

T A N S U N Q U A R T Z H E A T

Reference Manual

Rio

MODELS 1.0kW / 1.5kW / 2.0kW

Horizontally Mounted

MODELS 1.0kW / 1.5kW

Vertically Mounted



T A N S U N L I M I T E D

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Introduction

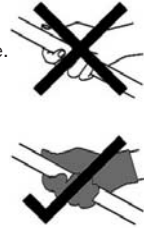
The Rio heater produces radiant heat like the sun, warming people and objects rather than the air in between. It is mounted on an adjustable bracket that allows the heat to be directed exactly where it is required. Its attractive, lightweight design means that it is effective yet unobtrusive. The Rio is primarily designed for indoor use but can be used outside under an appropriate awning, umbrella canopy, etc.

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.

Caution

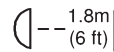
Before using this appliance:

- 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.
- Disconnect from the mains by removing the plug from its socket, during installation, cleaning and/or replacing the emitter and always ensure that the emitter is cool.
- Do not handle the halogen lamp with bare hands. If it is inadvertently touched, remove finger marks with a soft cloth and methylated spirit or alcohol. Otherwise, the marks will burn into the quartz glass causing premature heater failure.
- Do not use an extension cable with this product.
- Keep the mains cable away from the body of the heater which will get hot during use.
- Do not cover or obstruct the heater while it is in use.
- Ensure that children do not tamper with the heater.
- Do not insert any object through any slot or opening in the heater.
- Do not use if guard is not present.
- Always install following the minimum mounting height.
- **Warning - This appliance must be earthed!**



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 lamp is to be used outside, we recommend that a waterproof or indoor socket is used.



Specification

TABLE 1. UK and European heaters

Part No.	Voltage (V)	Total Power (kW)	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)
Rio 010	230	1.0	4.3	2.4	0.3	1.5	390 x 100 x 108	1.65
Rio 015	230	1.5	6.5	2.4	0.3	1.5	390 x 100 x 108	1.65
Rio 020*	230	2.0	8.7	2.4	0.3	1.5	390 x 100 x 108	1.65

Use MCB Type 3.

*Horizontal mounting only.

TABLE 2. US heaters

Part No.	Voltage (V)	Total Power (kW)	Current (A)	Min. hgt from floor (ft)	Min. dist. from ceiling (ft)	Min. dist. from side wall (in)	Dimensions W x H x D (in)	Weight (lb)
Rio 010 USA	120	1.0	8.3	7' 10 ¹ / ₂	11 ³ / ₄	59	15 ¹ / ₂ x 4 x 4 ¹ / ₂	3lb 10oz
Rio 015 USA	120	1.5	12.5	7' 10 ¹ / ₂	11 ³ / ₄	59	15 ¹ / ₂ x 4 x 4 ¹ / ₂	3lb 10oz
Rio 020 USA*	120	2.0	16.7	7' 10 ¹ / ₂	11 ³ / ₄	59	15 ¹ / ₂ x 4 x 4 ¹ / ₂	3lb 10oz

Use MCB Type 3 or equivalent.

*Horizontal mounting only.

Installation Instructions

The Rio heater is fitted with a supply cable and a moulded plug, therefore the terminals should not be interfered with.

The following points should be considered when positioning the heater:

- Please observe the minimum safe distance between the heater body and any inflammable surfaces.
- For horizontal mounted models, do not position the heater at an angle of more than 50° from the rear wall (See Fig. 1).
- For vertically mounted models, ensure to leave a gap between the heater and mounting surface (See Fig. 4 - dim A).
- If in any doubt, please contact a suitably qualified electrician.
- Keep out of the reach of children.
- Do not position this heater near to furniture or curtains as this could present a fire hazard.
- Always allow the heater to cool before attempting to re-position/move. Never attempt to move the heater while it is switched on!
- The Rio is designed for indoor use and outside use under an appropriate canopy. When the electrical connection is outside, it is recommended that a waterproof socket is used for the connection/terminal. Otherwise, the plug should be connected to a socket indoors. An RCD should be used on this appliance in all cases.

