



DRV30-E, DRV60-E, DRV96-E



DRV40-E



DRV150-E, DRV200-E, DRV300-E

ABOUT

- Meets IEEE Standard 1789-2015
- Compact size
- Universal Voltage: 120V - 277V AC
- Powder Coated Aluminum or Steel Enclosure
- 2 Form Factors
- UL Listed

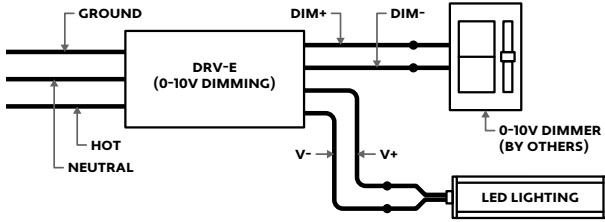
- California Title 24 JA8 Compliant
- Available with Indoor or Outdoor ratings
- Default listing is indoor (DRY)
- 10V or Forward / Reverse Phase Dimming
- Highest degree of efficiency
- Consult factory for other input voltages

FEATURED SPECIFICATIONS

Model Name / Product Code	Max Watts	Input Voltage	Output Voltage	Max Input Current	Max Output Current	Power Factor	Size (L x W x H)	Weight
DRV30-E-UNV-24VDC-10V-DRY	30	Universal Voltage: 120-277VAC	24VDC	0.33 Amps @ 120V AC, 60 Hz, Fully Loaded	3.125 Amps	> 0.9	11.02" x 4.06" x 2.21"	2.27 lbs
DRV30-E-UNV-24VDC-PH-DRY				0.15 Amps @ 277V AC, 60 Hz, Fully Loaded				
DRV30-E-UNV-24VDC-10V-WET								
DRV30-E-UNV-24VDC-PH-WET								
DRV40-E-UNV-24VDC-10V-DRY	40	Universal Voltage: 120-277VAC	24VDC	0.42 Amps @ 120V AC, 60 Hz, Fully Loaded	1.67 Amps	> 0.9	15.69" x 2.69" x 2.38"	2.63 lbs
DRV40-E-UNV-24VDC-PH-DRY				0.19 Amps @ 277V AC, 60 Hz, Fully Loaded				
DRV40-E-UNV-24VDC-10V-WET								
DRV40-E-UNV-24VDC-PH-WET								
DRV60-E-UNV-24VDC-10V-DRY	60	Universal Voltage: 120-277VAC	24VDC	0.715 Amps @ 120V AC, 60 Hz, Fully Loaded	2.5 Amps	> 0.9	11.02" x 4.06" x 2.21"	2.59 lbs
DRV60-E-UNV-24VDC-PH-DRY				0.32 Amps @ 277V AC, 60 Hz, Fully Loaded				
DRV60-E-UNV-24VDC-10V-WET								
DRV60-E-UNV-24VDC-PH-WET								
DRV96-E-UNV-24VDC-10V-DRY	96	Universal Voltage: 120-277VAC	24VDC	1.1 Amps @ 120V AC, 60 Hz, Fully Loaded	4 Amps	> 0.9	11.02" x 4.06" x 2.21"	3.21 lbs
DRV96-E-UNV-24VDC-PH-DRY				0.48 Amps @ 277V AC, 60 Hz, Fully Loaded				
DRV96-E-UNV-24VDC-10V-WET								
DRV96-E-UNV-24VDC-PH-WET								
DRV150-E-UNV-24VDC-10V-DRY	150	Universal Voltage: 120-277VAC	24VDC	1.8 Amps @ 120V AC, 60 Hz, Fully Loaded	6.25 Amps	> 0.95	10" x 5.69" x 1.82"	4.78 lbs
DRV150-E-UNV-24VDC-PH-DRY				0.8 Amps @ 277V AC, 60 Hz, Fully Loaded				
DRV150-E-UNV-24VDC-10V-WET								
DRV150-E-UNV-24VDC-PH-WET								
DRV200-E-UNV-24VDC-10V-DRY	200	Universal Voltage: 120-277VAC	24VDC	2.3 Amps @ 120V AC, 60 Hz, Fully Loaded	8.3 Amps	> 0.95	10" x 5.69" x 1.82"	4.80 lbs
DRV200-E-UNV-24VDC-PH-DRY				1.0 Amps @ 277V AC, 60 Hz, Fully Loaded				
DRV200-E-UNV-24VDC-10V-WET								
DRV200-E-UNV-24VDC-PH-WET								
DRV300-E-UNV-24VDC-10V-DRY	300	Universal Voltage: 120-277VAC	24VDC	3.4 Amps @ 120V AC, 60 Hz, Fully Loaded	12.5 Amps	> 0.95	10" x 5.69" x 1.82"	5.0 lbs
DRV300-E-UNV-24VDC-PH-DRY				1.5 Amps @ 277V AC, 60 Hz, Fully Loaded				
DRV300-E-UNV-24VDC-10V-WET								
DRV300-E-UNV-24VDC-PH-WET								

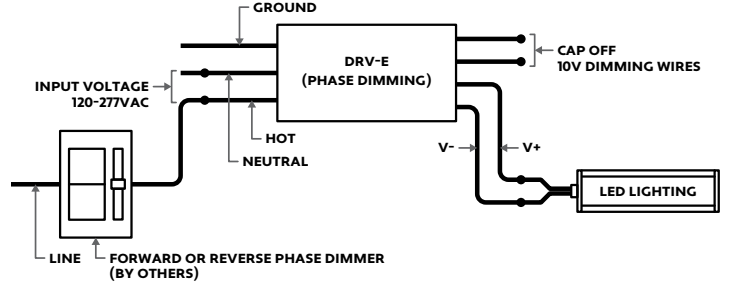
Note: Refer to individual driver submittal for additional specifications.

