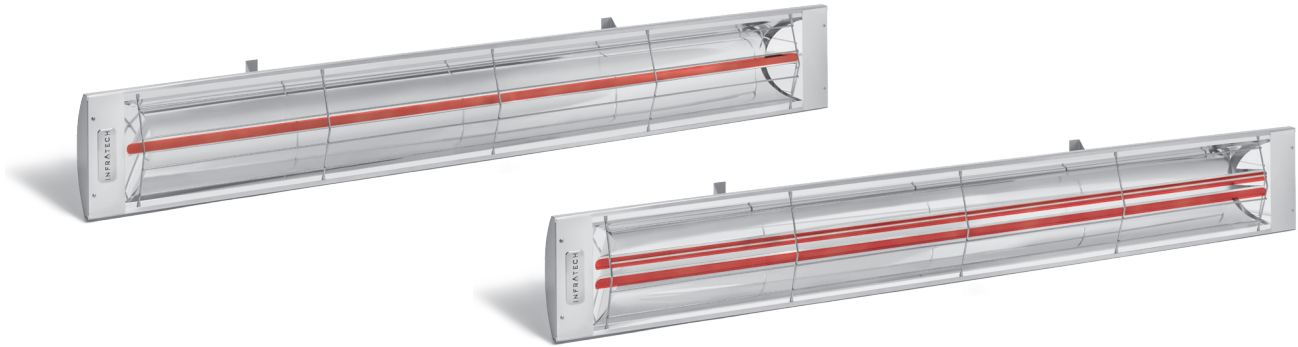


# INSTALLATION USE & CARE MANUAL

ALL WEATHER C-SERIES AND CD-SERIES

QUARTZ TUBE ELECTRIC INFRARED RADIANT HEATER

**INFRA**TECH  
COMFORT



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## WARNINGS

READ ALL INSTRUCTIONS BEFORE INSTALLING/OPERATING HEATER. Unit must be installed and serviced by a licensed electrician. Unit may be a source of possible shock. NEVER attempt to service the heater without disconnecting its power source. Source of possible ignition.



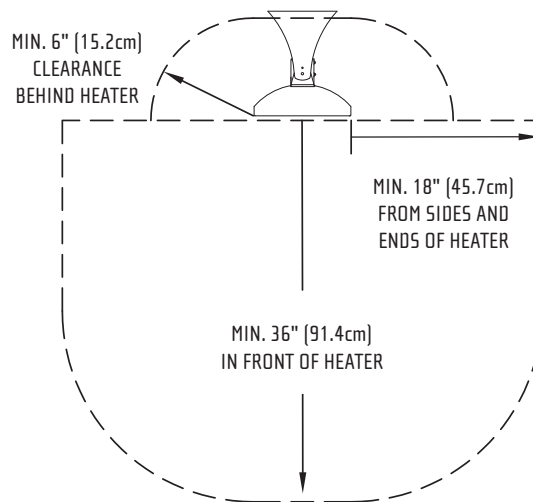
**WARNING:** If not installed, operated and maintained in accordance with the manufacturer's instructions, this product can expose you to chemicals including nickel, which are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## CAUTION

High Temperature, risk of fire, keep electrical cords, drapery, furnishings and other combustibles at least 3' (0.9m) from the front of heater and away from sides and rear.

## MOUNTING HEIGHT/CLEARANCES

### CLEARANCE FROM COMBUSTIBLES:



- For Wall-Mounting, do not install heater closer than 18" (45.7cm) from adjacent walls and 12" (30.5cm) from ceiling and do not install less than 6' (1.8m) if the heater is labeled as UL Listed and 8' (2.4m) if the heater is labeled as UL/CUL Listed from floor, while heater is set at a downward angle of 30 to 60 degrees.
- For Ceiling-Mounting, do not install heater closer than 18" (45.7cm) from adjacent walls and 6" (15.2cm) from ceiling and do not install less than 6' (1.8m) if the heater is labeled as UL Listed and 8' (2.4m) if the heater is labeled as UL/CUL Listed from floor, while heater is at a maximum 30 degrees.
- Do NOT operate within 25' (7.6m) of flammable/explosive material.
- Never block heater.
- Heaters greater than 240 Volts are for "Commercial Use Only. Risk of fire. Do not use as a residential or household heater."
- A means for disconnection of the appliance must be incorporated in accordance with the local wiring codes.
- Do not use if the heating element is damaged or cracked.
- Not for use as a replacement for forced air/ductless heating.
- Do not leave powered heaters unattended.

