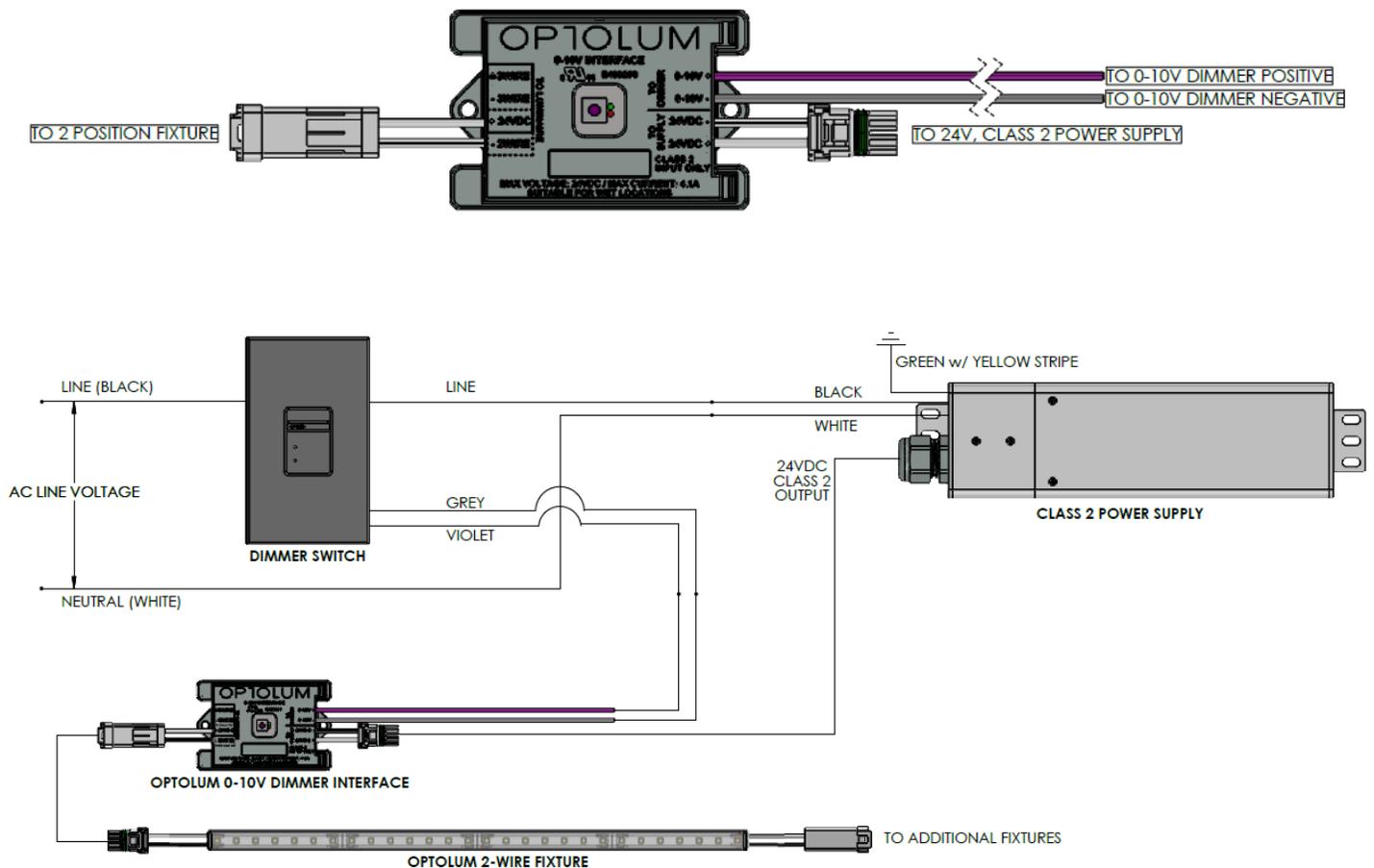


OPTOLUM

OptoLum 0-10V Dimmer Interface

The OptoLum 0-10V Dimmer Interface is used along with a 24V DC power supply and either 2 position and/or 3 position OptoLum dimmable fixtures to enable lamp dimming through the use of a 0-10V analog control signal. This 0-10V control signal is compatible with most 0-10V dimmer controllers. The unit is compatible with both 0-10V 'source' and 'sink' type controllers. Although 0-10V dimming control is widely used, there are a number of different types of control systems, and the behavior of these systems can vary depending on a number of factors. To allow the user to optimize the dimming performance of the OptoLum fixtures with different 0-10V controllers, the unit has several operating modes selectable through the use of a push button switch with colored LED indicators. This allows a large amount of flexibility and enables users to tune the dimming behavior of the OptoLum lamps to meet individual needs.

