

# SOLIDRIVE

P/N: CV

## Constant Voltage Electronic 0-10V & Non-Dimmable LED Driver

The SOLIDRIVE is an electronic Class 2, 0-10V dimmable LED driver with an available integrated junction box, making it the perfect choice for tape lighting, tube lighting, linear lighting and multiple other commercial lighting applications. The UL enclosure is IP66 and UL2043 plenum rated and are suitable for both indoor and outdoor installations; each includes a separate input and output wiring compartment with three 7/8" knockouts for easy installation. The driver features hiccup mode, over current and short circuit protection – as well as an efficiency over 84%, resulting in low operating case temperature. The SOLIDRIVE is dimmable down to 1% with a 0-10V dimmer and is also available in a non-dimmable version.



**UL without Junction Box**  
7.50" L x 2.36" W x 1.40" H



**UL with Integrated Junction Box**  
12.1" L x 2.36" W x 1.40" H

**Installation:** Can have integrated junction box with multiple 7/8" knock-outs – or no junction box with wire leads

**Driver Type:** Class 2 Single Channel

**Dimming:** 0-10V dimmable down to 1%; non-dimmable available

**Input Voltage:** Universal 120VAC to 277VAC, 50/60Hz

**Output Voltage:** 12, 24, 36, or 48VDC

**Environmental:** Dry & damp

**IP Rating:** IP66

**Listing:** Available in UL Listed, Class P, Type HL

**Certifications:** UL8750, UL2043 Plenum Rated

**Warranty:** 5-Year



SOLIDRIVE is also available in:

- **JB-SERIES** (Junction Box Series)
- **EZJBOX** (EZ Junction Box Series)

Please refer to our website at [Magnitudeinc.com](http://Magnitudeinc.com) for more details.

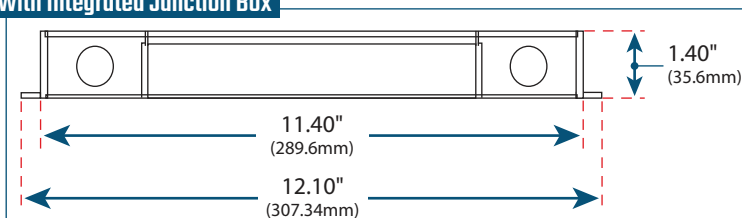
### Ordering Guide

CV	DC	Example: CVN50L12DC		
TYPE	DIMMING	MAX POWER	LISTING	OUTPUT
CV – Constant Voltage	N – Non-Dimming D – Dimming	30 <sup>1</sup> - 30W 50 <sup>2</sup> - 50W 60 <sup>1</sup> - 60W 96 <sup>3</sup> - 96W	L - With Junction Box R - Without Junction Box	12 - 12VDC 24 - 24VDC 36 - 36VDC 48 - 48VDC

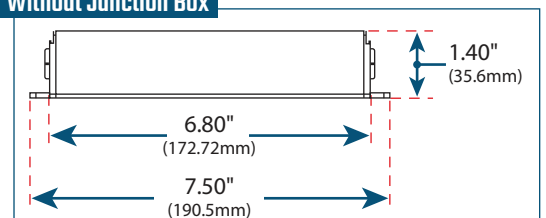
<sup>1</sup>24 & 48VDC only  
<sup>2</sup>12VDC only  
<sup>3</sup>24, 36, & 48VDC only

	With Junction Box	Without Junction Box
<b>Length</b>	12.10" (307.34mm)	7.50" (190.5mm)
<b>Width</b>	2.36" (59.94mm)	2.36" (59.94mm)
<b>Height</b>	1.40" (35.6mm)	1.40" (35.6mm)

