



## OPERATING MANUAL

### INFRARED RADIANT HEATER: TORRID SERIES

**T4000/8r & T4000/12r**  
**220 VOLT**

**T4000/8r - 34 inches**



**T4000/12r - 50 inches**



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**Thank you for choosing RADtec heating products.  
This product operates in compliance with the information laid out in this manual.**

**\*\*\*Attention! Before using this product, please read the manual carefully\*\*\***

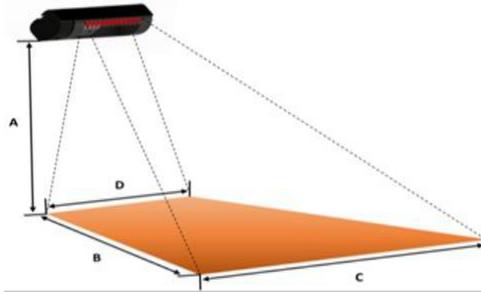
**You have purchased the following model: RADtec Torrid Series - Infrared Radiant Heater**

**RADtec T4000/8r**

**RADtec T4000/12r**

This model heater operates by projecting a "Radiant Footprint" over your living space. Radiant energy is transferred to people and objects within this projected footprint via radiant energy – similar to how the sun warms you up when you stand in sunlight. This method of heating is very popular today because infrared heat energy transfer is hyper efficient. Remember, warm or hot air is less dense than surrounding colder air and rises due to thermal convection. Infrared heat is not lost to air currents because infrared heaters do not heat the air. Infrared energy does not "excite" air molecules, instead bypassing them and warming whatever surface this energy hits thereafter.

Please reference the graphic below to better understand how this footprint projects from the heater you have purchased.



**Description of RADtec Torrid Series Heaters:**

RADtec infrared heaters are designed for various applications, both outdoors and indoors.  
Example: terraces, patios, verandas, gazebos, hangars, workshops, etc.

RADtec Torrid series heaters have a stylish compact design. Applications can include both vertical(wall) and horizontal(ceiling) installations. It is also possible to place this heater on a mobile stand (not included, purchased separately).

RADtec state-of-the-art infrared heaters use high efficiency heating elements. 95% or more of the electrical power consumed is converted into a heat flux. Infrared heating achieves this efficiency by heating objects in the area without having to heat the surrounding air.

**What Does Heat Flux Mean?**

Heat flux is thermal energy transferred from one substance to another per unit time and area denoted by temperature change measured in watts per feet/meter squared units. In simple terms, it is the heat transferred per unit area. To obtain this value, one must obtain the change in temperature, the thermal conductivity of the medium of conduction and the direction of the heat transfer. Accurate figures are obtained when the system is in a steady state condition.

<i>A , B , C , D : feet(ft) S: square feet( ft2)</i>	<i>T4000/8r</i>	<i>T4000/12r</i>
<i>A (Min-Max)</i>	<i>6-10</i>	<i>6-10</i>
<i>B (Min-Max)</i>	<i>8-13</i>	<i>8-13</i>
<i>C (Min-Max)</i>	<i>15-16</i>	<i>18-21</i>
<i>D (Min-Max)</i>	<i>7-16</i>	<i>7-18</i>
<i>S (Min-Max)</i>	<i>96-145</i>	<i>129-236</i>

## Advantages of RADtec heaters

- **Wide range of applications**
- **Eco-friendly, safe for humans and animals**
- **Remote controlled**
- **Instant heat**
- **High efficiency**
- **2-yr warranty**
- **First heater with IP67 certification**

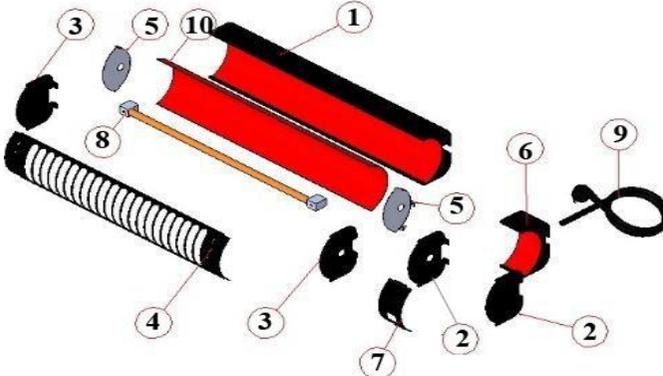
## Characteristics of Torrid Series Models

