

Technical Note TN7.1

3rd October 2008

800 series PSU exchange: UMEC to XP

This note details the electrical changes required when fitting an "XP" PSU to a product previously fitted with a "UMEC" type. The PSUs are not pin compatible, so the connecting wires must be re-arranged.

The new-type PSU is available from Meridian: Stock code and description "**PA10140 - 800 Series PSU**".

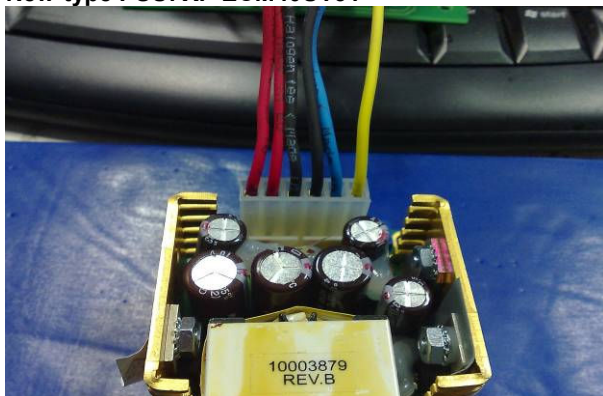
Old-type PSU: UMEC UPO653S-01



Yellow (12V), Red, Red (5V), Black, Black (0V), Blue (-12V).

The connecting wires must be re-arranged into the order shown in the following picture.

New-type PSU: XP ECM40UT31



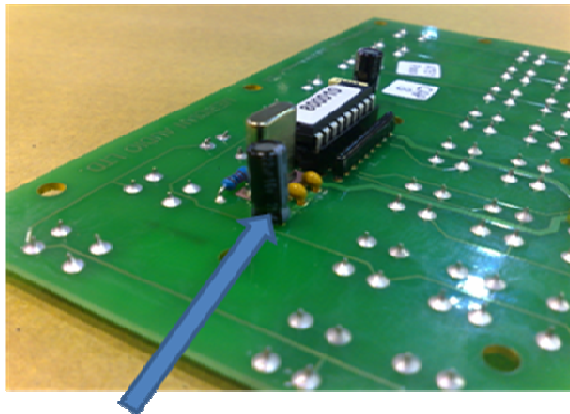
Red, Red (5V), Black, Black (0V), Blue (-12V), Yellow (12V).

The power supply is factory set at 5.2 Volts. Check the voltage after installation. If it is not 5.2V, the output should be adjusted using the trimmer located adjacent to the 6-way header.

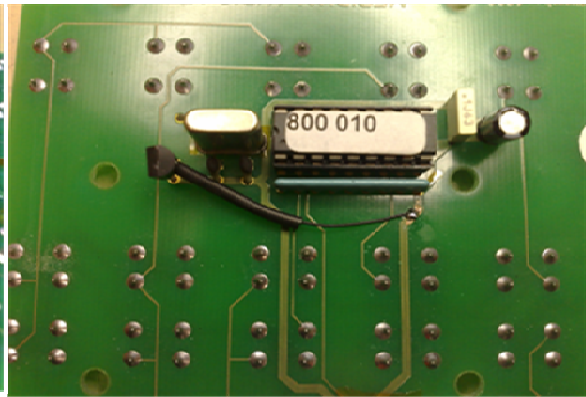
Important information concerning modification to Switch PCB overleaf...

Switch PCB modification

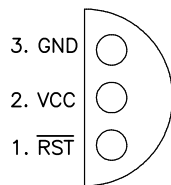
When fitted with the new-type PSU, 800 series products require a modification to the Switch PCB within the front-fascia assembly. This involves removing a capacitor and fitting a three-pin “watchdog” IC.



Remove capacitor C3



Add watchdog IC, DS1813 (Meridian part number D81813)



Solder the two outer pins of the IC into the footprint left by the removal of the capacitor. The centre pin (VCC) of the IC should be connected to the 5V track on the PCB. To do this, scrape away a portion of solder-resist from the 5V track and use a flying lead as shown in the picture above.

DS1813 (viewed from below)

Note: Failure to carry out this modification may result in the front-panel keys locking up after a power cycle.

Following the modification, the “Brightness” and “Contrast” of the front-panel display may need adjustment in order to return the product to a standard appearance. See the user-manual for further details. No other adjustments should be necessary.