#### With Integrated Junction Box



#### Without Junction Box



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### Specifications

Input	30W	50W	60W	96W
<b>Input Voltage Range:</b>	120 - 277VAC ± 10%	120 - 277VAC ± 10%	120 - 277VAC ± 10%	120 - 277VAC ± 10%
<b>Input Frequency:</b>	50 / 60Hz	50 / 60Hz	50 / 60Hz	50 / 60Hz
<b>Input Current:</b>	0.96A Max (24VDC) 0.96A Max (48VDC)	0.96A Max	0.96A Max	0.96A Max
<b>Inrush Current:</b>	5A Max@120VAC 30A Max@277VAC	6A Max@120VAC 30A Max@277VAC	5A Max@120VAC 30A Max@277VAC	5A Max@120VAC 30A Max@277VAC
<b>Efficiency:</b>	> 84% Max (24VDC) > 84% Max (48VDC)	> 80% Max	> 84% Max	> 84% Max (24VDC) > 84% Max (36VDC) > 84% Max (48VDC)
<b>Power Factor:</b>	> 0.91 (24VDC) > 0.95 (48VDC)	> 0.95	> 0.95	> 0.95
<b>THD:</b>	< 20%	< 20%	< 20%	< 20%

Output	30W	50W	60W	96W
<b>Output Voltage:</b>	24VDC / 48VDC	12VDC	24VDC	24VDC / 36VDC / 48VDC
<b>Max Load:</b>	30W	50W	60W	96W
<b>Output Current @ Max Load:</b>	1.3A (24VDC) 625mA Max(48VDC)	4.2A	2.6A	4.1A (24VDC) 2.7A (36VDC) 2.0A (48VDC)
<b>Output Ripple:</b>	< 3%	< 3%	< 3%	< 3%
<b>Line Regulation:</b>	< 2%	< 2%	< 2%	< 2%
<b>Load Regulation:</b>	< 3% (24VDC) < 1% (48VDC)	< 5%	< 3%	< 3% (24VDC) < 3% (36VDC) < 1% (48VDC)
<b>Turn On Delay Time:</b>	< 0.3 sec	< 0.3 sec	< 0.3 sec	< 0.3 sec

Environmental	30W	50W	60W	96W
<b>Env. Protection Rating:</b>	IP66	IP66	IP66	IP66
<b>Ambient Operating Temp.:</b>	-25°C - +40°C (-13°F - 104°F)	-25°C - +40°C (-13°F - 104°F)	-25°C - +40°C (-13°F - 104°F)	-25°C - +40°C (-13°F - 104°F)
<b>Max Case Temp. (Tcase):</b>	80°C (176°F)	80°C (176°F)	80°C (176°F)	80°C (176°F)
<b>Storage Temperature:</b>	-40°C - +85°C (-40°F - 185°F)	-40°C - +85°C (-40°F - 185°F)	-40°C - +85°C (-40°F - 185°F)	-40°C - +85°C (-40°F - 185°F)
<b>Expected Lifetime:</b>	50k hours (>65°C) Tc	50k hours (>65°C) Tc	50k hours (>65°C) Tc	50k hours (>65°C) Tc
<b>Audible Noise:</b>	< 24dB Class A	< 24dB Class A	< 24dB Class A	< 24dB Class A

Dimming (Dimming Models Only)	30W	50W	60W	96W
<b>Dimming Control:</b>	0-10V	0-10V	0-10V	0-10V
<b>Min. Dimming Level:</b>	1%	1%	1%	1%
<b>Dimming Curve:</b>	Linear	Linear	Linear	Linear
<b>Current Consumption:</b>	0.2mA Max Source / Sinc	0.2mA Max Source / Sinc	0.2mA Max Source / Sinc	0.2mA Max Source / Sinc

Protection	30W	50W	60W	96W
<b>Over Current Protection:</b>	Yes	Yes	Yes	Yes
<b>Over Voltage Protection:</b>	Yes	Yes	Yes	Yes
<b>Over Temperature Protection:</b>	Yes / Hiccup Mode	Yes / Hiccup Mode	Yes / Hiccup Mode	Yes / Hiccup Mode
<b>Over Load Protection:</b>	Yes / Current Limit	Yes / Current Limit	Yes / Current Limit	Yes / Current Limit
<b>Short Circuit Protection:</b>	Yes / Current Limit	Yes / Current Limit	Yes / Current Limit	Yes / Current Limit

