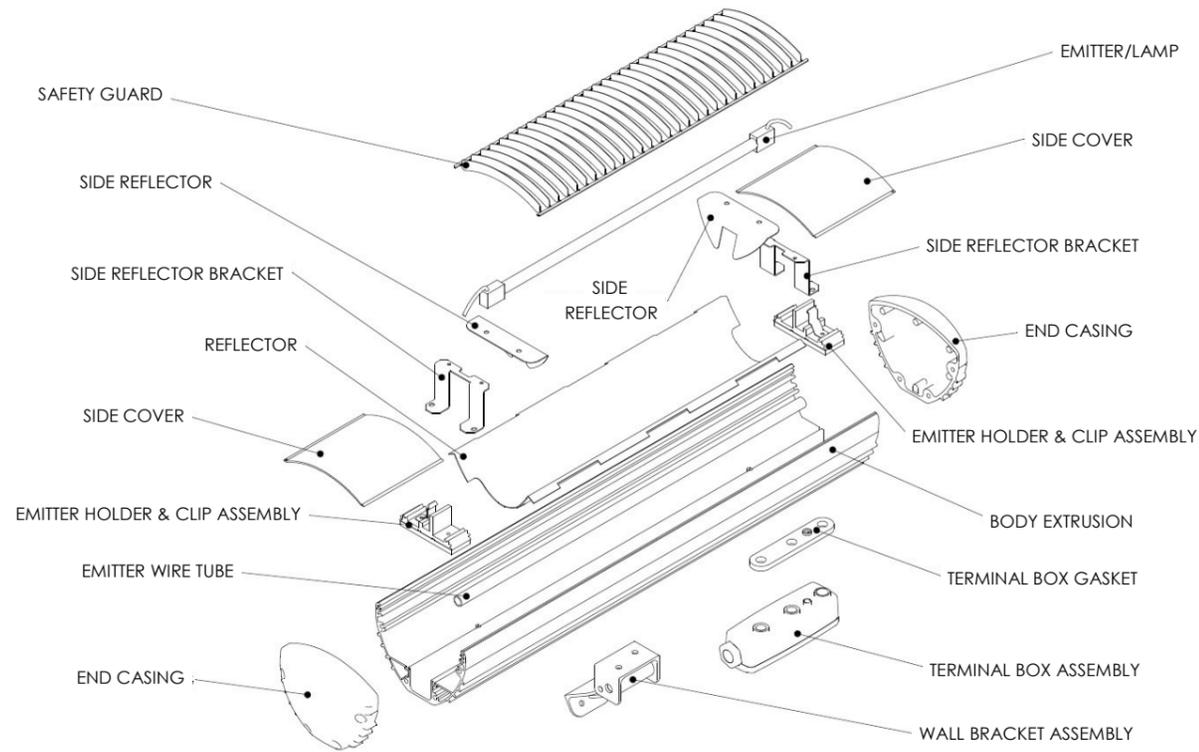


Rio Grande Component Parts Diagram



TANSUN QUARTZHEAT

Reference Manual

Rio Grande

UK & EUROPEAN MODEL HEATERS:

RIO 310 UK & RIO 310 EU

RIO 315 UK & RIO 315 EU

RIO 320 UK & RIO 320 EU



Following information is only for EU-member states:

The use of this symbol indicates that this product may not be treated as household waste. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about recycling of this product, please contact your local council, your household waste disposal service or the shop where you purchased the product.



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TANSUN LIMITED

Spectrum House, Unit 1, Ridgacre Road, West Bromwich,
West Midlands, B71 1BW, England.

Tel: +44 (0)121 580 6200 - Fax: +44 (0)121 580 6222

Email: quartzinfo@tansun.com - Website: www.tansun.com

Caution

When using Tansun electrical heaters, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

Read all instructions before using this heater.

