

#120 Matrix PS Board



[10/03/01]

Replacing the Power Supply Board in the **intelix** 2U matrix chassis

Tech Note

Follow the directions below to replace the power supply board of an Intelix 2U matrix. You will need the following tools: a small Phillips screwdriver and a 5/64" Allen wrench.

Removing the Old Power Supply Board

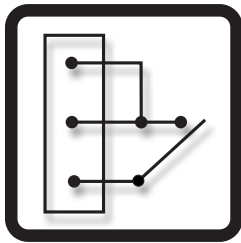
- 1) Begin by choosing a static-free environment and grounding yourself appropriately. The power supply board is not static sensitive, but other boards near it are.
- 2) Power down the matrix and unplug the external power transformer from the rear of the matrix..
- 3) Turn the matrix upside-down on a work bench so the bottom of the matrix chassis is accessible. Remove the 10 Phillips screws of the bottom panel and set the bottom aside. Removing this panel exposes the power supply board. The power supply board is the only board mounted upside-down, in relation to the matrix normal orientation.
- 4) It is very important that you take note and document where the cables terminate on the power supply board. All of the connectors around the outside of the board are to be tab side up with the red and black pair going on one of the connectors labelled P13, P14, or P15. All three are in parallel at 10.5 VDC. The orange, purple, yellow, black, and red groups connect to any of the connectors labelled P7 through P12 providing -18, +18, and +10.5 VDC. These six connectors are also in parallel.
- 5) Near the center of the power supply board is the connector for the front panel status LED. The direction of this connector is also critical: the black wire is to be closer to J6 and the white wire is to be closer to the front of the matrix.
- 6) Removing the power supply board itself requires a small Phillips screwdriver to remove 4 small screws, one in each corner of the board.
- 7) Using the 5/64" Allen wrench, remove the black grounding wire from its connection to the matrix side panel.
- 8) Lift the old power supply board out of the chassis and set it aside.

Installing the New Power Supply Board

- 1) With the unit's bottom panel removed and the front of the matrix facing you, insert the new power supply board into the back left corner of the chassis. The four capacitors should align against the wall and the back panel of the chassis.
- 2) Secure the board to the chassis with the 4 screws that were used with the old power supply board. The smaller screws go toward the back of the unit and the larger ones go toward the front.
- 3) Referring to your documented connector terminations, connect all cables to the new power supply board. A dab of glue or silicone is advised for J6--the front panel LED connection--since it is mounted upside-down.
- 4) Replace the bottom of the chassis by inserting and tightening the ten Phillips screws.
- 5) Power up and test the matrix.

See the following page for an illustration and a photo of an **intelix** Power Supply Board.

www.intelix.com intelix@intelix.com 608-831-0880 fax 831-1833



Tech Note

#120 Matrix PS Boards, Pg 2



[10/18/00]

Illustration of an **intelix** Power Supply Board

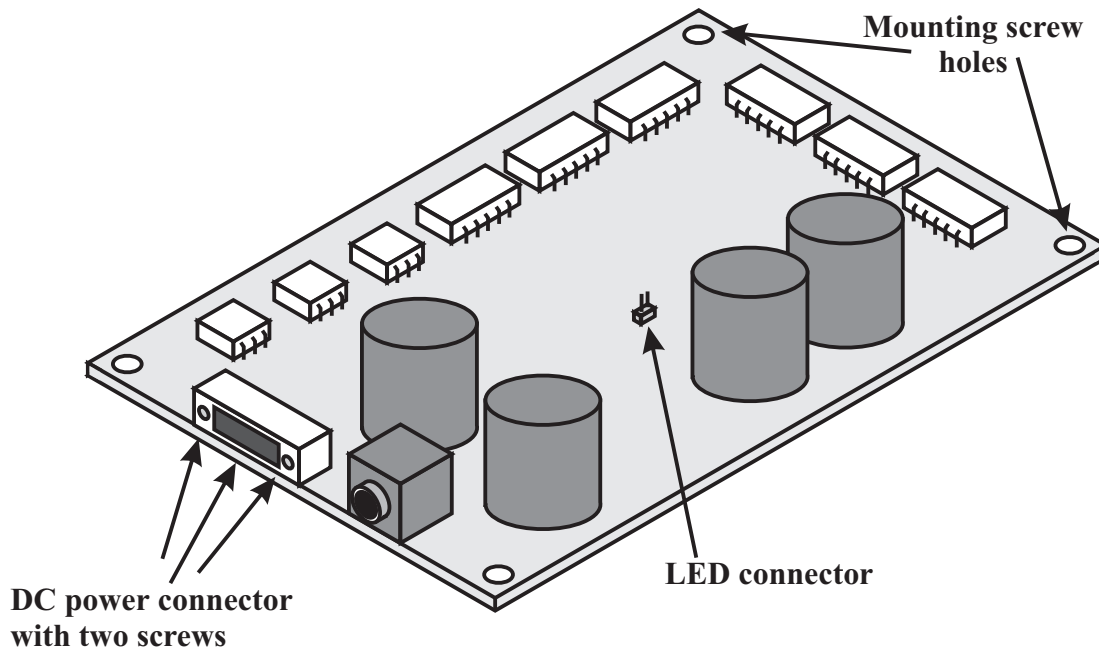


Photo of an **intelix** Power Supply Board (bottom of matrix chassis removed)

