

# PMS500



INSTRUCTION BOOK

IB614101

## Appendix B

### MAINFRAME AND POWER SUPPLY INSTRUCTIONS AND SCHEMATIC

Includes PMS500-24 and PMS500-48.

The PMS500 is a mainframe power supply for mounting FM SYSTEMS, INC. 500 series equipment. Up to three circuit board modules may be accommodated. These modules may be readily installed in the field with common hand tools; no soldering is required.

MECHANICAL: Fits standard 19" wide rack. 1 3/4" High x 10 1/4" Deep.

CAPACITY: Up to three FM SYSTEMS, INC. standard circuit board modules, each 5.3" wide x 9.35" deep, or one 10.7" double-wide module and an additional single module.

INPUT POWER: PMS500 105-125 VAC 60Hz at 0.4 Amps max. Standard 5' 3-wire grounded U.S.A. cord set. PMS500-24 uses a 5 way binding post positive ground -24 VDC 0.5 Amp max auto-reset fuse system. PMS500-48 uses a 5 way binding post positive ground -48 VDC 0.5 Amp max Switching Power Supply with auto-reset fuse system.

OUTPUT POWER: PMS500, PMS500-24, PMS500-48, output -24 VDC at 0.5 Amps max distributed to the individual circuit cards with a daisy chain power wire internally.

CONNECTORS: Accessible on the rear panel, provided as integral part of circuit board modules, see individual specification sheets for particulars.

WEIGHT: PMS500=7 lbs. PMS500-24=6 lbs. PMS500-48=6 lbs.

#### MODULE CARD INSTALLATION

1. Select which of the three positions will be occupied by the new circuit board module.
2. Remove the mainframe from the rack, disconnect power.
3. Remove the bottom cover, and the # 4-40 x 1/4" mounting studs adjacent to the new modules location from the mainframe.
4. Remove the appropriate rear-panel connector (blank) from the mainframe.

5. Remove the appropriate front-panel "nameplate" blank from the mainframe. To remove old nameplate carefully lift one corner, then slowly peel the nameplate from the aluminum panel. The old nameplate may be destroyed, but the aluminum panel should be essentially as new.
6. Install the new circuit board module with the components toward top cover. Take care to avoid moving any of the preset controls (just a "slight" change can cause the unit to malfunction). Slip the connectors through the holes in the rear panel and drop the front edge of the circuit board onto the brackets attached to the front panel.
7. Install two 3/8" lock washer and two 3/8" - 32 nuts on the outermost "F" connector barrels. Gently tighten the nuts while holding the circuit board to the mounting brackets.
8. Install two #4-40 x 1/4" studs and lock washer to secure the front of the board to the mounting brackets.
9. Remove the top cover from the mainframe.
10. Connect the DC supply from the PMS500 power distribution daisy chain wire to the new circuit card.
11. Push any L.E.D. (Light Emitting Diodes) straight into the appropriate mounting holes. Insert only until the dark collar around the colored L.E.D. is flush with the front panel, the collar must not protrude, in order to avoid interfering with the new nameplate.
12. Mount the new front panel nameplate (Furnished with the circuit board module being installed). Temporarily set the new nameplate in place and check that all necessary cutouts are clear. Remove the paper peel coat from the adhesive backing of the nameplate, then slide the nameplate down around the L.E.D.s onto the panel. Press gently to set the adhesive. Mount any additional panel components (Switches, meters, potentiometers etc.) with the hardware supplied. Gently tighten the fasteners to secure the components, do not over tighten.
13. Mount the new rear panel connector identification strips as illustrated in the instruction book for the particular module being installed.

14. Connect input, output and power cables, the green "POWER-ON" indicator should be illuminated. Set any external controls as required.

CAUTION:

Most circuit board modules have several adjustments which are carefully factory set with precision instruments for optimum performance. Change only those which must be adjusted, some controls when mis-adjusted produce little change under normal operating conditions, but can seriously reduce the ability of the unit to function correctly under other conditions which may be encountered. Therefore, if you must adjust a control, place a mark on it before moving it, so that it may be returned to its original setting with reasonable accuracy.

15. Disconnect power. Replace top and bottom covers and mount mainframe to rack. Reconnect power and check for normal operations of each module.



## REAR VIEW