1. Securely fasten the Rio bracket to the mounting surface using the fixing holes in the bracket. Please refer to Table 1 or 2 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.
3. The Rio bracket can be used to adjust the direction of the heater up and down (see Fig. 2) and side to side (see Fig. 3). This is done by loosening the bolts fixing the heater to the bracket, and then retightening once the correct position is achieved.

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

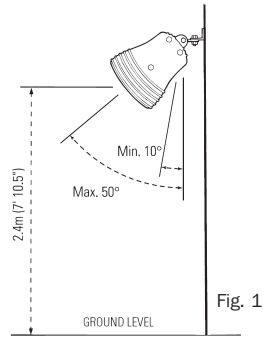


Fig. 1

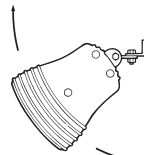


Fig. 2

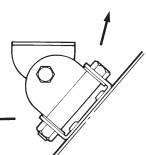


Fig. 3

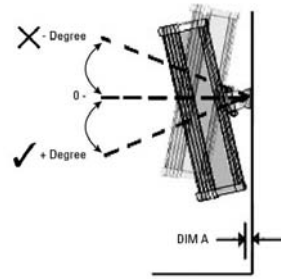


Fig. 4

Maintenance

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

- Disconnect from the mains before commencing any maintenance procedure including cleaning.
- To ensure optimum heat effectiveness, it is recommended that after the heater has been used for approximately 80-100 hours, that the guard and lamp are removed and the reflector is wiped with a lint-free cloth before reassembling.

Replacing the Lamp - General

Your new lamp should not be handled with bare hands.

Remove finger marks with a soft cloth and methylated spirits or alcohol. Finger marks will burn into quartz causing premature lamp failure.

Also note the heater outer casing can reach high temperatures.

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 lamp.



Replacing the Lamp - Terminal Box Models

1. Ensure the heater and lamp are cool and the power supply is disconnected by removing the plug from the socket outlet.
2. Remove the heater from its mounting and work on a safe, flat surface.
3. Remove the two screws from the terminal box and lift off the lid.



Fig. 1

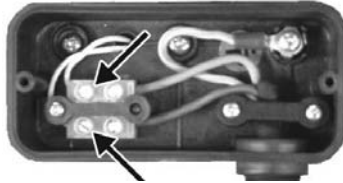


Fig. 2

4. Disconnect the lamp from the connector blocks by unscrewing the screws highlighted above in Fig. 2.
5. Unscrew the two self-tapping screws (see Fig. 3) from each side of the casing and let the back pivot down (Fig. 4).

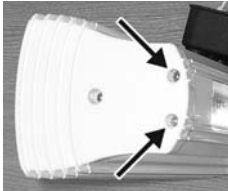


Fig. 3



Fig. 4

6. Gently pull the lamp wires through the body of the heater so the wires exit the terminal box (Fig 5).
7. Starting at the left hand side, remove the end casing - this may require a few gentle taps to disengage the locating lugs and allow the casing to become free. The back plate will also now be free from its fixings (Fig 6).
8. Slide out the side reflector and the guard completely through the open end to fully expose the lamp holder (Fig 7).



Fig. 5



Fig. 6



Fig. 7

9. Release the lamp end by depressing the back of the lamp holder. Gently lift the end of the lamp a few millimetres so it is no longer being retained and ease the lead through the hole in the lamp holder (Fig. 8).
10. Repeat the removal of the end casing on the opposite end and remove the side reflector. The lamp can be released from this side now and completely removed (Fig. 9). The heater should now be broken down in its part form as shown in Fig. 10.

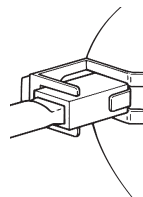


Fig. 8



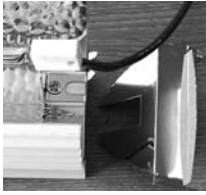


Fig. 9



Fig. 10

11. Take your new lamp and refit by ensuring the leads pass down the sides of the lamp holders. The lamp can be clipped in by pulling the tabs back (Fig. 11).



Fig. 11

12. The guard and side reflectors can now be refitted. Starting with the guard, slide it down its track and roughly centralise it. Then slide the side reflectors in at each end (Fig. 12).

