

## Power Supply Module - Fitting Instructions

### WARNING - FITTING SHOULD ONLY BE ATTEMPTED BY COMPETENT PERSONNEL

The Power Supply Module is designed to be panel mounted by means of the 0.25" jack socket and to draw its power from the low voltage ac within the host power supply.

To complete the fitting, you will need the following equipment:

- A suitable screwdriver to undo the power supply case
- An electric or hand drill with a 0.5" chuck
- A small drill bit (about 3mm) and a 12mm drill bit
- A soldering iron plus solder
- A pair of pliers
- A multimeter

Disconnect the power supply from the mains, undo the casing screws and remove the cover.

Locate a suitable position inside the power supply for the Power Supply Module. This should be far away from the mains wiring and so positioned to offer easy entry of the jack plug.

After carefully checking that the Power Supply Module will not foul other components when the case is reassembled, drill a pilot hole using the small drill.

Open up the hole using the 12mm drill.

Mount the module by means of its jack socket ensuring that the fibre washer is fitted behind the panel. Turn the module so that there is easy access to the on-board voltage adjuster and tighten the nut with pliers.

The module requires a supply voltage in the range 8-12V a.c. The input voltage to the module should be at least 3V higher than the required output voltage.

**WATCH ON THE POWER SUPPLY \*\*\*\*\* CAUTION, MAINS VOLTAGE IS PRESENT AT THE MAINS SWITCH AND SOME OF THE TRANSFORMER TAPS. IF IN DOUBT, CHECK WITH A MAINS TEST SCREWDRIVER BEFORE PROCEEDING \*\*\*\*\***

With the multimeter set on a suitable a.c. range (e.g. 20V a.c.), check various points on the power supply's transformer secondary tags (or the voltage selector switch) until a suitable transformer tap is found - i.e. there is no effect on the voltage reading when the power supply's voltage selector is turned.

Solder the two wires from the module to the appropriate points - they can be soldered either way round. Solder suitable leads to the jack plug: positive to the centre (tip), negative to the barrel.

Turn the on-board adjuster fully clockwise and read the output voltage of the module using a d.c. meter - the reading should be within 2% of 5V. Turn the power supply selector switch to ensure that a steady input voltage is applied to the module. The onboard adjuster can be altered to raise the output voltage (see note 6) but some slight loss of regulation may occur.

**B. The Power Supply Module can be damaged by connecting the raw power supply output and the module's output together. This situation should be avoided.**