

## 0-10V DECORATOR DIMMER

| DCLV2

Controls low voltage 0-10V lighting loads, including LED

Decorator styling, compatible with radiant® screwless or standard wall plates

Last Assigned Recall

Single Pole



Input for occupancy sensors

Can be set for Manual-On or Partial-On to meet advanced energy codes.

Easy to use interface

## Description

The DCLV2 0-10V Lighting Dimmer is a low voltage (Class 2) device. The DCLV2 provides a nominal 0-10VDC signal to smoothly dim compatible 0-10V LED lighting drivers. Controller includes a sensor input for automatic operation and can also be put in Manual-On mode for code compliance.

## Operation

Users operate the 0-10V Controller by pressing up or down on the paddle to raise or lower light level. Users may also enable the sensor to trigger occupancy, the DCLV2 will normally set the load to the dimming level that it was at when Manual-On or Auto On is enabled.

The DCLV2 is programmed to default to the Manual-On setting. If switched to Auto-On mode, the DCLV2 defaults to 50% Partial-On if no adjustments are made. If connected to a sensor, the lights will fade on to the preset level and fade off, based on occupancy.

The DCLV2 can be used with the ELCU-200 to turn the lights to full ON upon an emergency. The DCLV2 opens the 0-10V circuit at time of power loss. If the Emergency lighting was in a dimmed state when the normal power was lost, the emergency lighting will be at 100% versus last dimmed level. The ELCU-200 or some like device needs to be involved in the overall emergency management system to monitor the loss of normal power so that the 0-10 volt emergency lighting will not only be ON but ON at 100%.

## Features

- May be used for on/off lighting and 0-10V dimming control
- Sinks up to 50mA, to control 25 drivers/ballasts wired in parallel and sourced at 2mA (more drivers/ballasts are possible with lower current fixtures)
- Controls two external maintained relays
- Recalls last-used light level (preset)
- Two-second fade rate
- Power failure restore to last-used level
- Compatible with decorator wall plates
- Compatible with ELCU-200 Emergency Lighting Control Unit

## Code-Compliant 0-10V Dimming

0-10V dimming is smooth across the fixture's dimming range (consult driver manufacturer for lowest output level). When the Controller signal output drops to 0, the auxiliary relay (WattStopper power pack) will turn the controlled fixtures off after one to two seconds. For code-compliant automatic-off lighting control, an occupancy sensor input may be wired to the controller. Both the sensor and the Controller may be powered from a single power pack. Lighting will fade on when the sensor detects occupancy and off after the space has been vacated.

Note: Fixtures may stop dimming lower once 1VDC is reached, per ANSI C82.11-Annex A for 0-10V controls.

## Applications

Common applications include offices, conference rooms, training centers and healthcare & classrooms where load control is required from a single location.