Product ID	T4000/8r	T4000/12r
Controller	Yes	Yes
IRWavelength	1,2 µm	1,2 µm
IRQuantity	2	2
IRFilament Length (mm)	2x355	2x550
Operating Voltage (Volt)	220V	220V
Total Power (Watts)	4000	4000
Dimensions (in)	34x6x5	50x6x5
IP Class	IP67	IP67
Heating Area (ft2)	96-145	129-236
Infrared Life (hours)	7000	7000
Warranty Period	2 Years	2 Years
BODY FEATURES		
Material used	Aluminum	Aluminum
Color	Black	Black
Power Cord	48in	48in
MOUNTING FEATURES		
Application surface	Wall/Ceiling	Wall/Ceiling

## Equipment

- **Packaging containers - 1 pc.**
- **Heater with power cable and plug - 1 pc.**
- **Remote control (with power supply - 2 pcs., Type AAA battery) - 1 pc. \***  
**\*(for r series models)**
- **Fasteners - set.**
- **Operation manual - 1 pc.**
- **Warranty card - 1 pc.**

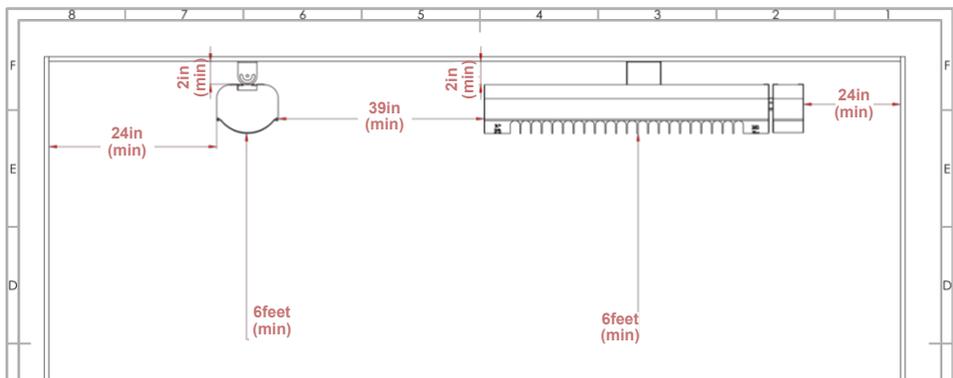
Heater device (fig. 1)



- |                                 |                                 |
|---------------------------------|---------------------------------|
| 1. Heater body                  | 2. Side control module covers * |
| 3. Heater casing lateral covers | 4. Protective grill             |
| 5. Side walls of the reflector  | 6. Control module housing *     |
| 7. Control module panel *       | 8. Infrared element             |
| 9. Power cable with plug        | 10. Heat Reflector              |

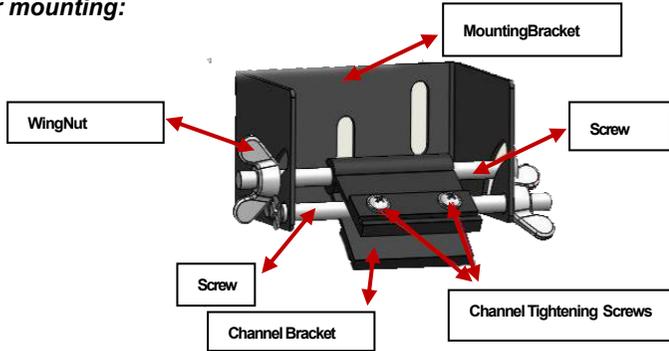
## Heater fixing procedure

1. Inspect the heater for external damage.
2. Determine mounting location for the heater, taking into account the requirements indicated in the diagram.

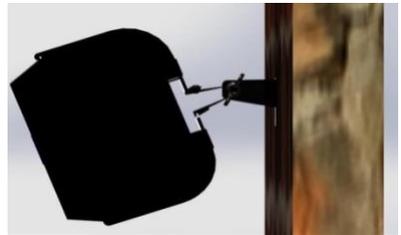


3. Fix the mounting bracket to the surface (wall or ceiling).
4. Assemble the heater mounting mechanism as shown in the Heater Mounting section.
5. Install the heater on the bracket using the guides on the back of the housing . When mounting the heater on a vertical surface, ensure that the Control Module is in the correct position (page 8)
6. Connect the heater to a power supply in accordance with local electrical and fire safety requirements.

**Heater mounting:**



**Finished mounting hardware**



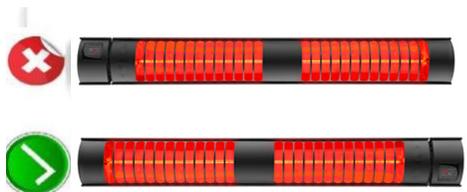
**Wall installation of the infrared heater**

**Correct position of the heater on a vertical surface (wall) for Torrid series models**

**vertical placement**



**horizontal placement**



### **Heater Connection Requirements**

1. The heater is 220-240 volts.
2. The heater (s) are connected to a separate line with a dedicated circuit breaker with a current cut-off rating corresponding to the power of the heater (s).
3. Consult a licensed electrician for installation.