**"IMPORTANT INSTRUCTIONS"**  
**"SAVE THESE INSTRUCTIONS"**

**INSTALLATION INSTRUCTIONS**

This heater must be permanently installed and hard wired by a licensed electrician in accordance with local electrical codes. Assembly procedure must be performed with no electrical power to unit.

**Step 1:** Check the heater's UL/CUL/CE label for proper voltage.

**Step 2:** All electrical connections must comply with the National Electric Code (NEC) and local codes.

**Step 3:** For outdoor installations, use components with a minimum IPX4 rating.

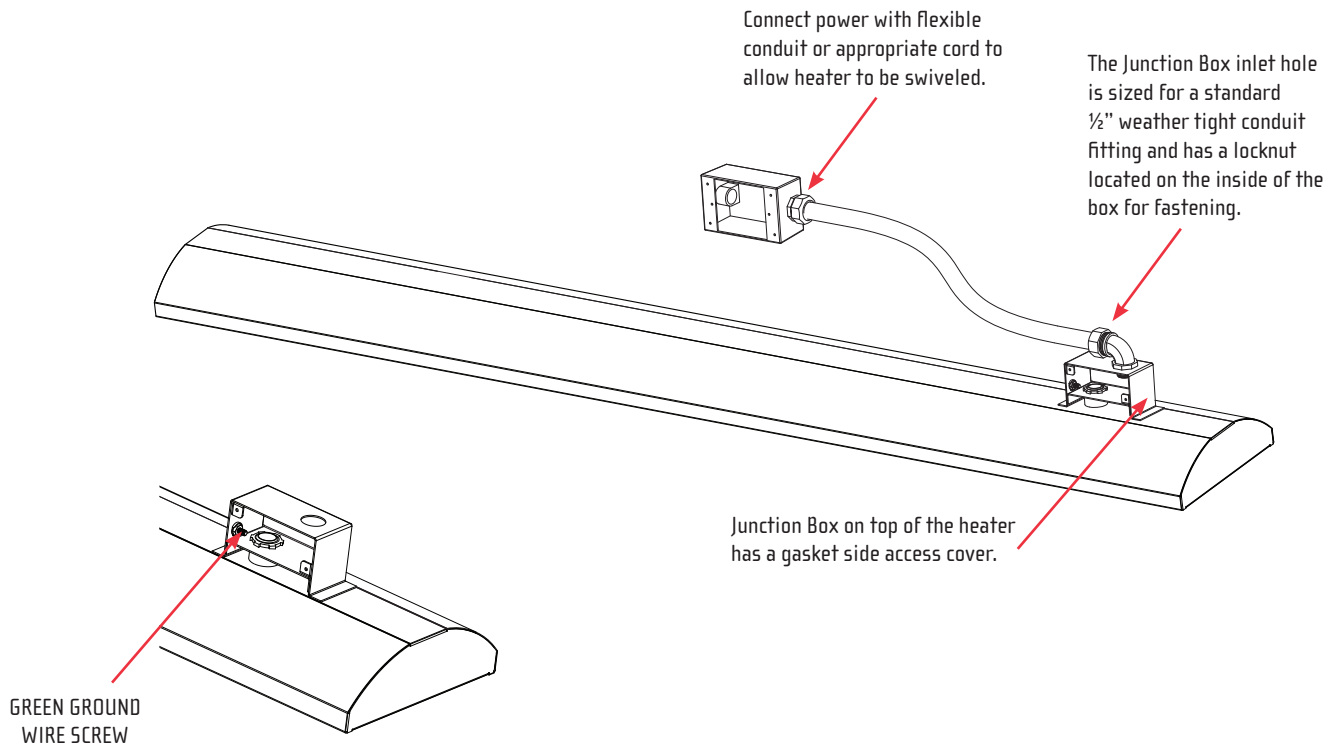
**Step 4:** Ensure all heating elements are securely installed and the heater is horizontally level before energizing/operating.

