

DMX 6-PORT MERGER



JSI's DMX 6-PORT MERGER combines up to six DMX512 data lines into one DMX512 universe. A cost-effective DMX input management solution for temporary and hardwired installations requiring multiple DMX sources or multiple opto-isolated DMX input locations.

Model variants include compact portable, 19" rack mount and installation boxes for permanent installations. DMX I/O options include RJ45, terminal block and 5-Pin XLR connector.

Input DMX data streams are combined in a "Highest Take Precedence" (HTP) or "Pile On". Multiple units can be cascaded together for larger installations.

A USB "TECH PORT" interface (for use with a *PC) for ease of monitoring DMX output level data on all 512 channels at one time.

- ✦ Six DMX512 inputs, one DMX512 output.
- ✦ State-of-the-art design permits "real-time" DMX merging/combining of all six DMX inputs at 44 packets per second.
- ✦ LCD display for easy setup and monitoring.
- ✦ Power and data receive LED indicators.
- ✦ DMX I/O options include RJ-45, terminal block and 5 pin XLR connectors.
- ✦ USB "TECH PORT" for *PC monitoring of all DMX inputs and output.
- ✦ Removable EEPROM module allows for ease of firmware upgrade.
- ✦ Unique power saving standby (idle) mode reduces power consumption to less than 1 Watt, a "green" power management product.
- ✦ Keypad lockout prevents unauthorized access.
- ✦ Up to 10 year product warranty available.



Installation Merger/Combiner Panel



These products are energy efficient and consume less than 1 watt. Compliance with the International Energy Agency's "One Watt Initiative".



JOHNSON SYSTEMS INC.

"PROFESSIONAL LIGHT CONTROL PRODUCTS"

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DMX 6-PORT MERGER CHARACTERISTICS

Power Supply Requirements

DMX-6PM (all models) = 12VDC (adapter included).
 DMX-6PIM (installation version) = 90 to 264VAC, 47-63HZ, 1Ø 3 wire.

Environment

Temperature Range: 23°F (-5°C) to 104°F (40°C) ambient.
 Humidity Range: 0% to 90% non-condensing.

Isolation

2,500 Vrms minimum per DMX input.
 Auto-resetting 240V polyswitch fusing of all DMX inputs and output.

Physical

DMX-6PM (All models) = 9" x 7" x 1.75" (23 cm x 18 cm x 4.4 cm).
 DMX-6PIM (Installation box version) = 9.5" x 12" x 3.4" (24 cm x 30 cm x 8.6 cm).
 DMX-6PIM-FM (Flush Mount cover for above) = 11.7" x 14.2" (30 cm x 36 cm).

Weight

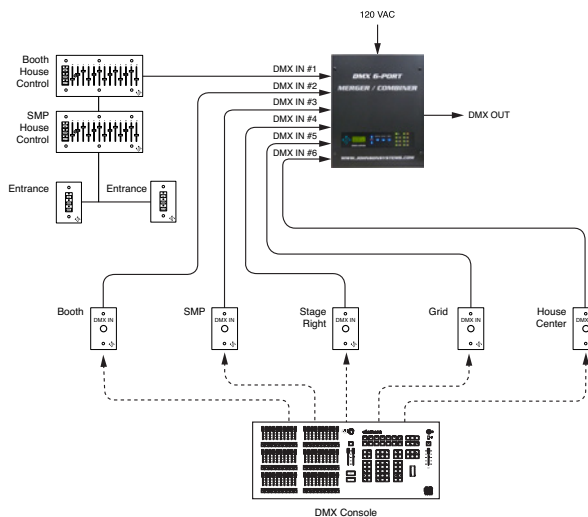
DMX-6PM (Portable/table top version) = 3.6 Lbs. (1.6 Kg).
 DMX-6PIM (Installation box version) = 7.4 lbs. (3.3 Kg).

Material

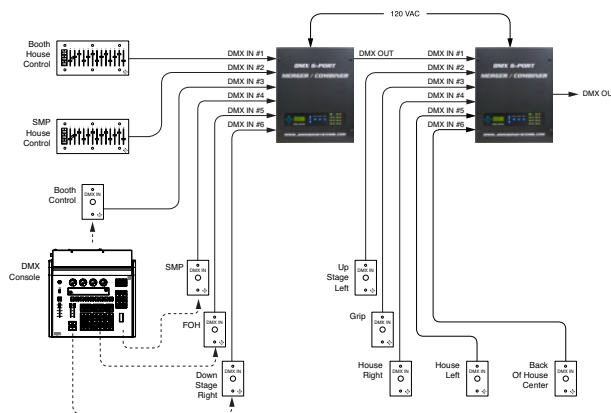
18-gauge steel CRS.

