possible.**

CEMENT STEPS ONLY: Hold the heated step tread in place on the step. With a 3/16" masonry drill bit, drill six small holes through the step tread into the cement step **using the pre-drilled holes** located on the step tread as a template. Remove the tread and place the plastic cement anchors into each of the six drilled holes. Reposition the step tread over the holes. (Old or worn out cement may compromise the integrity of the installation. Consult a licensed mason if you have any questions.)

Screw the entire step firmly into place with the screws provided. Be sure the tread is secure. Follow this installation procedure on each step.

2. INSTALLING THE LANDING HEATER (175 WATTS) AND ITS TRANSFORMER

Clean all debris from the landing.

Place the landing heater in the desired position. **Be sure to locate the lead wire where it will not be tripped over.** FOR CEMENT SURFACES, FOLLOW THE PROCEDURE DESCRIBED ABOVE IN "CEMENT STEPS ONLY" FOR DRILLING INTO CEMENT AND USING CEMENT ANCHORS.

Then, with the screws provided, screw the heated landing tread to the landing or porch through the pre-drilled holes located at the corners of the tread.

Landing heaters come with their own transformers. Connect the landing heater directly to the transformer, following the directions included with the transformer.

3. INSTALLING THE TRANSFORMER(S):

Install the transformer(s) included with your system according to the instructions found in the transformer box or on the inside of the transformer lid.

Be sure to place the transformer within 15-20 feet of the most distant heated step tread. The wiring harness, which is 20 feet long, will connect the heaters to the transformer.

4. RUN THE WIRING HARNESS THE LENGTH OF THE STEPS, ATTACHING ONE END TO THE TRANSFORMER:

Install the 12/2 low voltage wiring harness on either the left (see Diagram A) or right side of your steps, as you determined when you placed your order.

Place the harness as far to the side edge of the step as possible so people won't trip on it or damage the low voltage plugs. If you wish, you can string the cable so the harness assembly is off the side edge as shown in Diagram A. Adjust the harness to ensure the step tread and harness plugs will attach to each other easily.

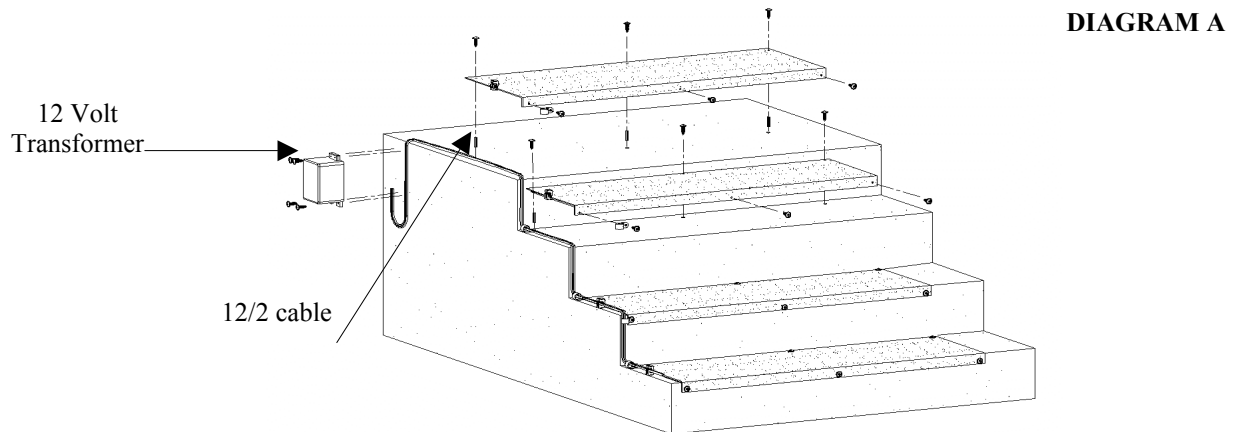
Connect the wiring harness to the transformer (see transformer instructions).

**Please see note below for further information on this system and transformers

5. PLUG IN THE STEP TREADS TO THE WIRING HARNESS

Since all components up to this point have been installed and wired, all that remains is to connect the plugs between the step treads and the wiring harness. Do this for each step, applying enough pressure to achieve a firm connection.