**WIRING INSTRUCTIONS**

The heater is drilled and threaded for standard 1/2" conduit fittings. The installing electrician will need to provide the appropriate rigid metallic, flexible or liquid tight conduit for the installation location.

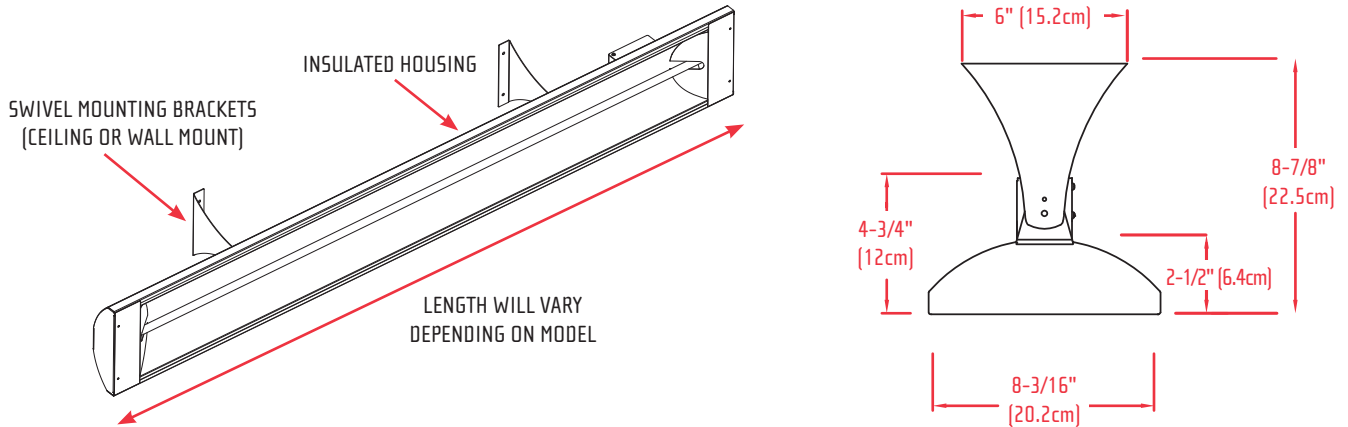
**IMPORTANT:** Pre-wiring without a chosen control can lead to rework if the wiring doesn't match the final control selection.

- Follow the wiring instructions with Infratech controls, if purchased.
- Observe NEC and local electrical code regulations.
- Remove the cover plate from the junction box.
- Attach appropriate fittings.
- Use only copper wire suitable for 90°C.
- Reinstall the junction box cover plate.



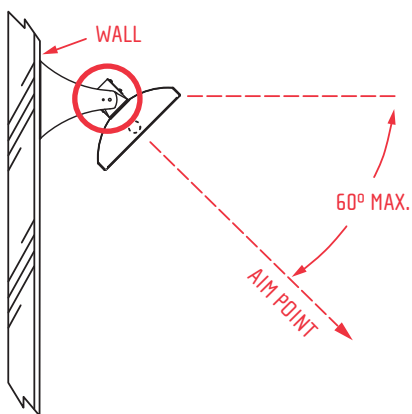
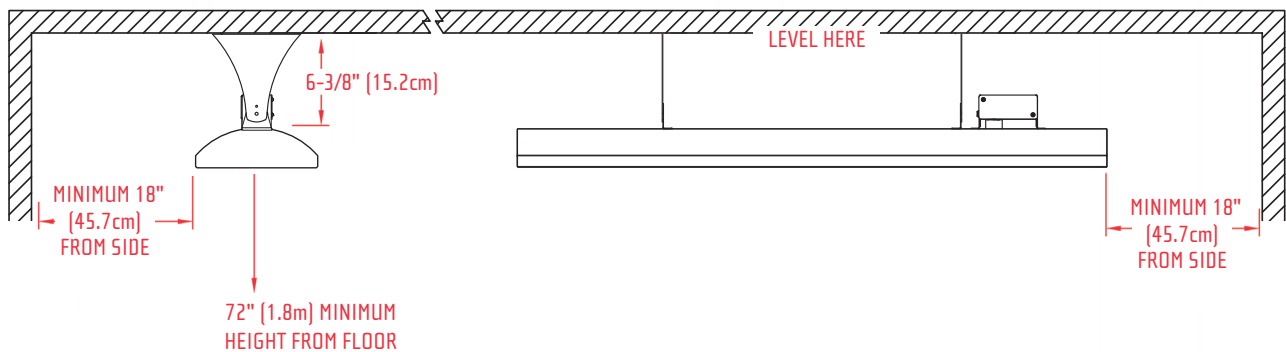
**MOUNTING INSTRUCTIONS**

