

Section 3 Calibration Procedure

This procedure applies to models PP40, PP41, PP42 and ZL33 programmers.

The Programmers can be put into a Calibration mode via the keyboard entering routines located within the mainframe PROM.

Equipment Requirements.

1. DMM in Calibration
2. Adjustment Tool

- 3.1 Disconnect supply to the Programmer and remove the module.
- 3.2 Remove the five cross-headed screws that secure the cover moulding to the metal base. Two of these screws are located at the top corners of the rear metalwork panel and three at the extreme front of the metal base.
- 3.3 Lift the cover moulding away from the base.

If applicable remove the Twin ribbon cables connecting the RS232 connectors to the RS232/RAM PCB.

Access will be required at first to the keyboard to gain entry to the calibration mode.
- 3.4 Re-connect the supply to the programmer and power on.

The unit will display "MODULE ?".
- 3.5 Press the "SET" key followed by the "E" and "4" keys.

The unit will now display "CAL. VCL ALL"
- 3.6 Connect the Negative lead of the DMM to the Ground connection located on the metal base next to the ON/OFF switch.
- 3.7 Monitor the following Test points and adjust as required.

ISSUE 1 PCBs ONLY

Test Point	Voltage Range	Adjust.
R128 (6K8) square pad end	12.5V \pm 0.1V	VR1
R125 (6K8) square pad end	12.5V \pm 0.1V	VR2
R133 (6K8) square pad end	12.5V \pm 0.1V	VR3
R135 (6K8) square pad end	6.5V \pm 0.1V	VR4

ISSUE 2 and LATER PCBs

Monitor	Reference	Voltage Range	Adjust.
R120 (6K8)	square pad end	12.5V \pm 0.1V	VR1
R125 (6K8)	square pad end	12.5V \pm 0.1V	VR2
R131 (6K8)	square pad end	12.5V \pm 0.1V	VR3
R138 (6K8)	square pad end	6.5V \pm 0.1V	VR4

Confirm outputs of PSU

The PP40 series PSU is factory preset and no adjustment is available. Should any supplies be out of tolerance, the PSU should be replaced.

Voltage Range

TP1 (Blue cable)	+5.0V	to	+5.2V
TP2 (Blue cable)	+5.0V	to	+5.2V
TP3 (Yellow cable)	0V		
TP4 (Yellow cable)	0V		
TP5 (Green cable)	+19.0V to		+23.0V
TP6 (Brown cable)	+28.0V to		+33.0V
TP7 (Yellow cable)	0V		
TP8 (Black cable)	-11.70V	to	-12.30V
TP9	0V		
TP10 (Orange cable)			
TP11 (Red cable)			

The calibration of the unit is now complete.

Power off and re-assemble ensuring that if applicable the RS232 ribbon cable connections are re-fitted.