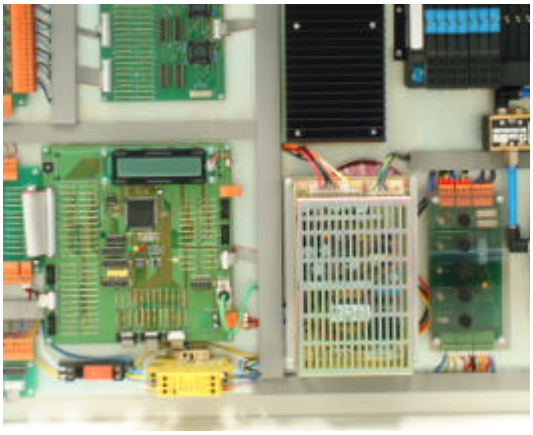
Technical Bulletin #17 5V Adjustment for MPU Board.

Warning! PSU generates dangerously high voltages. Only to be undertaken by qualified personnel.

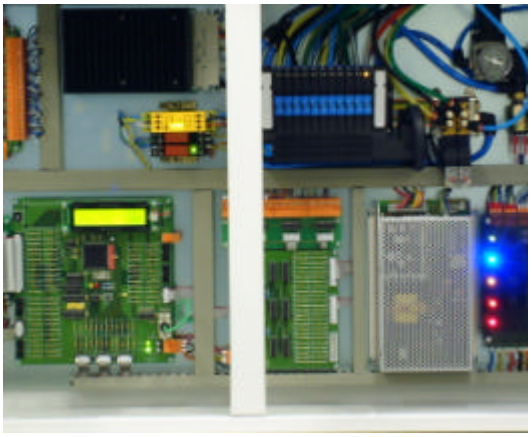
The supply voltage for the MPU board must not fall below 4.75V or be raised higher than 5.25V. A small amount of adjustment of the 5V supply can be made through the Switch Mode Power Supply, optimally the voltage should be set as close to 5V as possible.

There are two types of power supply used on the Mkii chassis, both are covered in this bulletin and are easy to identify.

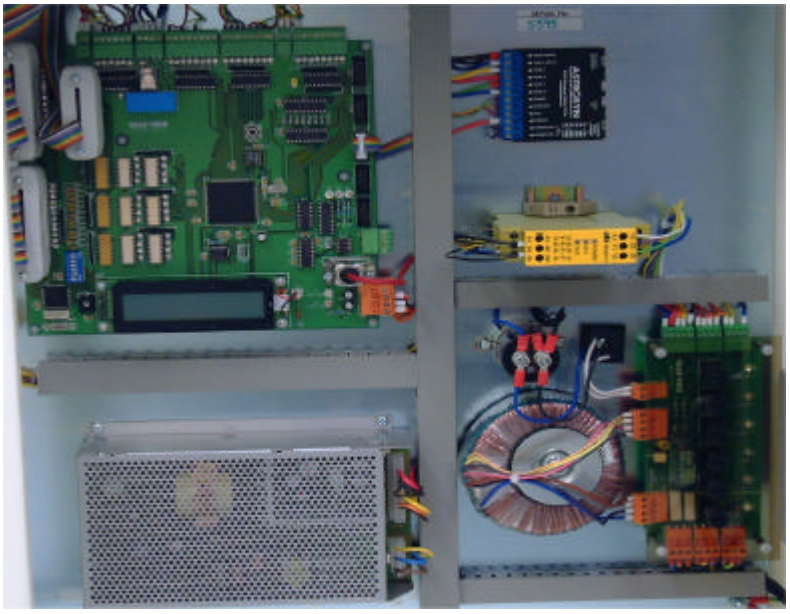
Measure the 5V into the MPU across the red and black wires at the terminal block of the MPU board.