Finish

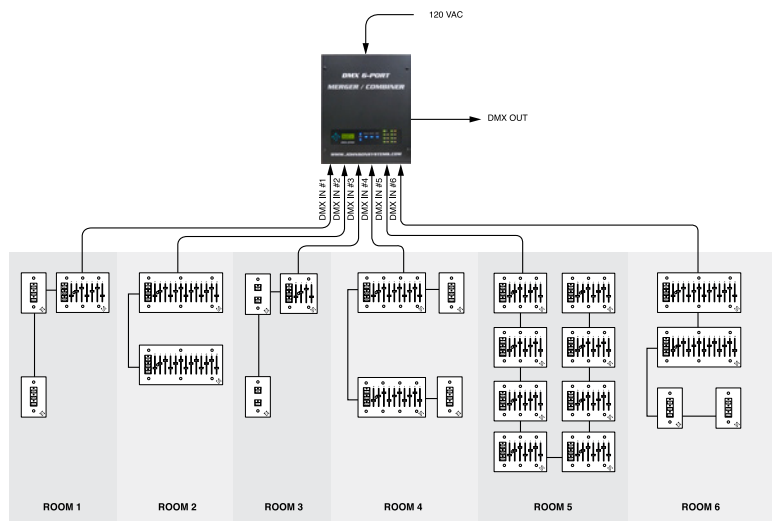
Hammer texture black powder coat.