**WARNING:** Do not use extension cords as they are not designed to power outdoor heaters.

### **Safety warnings**

1. Use the heater only for its intended purpose.
2. Observe the required distances to the suspension height when installing and using the heater.
  - Heater distance to ground or floor - not less than 6 feet.
  - Heater distance to heated surfaces - not less than 24 inches.
3. Do not place or store flammable objects and materials in the place where the heater is used.
4. Do not touch the heater during operation, and do not allow children and pets to come into contact with the heater.

### **Heater remote control**

**There are 3 buttons on the remote control.**

Button 1 (bottom right) - power on / off.

Buttons 2 and 3 - selection of 4 heating power modes.

The selected mode is displayed on the display of the heater control module. It is possible to control several heaters using one remote control.



### **Heater maintenance**

- To ensure stable operation of the product, regularly inspect the heater and the supply cable for external damage
- As the heater and reflector become dirty, clean in the following order:
  1. Make sure that the heater has not been used and that the casing of the heater is at ambient temperature.
  2. Disconnect the heater from the power source, remove it from the attachment point and place it on a horizontal surface.
  3. Clean the external elements of the heater with a dry clean, soft cloth.
  4. Remove the left side cover of the heater housing. There are two screws on the end of the heater and two screws on the rear wall of the housing
  5. Carefully slide the protective grill out of the left side.
  6. Clean the internal elements of the compartment with a dry clean, soft cloth.

**WARNING:** Use cotton or latex gloves to clean. This will prevent contact with the IR element. Direct contact with the element will leave fingerprints, which will negatively affect its operation and damage the heating element.

7. After cleaning the heater, reassemble in the reverse order and reinstall the heater.

# Limited Warranty

RADtec provides a 30-Day Return Window (see refund and return policy page) and the following limited warranty. This limited warranty extends only to the original purchaser.

Please note that any warranty services or questions must be accompanied by order number from the transaction through which the warranted product was purchased, and the ID number located on the unit. The order number and ID# serve as your warranty numbers and must be retained. RADtec will offer no warranty service without these numbers. RADtec warrants this product and its parts against defects in materials or workmanship for (2) years' parts and labor (residential use) and (1) year parts and labor (commercial use) from the original ship date. During this period, RADtec will repair or replace defective parts with new or reconditioned parts at RADtec's option, without charge to you.

Shipping fees incurred from returns for under-warranty service in the first 30-days will be paid by RADtec. All shipping fees both to and from RADtec following this 30-day period must be paid by the customer. All returns, both during and following the 30-day period, must be affected via the Procedures for Obtaining Warranty Service described below. All original parts (parts installed by RADtec at the original build) replaced by RADtec or its authorized service center, become the property of RADtec. Any after-market additions or modifications will not be warranted. The heater owner is responsible for the payment, at current rates, for any service or repair outside the scope of this limited warranty.

RADtec makes no other warranty, either express or implied, including but not limited to implied warranties or merchantability, fitness for a particular purpose, or conformity to any representation or description, with respect to this heater other than as set forth below. RADtec makes no warranty or representation, either express or implied, with respect to any other manufacturer's product or documentation, its quality, performance, merchantability, fitness for a particular purpose, or conformity to any representation or description.

Except as provided below, RADtec is not liable for any loss, cost, expense, inconvenience or damage that may result from use or inability to use the heater. Under no circumstances shall RADtec be liable for any loss, cost, expense, inconvenience or damage exceeding the purchase price of the heater.

The warranty and remedies set forth below are exclusive and in lieu of all others, oral or written, expressed or implied. No reseller, agent or employee is authorized to make any modification, extension or addition to this warranty.

## Warranty Conditions

The above Limited Warranty is subject to the following conditions:

1. This warranty extends only to products distributed and/or sold by RADtec. It is effective only if the products are purchased and operated in the USA. (Within the USA including US 48 States, Alaska, and Hawaii.)
2. This warranty covers only normal use of the heater. RADtec shall not be liable under this warranty if any damage or defect results from (i) misuse, abuse, neglect, improper shipping or installation; (ii) disasters such as fire, flood, lightning or improper electric current; or (iii) service or alteration by anyone other than an authorized RADtec representative; (iv) damages incurred through irresponsible use, including those resulting from mounting the heater above a body of water, mounting the heater vertically and or other non-recommended practices.
3. You must retain your bill of sale or other proof of purchase to receive warranty service.
4. No warranty extension will be granted for any replacement part(s) furnished to the purchaser in fulfillment of this warranty.
5. RADtec makes no warranty either expressed or implied regarding third-party (non-RADtec) parts.
6. You must have filled out and filed your Warranty Card with RADtec to activate this warranty.

