

Add dimming to LED Troffer installations at the lowest cost in parts and labor.

The Problem: Over the next 10 years almost all office lighting will transition to LED both in new and retrofit installations. Installers and designers need a method to change the illumination level of LED troffer fixtures that is easy to install, works well, dims and brightens smoothly, and doesn't suffer from flickering at low illumination levels.

The Solution: Powerline Control Systems, Inc. has patented a new method called Relay Dimming that offers many advantages. Relay Dimming uses the standard mechanical relay in wall switches or occupancy sensors to send messages to our simple low-cost receiver modules installed in any standard LED fixture with a 0-10V driver. Functioning together, smooth dimming to any level is easily achieved.

Relay Dimming - Wall Switch Dimmer

FEATURES AND BENEFITS:

- Full featured dimming
- Single-tap: top 100% - bottom: Off. Double tap: top 40% - bottom 10%
- If needed, field adjustable levels in switch to "tune" for the site
- No new wires means a 2-person job is now a 1-person job
- Bid the job without investigating wiring complexity
- No programming or commissioning needed - operates right after install
- Parts cost equal to the older, less functional method of using a low-voltage switch
- Switch has occupancy sensor input if needed
- Switch has 3-way (traveler) control possible with available remote-switches
- The easiest least-expensive way to meet Title 24 dimming requirement
- Win retrofit and new install jobs with less effort and better function
- Wall Switch Dimmer and Remote Switch available in White (W), Light Almond (LA), Ivory (I)

Receiving Module 0-10V

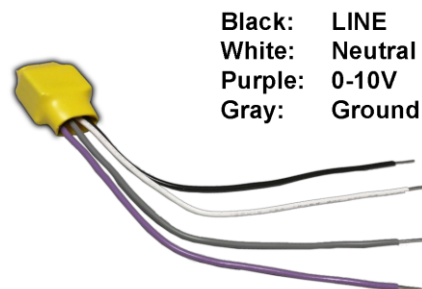
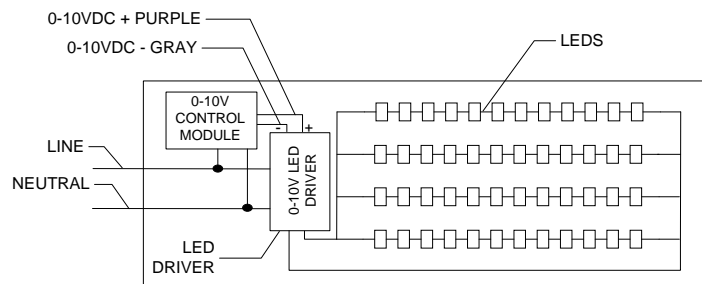
FEATURES AND BENEFITS:

- Needs no low-voltage control wires between control point and fixture
- Utilizes patented "relay" communication, no PLC, no RF wireless, no Wi-Fi
- Fast install – receiver module installs in fixture in less than 30 seconds
- No commissioning, programming or addressing
- Dimmer can only control receivers on its own controlled power circuit
- Requires no mounting, just connect the four wires, L, N, Dim+, Dim-
- Universal module for 120V or 277V

Product Name	Part Number	Availability
Relay Dimming- Wall Switch Dimmer, 120V/277V, 15A	WS-120V-X/WS-277V-X	Feb 2018
Receiving Module 0-10V	RM-0-10V	Feb 2018
Remote Switch for 3-way 120V/277V	RWS-X	Feb 2018

The RM-0-10V is a small module designed to be installed in lighting fixtures to enable control of the fixture by controllers that implement Relay Dimming. The controller communicates to the RM-0-10V using a pattern of relay open and close events to change the lighting level to one of the preselected levels or to increase or decrease the current light level.

The RM-0-10V is installed according to the wiring diagram below.



Warning: Version 1.0 of the Receiving Module must be connected with LINE and NEUTRAL correctly. In Version 1.0 the Neutral and the DIM(-) are internally connected. Failure to connect correctly could cause line voltage to be present on the dimming circuit.

The RM-0-10V does not contain an address or other identifying information that the transmitter must know to communicate with it. This means that any RM-0-10V can be installed in any fixture and does not need to be programmed before or after installation.

If the transmitter powers more than one LED fixture, install a RM-0-10V in each fixture. To test the RM-0-10V installation use the WS1C wall switch or KPLC7 keypad to verify correct operation. The fixture should dim or brighten using the paddle of the WS1C or the keypad buttons of the KPLC7.

Note: When using the RM-0-10V you may hear the controller relay in the wall switch or keypad going on and off very quickly. That is the communication to the RM-0-10V and is as expected.

SPECIFICATIONS

Requirements	WS1C
Connections	16 GA, 105 C insulation
Input Power	120 or 277 VAC
Input Frequency	60 \pm .3 Hz
Operating Temp	-40 °F to 140 °F

Limited Warranty

Seller warrants this product, if used in accordance with all applicable instructions, to be free from original defects in materials and workmanship for a period of five years from the date of purchase. Refer to the warranty information on the PCS website (www.PCSLighting.com) for exact details.