- Before using this appliance:
 - Check that the voltage indicated on the type plate corresponds to the mains supply voltage.
 - Ensure that the heater has been securely fastened in its final mounting position.
- Do not locate the heater immediately below a socket outlet.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- Children of less than 3 years should be kept away unless continually supervised.
- Children aged from 3 years and less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children aged from 3 years and less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.
- **CAUTION - Some parts of the product can become very hot and cause burns. Particular attention has been given where children and vulnerable people are present.**
- Remove the plug from the mains socket (or disconnect pole switch) during installation, cleaning and/or replacing the element and always ensure that the element is cool.

7. Remove the two screws as highlighted on in Fig. 5 to take out the side reflector bracket and reflector assembly that allows access the emitter holding clip. Repeat at opposite end of emitter.

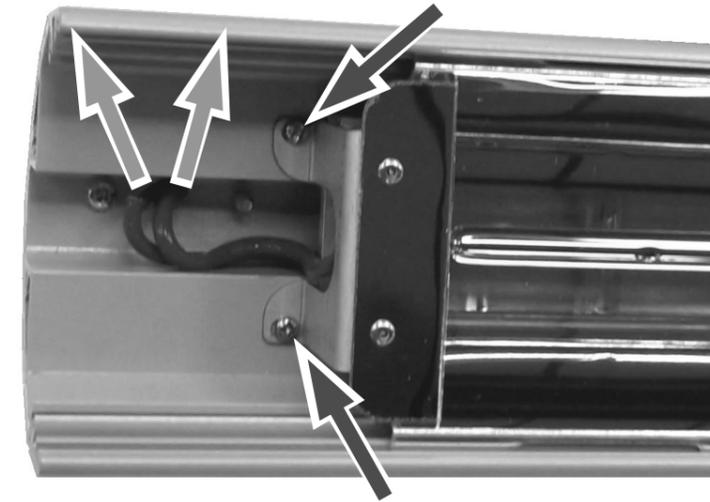


Fig. 5

8. Where the emitter wires are fed through the gasket into the terminal box (Fig. 5), gently pull the emitter wires through the body of the heater so the wires exit the terminal box.

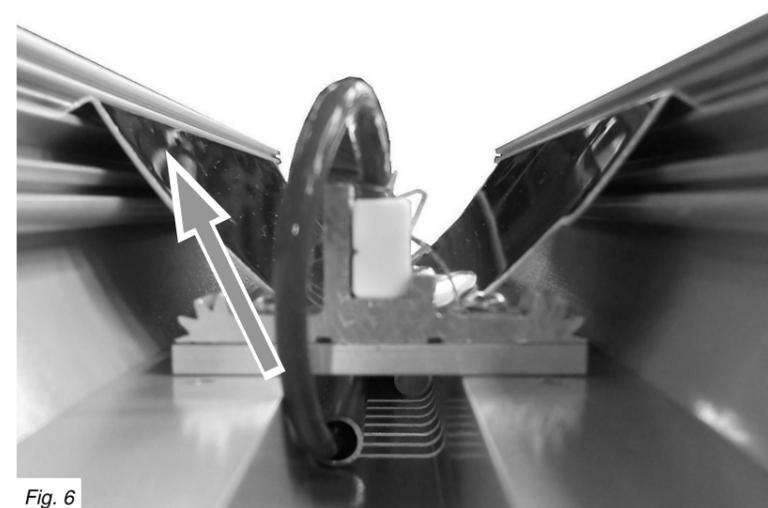


Fig. 6

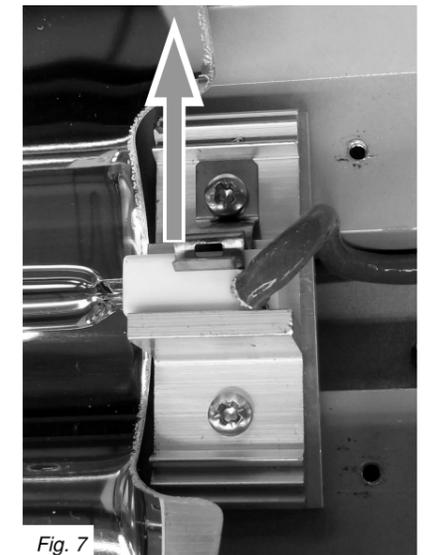


Fig. 7

9. At the opposite end of the emitter, the wire will be clearly visible in the emitter wire tube so gently pull the wire (Fig. 6) out of the tube until it is free.

