

## **Grass Valley Products**

# **Field Modification Note**

**FM Number**: FM2542-00 (A2) **Ref ECO**: 624C, 105D **Date**: August, 1997

**Product:** VPE Series Editors–Models 131, 141L and 241L

VPE 300 Series Editors-Models 331, 341, and 351

**Assemblies:** Editor Frame Power Supply, Assembly Number PE1248-00

**Purpose:** Replaces power supply PE1248-00 with PE1264-00 to improve reliability,

provide regulated dc outputs, output current protection and higher wattage for

improved disk drive functionality.

### Parts Included:

Part Number	Description	Qty
	FM2542-00 (A2) Sticker	1
	Assembled Power Supply consisting of the following:	
PE1264-00	Power Supply, 4 Output, 80 W	1
037108-00	Power Supply Mount	1
054692-00	Cable, Assembly, AC Power	1
054693-00	Cable Assembly, DC Power	1
007128-00	AC Power Supply Guard	1
NA4085-00	Nut, Lock 4-40 .25 Hex .14 THK SST	4
SA1286-01	Screw, 6-32 x .25	4
WA2015-00	Washer, #6 Star	4
CH8026-00	Cover, Metal Pwr Supply	1

Tektronix, Inc., Grass Valley Products P.O. Box 1114 Grass Valley, California 95945 USA Tel (916) 478-3000 TRT 160432 ©1997 by Tektronix, Inc. All rights reserved. You Will Need: # 2 Phillips screwdriver

1/4 inch nutdriver 5/16 inch nutdriver Small flat-blade screwdriver

#### Instructions:

#### **CAUTION**

To prevent static damage to sensitive components, use a grounded wrist strap, mat, and tools when handling printed circuit modules.

- 1. Turn off power to the editor frame with the power switch at the right front of the chassis and remove the AC line cord from the rear of the chassis.
- 2. This modification requires the removal of the top cover of the frame. Un-rack the unit if necessary and remove the top cover by removing the 14 Phillips screws holding it in place.
- 3. Inside the right front corner of the frame, cut the cable tie holding down the AC cable harness (blue/brown wires) from the power supply to the front power switch.
- 4. Noting the orientation of the wiring (location of blue and brown wires), disconnect the *top* AC cable harness spade connections from the front power switch; leave the bottom wires connected.
- 5. At the rear of the chassis, remove the Power Supply DC cable harness from the rear chassis backplane connector by gently prying open the connector tabs on either side with a small, flat-bladed screwdriver.
- 6. Remove the metal cover from the top of the old power supply by removing the four #2 Phillips screws holding it in place.
- 7. Using a 1/4 inch nutdriver, remove the four hex standoffs holding the power supply to the bottom of the chassis.
- 8. Using the 5/16 inch nutdriver, remove and retain the nut holding the green chassis ground wire from the power supply to the rear ground stud; leave the other ground wire connected to the stud.
- 9. Remove the old power supply.
- 10. Install the new power supply by aligning the four mounting holes in the power supply metal brackets over the four studs on the chassis bottom as illustrated in Figure 1. Secure the supply to the bottom of the chassis with the four nuts (NA4085-00) and star washers (WA2015-00) provided.

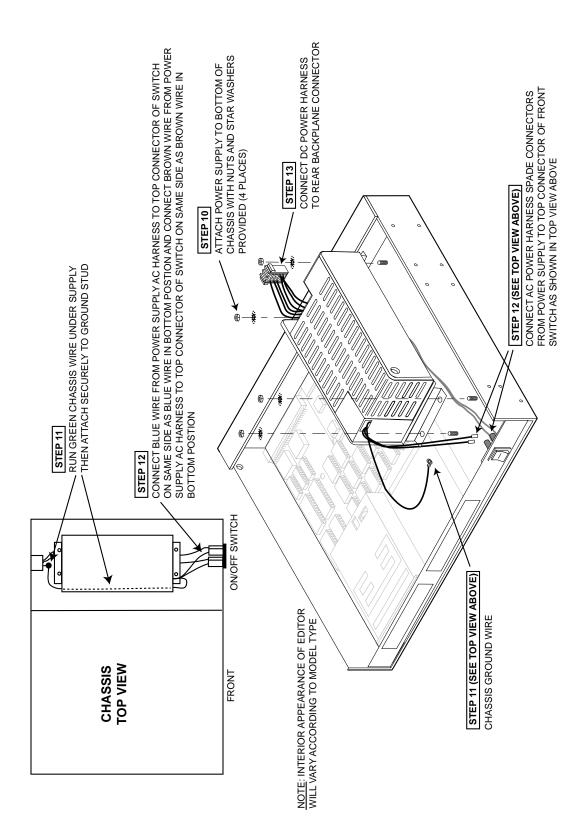
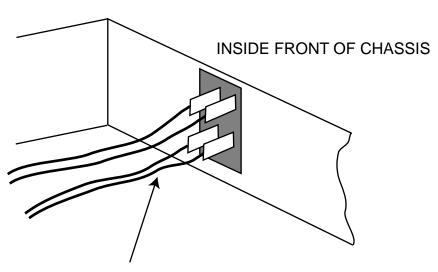


Figure 1

- 11. Run the green chassis ground wire from the power supply underneath the power supply and attach it securely to the ground stud at the rear of the chassis with the nut and star washer removed previously.
- 12. Connect the power spade connections from the power supply AC harness to the front panel switch as follows and as shown in Figure 2:
  - Connect the blue wire from the power supply AC harness into the top position on *the same side* as the blue wire connected to the bottom switch position.
  - Connect the brown wire from the power supply AC harness into the top position *on the same side* as the brown wire connected to the bottom switch position.

#### **WARNING**

The wire colors in the top and bottom positions on the right and left sides of the power switch <u>must match</u> as stated above or a direct short will result.



USE BLUE AND BROWN WIRE LOCATIONS ON BOTTOM OF SWITCH AS GUIDE FOR CONNECTING BLUE AND BROWN WIRES TO TOP CONNECTORS (COLOR OF WIRE ON LEFT AND RIGHT SIDES SHOULD MATCH)

Figure 2

- 13. Plug the DC Power Harness connector from the power supply into the rear backplane connector (this connector is keyed for proper installation).
- 14. This completes the power supply installation. Make sure the wiring in step 12 is correct before proceeding.
- 15. Before putting the top cover of the chassis back on, check the power supply for proper operation as follows:

- a. Install the ac power cord into the back of the chassis.
- b. Turn on power to the chassis.
- c. Using a voltmeter, measure the power supply voltages at the front right testpoints of the SBC board using caution not to short the testpoints together with the voltmeter leads.

Check the +5V, +12V and -12V testpoints for the following <u>approximate</u> voltages.

- +5.1 V
- +12.5 V
- -13.0 V
- d. The actual voltage values will vary. If they are in the above general range, the power supply is working properly.
- 16. Power down the chassis.
- 17. Re-attach the frame cover and re-rack the frame if necessary.
- 18. Place the green Field Mod Note sticker provided in a prominent location on the outside of the frame to indicate this change has been made.
- 19. Power up the frame and resume operation.