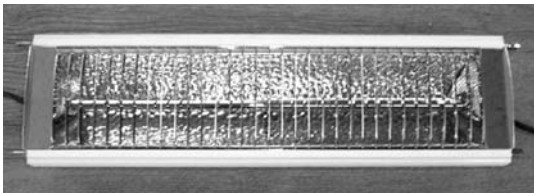


Fig. 12



Fig. 13

13. Turn the heater over and starting with one end of the heater, place one of the lamp leads into the back of the heater and shape it so it is clear of the screw hole for the end casing (Fig. 13).
14. Take an end casing and refit by lining up the locating lugs - taking care that the lamp lead is free of the centre screw hole and rear mating surface. More pressure can be applied to the two parts to engage the lugs enough to see that the lead is not going to get trapped. This is extremely important! Should you trap a lead the heatproof sleeve should be removed and the insulation inspected for damage.

Any signs of damage will render the lamp unsuitable for use and should be replaced!

15. If the lamp lead is free, the end casing can be fully fitted by tapping into place firstly at the front then at the back (Fig. 15). The middle screw should be refitted.

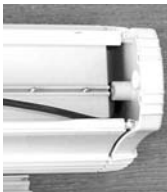


Fig. 14



Fig. 15

16. At this point, the new lamp can be connected. Firstly remove the connector block saddle by removing the screw and lifting out. The connector block can be lifted out of its locating lugs to allow for better access when connecting the new lamp (see Fig. 16)



Fig. 16

17. From inside of the heater body, push one of the leads through the black rubber gasket and into the terminal box. The gasket has two small holes in it and one wire per hole should be inserted (the sleeving needs to be pulled back so only the white wire comes through) and push it firmly into either one of the terminals. Hold in place and tighten the screw fully (see Fig. 17).



Fig. 17



Fig. 18

18. Push the other lamp lead through the second hole in the gasket and fit to the second terminal of the connector block (Fig. 17). The connector block can now be returned to its locating lugs and the screws checked for tightness. Replace the saddle and screw (Fig. 18).

19. The back plate can now be placed on the back of the heater and the locating lugs pushed in as shown in Fig. 19.



Fig. 19

20. The end casing be aligned and providing the lead is not going to get trapped (as step 15!), push into place. It is recommended that the heater is stood up on its fixed end and downward force applied to ensure everything goes back together correctly (Fig. 20).

21. If the leads are free to move and the guard and side reflectors are in order, the back plate should be closed and all screws refitted and checked for tightness as Fig. 22.



Fig. 20



Fig. 21

22. Make a final check in the terminal box that all of the wires are secure and replace the cover and refit the screws.



Fig. 22

23. The heater can now be returned to its original mounting position and the mains power reconnected.



Fig. 23

Replacing the Lamp - Direct Wired Models

1. Ensure the heater and lamp are cool and the power supply is disconnected by removing the plug from the socket outlet.
2. Remove the heater from its mounting and work on a safe, flat surface.
3. Unscrew the two self-tapping screws (see Fig. 1) from each side of the casing and let the back pivot down.
4. Disconnect the lamp leads from the ceramic terminal block on both sides.
5. Follow steps 7 to 15 of 'terminal box models' on previous pages.
6. At this point, the new lamp can be connected by doing the reverse of step 4.
7. Follow steps 19 to 21 of 'terminal box models' on previous pages.
8. The heater can now be returned to its original mounting position and the mains power reconnected.

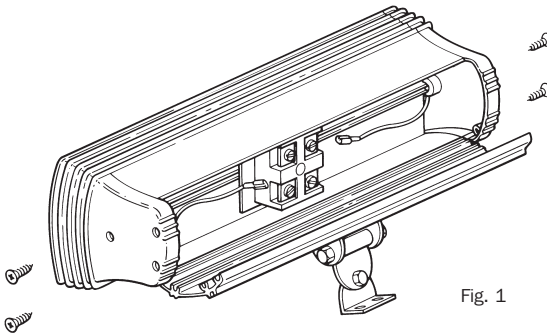


Fig. 1

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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