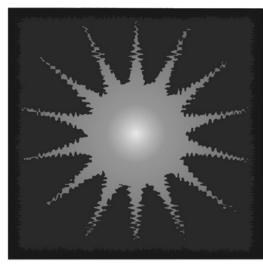
Owners Manual

Heatizon Systems Low Voltage Products

Floorizwarm System





INDEX	
Introduction	.2
Caution Notices	
System Information	4
Troubleshooting	
Warnings	
Warranty	
RMA Form	
Products	







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Owner's Manual Heatizon Systems Low Voltage Products Floorizwarm

Congratulations on your decision to purchase the finest floor warming, space heating, roof snow and ice melting and/or snow melting products available today. We are so confident that your decision to purchase our products will provide you with many years of satisfaction that we have backed them up with the longest warranty in the industry. In the event you ever have questions regarding the Heatizon Systems products please do not hesitate to contact us.

Heatizon Systems 4137 South 500 West Murray, Utah 84123 (801) 293-1232 Phone (801) 293-3077 Fax

www.Heatizon.com

Heatizon Systems Products

Utilizing state of the art components and low-voltage electricity, Heatizon's products are unprecedented in ease of operation. They are virtually maintenance free and efficient in operation. ZMesh and Tuff Cable have a limited 25 year warranty and are engineered to provide simple and problem-free solutions to your floor warming, in floor space heating, snow melting and roof snow and ice melting needs. Heatizon's ZMesh and Tuff Cable are tried and proven, and have been Warming American's Cold Spots since 1979.

Heatizon Systems products do not use chemicals or potentially explosive gases. The secondary side of all of our low voltage products operates at 65 volt AC or less.

CAUTION NOTICES

IMPORTANT! A plastic "STOP! DANGER!" sign and an "Electric Shock Or Fire Hazard" sticker indicating the presence of electric deicing, snow melting or warming equipment has been included with your Heatizon product packaging. These caution notices must be affixed at the fuse or circuit breaker panel and be clearly visible.

Never cut or in any other way damage the Tuff Cable or ZMesh. Never short the ZMesh or Tuff Cable to anything electronically conductive.





It is not recommend that you ever remove any of the covers on the Control Unit. Never open your Heatizon Systems Control Unit without first turning the power to the Control Unit completely off by turning both the Control Unit Switch, if so equipped, and the Circuit Breaker in the Electric Distribution Panel to the off position.



SYSTEM INFORMATION

Before Starting Your System:

- 1. Review all "Warnings" and "Start-Up Procedures" in both this manual and the Design and Installation manual which is available online at www.heatizon.com.
- 2. Make sure the "Warranty Card" has been sent to Heatizon Systems.
- 3. Start a file which includes a copy of the "After Element Installation Tests", this owners manual, the "Design and Installation Manual" and "Activation Device instructions."

Operating Your System:

Operation. Other than setting the activators and turning the breaker to the "On" position, Heatizon Systems products have nothing else that require your attention. In the event your Heatizon Systems products are not operating correctly, call a qualified electrical contractor or Heatizon certified installation professional to make any necessary adjustments or repairs.

Danger. Do not cut, short, or damage the Heatizon ZMesh or Tuff Cable heating elements once they have been installed. If you are performing work in the area where the heating element is located:

- 1. Turn the power off
- 2. Identify the exact location of the heating element
- 3. Contact Heatizon Systems (801-293-1232 or www.heatizon.com) if the heating element is damaged in any way

Maintaining Your System:

Maintenance. Other than keeping the airflow vents on the Control Unit clean and unobstructed, Heatizon Systems products do not require any routine maintenance. In the event your Heatizon Systems products are not operating correctly please call a qualified electrical contractor to make any necessary adjustments or repairs.

Summer Shut-down. Heatizon Systems recommends that the switch on the Heatizon Systems Control Unit, if so equipped, and the Circuit Breaker (located in your Electrical Distribution Panel) that services your Heatizon Systems product(s) be turned to the "off" position during the summer time and other extended periods of time when it will not be used.