PROJECT

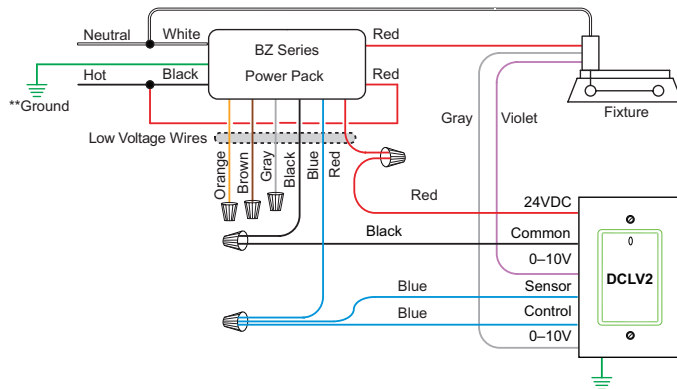
LOCATION/  
TYPE

## Specifications

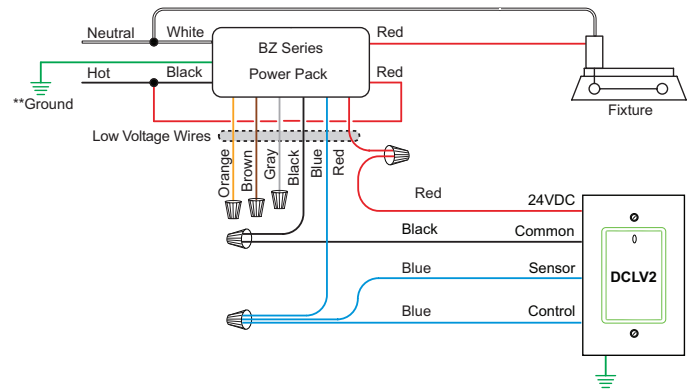
- Input voltage: 24VDC, 16mA
- Control output for 0-10VDC ballasts: Sinks up to 50mA; maximum voltage, 9.5VDC, minimum voltage, 0.75VDC  
Consult ballast/driver manufacturer to determine 0-10V mA output
- Dimensions: 2.64" x 1.75" x 1.98" (67.1mm x 44.5mm x 50.3mm) L x W x D; depth in wall 1.65" (41.9mm)
- Operating conditions: for indoor use only; 32-104°F (0-40°C); 0-80% RH, non condensing
- UL and cUL listing
- Five year warranty

## Wiring

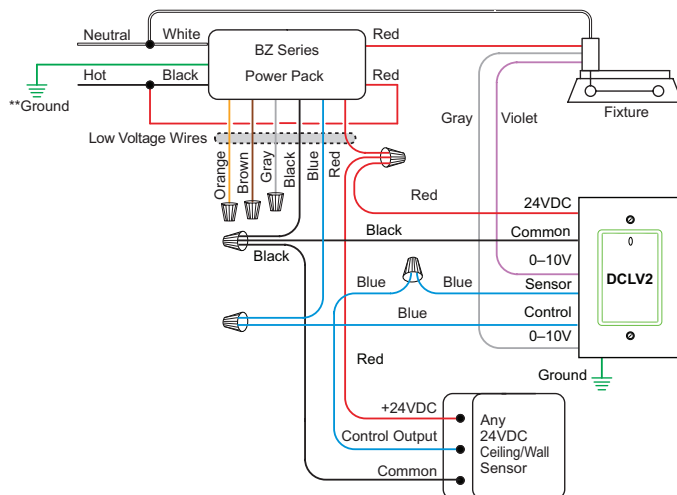
### 0-10V Wiring



### On/Off Wiring



### 0-10V Wiring for use with a Sensor



NOTE: For all wiring applications, if BZ Power Pack model includes a DIP switch, do not set switch to "Manual"]

## Button Functions

### Changing the Mode

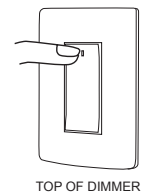
#### LEARN/Select

Press the switch with both fingers (just enough to push both toggles inward). Then select the appropriate mode.



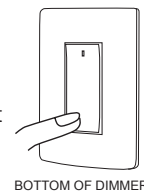
#### RAISE/Auto On

Raise the dim level. While in LEARN Mode: A Red LED Confirms that the Auto On Mode is selected.

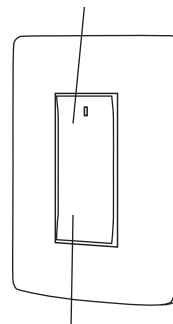


#### LOWER/Manual On

Lower the dim level. While in LEARN Mode: A Green LED Confirms that the Manual On Mode is selected.