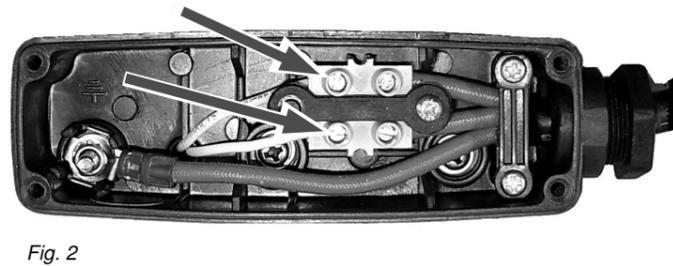
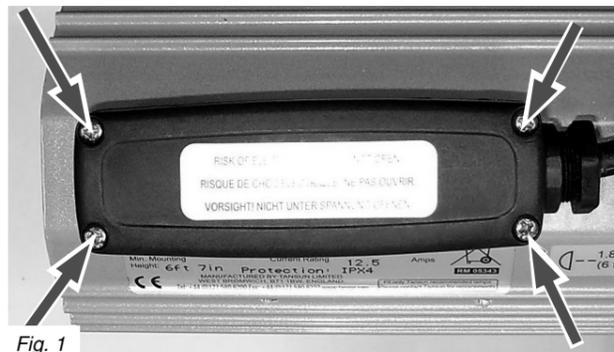
10. One at a time pull the spring clips back in the direction shown in Fig. 7 and lift up the ceramic caps of the emitter to remove it from the heater.

11. The emitter should now be removed from the heater. Refit the new emitter in reverse order ensuring the ceramic caps are correctly seated in the emitter holders, no wires are trapped and all screws are fully tightened.

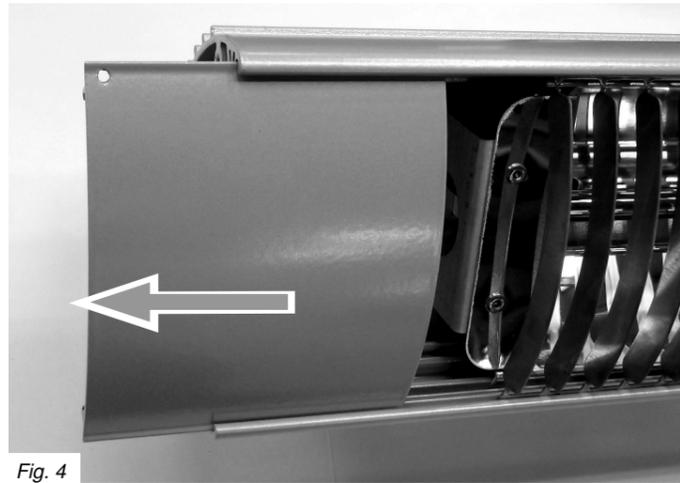
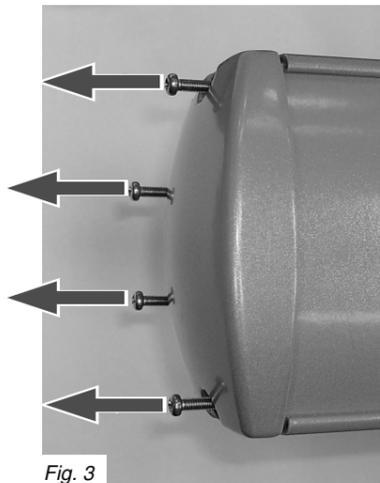
Replacing the Emitter

If you are in any doubt about following the procedure below, please contact us for technical assistance. The mains power should be disconnected before any attempts are made to replace the emitter. The following should be carried out with compliance to the latest electrical regulations. Please read the notes on the previous page with regards to handling and buying a replacement emitter before proceeding. We also recommend you read through the procedure and refer to the parts diagram on the back page of this manual before commencing work.

