



EDL Displays, Inc.

LOW VOLTAGE POWER SUPPLY

THEORY

The low voltage power supply 'LVPS' takes the 110VAC (220 switchable) input and produces all of the DC voltages needed for operation of the monitor. This is a switching power supply with three separate switching regulators. The output voltages are

divided into the three channels as follows:

1. +15V -15V +6V
2. +70V +26V
3. B+ (Will vary from 65 to 200 VDC depending on the horizontal input frequency.)

TESTING

1. Visually inspect PCB assembly
2. Preset 'R32 & R38' to 12 o'clock position
3. Apply AC power
4. Adjust 'R32' to set +15, -15 & +6.2 VDC
5. Adjust 'R38' to set +70 & +28 VDC

Troubleshooting

- 1) If LVPS cycles or will not attempt to start
 - Remove Power
 - With external power supply '+' lead to anode of 'D2' 'GND' lead to right end of 'R19' apply 18 to 20 VDC, look for clock pulses @ gates of 'Q2, Q3 & Q4'

LOW VOLTAGE POWER SUPPLY REPLACEMENT

P/N XXXX-0106-03

Revision B or higher may be used.

Tools Required: 1. Screwdriver, common, straight slot.

REPLACEMENT PROCEDURE

1. Turn a/c. power OFF at front panel.
2. Disconnect the monitor a/c. power cord.
3. Unscrew the four captive screws on the Low Voltage Power Supply (LVPS).
4. Remove the Low Voltage Power Supply from its slot; At this time, inspect the Power Supply Module connector for damage and check for blown fuses. Verify that the 115V/230V switch is set correctly. If there are any blown fuses, replace with the proper fuse and proceed to step 5. If the required a/c. input voltage is 115 a/c. and the switch was set to the 230V a/c. position, set the switch to the required 115V a/c. position and proceed to step 5. If the required voltage is 230V a/c. and the switch was set to 115V a/c. with power applied, Do Not Retry the Supply. Fuses: F1 -Buss Little Fuse MDV-3 315003, F2-1A Buss Little Fuse GFA-1 251001.

NOTE: Low Voltage Power Supply voltages are set at the factory - Do Not Adjust or attempt to adjust the voltage control pots. Check programmable dip-switch SW3 for proper setting.

<u>SW3-1</u>	<u>SW3-2</u>	<u>SW3-3</u>	<u>SW3-4</u>
OFF	ON	OFF	ON

5. Carefully insert the Low Voltage Power Supply into its slot making sure the connector is properly aligned with the Mother Board mating connector. Check the following on the good supply before installing:
 - a. Good fuses in F1 & F2.
 - b. SW4 (115/230V a/c. switch) set for proper voltage (115V a/c.).
 - c. SW3 (B+/ext. control switch) set for multi-sync operation.
6. Tighten the four captive screws to seat the Low Voltage Power Supply.
7. Connect the a/c. power cord to the monitor.
8. Apply a/c. power and input signals and check the display for proper operation.
9. If a power supply has been re-tried after replacing a blown fuse or correcting a switch setting and the fault is not corrected, follow the above procedure and replace the Power Supply with a known good spare supply. If the fault still persists, submit the monitor to shop maintenance for evaluation.