Type 1 PSU with MKII Controller



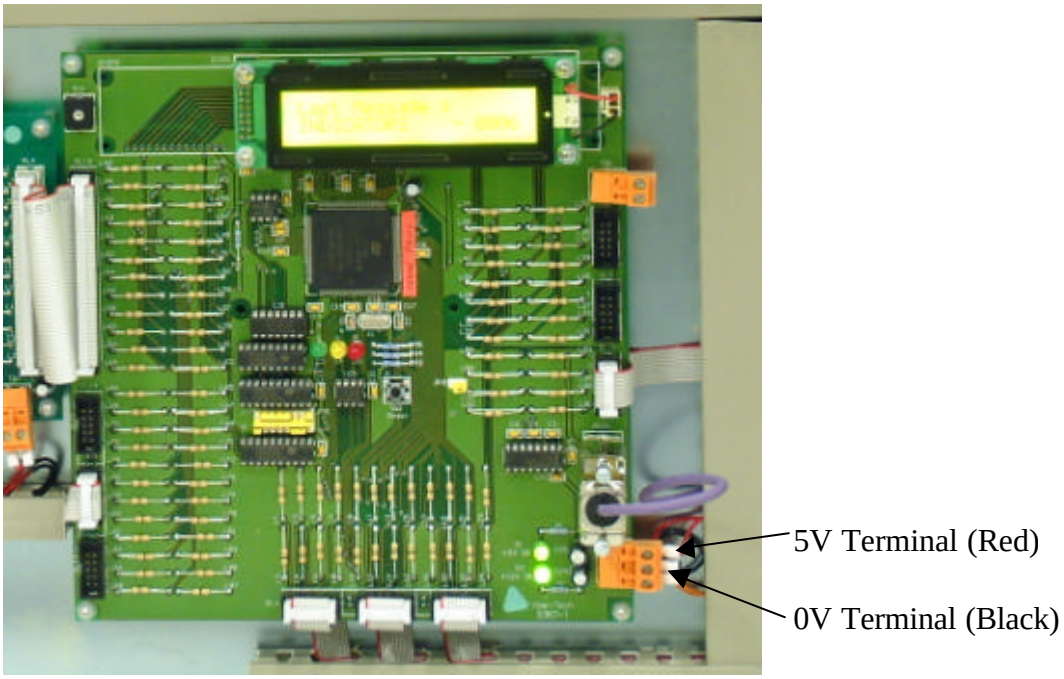
Type 2 PSU with MKII Controller



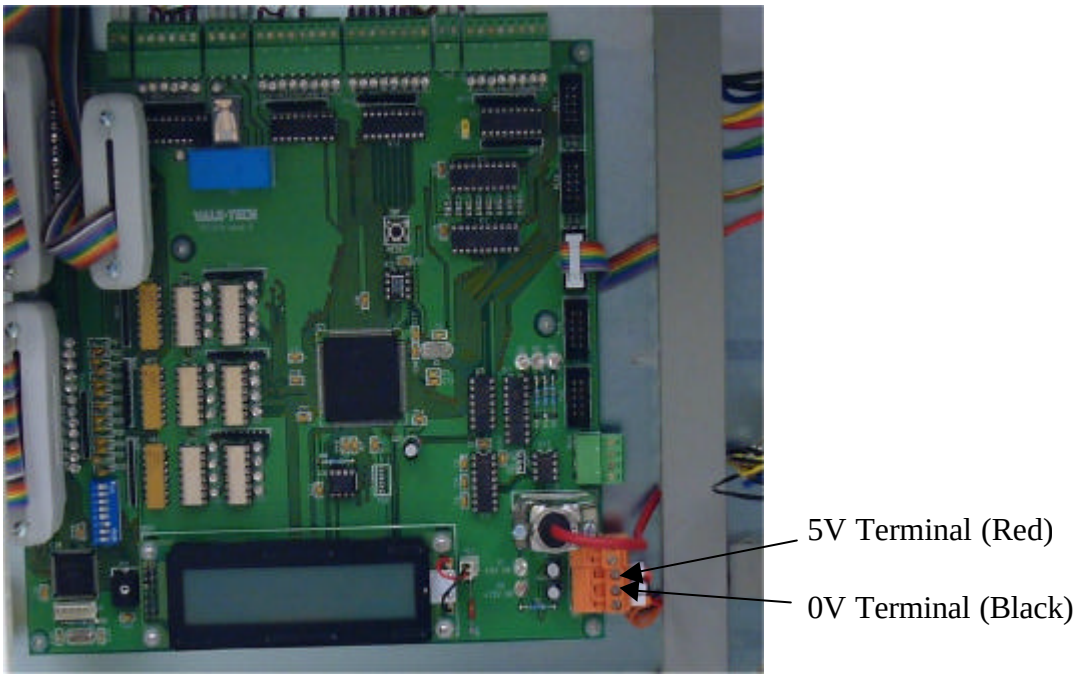
Type 2 PSU with MKIII Controller

Locate the MPU and attach a DVM set to DC Volts to the 5V supply on the board.

