

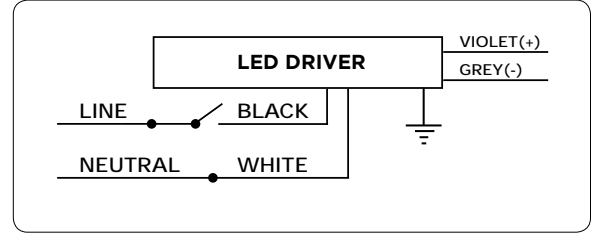


AR Series Troffer / CR Series Troffer / ZR Troffer Series / CS Series Linear Luminaire / UR Series LED Upgrade Kit Control Options

0-10V Dimming 5%

Increase energy savings and aesthetics with 0-10V dimming control to 5%. The AR Series Troffer, CR Series Troffer, ZR Series Troffer, CS Series LED Linear Luminaire and UR Series LED Upgrade Kit work with any standard current sink 0-10V control (IEC60929). Adjust the AR Series Troffer, CR Series Troffer, ZR Series Troffer, CS Series LED Linear Luminaire or UR Series LED Upgrade Kit to deliver the right amount of light for any task, or combine with energy-saving controls like timeclocks, occupancy sensors, and daylight sensors to maximize energy savings.

IMPORTANT: USE ONLY LIGHTING CONTROLS WITH RELAY OR FET-BASED OUTPUTS, OR LIGHTING CONTROLS WITH NEUTRAL CONNECTION.

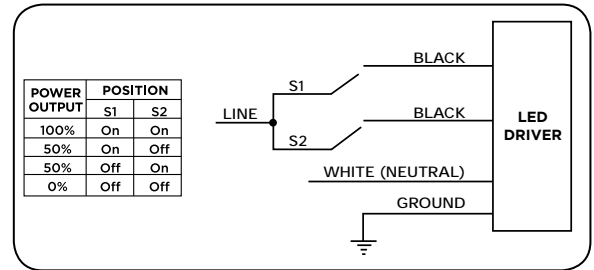


0-10V DIMMING WIRING DIAGRAM

Step Dimming 50% (AR & CR Series Troffers and UR Series Upgrade Kits ONLY)

The “S” option is for Step Dimming 50%. This option allows the luminaire to deliver either 100% light output (both switches ON), 50% light output (either switch ON and the other OFF) or 0% light output (both switches in the OFF position). Control the AR and CR Series Troffer or UR Series Upgrade Kit with a simple toggle switch, or capture additional savings with energy-saving controls like timeclocks, occupancy sensors, and daylight sensors.

IMPORTANT: USE ONLY LIGHTING CONTROLS WITH RELAY OR FET-BASED OUTPUTS, OR LIGHTING CONTROLS WITH NEUTRAL CONNECTION.

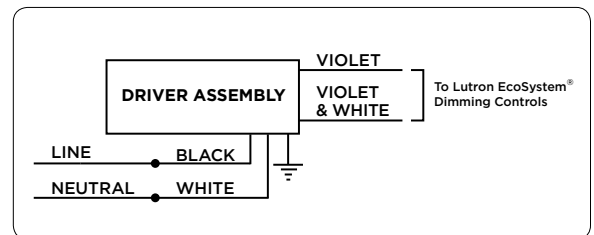


STEP DIMMING WIRING DIAGRAM

NOTE: (1) DO NOT CONNECT two separate phases of the line voltage to the input of the CR Troffer, the LED driver will be damaged and not covered by warranty. (2) Install in accordance with National & Local Electric Code(s). (3) The AC line inputs must be connected to the same phase of the line voltage. (4) If step dimming isn't required, combine BLACK- Switched HOT #1 (S1) and BLACK- Switched HOT #2 (S2) together.

Lutron EcoSystem® Dimming 5% (AR & CR Series Troffers ONLY)

The “LES” option is for Lutron EcoSystem® Enabled dimming to 5%. With this option, the luminaire is designed with an intelligent, pre-tested microprocessor directly integrated into its LED driver. This design eliminates the need for additional interfaces, enabling the fixture and controls to communicate directly with each other for instant and seamless interoperability with Lutron EcoSystem® technology.



LUTRON ECOSYSTEM® DIMMING WIRING DIAGRAM



LUTRON® Product Report Card

Manufacturer: Cree
 Model Number Tested: CR22-32L-35K-10V
 Other Model Numbers: CR14-xxxx-10V, CR22-xxxx-10V, and CR24-xxxx-10V models

Manufacturer's Description

Type of device:	<u>LED CR22 35W troffer</u>	Control Type: <u>0-10V sink or EcoSystem</u>
Operating voltage:	<u>120V</u>	Dimming Range: <u>100%-5%</u>
Input Power:	<u>50W maximum</u>	Output Power: <u>Varies</u>
Input Current:	<u>Varies</u>	Lumen Output: <u>Varies</u>
Input Frequency:	<u>60Hz</u>	

Lutron Test Results

Date Tested: 3-Apr-12
 Figure of Merit: N/A
 Test Voltage: 120 V
 Test Notes: None

Lutron Recommended Compatible Products

Lutron products not in this list can be considered to be not compatible, based on our testing.

Product	Model Number	Fixtures per Dimmer		Measured Dimming Range ⁽¹⁾		Perceived Low End ⁽²⁾	Comments
		Minimum	Maximum	Low End	High End		
<i>Wallbox Dimmers</i>							
Nova T/Nova/Diva (all with Power Pack)	DVTV/NFTV/N TFTV with PP-20	1	47	5%	100%	21%	
<i>Commercial Systems</i>							
Energi Savr Node	QSN-4T16-S	1	52	2%	98%	16%	
Panels	TVM2 Module	1	N/A	5%	100%	22%	
EcoSystem	All EcoSystem-compatible controls	1	32 or 64	5%	100%	22%	Fixture must be ordered with "LES" option instead of "-10V". Check with Cree for availability on specific fixtures.
EcoSystem	TVI-LMF-2A	1	5	5%	100%	22%	
<i>Residential Systems</i>							
Panels	TVM2 Module	1	N/A	5%	100%	22%	
<i>Interfaces ⁽³⁾</i>							
	GRX-TVI with Grafik Eye QS Main Unit	1	54	5%	100%	22%	
Notes:	(1) Values are based on light output using the specified dimming control, and may not be an indication of the fixture's full rated capability (2) Perceived light level percentage is the square root of the measured light level percentage, per IESNA Lighting Handbook (3) Interfaces have been tested with the listed control; any compatible dimmer may be used instead, but high end/low end light levels may vary slightly						

Test Comments: High and low end trim required for all controls

*For any questions on this report, please contact the Lutron LED Center of Excellence at 877-DIM-LED8 or leds@lutron.com.
 This information was posted with the consent and cooperation of the device manufacturer. Latest test results can always be found at www.lutron.com/LEDtool.*