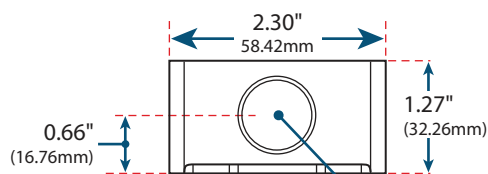
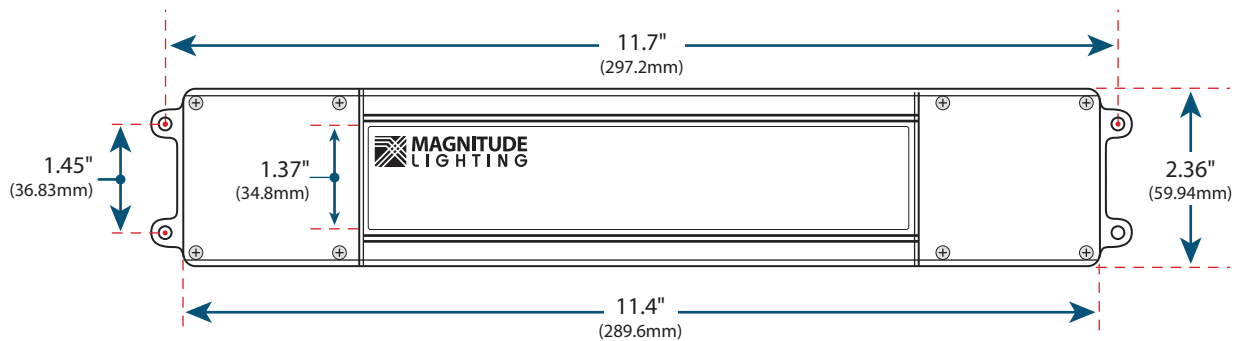
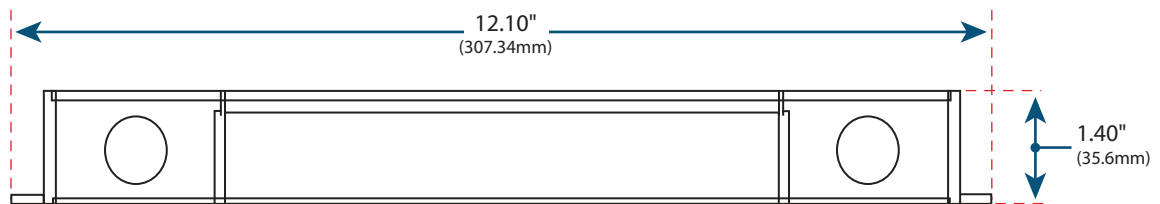
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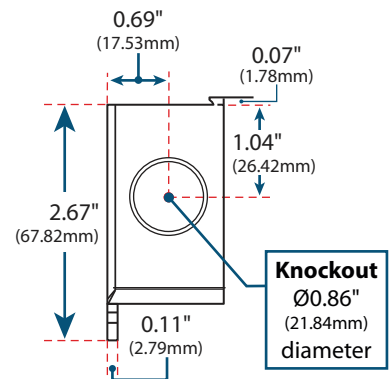
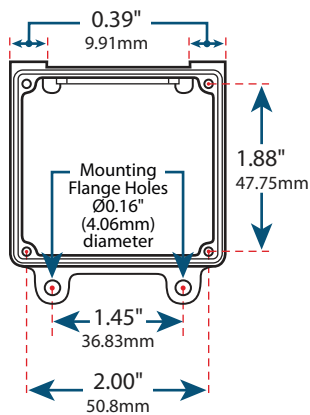
## Mechanical Diagrams

With Integrated Junction Box

(Drawings not to scale)