These models may be chain or bracket mounted to any ceiling or horizontal surface. Installation must be such that 18" (45.7cm) minimum clearance is maintained around the heater on all four sides and 36" (91.4cm) directly in front. A minimum of 6" (15.24cm) of clearance provided by mounting brackets is required behind the plane of the face. Heater can be hung using chains or custom brackets. Heater must be level, but can be rotated around its horizontal axis.

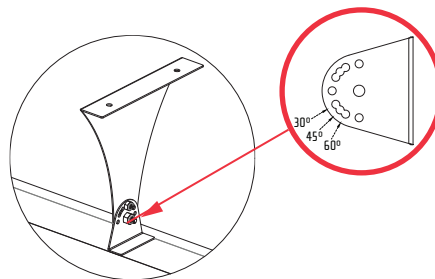


Heater must be installed with the quartz tube horizontally level. For maximum tube life, use a carpenter's level tool to find the optimum level position for the heater's body. It's important to always maintain the minimum clearances from the heater body to any combustible materials.

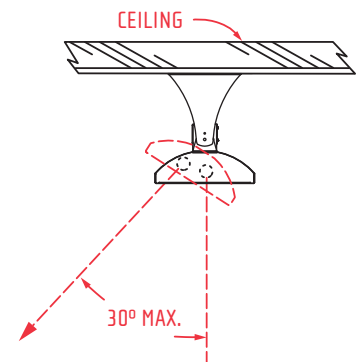
**NOTE:** Custom brackets are available and can be engineered to meet height, clearance, and combustible requirements upon request.



**Detail of C-Series Multi-Position Mounting Bracket Tab**



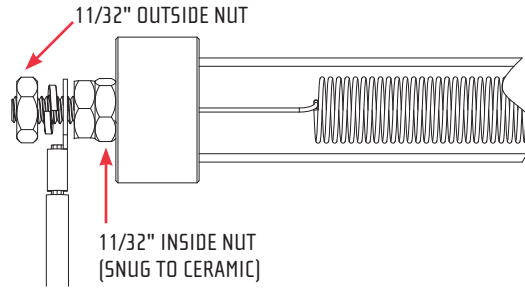
**WARNING:** Positions selected must meet all clearances from combustibles (refer to page 2)



**ELEMENT INSTALLATION INSTRUCTIONS** (VISIT [INFRATECH.COM](http://INFRATECH.COM) FOR INSTALLATION AND REPLACEMENT VIDEO INSTRUCTIONS)

- Disconnect power to the heater
- Unscrew and take off the end covers.
- Remove the screw, pivot the element clips, and carefully position the new quartz tube(s) in place. Close the element clips that secure the tube to the heater and reinstall the screw.
- Tighten the nuts on the element ends with the provided 11/32" wrench, holding the inner nut while tightening the outer nut (see note below).
- Ensure a secure connection. A licensed electrician should inspect wire connections yearly.
- Reinstall the end covers and screw in place.
- Snap the grill onto the heater.

**NOTE:** Hold ceramic element firmly while tightening nut to prevent damage to element. Nut should be tightened snug. A loose connection can cause the element to short or fail prematurely.



