



P.L. LIGHT SYSTEMS

THE LIGHTING KNOWLEDGE COMPANY

T: 905.563.4133
 Toll Free: 1.800.263.0213
 F: 905.563.0445
 www.plight.com



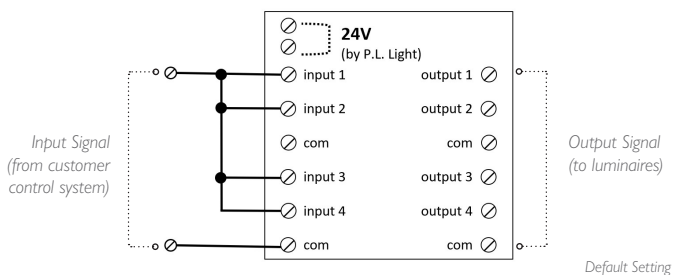
Multi Channel Signal Amplifier (MCSA)

| | | |
|-----------------------|------------------|--------------------|
| Compatible Luminaires | HortiLED Top 2.0 | |
| | TriPlane | TriPlane Linear |
| | VertiMax | ParFX Ultra / Plus |

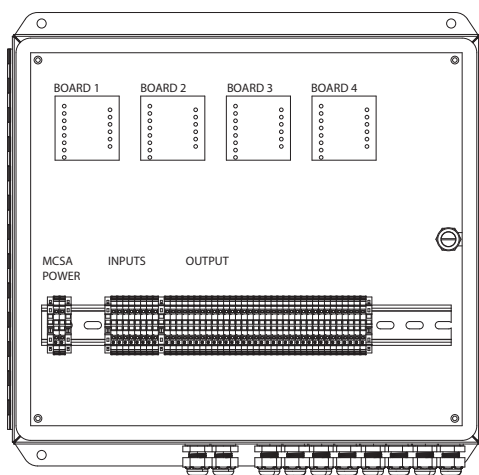
The P.L. Light Systems MCSA will amplify your 1-10V sink or source control signal—allowing you to increase the number of luminaires that can be controlled.

| | Max # Luminaires / MCSA | | | |
|--------------------|-----------------------------------|----------|----------|--|
| | # 4-Channel Signal Boards in MCSA | | | |
| | 1board | 2 boards | 3 boards | 4 boards <small>Default Configuration</small> |
| HortiLED Top 2.0 | 100 | 200 | 300 | 400 |
| ParFX Ultra / Plus | 100 | 200 | 300 | 400 |
| TriPlane | 100 | 200 | 300 | 400 |
| TriPlane Linear | 100 | 200 | 300 | 400 |
| VertiMax | 44 | 88 | 132 | 176 |

Each signal board can accommodate up to four (4) inputs and four (4) outputs.



The default configuration for the MCSA is with four 4-channel signal boards.



Default: 4 board configuration

SIGNAL BOARD SPECIFICATIONS

| | |
|----------------------------|---|
| Number of Channels | 4 channels |
| Current Capacity / Channel | 20 mA at 0-10V* / 1-10V* (depending on luminaire) |
| Input Configuration | 1, 2, 3 or 4 channels 0-10V or 1-10V sink or source (input and output protocols must be the same for each channel) based on jumper selection |
| Output Configuration | 1, 2, 3 or 4 channels that duplicate the input channel, based on jumper selection |

*Exceeding 10V or 20 mA on any channel may result in permanent board damage.

MCSA SPECIFICATIONS

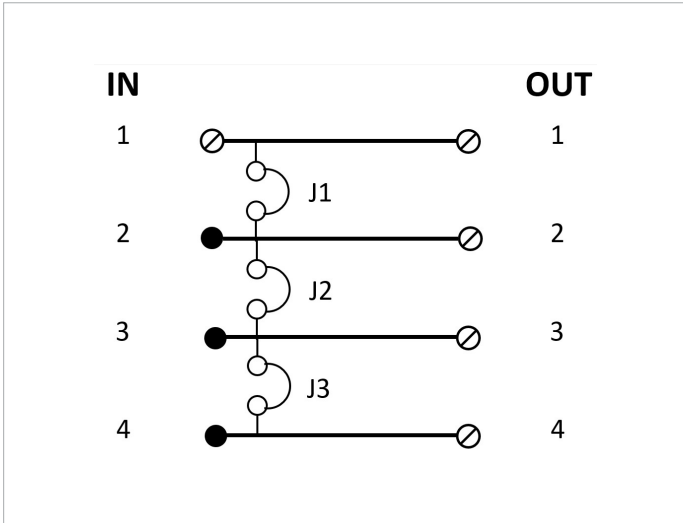
| | |
|-------------------------|---|
| Number of Signal Boards | 1-4 boards |
| Plug-In Power Supply | 24V at 1 A Center positive 2.1mm x 5.5mm plug |
| Main Power Supply | 24V DC via plug at 120V power supply |
| Temperature | 10 - 40 °C / 50 - 104 °F |
| IP Rating | 65 |
| Dimming Connection | Strain relief to the MCSA board; dimming cable† connecting MCSA to pre-installed dimming circuit to be supplied by customer |