Longevity and Reliability. There are no moving parts in your Heatizon Systems product. All controls are 100% solid-state for long term life and reliability.

PRODUCTS

Heatizon Systems carries a full line of Radiant Heating, Snow Melting, Roof Deicing and Pipe Freeze protection products. Contact Heatizon Systems or your local distributor for more product information.



















RETURN MATERIALS

If it becomes necessary to return any purchased materials to Heatizon Systems, they need to be accompanied by a Return Materials Authorization (RMA) form and number. Please call Heatizon Systems to get an RMA number and form, or use the RMA form below. RMA Forms also available online or by Fax. Complete all information on the form, package products in their original shipping materials, and return them as directed. Products being returned for repair or warranty will be evaluated by our engineers prior to determining if repairs can be made and/or if warranty applies to returned materials. Please be aware of shipping. restocking, and other charges that may apply to your returned materials.



RETURN MATERIALS AUTHORIZATION

4137 South 500 West . Murray, UT 84123 Phone (801) 293-1232 • Fax (801) 293-3077

RMA#

HOW TO RETURN MERCHANDISE

- Call Customer Service (1-888-239-1232) for a Return Materials Authorization number. Write your RMA number
- . Complete steps 1 through 4 on this form and return it with
- Pack and tape your shipment carefully in the original packaging, or in a strong cardboard carton to avoid damage in shipment. Heatizon reserves the right not to issue a refund if return merchandise is damaged due to poor packaging. Be particularly careful with electronic items and heavy items, such as transformers
- . Complete and detach the label below, and affix the return shipping label to your package Be sure to write your RMA number on the shipping label.
- . Ship your package prepaid and insured via UPS Ground or FedEx Ground (Sorry, we can not accept COD's). Return shipping charges are the customer's responsibility.
- . A restocking fee will apply to all materials being returned to inventory. Special order items are not returnable

RETURN CODES

- 20 Ordered wrong materials 21 Ordered wrong quantity
- Project changed after order
- 23 Decided didn't want
- 24 Shipped wrong materials
- 25 Item labeled incorrectly
- 26 Parts shipped do not match order
- 27 Defective material
- 28 Parts missing from product
- 29 Does not work (Explain on back)
- 30 Damaged in shipping
- 31 Repair and return

HEATIZON RETURN POLICY

Heatizon will provide an exchange or refund for new products returned within 30 days, less restocking fee and shipping and handling. All products must be in new, unused condition and in the original packaging to receive a refund or credit. Merchandise returned not in the original condition in which it was shipped will be subject to a restocking fee, a repair fee, or may be ineligible for refund. Beyond 30 days, items are returnable for exchange only after inspection. Items being returned for repair require credit card preauthorization by up to \$100 to assess and repair the item. The customer will be contacted for authorization to proceed if repairs exceed \$100. Any item that is shipped without completed RMA form, or any item left unclaimed for 30 days becomes the property of Heatizon Systems.

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E-Mail Address			Date of Purchase Invoice Number			
comments						
Please indicate the Any credit or reimbursement dvise them of this return and	is made to the d arrange for cred	istributor that the pro	duct was purchased t		Repair t your Heatizon	
TEP 3: ITEMS BEING RE	ETURNED		ITEMS EXCHAN	GING FOR		26
ITEM # AND DESCRIPTION	QTY	REASON CODE	ITEM# AND DES	CRIPTION	QTY	PRICE
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turned for repairs or prior approval if repairs exc Usa MasterCard	will be examined ceed \$100. Failured Discover	d and repaired if cost re to complete this s	to repair does not ex ection may cause dela Express	ceed \$100. ays in the pro is Enclosed	Customer will b	e contacted
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TROUBLE SHOOTING PROCEDURES

WARNING: HIGH VOLTAGE PRESENT! TROUBLE-SHOOTING PROCEDURES AND MEASUREMENTS MUST BE PERFORMED WITH THE SYSTEM ENER-GIZED AND THE COVERS REMOVED. ALWAYS MAKE CERTAIN THAT THE PER-SON PERFORMING THESE PROCEDURES IS FAMILIAR WITH SAFE PRACTICES REQUIRED FOR WORKING WITH HIGH VOLTAGE EQUIPMENT. A QUALIFIED TECHNICIAN OR ELECTRI-CIAN SHOULD PERFORM THE FOLLOWING PROCE-DURES!

