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DMX Input Software License for Quantum

This license for DMX input software allows a DMX lighting stage board (or other DMX source) to control the levels of lights that are part of a Quantum Total Light Management system.

Users continue to experience the benefits of Quantum Total Light Management (e.g., scheduled events, occupancy sensing, daylighting, wall-station control) while also maintaining flexible DMX control for setting up light levels during special events.

This feature is intended for flexible, static lighting zone adjustment; it is not intended to manage continuously changing light levels (e.g., theatrical lighting).

Model Number

QSW-DMX-IN

Features

- Supports up to 512 input channels per processor on a single universe.
- An input channel controls a single lighting zone in the system.
- DMX input control can be enabled and disabled on an area-by-area basis.
  - Enabling and disabling DMX is achieved by activating or deactivating the DMX scene in an area.
  - Enabling and disabling the DMX scene in an area can be activated through a timeclock event, contact closure input, or keypad button press.
- DMX control must be enabled by activating the specified DMX scene before DMX zone control can take place in that area. This can be accomplished via contact-closure input, wall station, keyswitch control, Quantum Vue or other programmable input.
- Supports zone chaining for partitioned spaces.
- Supports a sustained rate of up to five constantly changing channels at any one time.

Capabilities

- Adjusts a given zone level up to 10 times/second in response to DMX input.
- Supports a burst rate of up to 500 zone level adjustments/second for a maximum of 10 seconds.
- Each input channel can control a single lighting zone (dimmed or non-dimmed).

Requirements

- Requires a dedicated link on a Quantum processor that will be controlling zones using a DMX input.
  - Only one link per processor can be dedicated for DMX, with a maximum of 512 inputs on this link.
  - Each input can be mapped to only one zone. The zone must be in the same logical processor subsystem as the DMX input that is controlling it.
- When controlling the zones in an area from another source (e.g., a wall station, scheduled event, Quantum Vue software), the zones in that area will exit the DMX scene. To prevent this from happening, these sources must be locked or disabled.
- The lights in an area will not respond to DMX commands unless the DMX scene is active in that area.
- One license is required for each processor. The license is only required for processors that manage the zones being controlled via a DMX input.
- This license must be activated by Lutron Field Service.
- Requires Quantum version 3.1 or higher.

Limitations

- If daylighting is enabled on all scenes in an area, the DMX scene will also be daylighted.
- DMX inputs cannot be mapped to 3-channel DMX zones or to a GRAFIK Eye QS zone.
- The DMX input control is only compatible with the following Lutron lighting controllers:
  - GP dimming panels
  - LP dimming panels
  - CCP dimming panels
  - XP switching panels
  - Energi Savr Node 0–10 V⎓ modules
  - Energi Savr Node switching modules
  - Energi Savr Node phase-adaptive modules
  - EcoSystem devices connected directly to QP2 hubs

  Note: DALI devices, EcoSystem devices connected to a GRAFIK Eye QS unit, and EcoSystem devices connected to an Energi Savr Node with EcoSystem unit cannot be controlled via the DMX input control feature.

Best Practices

- See Application Note #592 Lutron Solutions for DMX512-A (www.lutron.com/TechnicalDocumentLibrary/048592.pdf)

