

8A 1-24V AC/DC Power Supply

General Description

The unit provides a.c. and d.c. outputs up to a maximum current of 8 amps. The output voltage is selected by use of the rotary selector switch and the +1V toggle switch. The outputs are available through colour coded 4mm terminal posts - yellow for a.c. and red and black for d.c. The outputs are protected against short circuit and overload by an automatic cut-out. Under fault conditions, this will operate and reset when the fault is removed.

Using the Unit

The mains lead should be plugged into a suitable mains socket. When switched on, the rocker neon will glow. The a.c. and d.c. output voltages marked on the selector are nominal and will depend on the amount of current being drawn.

A collet lock is mounted behind the voltage selector knob. To lock the power supply on a particular voltage, this should be tightened clockwise using a pair of pliers or suitable open ended spanner.

The d.c. output is full wave rectified, but is not smoothed and is, therefore, unsuitable for electronics work unless a large value electrolytic capacitor is connected in parallel with the output. If this is done, the d.c. voltage will rise by a factor of approximately x 1.4.

Mains Fuses

Should the rocker switch not illuminate when the mains is switched on, then the rear panel and mains plug fuses should be checked. The rear panel fuse may be released using a screwdriver. Replacement is 20mm 5A quick blow.

The mains plug fuse may be removed by levering out the holder from the mains plug. Replacement is 5A - **do not use a 13A fuse under any circumstances.**

Electrical Safety Testing

The unit is classified as Class 1 for the purposes of safety testing. Suitable earth test points are the green earth terminal or any of the eight case lid securing screws. For further details on safety testing, please refer to Health and Safety Executive leaflet GS23 (ISBN 0 11 883567 X).

Specification

Input

Supply voltage	230V a.c.
Supply frequency	50Hz
Maximum power	300W
Panel fuse rating	5A quick blow
Mains plug fuse rating	5A

Output

Voltage	1-24V unregulated a.c./d.c.
Maximum output current	8A

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.