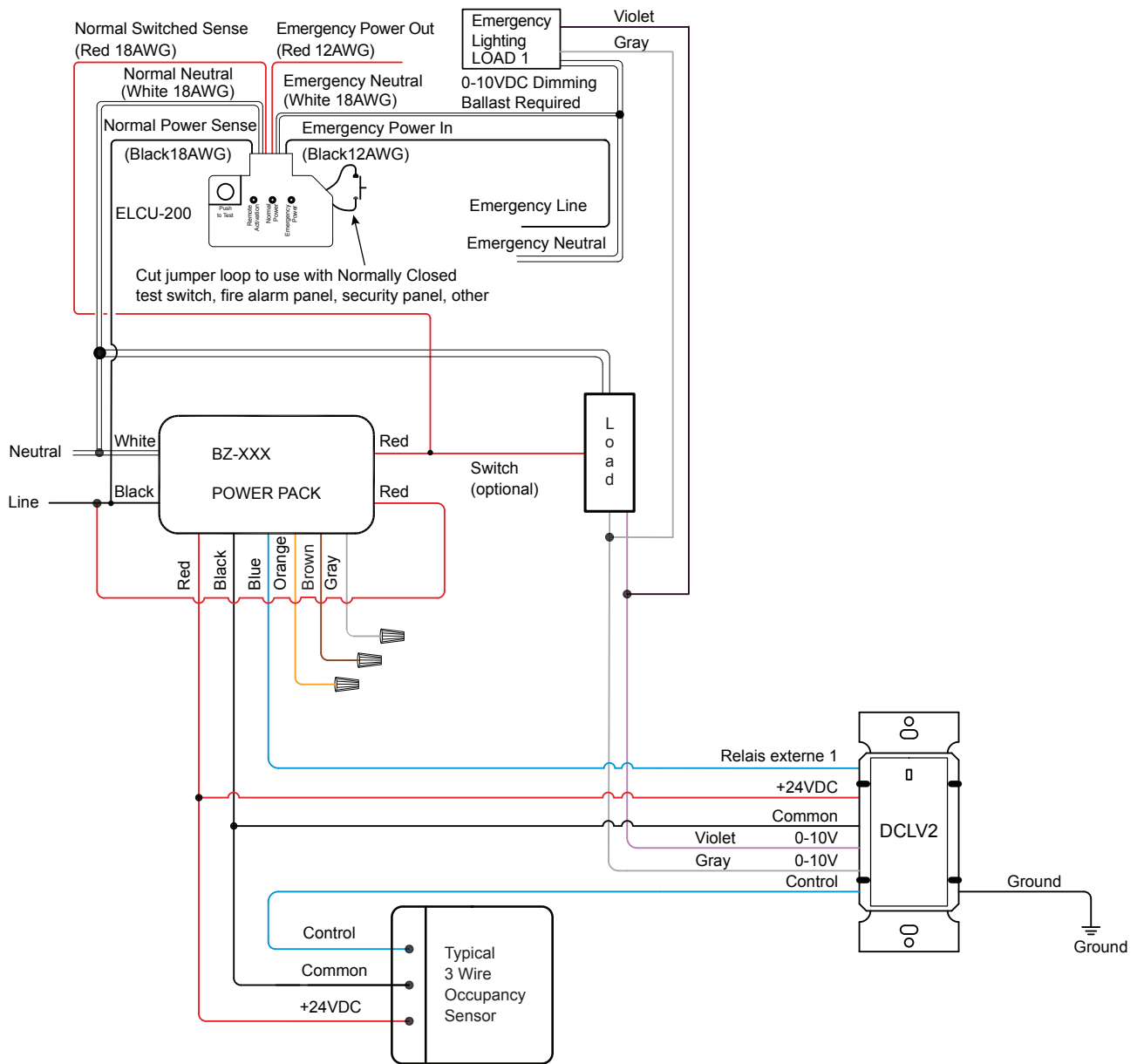


1 tap = last non-zero level  
2 taps = full output  
Press and hold = raise level



1 tap = fade to OFF  
Press and hold = lower level

## DCLV2 Wiring for use with an ELCU-200 and Sensor



## Ordering Information

Catalog #	Description	Input Voltage	Color
<input type="checkbox"/> DCLV2-W	0-10V Decorator Lighting Dimmer	24VDC	White
<input type="checkbox"/> DCLV2-LA	0-10V Decorator Lighting Dimmer	24VDC	Light Almond
<input type="checkbox"/> DCLV2-I	0-10V Decorator Lighting Dimmer	24VDC	Ivory
<input type="checkbox"/> DCLV2-B	0-10V Decorator Lighting Dimmer	24VDC	Black
<input type="checkbox"/> DCLV2-G	0-10V Decorator Lighting Dimmer	24VDC	Gray
<input type="checkbox"/> DCLV2-R	0-10V Decorator Lighting Dimmer	24VDC	Red

Order Wall Plates and Power Packs separately.