Type 1 PSU MKII Controller

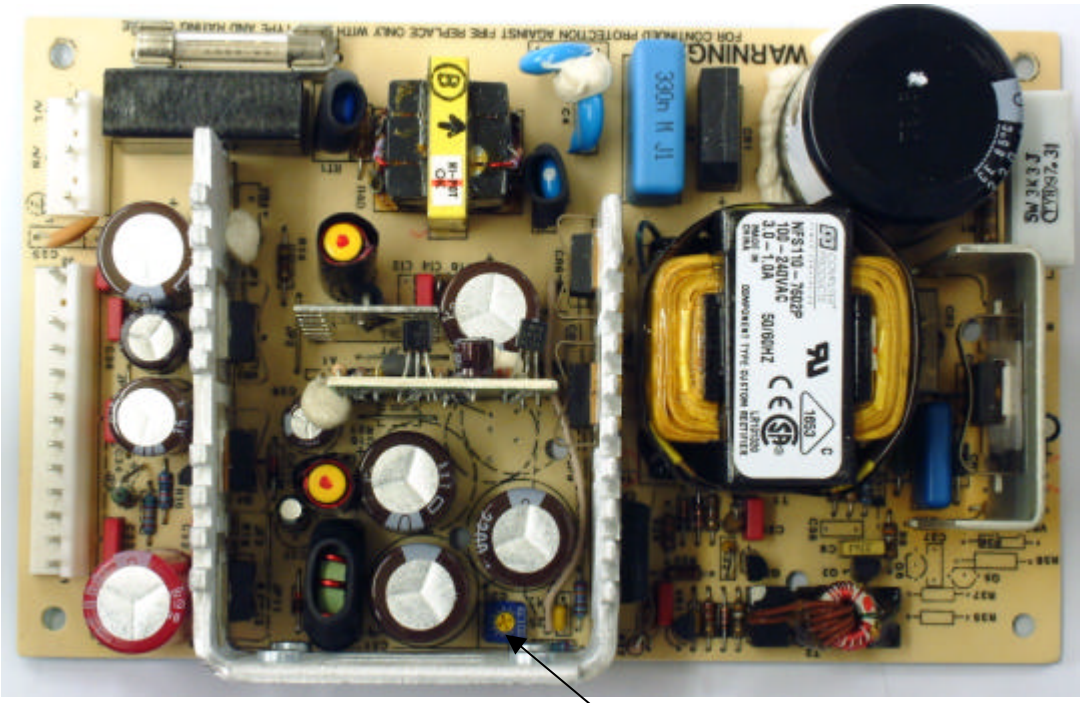


Type 2 PSU MKIII Controller



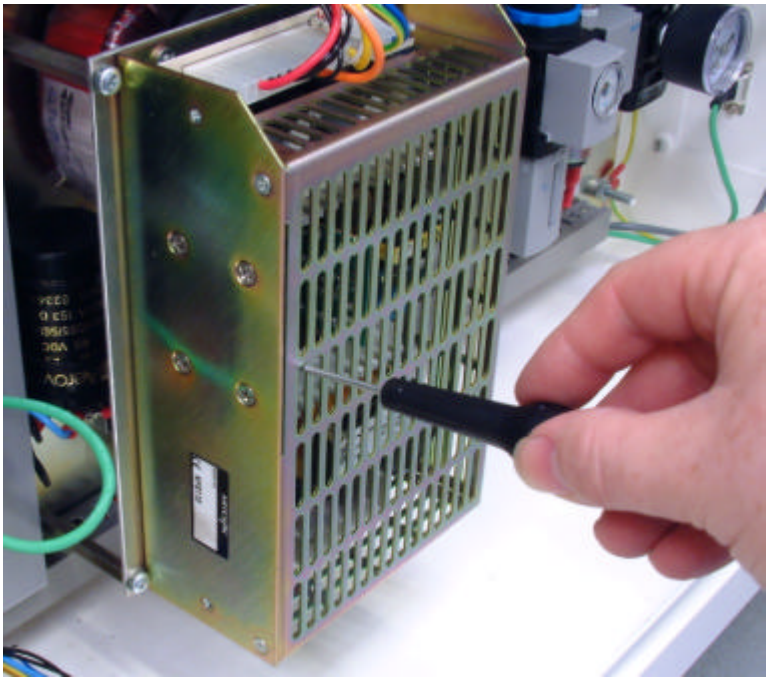
Type 1 PSU Adjustment

The PSU has a small trim pot for adjusting the 5V, this can just be seen through the ventilation holes. The type 1 PSU is shown below without the cover showing the Trim Pot:



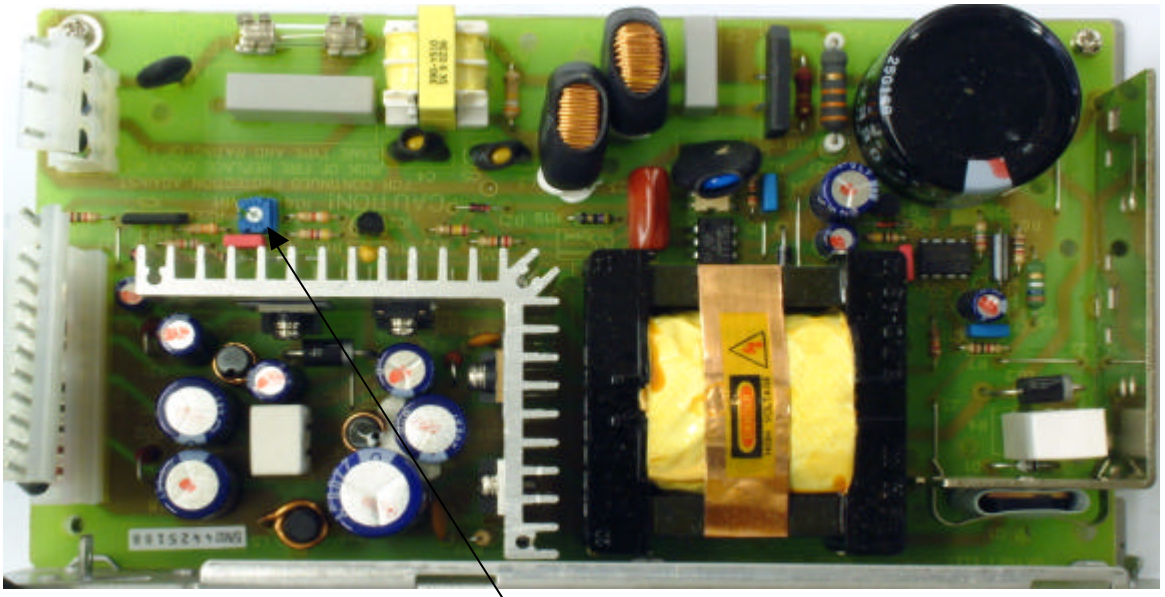
5V Adjustment Trim Pot Location

Using a terminal screw driver, flat blade 0.5 x 3 x 60 shaft or similar, **very carefully** insert the screwdriver through the ventilation hole above the trim pot (shown below), and adjust to 5.00V on the DVM.

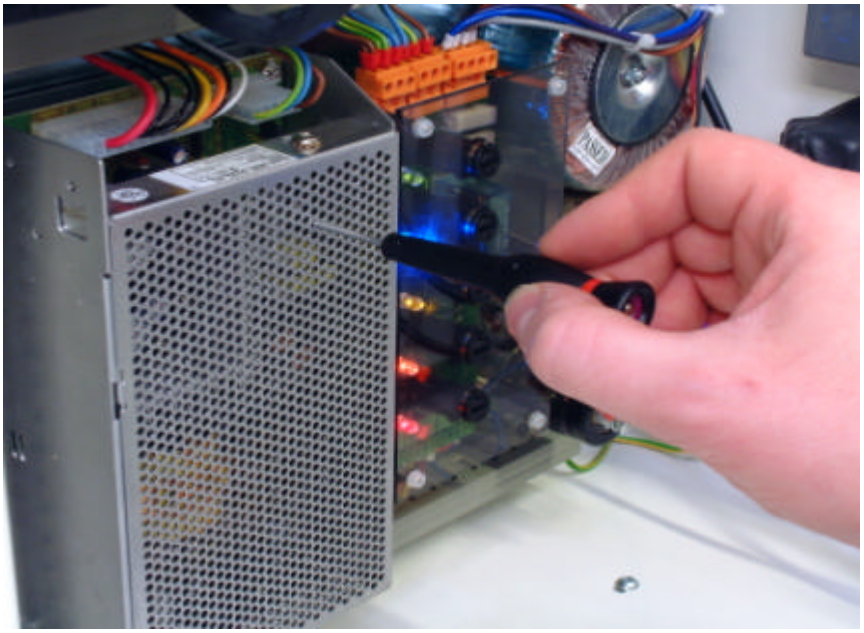


Type 2 PSU Adjustment.

The Type 2 PSU also has a small trim pot for adjusting the 5V, this is difficult to see through the ventilation holes. The Type 2 PSU is shown below without the cover showing the Trim Pot:



Using a terminal screw driver, flat blade 0.5 x 2.4 x 75 shaft or similar, **very carefully** insert the screwdriver through the ventilation hole above the trim pot (shown below), and adjust to 5.00V on the DVM.



Warning.

If the cover has to be removed to gain access to the pot, power down first to remove it, and again to replace it, an accidental short circuit condition is possible.