SCAN FOR VIDEO INSTRUCTIONS



**REPLACEMENT ELEMENTS** (OTHER VOLTAGES ALSO AVAILABLE)

PART NUMBER	ELEMENT NUMBER	LENGTH	WATTS	VOLTS	FITS
10-1020	E-7512	16-1/2" (0.4m)	750	120	C-7512
10-1050	E-1412	30" (0.8m)	1500	120	C-1512
10-1055	E-1424	30" (0.8m)	1500	240	C-1524/CD-3024
10-1085	E-2024	36" (0.9m)	2000	240	C-2024/CD-4024
10-2026	E-2624	45" (1.1m)	2600	240	C-2624/CD-5224
10-2030	E-3024	58" (1.5m)	3000	240	C-3024/CD-6024
10-2055	E-4024	58" (1.5m)	4000	240	C-4024

Consult the label on back of heater for proper watts, voltage, and replacement element part number.

**Need help?** To order replacement elements for your Infratech heating system, please contact us via phone or visit our website.

**REPLACEMENT PARTS**

PART NUMBER	PART DESCRIPTION	QUANTITY
13-1213	C-Series Single Element End Cover (Set of 2)	1
13-1255	CD-Series Dual Element End Cover (Set of 2)	1
13-1207, 13-1208, 13-1206, 13-1209	Body Reflector – Fits 33" (0.8m), 39" (1.0m), 48" (1.2m), 61-1/4" (1.6m)	1
13-1232, 13-1230, 13-1234, 13-1235	Lead Wire Set – Fits 33" (0.8m), 39" (1.0m), 48" (1.2m), 61-1/4" (1.6m)*	1
13-1242, 13-1240, 13-1243, 13-1245	Grill Guard – Fits 33" (0.8m), 39" (1.0m), 48" (1.2m), 61-1/4" (1.6m)	1
13-1250	SS Mounting Bracket (Set of 2)	1

\* Note: Dual Element Heaters require 2 Lead Wire Sets per Heater

**SINGLE ELEMENT AREAS COVERED (FEET)**

MODEL	WATTS	MOUNTING HEIGHT	AVERAGE	COLD	PROTECTED
<b>C-1512 SS</b>	1,500	6' - 7' (1.8m - 2.1m)	5' x 5' (1.5m x 1.5m)	3' x 3' (0.91m x 0.91m)	7' x 7' (2.1m x 2.1m)
<b>C-2024 SS</b>	2,000	7' - 8' (2.1m - 2.4m)	6' x 6' (1.8m x 1.8m)	4' x 4' (1.2m x 1.2m)	8' x 8' (2.4m x 2.4m)
<b>C-2624 SS</b>	2,600	7' - 8' (2.1m - 2.4m)	7' x 8' (2.1m x 2.4m)	5' x 5' (1.5m x 1.5m)	9' x 9' (2.7m x 2.7m)
<b>C-3024 SS</b>	3,000	7' - 9' (2.1m - 2.7m)	8' x 8' (2.4m x 2.4m)	6' x 6' (1.8m x 1.8m)	10' x 10' (3.0m x 3.0m)
<b>C-4024 SS</b>	4,000	8' - 10' (2.4m - 3.0m)	10' x 10' (3.0m x 3.0m)	8' x 8' (2.4m x 2.4m)	12' x 12' (3.7m x 3.7m)

Also available in 316 Marine Grade Stainless Steel on request

**DUAL ELEMENT AREAS COVERED (FEET)**

MODEL	WATTS	MOUNTING HEIGHT	AVERAGE	COLD	PROTECTED
<b>CD-3024 SS</b>	3,000	7' - 8' (2.1m x 2.4m)	7' x 7' (2.1m x 2.1m)	5' x 5' (1.5m x 1.5m)	9' x 9' (2.7m x 2.7m)
<b>CD-4024 SS</b>	4,000	8' - 10' (2.4m - 3.0m)	8' x 10' (2.4m x 3.0m)	6' x 8' (1.8m x 2.4m)	10' x 12' (3.0m x 3.7m)
<b>CD-5224 SS</b>	5,200	8' - 10' (2.4m - 3.0m)	10' x 10' (3.0m x 3.0m)	8' x 8' (2.4m x 2.4m)	12' x 12' (3.7m x 3.7m)
<b>CD-6024 SS</b>	6,000	8' - 12' (2.4m - 3.7m)	11' x 11' (3.4m x 3.4m)	10' x 10' (3.0m x 3.0m)	12' x 12' (3.7m x 3.7m)

Also available in 316 Marine Grade Stainless Steel on request

**NOTE:** Mounting height should not be less than 6' (1.8m) if the heater is labeled as UL Listed and 8' (2.4m) if the heater is labeled as CUL Listed. Indoor or well-protected environments will generally exceed average. Heaters can provide less than average coverage in extremely cold/windy conditions.

