



PS301
Intercom Power Supply
with
Program Audio Input

Intercom for Sound, Lighting and Production Professionals



- 1. The PS301 is a 3-circuit Power Supply with a unique hybrid configuration. Microprocessors operate all the switching, routing, and supervision functions, while the audio paths and the core power supply remain analog. The result is a station with unrivaled flexibility, muscular reliability, and clean, smooth audio.
- 2. The PS301, as in all the 300 series master stations and power supplies, has a large toroidal transformer which gives off virtually no stray-field radiation to interfere with the other devices with which it shares rack space.
- 3. Those power supply components which create heat are mounted on a massive heat sink, and, when necessary (rarely) get extra cooling from a thermally regulated cooling fan.
- 4. Each of the 3 PS301 circuits is independent of the others, except for sharing the toroidal transformer and the rectifier. Therefore, a problem on one circuit does not affect the others. When a circuit problem occurs, and is eliminated, the PS301 resumes normal operation without re-booting.
- 5. The monitoring and control functions include automatic adjustment of the termination impedance when the circuits are combined, adjusting to brown-outs or sudden drops in line voltage, monitoring the temperature of the heat sink and switching the cooling fan on when required, and reporting the status of each circuit to LED indicators on the front panel. The top, green LED reports that 24VDC is being delivered to the system. The lower 3 LEDs are green when that circuit OK, and become red when it is experiencing an overload and or short circuit and therefore has been shut down until the problem is solved.
- 6. The transformer has primary windings for both 120VAC and 240VAC (50/60 Hz) and allows wide deviation from those voltages without any effect on performance. At as low as 100VAC, the secondary voltage will remain at 24VDC while the available current will be slightly reduced from 2.4A continuous to 2.0A continuous. The voltage and fuse are changed on the rear panel.
- 7. The components and microprocessor which monitor and adjust the power supply's performance are separately mounted on their own circuit board, as far as possible from any heat source.
- 8. The PS301 can be used with any unbalanced 200 Ohm party-line intercom components.
- 9. Each circuit has a DIP switch on the rear panel for lifting the termination circuit. This is only needed when the PS301 is augmenting a system which already has a termination circuit.
- 10. There are 3 DIP switches on the rear panel for lifting the termination circuits. This is only necessary when the PS301 is being used to augment a system which already has a termination circuit.

Specifications: (subject to change without notice)

Current draw (at 120VAC): 0.14A (no load), 1.05A @ 2.4A DC out

Power output: 24 volts DC regulated @ 2.4A continuous

Line termination: DC: 5KW, 50Hz-20KHz: 200W

Aux. input: Mic level: (-44dBm) 48K Ohm, Line level (-24dBm): 1K Ohm

Size (excluding ears): 17" width x 9.5" depth x 1.75" height (432 x 241 x 44.5 mm)

Weight: 9.8lbs. 4.5Kg



## Pro Intercom LLC

Printed in USA Rev.0/20140207