TO OPERATE THE STEP HEATING SYSTEM:



Plug in the transformer and wait ten minutes.

Check to see that the *Warm Welcome*[®] step treads are warm (they won't be hot) by placing your hand on the tread surface.

If the treads are warm a good electrical connection was achieved.

All heaters have been tested to operate. If a heater is not operating, an electrical connection was not achieved somewhere in the system. Do the following:

- Check to ensure the power supply (transformer) is plugged in and is on.
- Be sure the low voltage plugs are connected properly.

PROPER USE OF YOUR NEW STEP HEATING SYSTEM

The heaters do not need to be turned on all the time. If you know snow is forecast, or if lowering temperatures might turn wet steps to ice, switch on your step heating system before these conditions occur.

Your step heating system is designed to prevent accumulations of snow and ice on your steps. **If snow is allowed to accumulate because the power supply is not on:**

- Switch on the transformer.
- Wait ten minutes for the step heaters to warm.
- Brush off the excess snow or ice with a brush or broom.

Do not use a shovel on the heated treads; use a stiff broom or brush to clear them.

Each time you use the heated treads, check to ensure they are turned on and working properly before stepping on them.

To get extra long life out of your *Warm Welcome*[®] step heating system, install it in the fall and remove it in the spring.

WARNING!!! Never cover heaters with insulative coverings such as entry mats or blankets, as this may result in overheating and possible fire. Do not use these heaters

for any other purpose than for use with Warm Welcome® step treads! Improper use may result in serious injury.

* The step heating system you have purchased includes a transformer with appropriate watts to power the number of heated step treads in your package. Be aware that transformers are available in varying wattages and each has a limited number of heaters it can power. You must know this in case you ever decide to replace the transformer in this package or increase the number of steps connected to it.

For your information:

A 9"x30" step heater uses 60 watts of electricity, the same as a 60-watt light bulb. To determine the number of watts the transformer needs to power your system, multiply 60 times the number of heaters you wish to use. (An example is given in the chart below.) Do not exceed the transformer's maximum watt rating when installing the system.

Tread Size	Watts per Step	Max No. of Steps	Total Watts	Transformer Size	Low Voltage Wiring Harness
9"x30"	60	5	300	300	1
9"x36"	75	4	300	300	1

THE LANDING HEATER IS 175 WATTS

12 volt outdoor lighting transformers are compatible with this step heating system. Be sure all transformers are U.L. approved

** **Note:** The 20' wiring harness provided can support up to five 9x30 heated treads or four 9x36 heated treads. You can use up to a maximum of 20' of 12/2 cable for either configuration.



Lighthouse International, Ltd.
423 E. Cleveland Spokane, WA 99207

NAME: _____ PHONE: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

DATE OF PURCHASE: _____ EMAIL: _____

NUMBER OF STEPS PURCHASED: _____ SIZE: _____

MAIL TO: Lighthouse International Ltd.
Warranty Registration
423 E. Cleveland Ste. B
Spokane, WA 99207

Warranty

Lighthouse International Ltd. warrants the Warm Welcome[®] low voltage step heaters to the original purchaser against defects in workmanship and materials when used under normal operating conditions for a period of one year from the date of purchase. Lighthouse's obligation under this warranty is limited to repair of the Warm Welcome[®] heaters. Cost of removal, installation and shipping is not included. If failure should occur, return the defective unit with a dated proof of purchase to Lighthouse International Ltd. for verification and repair, or replacement under this warranty. Lighthouse International Ltd. shall replace the defective heater within 90 days after the defect is verified. This remedy does not apply to any defect arising out of abnormal use, negligence, alteration of the steps, or improper installation. Lighthouse International Ltd. makes no other representations or express warranties except those contained herein. All implied warranties granted under state law, including warranties of merchantability and fitness for a particular purpose, are limited in duration to the express warranties granted hereunder. Lighthouse International Ltd. in no event shall be liable for direct, indirect, special or consequential damages. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you also may have other rights, which vary from state to state.