**Knockout**  
Ø0.86"  
(21.84mm)  
diameter



**Knockout**  
Ø0.86"  
(21.84mm)  
diameter

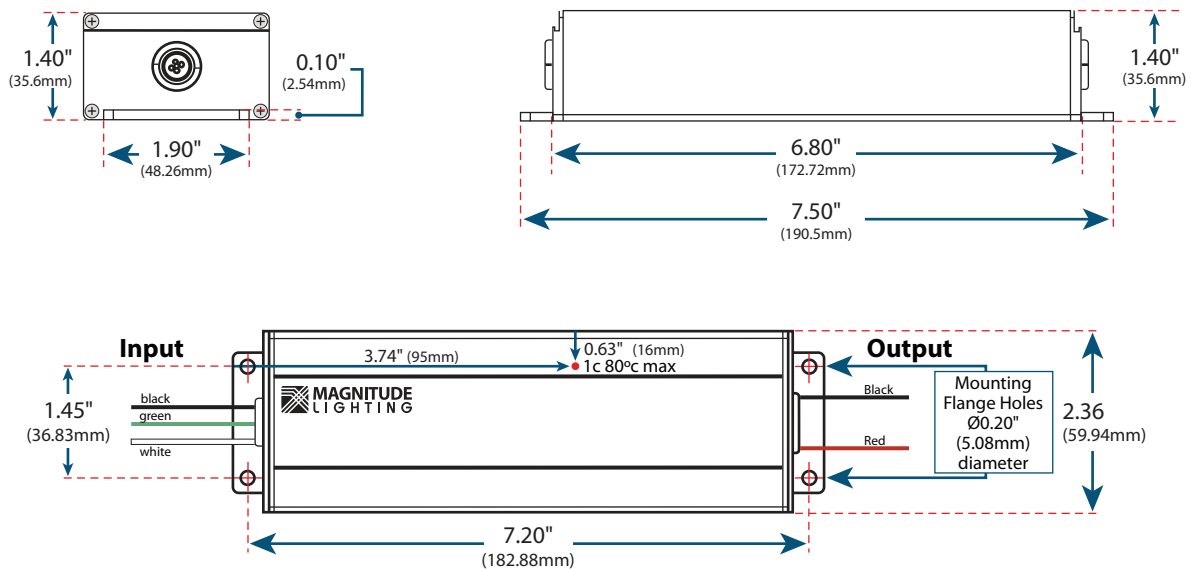
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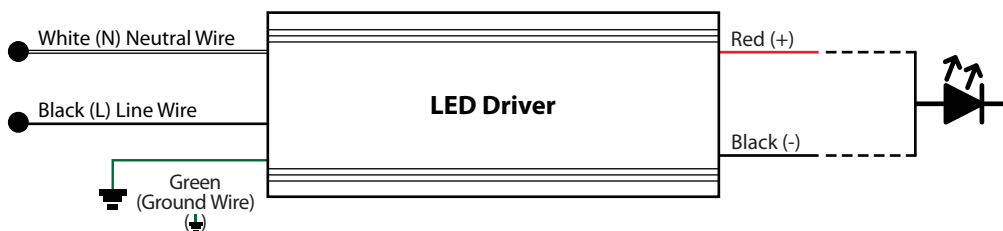


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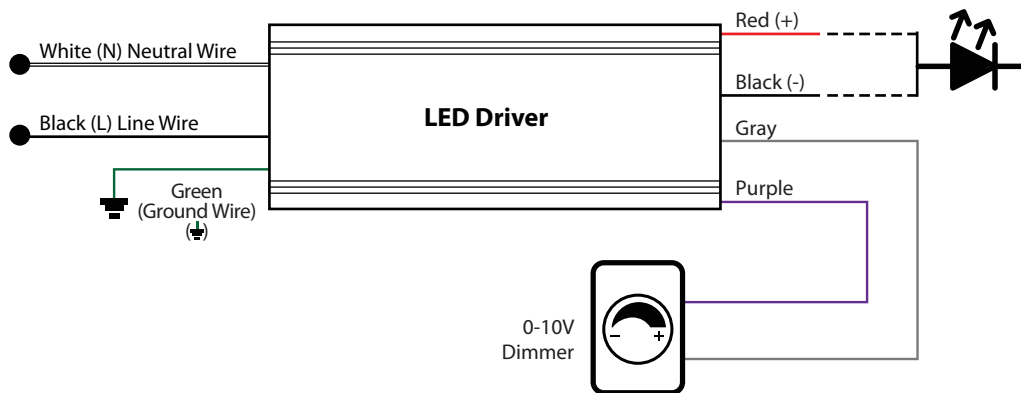
## Constant Voltage Electronic 0-10V & Non-Dimmable LED Driver

### Wiring Diagrams

#### Non-Dimmable Configuration



#### Dimmable Configuration



### Compatible 0-10V Dimmers

Dimming	Part Number
Lutron	Diva - DDTV
Lutron	Diva - NFTV
Lutron	Nova T - NTFTV
Leviton	Illumitech - IP7
Watt Stopper	DCLV1
Lightolier Controls	ZP600FAM120
Philips	Sunrise - SR1200ZTUNV

