

# Surrey Electronics

22 Downside Road  
 Guildford  
 Surrey  
 GU4 8PH  
 England  
 Telephone 01483 205400  
 s.e@ndirect.co.uk  
 www.surreyelectronics.com

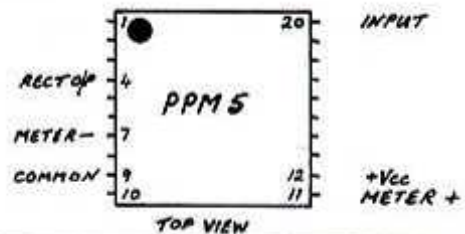


Our home 1973-2002 - the flood prone Forge

## PPM5 APPLICATIONS NOTE

PPM5 connections. 20 pin dual in line, pitch 1 inch, 25.5mm

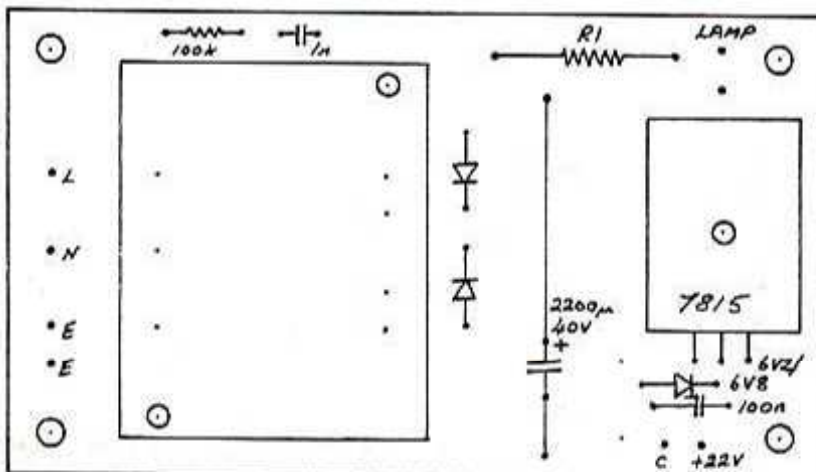
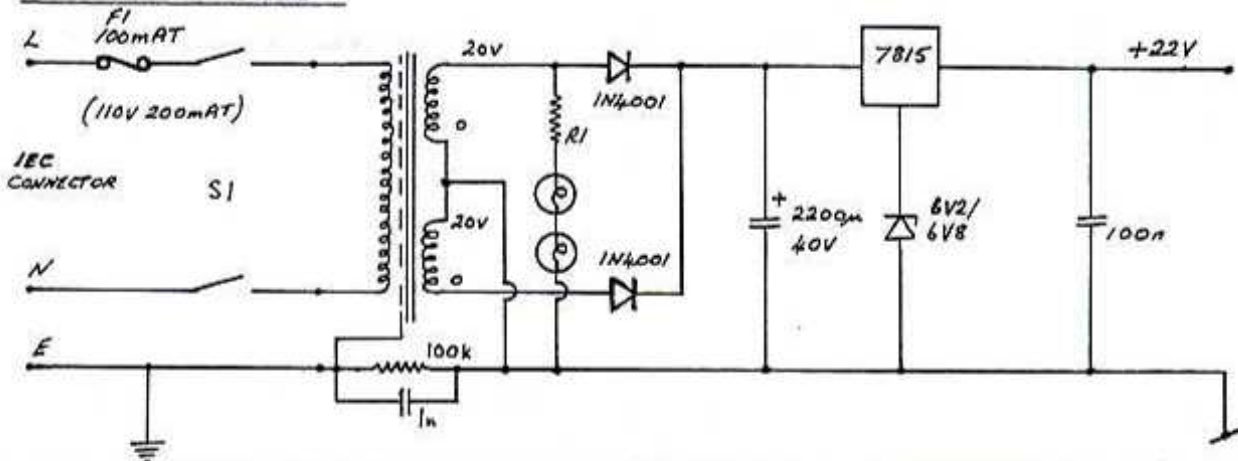
- 4 Rectifier output
- 7 Meter -
- 9 Common
- 11 Meter +
- 12 +Vcc, 8.5-35V
- 20 Input



The time constant resistors are fitted to the package externally to allow alteration for special applications.