1. Ensure the heater and emitter are cool and the power supply is disconnected by removing the plug from the socket outlet.
2. Providing there is reasonable access and you are standing on a safe and stable platform, the emitter can be replaced with the heater still mounted. Otherwise, remove the heater from its mounting and work on a safe, flat surface.
3. Remove the screws from the terminal box (Fig. 1) and lift off the cover.



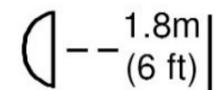
4. Disconnect the emitter from the connector blocks by unscrewing the screws highlighted above in Fig. 2.
5. Unscrew the four screws (see Fig. 3) from the end casing and remove from the heater body. Repeat at opposite end.
6. Slide out the side covers from both ends and slide out the guard from either end as shown in Fig. 4.



- Do not use an extension cord with this product because the extension cord may overheat and cause a risk of fire.
- Keep the mains supply cord away from the body of the heater which will get hot during use.
- Arrange the mains supply cord so it cannot be tripped over or damaged.
- Do not cover or obstruct the heater while it is in use.
- Do not insert any object through any slot or opening in the heater.
- Do not use if a guard is not present.
- Do not install less than the minimum mounting distance from the floor.
- **WARNING:** This heater is not equipped with a device to control the room temperature. Do not use this heater in small rooms when they are occupied by persons not capable of leaving the room on their own, unless constant supervision is provided.
- Do not touch the heater when it is turned on, as the body gets hot.
- Do not use the heater in a bathroom, laundry areas and similar locations. Never locate the heater where it may fall into a bathtub or other water container.
- A heater has hot parts inside. Do not use it in areas where petrol, paint, or flammable liquids are used or stored.
- **WARNING:** This appliance must be connected to a supply that is earthed! ⚡

**IMPORTANT -
SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE**

Risk of Fire



Keep combustible materials such as furniture, papers, clothes and curtains at least 1.8m (6 feet) from the front of the heater and away from the sides and rear. If the heater is to be used outside, we recommend that a waterproof or indoor socket outlet is used.

Introduction

The Rio Grande heater produces radiant heat like the sun, warming people and objects rather than the air in between. It is mounted on an adjustable bracket that allows the heat to be directed exactly where it is required. Its attractive, lightweight design means that it is effective yet unobtrusive. The Rio Grande is designed for indoor and outdoor use so is therefore weatherproof.

Please read the following instructions carefully before use. The safety of this heater is guaranteed only by its correct usage in accordance with these instructions, therefore it is recommended that they are retained for future reference.

Specification

Table 1. UK and European Heaters

Model	Voltage (V)	Total Power (W)	Current (A)	Min. height from floor (m)	Min. dist. from ceiling (m)	Min. dist. from side wall (m)	Dimensions W x H x D (mm)	Weight (kg)	Ingress Protection (IP)
Rio 310	230	1000	4.3	2.0	0.3	1.0	560 x 112 x 160	2.8	IP25
Rio 315	230	1500	6.5	2.0	0.3	1.0	560 x 112 x 160	2.8	IP25
Rio 320	230	2000	8.7	2.0	0.3	1.0	560 x 112 x 160	2.8	IP25

Use MCB Type 3 or C.

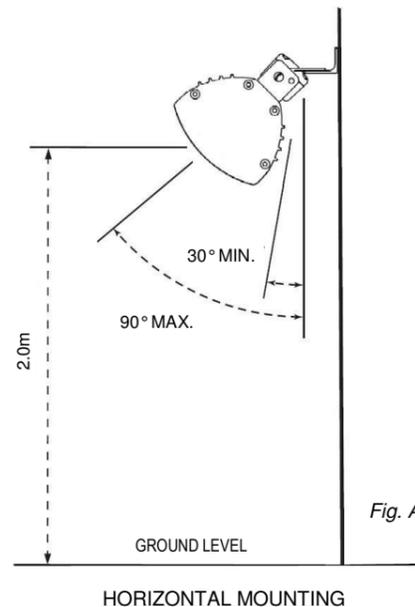
Installation

The Rio Grande heater is fitted with a supply cord and a moulded plug, therefore it is unnecessary to open the terminal box in order to carry out normal installation of this product and should not be interfered with.