**GENERAL NOTES**

Infratech Quartz Tube Electric Heaters are provided with wall/ceiling mount swivel brackets. Discard these brackets if using chains, special brackets, or a flush mount frame.

Prewiring is not recommended until an Infratech Control is chosen. Refer to the sales literature and price list for complete information on models, descriptions, amperage requirements, and voltage needs.

For ideal comfort heat, the best solution is to heat from two

sides rather than just one side. However, there are times when this is not practical. While heaters typically exceed average coverage in well-protected areas (see above charts), extreme cold or wind can limit their reach.

Infratech offers a variety of control options to customize your heating experience. All Infratech controls are sold separately and provided with all necessary installation instructions, wiring diagrams, and cut sheets.

**MAINTENANCE INSTRUCTIONS**

**NOTE:** It is recommended that a licensed electrician inspects your wiring connections yearly.

Always turn off the power and wait for the heater to cool completely before performing any maintenance. To remove surface contamination from the heater housing end covers, wipe down using a clean, scratch-free rag using isopropyl alcohol, a mild, non-harsh detergent, or warm water.

A stainless steel cleaner or polish can remove any oxidation, surface rust, or discoloration on the bare metal surface.

After cleaning, thoroughly dry the surface with a soft cloth. Leaving water spots can accelerate corrosion. Before reconnecting the power, remove all water, solvents, or cleaners and dry the heater.

Regularly check the heaters and or frames for signs of surface rust or tea staining. These are early signs of corrosion and can be addressed before significant damage occurs.

**Frequent Cleaning Recommended for Saltwater Exposure:**

Clean the surface with fresh water and a soft cloth to remove salt deposits. Salt can damage the protective layer of stainless steel. Aim for more frequent cleaning after storms or heavy ocean spray.

**NOTE:** While 316 stainless steel is known for its corrosion resistance, keep in mind that even with all its corrosive-resistant features, 316 marine-grade stainless steel is "stainless," not "stain-free." Maintenance is still required, especially near the ocean, where exposed to salt water.

**TROUBLESHOOTING**

PROBLEM	WHAT TO DO
Heater does not glow	<ul style="list-style-type: none"> <li>• Check supply voltage to confirm it matches voltage of heating element.</li> </ul>
Low heat output	<ul style="list-style-type: none"> <li>• A 240V element connected to 110V or 208V will warm, but not glow orange or generate sufficient heat for typical applications (Matching your voltage is extremely important). If element is visibly orange, but there is insufficient heat, refer to the areas covered with respect to conditions and mounting heights.</li> </ul>
Heater does not work	<ul style="list-style-type: none"> <li>• Disconnect power and check element with an ohm meter for continuity. If there is any continuity across the bulb, the problem is in the wiring/controls.</li> <li>• Check that there is proper voltage to the heater.</li> <li>• Check that the control/switch is working.</li> <li>• Check main power circuit breaker.</li> <li>• Check wiring for a loose connection or burned wire.</li> </ul>

**LOCATION SUGGESTIONS**

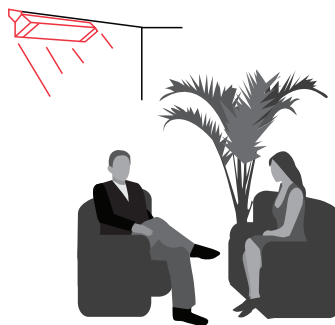
Unless heaters are installed over 12' (3.7m) high, it is generally recommended that all radiant heaters be mounted on an angle to assure that radiant warmth is distributed from the sides rather than straight down on the heads and shoulders of the people being warmed.