Theatrical Example #1

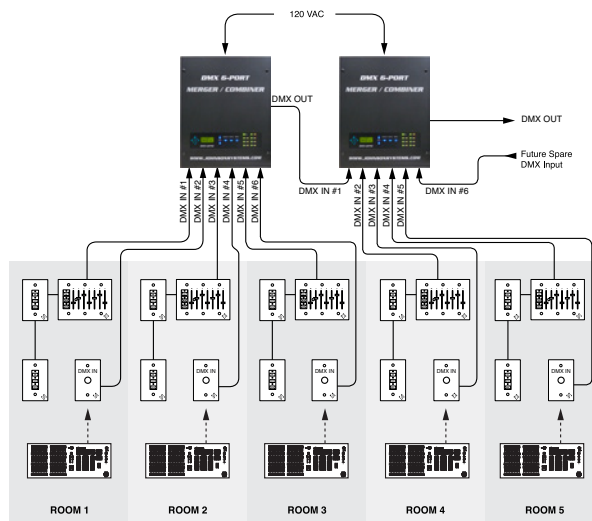


Theatrical Example #2



Architectural Example #1

with Johnson Systems CS-DMX Series Control Stations



Architectural Example #2

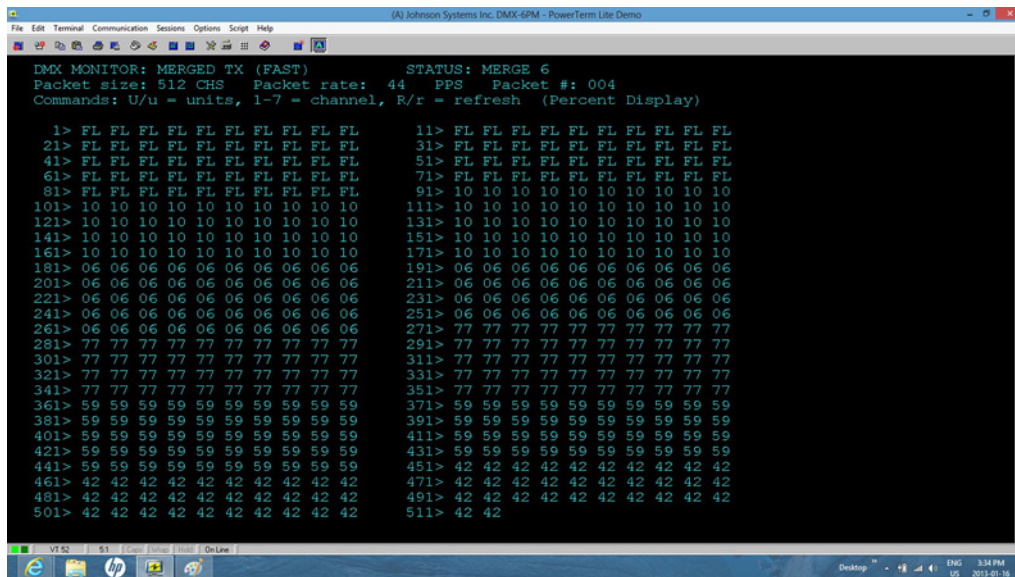


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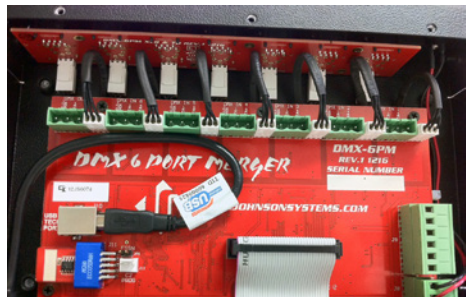
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USB TECH PORT VIA *PC WITH POWERTERM SOFTWARE



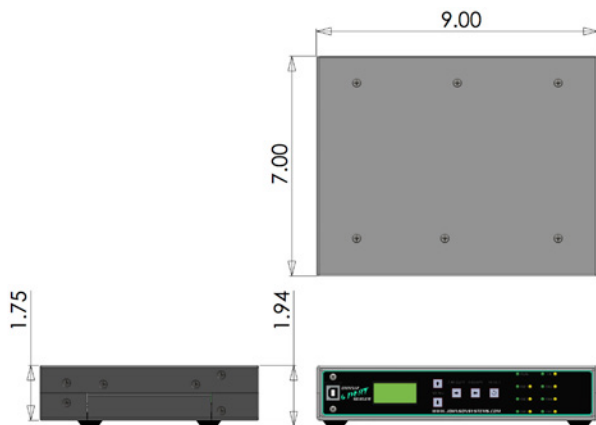
Analyze DMX input or output level data per channel in real time.



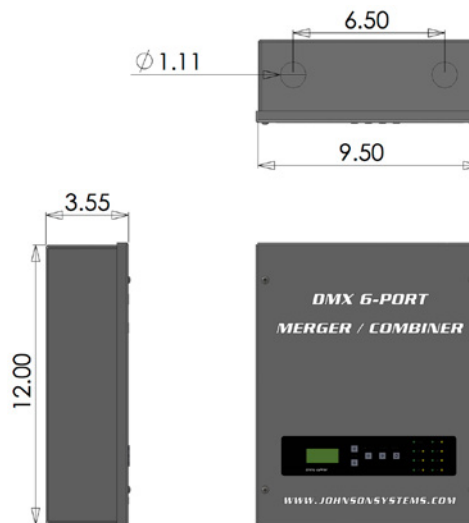
DMX-6PM Internal



DMX-PM Rear Panel Options



DMX-6PM Dimensions



DMX-6PIM Dimensions



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SPECIFICATIONS

1.0 DMX 6-PORT - 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 cascaded 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. **TECHPORT** 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.

Model	Description
All DMX 6-PORT Merger models include enclosure and power supply.	
DMX-6PIM 	6-PORT Installation Merger for permanent hardwired installations
DMX-6PIM-FM 	Flush Mount version of DMX-6PIM above
DMX-6PM-XLR 	Portable 6-PORT Merger with 5 pin XLR connectors
DMX-6PM-XLR-RM 	19" Rack Mount (1RU) 6-PORT Merger with 5 pin XLR connectors
DMX-6PM-TB 	Portable 6-PORT Merger with "break-away" terminal block DMX connectors
DMX-6PM-TB-RM 	19" Rack Mount (1RU) 6-PORT Merger with "break-away" terminal block DMX connectors
DMX-6PM-RJ45 	Portable 6-PORT Merger with RJ45 "Ethercon" connectors
DMX-6PM-RJ45-RM 	19" Rack Mount (1RU) Merger with RJ45 "Ethercon" connectors
* PC not included. Requires Windows. PowerTerm software not included.	



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