

Radiant Heater

Warning. The unit could constitute a fire hazard. Continuous supervision of children is required. Avoid contact with liquids. The heater should be put away when not in use. The top of the cage (painted red) gets extremely hot and will burn you if you touch it.

Please note that the red paint on the top of the cage will burn off after first use. This is due to the extremely high temperatures generated. It is recommended that you run the lamp for about 10 minutes in a fume cupboard before allowing pupils to use it for the first time.

The Electrosound Radiant Heater is a direct replacement for the original “bowl fire element” radiant heater. The original heater fell out of use due to its use of an exposed live element. After some accidents the risk of electric shock was considered too great - for more information contact CLEAPSS or SSERC.

The Electrosound Radiant Heater is a modern take on the original design. The heating element is totally enclosed and is safer to handle. The unit comprises a custom built 400W heating element encased in a ceramic “lamp” which is sealed into a ceramic base. The heating lamp is surrounded by a small grille cage and is mounted on a sturdy steel base, which is powder coated white and is wipe-clean.

In use the heater should be placed on a flat surface which is well away from inflammable materials such as curtains, shelves etc. Plug into the mains and switch on using the illuminated rocker switch. Allow 10 minutes for the unit to reach operating temperature. **CAUTION.** The heating element warms up but emits very little light (it glows slightly red in the dark). The energy is virtually all converted to infra red radiation; just because it does not look “on” does not necessarily mean that it is cool enough to touch.

After use switch off the unit and allow to cool for 10 minutes before handling. Do not wrap the mains cord around the cage when storing.

The unit should not require any servicing as the heating element is guaranteed for 10,000 hours. Should you ever require a replacement heating element, return the unit to us and we will fit a replacement. There are no user serviceable parts.

Suggested uses.

- Study heat radiation and absorption by comparing a standard stirring thermometer with one that has a blackened bulb. Clamp the two thermometers about 100mm from the heater grille and compare the readings over time.
- Set four polystyrene blocks equidistant around the heater. Place four cans, one with a shiny aluminium surface, one with a dull black surface, one with a shiny black surface and one with a white surface on the blocks and fill each with the same measured amount of water at the same temperature. Take the water temperature and switch on the radiant heater. After 20 minutes remove the cans, stir and measure and compare the four temperatures.
- Sprinkle a little finely sifted flour, or feathers, above the lamp to observe the convection currents.

Specification

Voltage 220 – 240V a.c.
Power 400W
Mains fuse 3A