0-10V Dimming Guide

What is 0-10V dimming?

A dimmer provides 0 to 10V (0-10V) control voltage to the control circuitry of a lighting fixture's power supply. The input from the dimmer adjusts the light level of the fixture. The lower the voltage input, the more the fixture will dim.

VS

- A 0-10V dimmable fixture can be paired with a 0-10V dimmer using purple and grey low voltage wires. The purple and grey wires are separate
 from AC or DC power wiring.
- Only a 0-10V dimmer can be used to dim a 0-10V dimmable lighting fixture.

NOTE: An in-line dimmer will prevent the fixture from operating properly.

Do not wire an in-line dimmer to a 0-10V dimmable fixture.

0-10V		
Dimming using separate control circuit inside of ballast/LED driver		
Two additional wires needed (purple and grey wires)		
Class 2 low voltage		

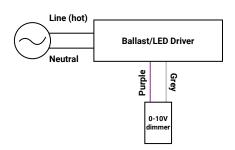
In-line (phase cut) dimming

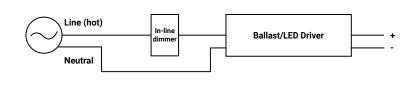
Dimming achieved via AC hot line

No additional wiring required

Class 1 AC power

Wiring Diagram Example





Note, these diagrams are only examples. You should refer to the instructions included with your dimmer switch.

Recommended Dimmer Switches*

Dimmer Make	Dimmer Series	Dimmer Model #	0-10V rated current (mA)
Eaton	Slide Dimmer	SF10P	200
Eaton	Decorator Dimmer	DF10P	200
Levitron	Illumatech	IP710-DL	28
Lutron	NTFTV	NOVA T	30
Lutron	DIVA	DVTV	30
Eaton	iLumin	SC277-06	100
Eaton	Greengate	CK4A	100

^{*} Most 0-10V dimmers include an integrated switch, button or rocker to completely turn off power to the fixture.