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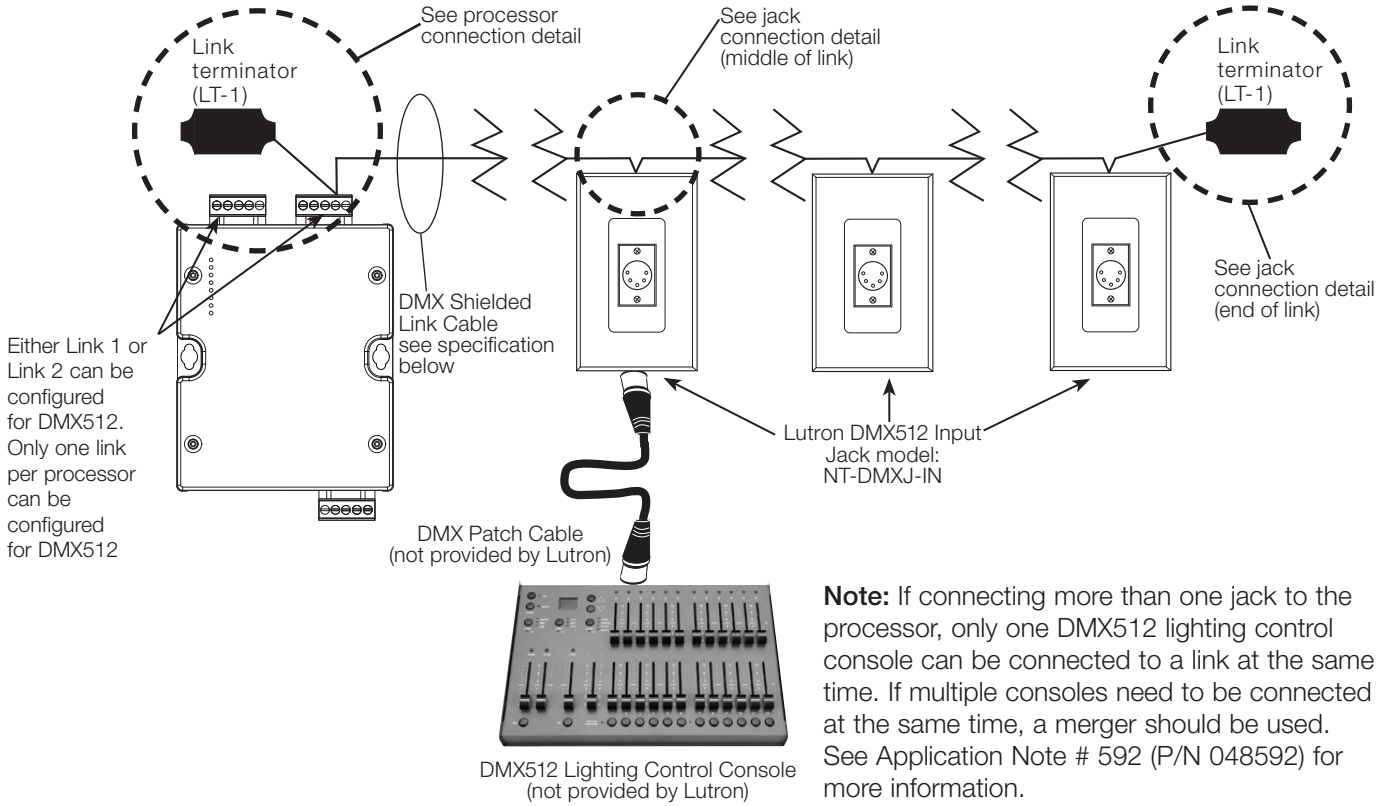
Job Name:	Model Numbers:	
Job Number:		

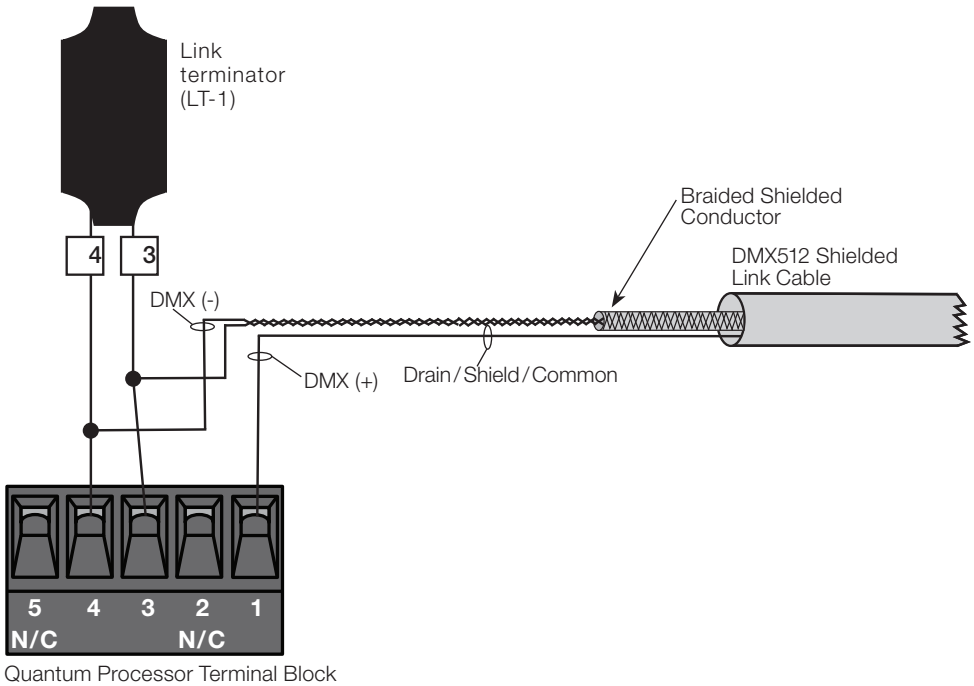
Wiring

DMX512 Input Typical 1-Line Diagram



Note: If connecting more than one jack to the processor, only one DMX512 lighting control console can be connected to a link at the same time. If multiple consoles need to be connected at the same time, a merger should be used. See Application Note # 592 (P/N 048592) for more information.