†Consult with a local certified electrical contractor for a suitable dimming cable. Specifications to consider include safety certifications; UV rated; voltage rating, temperature rating of ≥90°C; and should be 18 gauge twisted pair with foil.

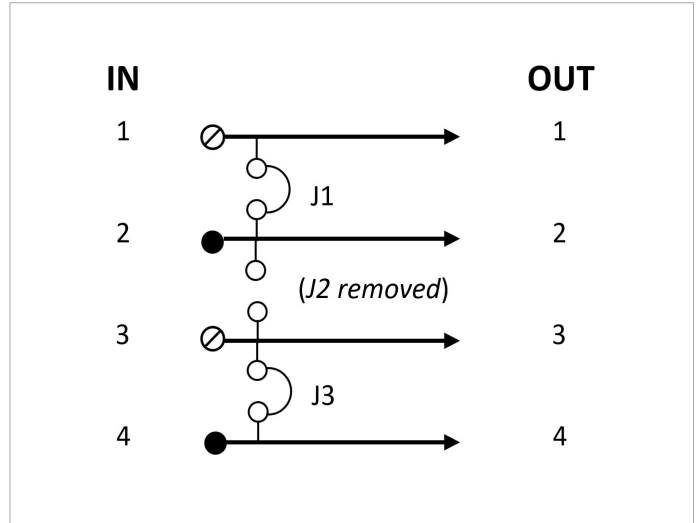
CONTROL CHANNELS

Each signal board can accommodate up to four (4) inputs and four (4) outputs.

The default setting for each board is for single-channel control, with all three (3) pre-installed jumpers in place—allowing for one (1) input signal to control all four (4) output signals. To modify the number of channels used, simply remove the relevant jumpers on the board. For example, if two control-amplifying channels are required, then simply remove J2 from the board (see Modified Setting image below).

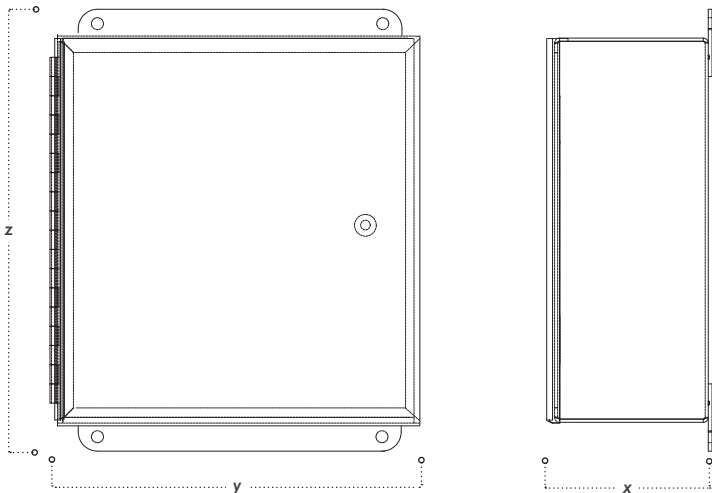


Default Setting: 1 in; 4 out



Modified Setting: 2 in; 4 out

NOTE: 10 k Ω resistor is required for unused outputs from the signal board.



The MCSA is covered by an in-field customer replacement part warranty for a period of (2) years.

MCSA DIMENSIONS

| | |
|------------|-----------------------|
| x = depth | 6.750 in. (17.15 cm) |
| y = width | 16.250 in. (41.28 cm) |
| z = height | 15.875 in. (40.32 cm) |
| weight | 23.1 lb. (10.48 kg) |