## Return of Non-Defective Products

A non-defective product may be returned to RADtec within thirty (30) days of the invoice date for a refund of the original purchase price with the following amendments/fees:

1. RADtec will refund neither the original shipping cost nor the shipping and handling fees incurred from the products return. If the original purchase was made under a "Free Shipping" promotion, then a standard \$50 fee will be deducted from any return in counter to that offer.
2. No refund will be granted for the heater which has been used or tampered with in any way which jeopardized RADtec's ability to remarket or resell the product. RADtec maintains full discretion in decisions regarding a product's fitness for return.
3. No refund will be granted if the product has been installed OR more than 30 days has elapsed since the product was purchased.
4. Any non-defective returns are subject to a 15% restocking fee; which percentage is taken from the final purchase price less any shipping or handling charges.
5. Quantity purchases of five heaters or more are not eligible for return.

To return a defective product, please contact our Customer Service Department for a Return Merchandise Authorization (RMA) number and follow the Return of Products Instructions below. The RMA is valid for 10 days from the date of issuance. **Returns will not be accepted without an RMA.** Manufacturer restrictions do apply.

## Procedures for Obtaining Warranty Service

RMA (Returning Merchandise Authorization) Policy:

If repairs are required, the customer must obtain an RMA number and provide proof of purchase. RMA and services are rendered by RADtec only. Any shipping costs after 30 days (starting from the original date of purchase) on any item returned for repair is the customers' responsibility. All returned parts must have an RMA number written clearly on the shipping label of the package along with a copy of the original proof of purchase. No COD packages will be accepted. No package will be accepted without an RMA number written on the shipping label. RMA numbers are only valid for 30 days from the date of issue.

Should you have any problems with your heater, please follow these procedures to obtain the service:

1. Please contact RADtec's Customer Service at 214-295-6889 or email at [info@radtec.net](mailto:info@radtec.net).
2. If the heater must be repaired, an RMA number (Return Merchandise Authorization Number) will be issued for shipment to our repair department. Please follow the instructions given by RADtec's technical support staff to ship your heater. RADtec will not accept any shipments without an RMA number.
3. Pack the heater in its original box or a well-protected box, as outlined in the Return Shipping Instructions. RADtec will not be responsible for shipping damage/loss of any product outside the original 30-day eRADusa-paid service period. It is very important that you include the RMA number clearly on the shipping label of the package. Ship the heater with a copy of your bill of sale or other proof of purchase, your name, address, phone number, description of the problem(s), and the RMA number you have obtained to:

### **RADtec Service Center**

**RMA# \_\_\_\_\_**  
**10500 Metric Dr. Suite 112.**  
**Dallas, TX 75243**

4. Upon receiving the heater, RADtec will repair or replace your heater (at RADtec's discretion) and will ship it back to you within 2 weeks (dependent on parts availability) via UPS.
5. RADtec will pay for shipping to the customer only within the first thirty days following the original product ship date. Following this 30-day period, all shipping fees both for under warranty and post-warranty repairs are the sole responsibility of the customer. The customer also assumes full liability for losses or damages resulting from shipping as well as all responsibility to pursue remuneration for such issues with their selected carrier.

## After Two-Year Warranty – Post-Warranty Repair

For post-warranty repair, the procedure is the same as outlined above for RMA and shipping. However, you are responsible for shipping charges both ways, current labor (\$75 per hour if not under warranty), and the current price of part(s) used in the repair.

## WARRANTY EXCLUSIONS:

RADtec accepts no liability for problems caused by after-market parts and hardware modifications or additions. RADtec is not responsible for giving any technical support concerning the installation or integration of any component the customer did not pay RADtec to install. This warranty is null and void if the defect or malfunction was due to damage resulting from operation not within manufacturer specifications. It will also be null and void if there are indications of misuse and/or abuse. RADtec has the option of voiding the warranty if anyone other than an RADtec technician attempts to service the product. RADtec will not warrant any problems arising from an act of God (lightning, flooding, tornado, etc.), electrical spikes or surges, or problems arising out of hardware, software, or additional devices added to complement any system/component bought at RADtec. Under no circumstances will RADtec be responsible for any refund or remuneration exceeding the original purchase price of the product less any shipping fees. RADtec will not be held responsible for typographical errors on sales receipts, repair tickets, or on our website. RADtec makes every effort to make sure all information on our website is correct.

***RAD*tec**  
The Outdoor Heating Source