DMX512 Quantum Processor Connection Details

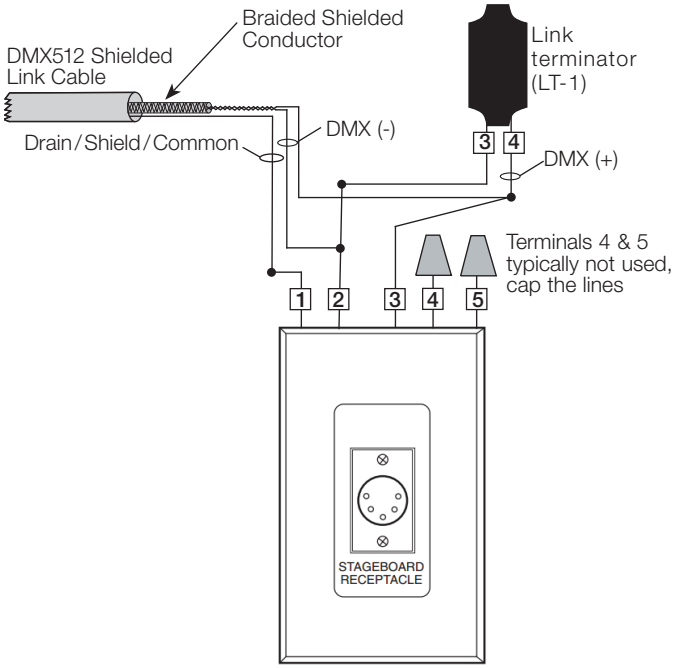


Quantum Processor Terminal Block

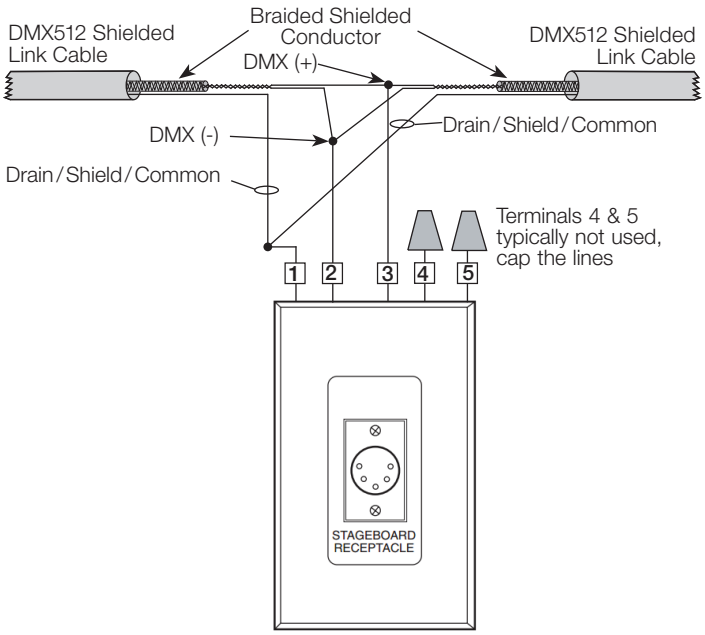
Job Name:	Model Numbers:	
Job Number:		

Wiring

Jack Connection Detail (End of Link)

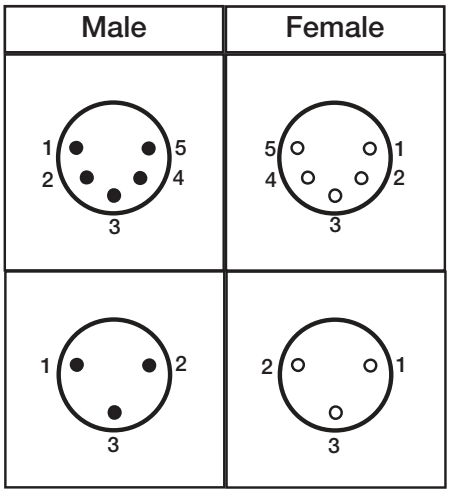


Jack Connection Detail (Middle of Link)



Lutron model
NT-DMXJ-IN shown
5-pin XLR Male
Wall Jack

Alternate XLR Jack Pinouts



DMX XLR Jack Pinout Standard

1	Drain/Shield/Common
2	DMX (-) Primary Link
3	DMX (+) Primary Link
4	DMX (-) Secondary Link
5	DMX (+) Secondary Link

Job Name:	Model Numbers:	
Job Number:		

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DMX Cable Wiring Table

The table below provides information pertaining to Lutron-provided (optional) DMX cable and how it should be terminated. For third-party cable, consult with the manufacturer for their connection recommendations and always use shielded cable that complies with the ANSI E1.11-2008, USITT DMX512-A standard.

Manufacturer	Model	Signal Name	Wire Color	Lutron model NT-DMXJ-IN connection	Lutron Quantum Procesor Connection
Lutron	GRX-CBL-DMX-250 or GRX-CBL-DMX-500	Drain/Shield/Common	Use braided wire that surrounds the twisted pairs	Pin 1 - Drain/Shield/Common (white with black stripe)	Pin 1 - Common
		DMX (-) Primary Link	White or pink	Pin 2 - DMX (-) Primary Link (red)	Pin 4 - $\overline{\text{MUX}}$
		DMX (+) Primary Link	Black	Pin 3 - DMX (+) Primary Link (yellow)	Pin 3 - MUX
		DMX (-) Secondary Link	Green	Pin 4 - DMX (-) Secondary Link (blue)	No connection (cap the wire)
		DMX (+) Secondary Link	Red	Pin 5 - DMX (+) Secondary Link (black)	No connection (cap the wire)

Job Name:	Model Numbers:	
Job Number:		