Hook Up Diagram (2-Wire Fixtures):

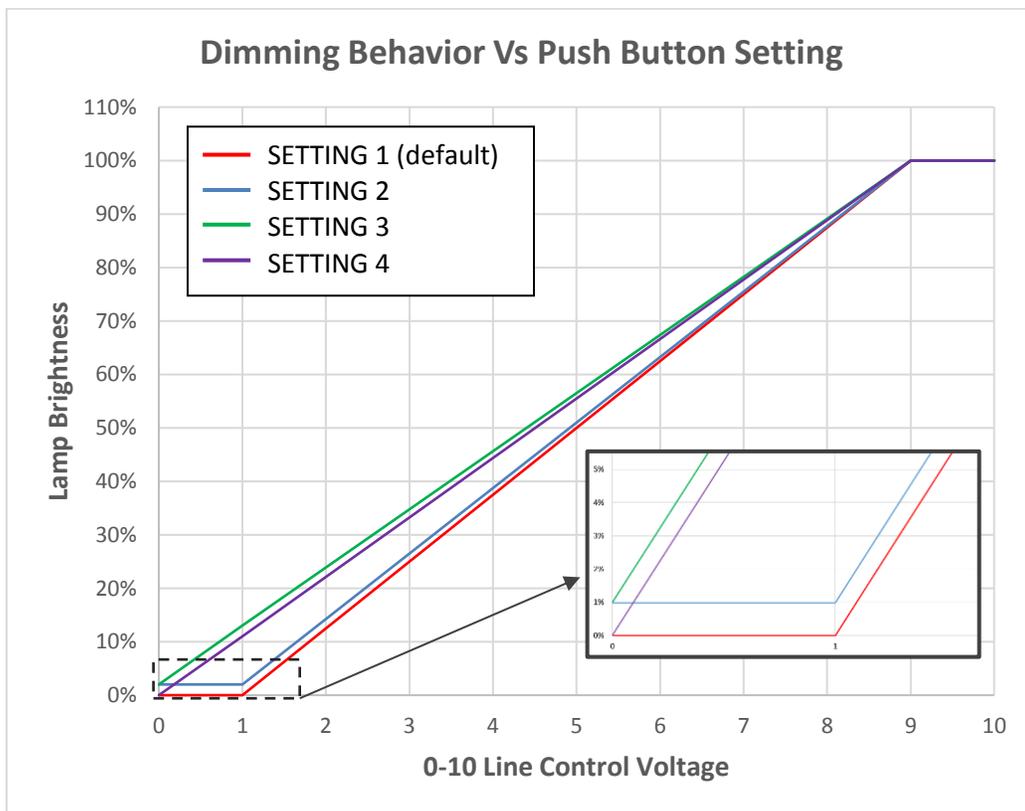


Adjustments:

Several options are available to alter the behavior of the dimmer control. These settings are controlled by the push button switch in the middle of the controller board which affects the low end of the dimming curve, changing at what voltage minimum dimming or turn off occurs. The table below describes the switch settings.

LED Indicator Color	Dimming Behavior
None (Default)	0V: Off , 1V: Off
Red	0V: Minimum Dim, 1V: Minimum Dim
Green	0V: Minimum Dim
Red & Green	0V: Off
Flashing (Hold 5 seconds)	Self-Test Mode. PWM output ramps up and down from 0-100% indefinitely. Press button again to stop test.

The chart below shows the approximate dimming behavior vs push button setting.



Typically the minimum brightness for a 2 wire lamp is less than 1% and the minimum brightness for a 3 wire lamp is less than 3%.

Use of 2 and 3 position lamps

Both 2 and 3 position lamps are compatible with the dimmer board. The total lamp load must be no more than 4A. This load can be created using only 2 position lamps, only 3 position lamps or a combination of 2 position and 3 position lamps. When both 2 position and 3 position lamps are used concurrently the lamps may not exhibit the identical dim levels at very low brightness settings.