NOTE: Always turn power off prior to removing or reinstalling covers.

NOTE: Never install or reinstall the Control Board with the primary power in the "ON" position.

NOTE: Prior to trouble-shooting the system, check for obvious problems such as loose connections, cut or broken wires, etc. Check the jumpers on the printed circuit board for proper settings. See Design and Installation Manual.

The following procedures cover most problems that can be encountered when installing or servicing Heatizon Systems Floorizwarm products. If your Heatizon Systems product cannot be repaired using the following procedures, contact Heatizon Systems for further assistance.

There is no power in the Floorizwarm Power Unit:

- Turn circuit breaker to the "off" position. Check for 1. proper power connection to the control unit.
- 2. Turn circuit breaker to the "off" position. Check all connections in control unit.
- 3. Check that the 20 amp circuit breaker panel is in the "on" position.

B. There is power in the Floorizwarm Power Unit:

- Check the fuse in the Floorizwarm Power Unit.
- 2. Check that the Thermostat is wired properly.
- 3. Check that the Thermostat is programmed correctly and is calling for heat.
- 4. Push the GFI reset on the Thermostat.
- 5. Check for 120 VAC on relay coil across pin 0 and 1.
- Check for 120 VAC on primary of Transformer. 6.
- Check for proper voltage on secondary of Transformer. 7.
- Using a clamp on Amp meter, check for current in the heating element. If no amperage is present, turn the circuit breaker to the Power Unit to the "off" position, disconnect the Cold Lead from the Transformer, and check for continuity of the Floorizwarm Heating Element.

Note: Prior to returning anything to Heatizon Systems, 4137 South 500 West, Murray, UT 84123, call (801) 293-1232 for a Return Materials Authorization form.

WARNINGS

Check contents of all boxes immediately upon receipt of your Heatizon shipment and notify Heatizon within 24 hours of any discrepancy or missing part.

Read this Installation Manual in its entirety before attempting to install any Heatizon Systems Products.

Installation of Heatizon Systems products and associated work must be performed by qualified persons and conform to local building codes, ordinances, trade practices, and in accordance with all applicable sections of the National Electric Code (NEC) or the Canadian Electrical Code (CEC).

Risk of fire! Risk of fire possible if installation of system is not completed according to all of the installation instructions contained within this Installation Manual, including but not limited to the warnings and notes throughout. Risk of fire possible if metal or any other conductive material is allowed to come into contact with the Cold Leads and Tuff Cable or ZMesh Heating Element. Risk of fire possible if connections/joints between Cold Leads and Tuff Cable, Colds Leads and ZMesh, Tuff Cable and Tuff Cable, and or ZMesh and ZMesh are not crimped and/or soldered correctly. Risk of fire possible if loose strands of ZMesh or Tuff Cable Heating Element or cuts or other damage to ZMesh or Tuff Cable are not repaired correctly. Note: The safety features incorporated into Heatizon Systems products cannot detect cuts in Cold Leads and ZMesh or Tuff Cable Heating Elements. Do not allow ZMesh to cross itself—maintain a minimum of 2" distance between adjacent runs of ZMesh Heating Element. Do not allow Tuff Cable to touch or cross itself.

Risk of shock! Make sure all power to your Heatizon Systems product and thermostat is shut off at the electric distribution panel before installing, removing covers, servicing, or working on any of the components of any Heatizon System product.

