6-PORT Merger/Manager (6 IN, 1 OUT) Specifications

1.0 J-PACK - GENERAL

1.1 The **DMX 6-PORT** Merger shall be capable of combining up to six independent DMX512 data streams into a single DMX output universe.

1.2 The **DMX 6-PORT** shall be available in portable (**DMX-6PM**) and installation (**DMX-6PIM**) versions. Multiples of either version shall be cascadable to support a large number of DMX inputs for either merging or isolation applications.

1.3 **DMX 6-PORT's** shall each contain an LCD user interface for ease of set up and monitoring. All programming shall be via a user-friendly, intuitive and self-prompting menu structure. No PC or special software is required.

1.4 **DMX 6-PORT's** shall have individual LED indicators of power and all DMX input and output lines. Active DMX data shall illuminate the corresponding LED. Loss of DMX shall extinguish the corresponding LED.

1.5 Model **DMX-6PIM** shall contain wire management allowances and a removable isolation barrier between the line voltage (power supply) section and the data section.

1.6 All **DMX 6-PORTS** shall have a USB "TECH-PORT" for *PC monitoring of all DMX input and output levels.

1.7 Model **DMX-6PIM** will operate with a voltage input range of 90-264VAC at 47Hz to 63Hz, thereby permitting global application. The **DMX-6PIM** power supply shall be UL approved and short circuit, overload and over voltage protected.

1.8 Model **DMX-6PM** shall be available with a choice of DMX input and output connectors including RJ45, "break away" terminal block and gold plated 5 pin XLR connectors. An optional 19" rack mount kit shall permit mounting in standard 1RU.

2.0 CONTROL PCB

2.1 **DMX 6-PORT's** shall employ the "system-on-a-chip" advanced "3000 Series" digital technology. The control electronics shall be contained on the Merger (6-PORT) and it's associated User Interface Board (UIB).

2.2 The DMX inputs and output shall comply with USITT DMX512-A (ANSI E1.11 - 2008) standard protocol for digital data control.

2.3 State-of-the-art design and high speed processor shall permit "real-time" DMX merging/combining of all six DMX inputs at 44 packets per second. Latency shall be negligible.

2.4 All DMX inputs shall be fully opto-isolated to a minimum of 2,500Vrms.

2.5 All DMX inputs and output shall employ auto-resetting ("self-healing") polyswitch fuse protection to a minimum of 240V.

2.6 Standby (idle) mode compliance with the International Energy Agency's "One Watt Initiative" standby power requirement. Please refer to U.S. Executive Order #13221. Processor standby power on DMX 6-PORT shall not exceed 1 Watt.

2.7 **DMX 6-PORT's** shall employ an EEPROM module to permit ease of firmware upgrade.

2.8 **DMX 6-PORT's** shall support the following menu items:

1. **DMX TYPE** - Selection three DMX data rates of transmit on the DMX output.

2. **CH CTRL** - Enable/disable the power control to any/all of the six DMX inputs.

3. **TECH PORT** - Enable/disable the USB port for DMX monitoring via PC*.

4. **RTIME** - ss hhhh:mm. Display the total run time in hours (hhhh), minutes (mm) and seconds (ss).

5. **HARD-KEY** - View the microcontroller's unique six-character hard-key code.

6. **SERIAL#** - View the unique eight-character silicone serial number.

7. **VERSION** - Display the software version.

8. **EEPROM** - Display the type of EEPROM module, parameter or firmware.

9. **FW LOAD** - Allows firmware load from the memory module.

10. **LCD VIEW** - Adjust the contrast of the LCD Display for optimum viewing.

2.9 **DMX 6-PORT's** employ a green LED for 12VDC power and a yellow LED for DMX data on each of the DMX inputs (RxD) and DMX output (TxD). 12VDC for powering external devices shall be limited to a maximum of 30 watts.

2.10 All DMX inputs shall have end-of-line, 100 ohm, self-termination.

2.11 A reset push-button shall be included on the face panel of all 6-PORT models. Resetting the unit, whether by the reset button or power-up, shall not affect any stored parameters or presets, and dimmer outputs shall automatically return to their former status.

2.12 All face panel buttons shall be blue LED back-lit with adjustable intensity.

2.13 All printed circuit boards (PBC's) shall be FR4/G10 with a UL 94V-0 Flame Class Rating.

Specifications subject to change without notice.