Read this Installation Guide completely before starting and reduce your installation time by 50%.

**LINK-TO DMX CONTROL CARD**

**Step 1.** Mount L2 DMX enclosure. Refer to customer approved submittal (where applicable) for mounting location.

**Step 2.** Make up conduit to line voltage compartment for power supply.

**Step 3.** Connect power supply to 120 V or 277 V (use appropriate lead) neutral and ground. Use a dedicated breaker.

! Do not power-up the panel electronics until the bus has been activated (see the System Start-Up Guide or Quick Start Guide).

**Step 4.** Land Cat. 5 cable with RJ45 connectors on GR 2400 Bus inputs.

Refer to customer approved submittal single line drawing (where applicable) for suggested Cat. 5 cable pathway.

**Step 5.** Land data cable on the DMX Bus inputs.

DMX cabling details ........................................ Pg 2

**Step 6.** Once the bus has been activated and the panel has been powered-up, set the DMX “start” address.

How to set the DMX 512 “start” address . . Pg 4

**Appendix**

- Product Overview ........................................ Pg 2
- Line and Low Voltage Connections ........ Pg 2
- Product Details and Call-Outs ................. Pg 3
- Setting Your DMX outputs ......................... Pg 4
- Programming Global Inputs ....................... Pg 4
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**Lighting Control & Design**

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Overview
The Link-To DMX control card converts 14 contiguous DMX outputs into 14 global GR 2400 commands (on and off only).

See the Link-To DMX tech sheet for more information on operation.

Line and Low Voltage Connections
Panel power supply may be 120 V or 277 V. Ground is for equipment only.

Connect XLR Pin #2 to DMX input #2 and XLR Pin #3 to DMX input #3. If end of line, connect a 120 ohm resistor across DMX inputs #2 and #3.

Use a proper data cable. Twisted pair with foil and twisted braids. Balanced audio cable will not do.
Panel Call Outs

A. DTC Clock Input

B. DMX Inputs

C. Power Input cable

D. Manual/Automatic Switch. When in the “Manual On” position, a high-output from the DMX controller will be simulated for all channels (inputs).

E. DMX Online LED: slow blink (1/second) means no DMX signal has been detected. Fast Blink (5 /second) means that DMX signal has been detected.

F. GR 2400 inputs (RJ45 connectors).

G. GR 2400 Addressing Button/OnLine LED. Used to set or check the address of the L2-DMX in the DTC Clock (See Programming Guide). LED is blinking if the card is online with the GR 2400 system.

H. Large power supply (1 amp @ 12v) can be used as a power-booster for the GR 2400 network.

I. Dual voltage 120/277 power supply. Line voltage section fully isolated from the low voltage (Class 2).

J. White buttons are used to simulate a “high” value output from a DMX channel into a programmable input. This function only works when no DMX signal is detected (unplugged or no signal) as indicated by a slowly blinking DMX Online LED (see “E” above), and when the “Manual On/Automatic” switch is set to Automatic (see “D” above).

When the button is pressed, the input has been activated, and the relays and/or smart breakers will open or close. Specific switches, occupants sensors, or other controllers can even be disabled (see programming guide). When pressed again, the input is de-activated.

Inputs are programmed just like any digital switch. The DMX 512 signal is considered by the system to be a “maintain” output.

K. Blue buttons are dual-purpose. They are used to a) set the DMX “start” address (see DMX Addressing on page 4) and b) to simulate the “high” output described above.

L. Assign DMX button is used to begin the DMX Binary Addressing process.

M. Ready to Address LED indicates that the Binary DMX address is ready to be set.
DMX Addressing

To receive and act upon commands from the DMX system, a “start” address must be set. The L2-DMX card will automatically take the next 14 contiguous channels. If the start address is 13, then Input 1 = DMX Channel 13, Input 2 = DMX Channel 14, etc.

If more than 14 global DMX-based inputs are required, another L2-DMX can be added to the system.

Any address may be set from 1 - 511 using the Binary address buttons on the L2-DMX Card. To assign a DMX “start” address:

1. Press and hold the Assign DMX Address button until the Ready to Address LED is lit (2 seconds).

2. While holding down Assign DMX Address, press the DMX binary address buttons to add up to the desired “start” address (channel).

   To select a binary address, press the associated button. Press the button again to clear it.

3. Release the Assign DMX button when DMX binary addressing is complete.

Examples:
• DMX Channel 13: Press: 1, 4, 8
• DMX Channel 384: Press: 128, 256

Setting DMX Outputs and DMX Programming Details

A dim level of below 10% (26) equals OFF and above 90% (231) equals ON. The L2-DMX card supports DMX 512a.

To find out if the L2-DMX is receiving a DMX signal, check the Card Online LED. The Card Online LED will indicate a DMX signal is present by the rate at which it oscillates: slow blink (1/second) means no DMX signal has been detected. Fast Blink (5 /second) means that DMX signal has been detected.

Relays are prevented by the GR 2400 system from being switched on or off more than once per second.

Programming L2-DMX Inputs

The L2-DMX card is considered by the GR 2400 system to be a 14 button DigiLink. Refer to the Programming Guide for programming a 14 button switch, for setting address, and other programming features.

For technical assistance or free remote dial-up programming, (modem required for remote programming) call us: 800-345-4448 ext. 2