All connections/joints between Colds Leads and Tuff Cable heating element must be embedded into mortar, asphalt, or other acceptable cementitious Heatsink.

Knockout openings shall not be used except with devices that are designed to fill such openings.

Obtain written approval from Heatizon Systems for applications and installations that are different from those described herein.

In order for your Heatizon Systems product to operate correctly, the transformer portion of the Control Unit must be installed so that it can dissipate the heat that it generates

Like all electric products, Heatizon Systems products create a magnetic field that may interfere with certain brands of televisions, computer monitors, etc. Unlike Cathode Ray Tubes ("CRT"), Plasma Display Panels ("PDP") and Liquid Crystal Displays ("LCD") do not seem to be affected by magnetic fields. In the event magnetic field interference is a concern for you please consult Heatizon Systems or your sales representative prior to making your purchase.

Mattresses, Bean Bag Chairs, LoveSacs, Futons, and all other items which have high insulating values should never be placed directly on any surface which has a radiant heating product under it.

Never install Heatizon Systems products in space heating or floor warming applications to deliver more than the15 watts per square foot (or 160 watts/m2) recommended by the Radiant Panel Association.

"Field installed wiring is to be in compliance with the National Electrical Code (NFPA-70) and/or ordinances," or the Canadian Electrical Code, or equivalent, as applicable to installation location.

Never install heating element near a wax toilet ring.



Twenty-five Year Limited Warranty for Heatizon Systems Floorizwarm AC and Specified Radiant Panel Heating Components

Heatizon Systems warrants to the end users of the following products that for the periods noted such products shall be free from defects in material and workmanship: Floorizwarm Cable Heating Element (E101-14) for a period of twenty-five (25) years, and the Control Box transformer for a period of five (5) years, and the Activation Device(s) for a period of one (1) year. Such warranty periods shall commence on the date of shipment by Heatizon Systems. If any parts are found to be defective in manufacture material or workmanship during such time period, Heatizon Systems will, at its sole option, replace or repair defective parts.

This Limited Warranty applies only if articles sold hereunder (a) are selected, designed, and installed according to instruction and operation manuals furnished by Heatizon Systems and installed in a "workmanlike manner" according to the building association standards adopted by Heatizon Systems, (b) remain in their originally installed location, (c) are connected to proper power supplies, (d) are not misused or abused, (e) show no evidence of tampering, mishandling, neglect, accidental damage, modifications or repair without the approval of Heatizon Systems, or damage done to the product by anyone other than Heatizon Systems, and (f) are installed in accordance with applicable code requirements. Any warranty claims must be made in writing, no later than one (1) month following expiration of the warranty period, and must be accompanied by the warranted part or component. Any claim not made in such manner shall not be honored by Heatizon Systems.

This Limited Warranty does not cover:

- 1. The workmanship of any installer of Heatizon Systems products.
- 2. Any Heatizon Systems products that have a failure or malfunction resulting from improper or negligent operation, accident, abuse, misuse, unauthorized alteration or improper repair or maintenance.
- 3. Any Heatizon Systems products that have had components not purchased from Heatizon Systems integrated into or connected to them.
- 4. Any labor costs for removal of alleged defective part(s) and/or reinstallation of replacement part(s), transportation to and from Heatizon Systems (if necessary) and any other material necessary to perform the exchange or repair.
- 5. Any Heatizon Systems heating products that have not been properly registered by completion and return of the Warranty Registration Card provided with your product.

DISCLAIMER OF WARRANTIES:

This warranty described above is in lieu of all other warranties, express or implied, including but not limited to any implied warranties of fitness for a particular purpose and merchantability. Heatizon Systems expressly disclaims and excludes any liability for losses, expenses, inconveniences, consequential, incidental, indirect, or punitive damages for breach of any express or implied warranty. By installing Heatizon Systems products, you accept the terms of this limited warranty.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above limitations and exclusions may not apply to you. This Limited Warranty gives you specific legal rights, and you may also have other rights, which may vary, from state to state.