ELECTRICAL INTALLATION INSTRUCTIONS



OVERVIEW

0-10V drivers are connected by a 2-wire low voltage bus that is suitable for Class 1 or Class 2 wiring installations. This application note explains how both Class 1 and 2 wiring are made and how they both meet National Electric Code (NEC) regulations.

To reduce the risk of interference it's highly recommended that 0-10V and communication wires be run as Class 2. The dimming performance of 0-10V can be impaired if the system is wired in a Class 1 configuration, especially if long distances of line voltage wiring are used. If Class 1 is desired, then actions should be taken to reduce the length of the 0-10V wires

CONTACT

PHONE: (310) 512-6480

WEBSITE: www.visionairelighting.com



STANDARD CONFIGURATION

2 ways of connected the fixture

1) No External dimming function available

The luminaire is wired as figure 1 shows. The green wire must be connected to physical ground, The White wire is the Neutral from AC line (typically 0V for Universal input or 220Vac for High Voltage). The Black wire is the active line (typically 120V for Universal input or 220Vac for High Voltage).



Figure 1: Standard configuration without dimming function

2) External Dimming function available

The luminaire is wired as figure 2 shows. The green wire must be connected to physical ground, The White wire is the Neutral from AC line (typically 0V for Universal input or 220Vac for High Voltage). The Black wire is the active line (typically 120V for Universal input or 220Vac for High Voltage).

Other wires (purple and gray) are for dimming external control, where Purple wire is the positive of this signal (Dim+) and the Gray wire is the negative (Dim-). These wires can connect with Dimmer or similar device to adjust intensity light.



Figure 2: Standard configuration with dimming function

USING EBPL (120-277VAC ONLY)

2 ways of connected the fixture

1) No External dimming function available

The luminaire is wired as figure 3 shows. The green wire must be connected to physical ground, The White wire is the Neutral from AC line. The Black wire is the active line.

This configuration will keep the luminaire always turn-on at least the energy goes out.



Figure 3: EBPL configuration only

1) External Dimming function available

The luminaire is wired as figure 4 shows. The green wire must be connected to physical ground, The White wire is the Neutral from AC line. The Black wire is the active line.

This configuration will keep the luminaire always turn-on at least the energy goes out.

Other wires (purple and gray) are for dimming external control, where Purple wire is the positive of this signal (Dim+) and the Gray wire is the negative (Dim-). These wires can connect with Dimmer or similar device to adjust intensity light.



Figure 4: EBPL and External dimming function configuration

USING UL924 (120-277VAC ONLY)

The luminaire is wired as figure 5 shows. The green wire must be connected to physical ground. The White wire is the Neutral from main AC line. The Black wire is the active line, this is connected to main "live" line. The Gray wire is connected to Neutral Emergency panel (or 2nd neutral of power energy/generator). The Purple wire is connected to "live" emergency panel (or 2nd 'live' line of power energy/generator).



Figure 5: Standard configuration without dimming function