

The Spider

The Spider comes ready for use and is supplied with a shatterproof mains plug. The output voltage, selected by the rotary switch, is present on all four sets of terminals which may be used simultaneously. The output voltage is regulated and smoothed and may be used to power lamps, motors, electronic circuitry etc.

Using the Spider

Plug the Spider into a 13A mains socket - the two red eyes should light up. The left eye indicates that there is power present whilst the right eye monitors the output. Should neither eye light, then the mains plug fuse (2A, 3A or 5A) should be checked - there are no user serviceable parts inside the Spider.

Should the right eye go out in use, this indicates that the output leads from a red and black terminal are connected together without a load (e.g. a lamp) between them - a so called 'short circuit' condition. On removal of the fault, the Spider will reset itself.

The output terminals are colour coded - red for positive and black for negative. They will accept 4mm plugs, 2mm plugs and bared wire. 4mm plugs fit directly into the socket. If the terminal is unscrewed, a hole will be found drilled through the metal post - this will accept 2mm plugs or bared wire may be threaded through and the terminal retightened to make a firm connection.

Please Note: The Spider is not suitable for high current applications such as heating and electromagnetism experiments.

N.B. When the Spider is working hard, a faint buzzing noise may be heard and slight warming of the case will occur - this is perfectly normal and does not indicate a fault.

WARNING - Do not attempt to use the Spider to charge Nickel Cadmium Batteries.

Specification

Input

Supply voltage	230V ac
Supply frequency	50Hz
Maximum power	10W
Mains plug fuse rating	3A

Output

Voltage	1.5, 3, 4.5 and 6V smoothed and regulated dc
Maximum output current	1A

Electrical Safety Testing

The unit is classified as Class 1 (earthed). When performing safety checks in compliance with Health and Safety Executive leaflet GS23 (ISBN 0 11 883567 X), suitable Earth Bond test points are the two transformer mounting screws on the base of the unit.

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 Compatibility Directive (89/336/EEC) and could lead to prosecution.