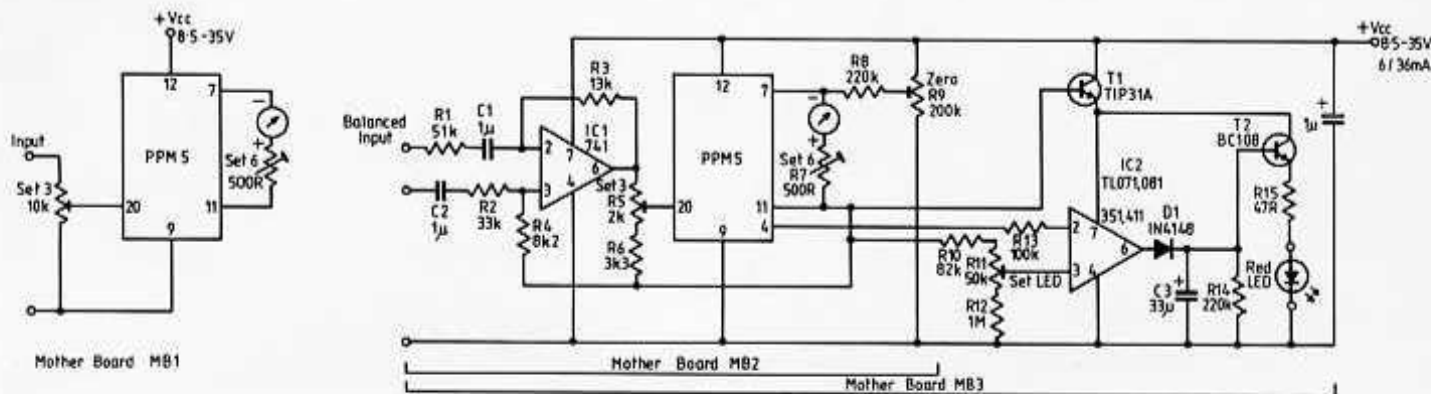
	nominally	permissible values
Attack resistor is fitted between pin 3 and pin 18	68-91Ω	47Ω-1kΩ
Decay resistor is fitted between pin 6 and pin 15	68-150kΩ	3k3Ω-1MΩ

### POWER SUPPLY BOARD 1

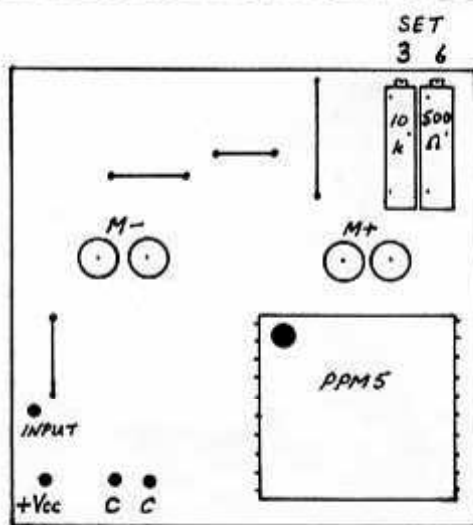


- 1 LAMP R1 = 47R 4W
- 2 LAMPS R1 = 8R2 2W5
- If the dc output is only supplying the light load of PPM5s (up to 100mA) then four lamps may be run
- 4 LAMPS R1 = s/c link

WARNING: THIS APPARATUS MUST BE EARTHED AND SUPPLIED FROM THE MAINS VIA A 100mAT FUSE.



**MOTHER BOARD 1**



Unbalanced

Input impedance 8k $\Omega$

Sensitivity for PPM $_4$ : -13dBV.7, 180mV

Alignment

PPM Mark 6 is to be maximum level

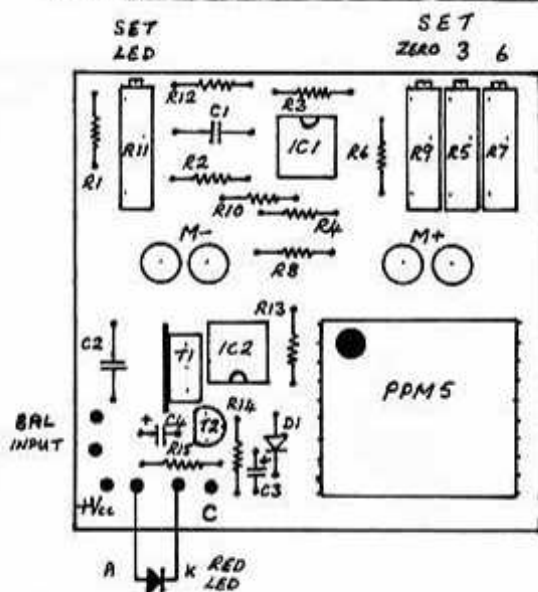
After the supply has been on for two minutes adjust the meter mechanical zero.

Apply a 1kHz sine wave at 12dB below maximum and adjust SET 3 for a reading of Mark 3.

Apply maximum level and adjust SET 6 for a reading of Mark 6.

Repeat and then check that all divisions 1 to 7 are 4dB.

**MOTHER BOARD 2**



Balanced. The input circuit is arranged to provide equal loading to both legs of the line for differential mode signals

Input impedance, balanced 80k $\Omega$ ;  
unbalanced 40k $\Omega$

Sensitivity for PPM $_4$ : 0dBV.7  $\pm$  1dB

Alignment

Where the meter has an accessible zero adjustment set this before connecting the supply.

After the supply has been on for two minutes adjust the SET ZERO preset.

Apply 1kHz sine wave at -4dBV.7 and adjust SET 3 for a reading of Mark 3.

Apply +8dBV.7 and adjust SET 6 for a reading of Mark 6.

Repeat and check that all divisions 1 to 7 are 4dB.

**MOTHER BOARD 3**

Balanced, as Mother Board 2

Overload +9dB LED flasher

LED current 30mA, constant for all supply voltages

Alignment

As Mother Board 2 but additionally:

Apply +9dBV.7 and adjust SET LED preset so the LED is just turned on.