- We recommend using a RCD where applicable.
- Please observe the minimum safe distance between the heater body and any inflammable surfaces.
- If the supply cord becomes damaged, it must be replaced by the manufacturer, its service agent or a similar qualified person in order to avoid a hazard.
- When the electrical connection is outside, it is recommended that a waterproof socket is used for the connection. Otherwise, the plug should be connected to a socket indoors.
- If in any doubt, please contact a suitably qualified electrician.

Mounting

- The Rio Grande heater can be mounted in a horizontal (Fig. A) or angled manner (Fig. C).
- When mounting the Rio Grande heater in a horizontal manner, do not position the heater at an angle more than 90° and less than 30° from the mounting surface as shown in Fig. A.
- When mounting the Rio Grande heater in an angled manner, ensure to leave a gap between the heater and mounting surface (See Fig. B - DIM A). The heater should always be angled downwards when mounting this way with the terminal box at the bottom of the heater - see Fig. B. Do not position the heater at an angle more than 45° and less than 30° to the horizontal as shown.
- Always allow the heater to cool before attempting to reposition/move. Never attempt to move the heater while it is switched on!



continued...

- Observe the minimum safe distance between the heater body and inflammable surfaces and objects when mounting.
- Please refer to Table 1 for the recommended positioning of the heater. **Do not install the heater in a corner!**
- Do not mount the heater on plastic soffits and fascia boards and ensure the mounting surface will suitably withstand the radiant heat from the heater body.
- Keep out of the reach of children.

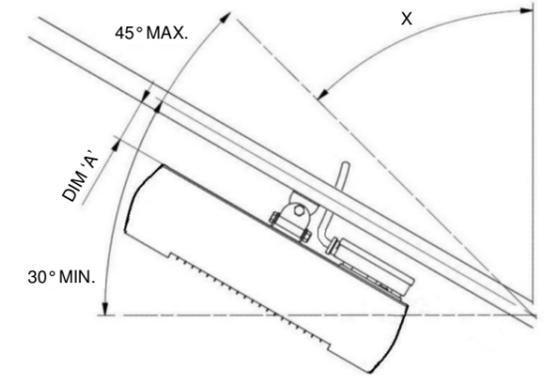


Fig. B

ANGLED MOUNTING

1. Securely fasten the Rio Grande bracket to the mounting surface using the fixing holes in the bracket. Please refer to Table 1 for recommended positioning of the heater.

2. Fix in the required angular position by tightening the fixing bolt on the bracket at the rear of the heater (Fig. C).

3. Secure the supply cord to the mounting surface with a suitable clip so the cord is directed away from the heater and is not resting on the body or obstructing the air-vents.

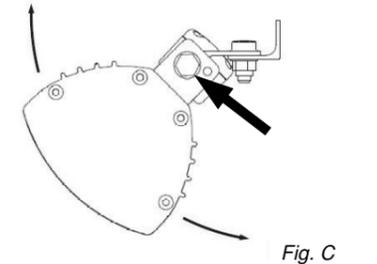


Fig. C

Always isolate the heater from the mains supply when adjusting the angular position.

Maintenance

In the event of heater failure, or for spare parts or advice, please contact Tansun Limited in the first instance.

- Disconnect from the mains before commencing any maintenance procedure including cleaning.
- To ensure optimum heat effectiveness, it is recommended that the guard and emitter are removed and the reflector is wiped with a lint-free cloth before reassembling should the reflector show considerable signs of dust or dirt.

Your Replacement Emitter

It is very important that your replacement emitter is exactly the same as the one it was supplied with. Failure to fit the exact same type could cause the heater to fail or even become dangerous especially when used in an outdoor environment. Please contact Tansun Limited to purchase your replacement emitter and state the model number of the heater you wish to fit the emitter to.

Handling the Replacement Emitter

Your new emitter should not be handled with bare hands. Remove finger marks with a soft cloth and methylated spirits or rubbing alcohol. Finger marks will burn into the emitters quartz glass causing premature failure.

