

5 Year Warranty

- Irwin Science Education hereby warrants, to the end user ("Purchaser") who purchased the genuine Irwin Science Education product ("Product"), from an authorised Irwin Science Education reseller. ("Reseller"), that the Product will be free from defects in materials and workmanship ("Defects"), for a period of five years from the date the Product was purchased from Irwin Science Education direct or via authorised reseller. Subject to the terms and conditions indicated below.
- Irwin Science Education will repair or replace such Product or part thereof which, upon inspection by Irwin Science Education, is found to be defective, despite the Product not having been subjected to Improper Activity (defined below). Improper activity shall render this warranty void. "Improper Activity" includes any and all of the following:
Installation by anyone other than a Reseller;
Improper installation:
Use/operation/maintenance other than in accordance with Irwin Science Education's instructions and requirements within an educational/training establishment (as directed below);
Tampering by Purchaser; neglect; damage by the application of force; bending; breaks; cracks; scratches; any other act of vandalism;
Repair or alteration by anyone other than a Reseller; Use of additional components or other components that are not suitable and genuine Irwin Science Education components;
Use in a non-educational teaching environment.
- All the foregoing as determined by Irwin Science Education, in its sole judgment.
 - Instructions and recommendations for correct use of Irwin products are within the original product instructions or available for download from www.irwinscienceeducation.com.
 - Irwin Science Education's sole obligation under this limited warranty is to repair or replace, at Irwin Science Education's sole discretion any Product and/or Product component found by Irwin Science Education to have Defects. This limited warranty does not grant any other rights or give rise to any other obligation, or absolve Purchaser of the responsibility to employ any other suitable measures, by whatever means, including insurance, against the risk of personal injury or damage to property.

This limited warranty relates to product's defects only. Irwin Science Education shall be liable, in any event, for any labour costs associated with the product and its installation process. In order to facilitate the warranty service and enable Irwin Science Education to determine entitlement under this warranty, Purchaser must first have completed the online product registration registration form within 1 month of the original product purchase date, with proof of purchase from a Reseller via the printed product registration card supplied or online at www.irwinscienceeducation.com. All shipping, handling or other incidental and/or related charges are fully payable by the purchaser only and are not included in this limited warranty. Items excluded / limited from this warranty, Nuts, Bolts, Normal wear and tear, Cleaning with cleaning detergents, Improper handling and misuse.



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Registered in England & Wales. Company no. 08748657

Radiant Heater Instructions





13 Amp plug power supply with on/off switch at rear.



Safety casing prevents direct heat contact.



The Irwin Radiant Heater is a compact heat source for heat radiation experiments. It comprises a base and cage containing a custom made infra red heating lamp of the dull emitter type.

The lamp is like the old Griffin lamp, but turned inside out. This means that it is impossible to for a pupil to get an electric shock by prodding it with a paper clip etc.

Please note: The unit can take up to half an hour to reach maximum temperature and so this time lag should be taken into account when planning lessons.

In normal use four thermometers, one with a blackened bulb, one with a silvered bulb, one with a white bulb and one with a "nude" bulb may be situated around the unit at equal distances and a heat absorption experiment performed.

The lamp does not visibly glow as almost all the energy provided is converted into heat. For this reason a cage has been placed around the lamp to prevent pupils touching it and burning themselves.

However some experiments require more heat and so the cowl may be removed by unscrewing the four retaining screws. If this is done, the pupils should be warned of the dangers.

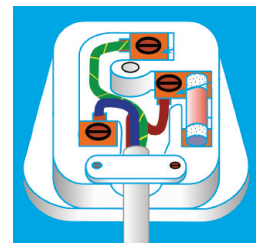
CAUTION: Although the lamp is secured please with the galvanised casing this will become hot to the touch. Never leave unsupervised with students.

IMPORTANT - ELECTRICAL SAFETY NOTICE

Connection to mains electricity supply. This apparatus is designed to safety class 1. Before connecting to the mains electricity supply, examine the information on the apparatus rating label. Ensure that the mains supply is single phase alternating current (a.c) of frequency 50Hz at 230V, with neutral nominally at earth potential.

WARNING - THIS APPARATUS MUST BE EARTHED

Your Irwin product should come with a plug with the recommended fuse rating. However if not fitted connect the wires to a non-reversible UK 3 pin plug as follows:



Green/Yellow wire marked: E (Earth) coloured Green/Yellow
Blue wire marked: N (Neutral) or coloured Blue
Brown wire marked: L (Live) or coloured Brown

LIVE PARTS SHOULD NEVER BE EXPOSED UNLESS THE APPARATUS HAVE BEEN SWITCHED OFF AND ISOLATED FROM THE MAINS ELECTRICITY.

Electromagnetic Compatibility

The use of this apparatus outside the classroom, laboratory, study area or similar such place invalidates the conformity with the protection requirements of the Electromagnetic Conformity Directive (89/336/EEC) and could lead to prosecution.

CORRESPONDENCE:

in the event of any correspondence concerning this apparatus, please contact your supplying agent quoting their catalogue number and serial number show on the apparatus. This will help us process your enquiry quickly. Any spare parts which may be required are supplied on the understanding that the replacement of those requiring the exposure of live electrical connections will be undertaken by an electrically qualified person.