**RECOMMENDED POSITIONING**



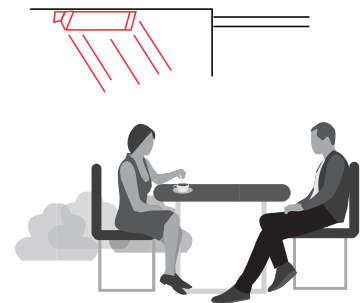
Angle fixture 30° to 60° from horizontal face down. Best angle is approximately 45°.

**INSTALLATION DIRECTION**



Install fixture to heat the area from the “cold side” if possible. This helps compensate for increased body heat losses due to exposure. Warm floors reradiate heat. Warmer air rises from floor. Some heat reflects from floor. Mounting a heater directly over a table or other obstruction will block the energy, primarily heating the object. It is best to move heater to the side, allowing complete body and floor coverage.

**OUTDOORS**



When outdoors, hang heater under protective roof or weather cover whenever possible. Even though heater is all-weather construction, it will last longer and look better if it is protected from rain and snow.

**LIMITED PRODUCT WARRANTY**

Model #: \_\_\_\_\_ Serial #: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_ Purchased From: \_\_\_\_\_

Thank you very much for purchasing a INFRATECH Quartz Tube Electric Heater.

We have designed this heater to provide you and your family with many years of great outdoor experiences. Please fill in the Model and Serial number as well as date of purchase in the areas indicated above. Please save this information for future reference. To get the full and safe enjoyment of your electric heater please read your Owner's Manual carefully and review the proper operating and safety instructions with any family members that may be using the heater.

**Manufacturer Warranty:**

This limited warranty solely covers manufacturer replacement parts.

**NOTE:** Use of competitor controls or accessories with Infratech heaters may void the Infratech Warranty.

**Extent of Warranty:**

This warranty extends to the selling dealers to the original purchaser at the original site of installation: This warranty becomes valid at the time of purchase and ends either by specified time frame listed above, owner transfer or relocation. In order to activate the warranty we require that you send in the attached warranty registration form. This registration is for our internal use only and will only be used in the event we need to send you important safety related product information. The information will not be sold or used for any marketing related purposes.

**Warranty Limitations and Exclusions:**

This warranty does not apply to damages resulting from negligence, alteration, misuse, abuse, accident, natural disaster, improper installation or improper operation, unauthorized adjustments or calibrations, dings, dents, scratches, nor damages due to harsh chemicals (i.e. cleaning products improperly applied). Warrantor is not responsible for consequential or incidental damages. Under no circumstances shall INFRATECH or any of its representatives be held liable for injury to any person or damage to any property, however arising.

Manufacturer's Warranty excludes ALL associated labor costs, including any labor or service charges to remove, repair, or reinstall the product. This warranty solely covers manufacture replacement parts.

**Important: Please retain original proof of purchase to establish warranty period.**

Any implied warranties of merchantability and fitness applicable to the equipment are limited in duration to the period of coverage of this express written warranty. This warranty grants specific legal rights to the purchaser. Other rights, which may vary from state to state, may also apply. Title to the merchandise passes to the consignee upon acceptance by the carrier. After acceptance by the carrier, the merchandise travels at the risk of the purchaser. In the event of freight damage, do not refuse shipment. Advise both the freight agent and the shipper of the damage. Note the details of that damage on the freight bill before any freight charges are paid and file a claim for damages with the freight agent.

**Online Warranty Registration**

Register your Infratech heater online today and you'll not only be covered by the most extensive three-year warranty in the industry – you'll also be automatically enrolled in our Heater Maintenance Program. This means you can enjoy industry-leading customer support and receive free replacement end covers when needed, to keep your heating system looking as new as the day it was installed. Register at: [infratech.com/warranty](http://infratech.com/warranty)

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**INFRATECH WARRANTY REGISTRATION**

Customer Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_

Model #: \_\_\_\_\_ Serial #: \_\_\_\_\_

Dealer's Name: \_\_\_\_\_ Date Purchased: \_\_\_\_\_

Dealer's Address: \_\_\_\_\_

This Warranty Registration Card must be returned within thirty days of purchase to properly activate your warranty. This information is for our internal use only.