0-10V WIRING DIAGRAM



Note: Refer to individual driver submittal for specific wiring colors.

FORWARD / REVERSE PHASE WIRING DIAGRAM



Note: Refer to individual driver submittal for specific wiring colors. Cap off 10V dimming wires for phase dimming applications.

VOLTAGE DROP

The maximum wiring distance of driver to LED Lighting refers to the wire used between the driver and first LED of the luminaire. If the wire gauge is inadequate for the wiring distance, the luminaire will receive decreased voltage, insufficient to power the LEDs. Refer to the table to determine appropriate wiring distances based on wire gauge and the LED load.



MAXIMUM WIRE LENGTH TO PREVENT EXCESS VOLTAGE DROP

Wire Size	Load Wattage (W)													
	15	24	30	40	48	60	76	96	120	150	160	200	240	300
20 AWG	78'	49'	39'	31'	24'	19'	15'	12'	9'	7'	7'	5'	4'	3'
18 AWG	125'	78'	62'	49'	39'	31'	24'	19'	15'	12'	11'	9'	7'	6'
16 AWG	199'	124'	99'	78'	62'	49'	39'	31'	24'	19'	18'	14'	12'	9'
14 AWG	316'	197'	158'	125'	98'	79'	62'	49'	39'	31'	29'	23'	19'	15'
12 AWG	503'	314'	251'	199'	157'	125'	99'	78'	62'	50'	47'	37'	31'	25'
10 AWG	800'	500'	400'	316'	250'	200'	158'	125'	100'	80'	75'	60'	50'	40'
8 AWG	1273'	795'	636'	503'	397'	318'	251'	198'	159'	127'	119'	95'	79'	63'

COMPATIBLE DIMMERS (DRV30-E, DRV40-E, DRV60-E, DRV96-E)

Manufacturer	Model Number	Manufacturer	Model Number
Crestron	CLS-C6	Lutron	DIVA CL / DVCL-153P-WH
	CLS-C6EX		DVELV-303P
	CLS-C6M		HQRD-6A
	CLS-C6MEX		HQRD-6NA
	CLS-C6MRF		MRF2-6ELV-120-WH
	CLS-C6RF		MAELV-600
	CLS-EXP-DIM		MSCELV-600M
	CLS-EXP-DIMU		MIRELV-600
	CLW-DELVEX-E		MRF2-6ELV-120
	CLW-DELVEX-P		NVELV-600-WH
	CLW-DIMEX-P		NTELV-300
	CLW-DIMSWEX-E		NTELV-600-WH
	CLW-DIMSWEX-P		SELV-300P
	CLX-IDELV4		SELV-600-WH
	CLX-IDIM4		CTELV-303P
	CLX-IDIM8		VTELV-600
	CLX-2DIM2		
	CLX-2DIM8		
	DIN-IDIM4		
	DIN-IDIMU4		
GLX-DIM6			
GLXX-2DIM8			
LW-DIMEX-E			
P-DIMEX			
Manufacturer	Model Number	Manufacturer	Model Number
Leviton	6615	Skylark	6615
	6672		6672
	6674/IPL06		6674/IPL06
	6674/IPL06		IPE04
	IPE04		IPI06
	IPI06		VP106
	VP106		VPE04
	VPE04		VPM06
	VPM06		VRE04
	VRE04		VRM10
	VRM10		

COMPATIBLE DIMMERS (DRV150-E, DRV200-E, DRV300-E)

Manufacturer	Model Number	Manufacturer	Model Number
Crestron	CLW-DELVEX-P-W-S	Lutron	PD-6WCL
			PD-5NE-WH
Legrand	ADPD453L		DZ6HD
	HCL453PW		DVCL-153PR-WH
	WSCL450TCCCV4		DVWCL-153PH-LA
	LSCL453PLACCV4		DV-600PR-BL
	RCHLC453PNICCV6		DV-600PR-WH
	ADTP703TUW4		DVELV-300P
Leviton	IPL06		DVELV-600P
	DZ6HD		MACL-153MH-LA
	AWSMT-EAW		MIR-600M
	6674		MRF2-6ND-120-AL
	6672		MRF2-6CL-GR
	TBL03		MSCELV-600M
	6602		MEF2-6ELV-120
	6683		NTLV-600-277-WH
	TTI06-1LZ		NTF-10-277
	VPI06-1LZ		SCL-153PR-WH
			CTCL-153PDH-LA
	CT-600PR-IV		
	CT-600PR-WH		
	CT-103PR-WH		
	S-600PR-WH		
	SELV-300P		
	ST-12P-277		
	TGCL-153PR-WH		
	TGCL-153PH-WH		
	TG-600PR-LA		
	TG-600PR-IV		
	TG-600PR-WH		

USING DRIVERS WITH DMX DECODER (CTRL-DMX-RGBX)

OVERVIEW OF TYPICAL LAYOUTS

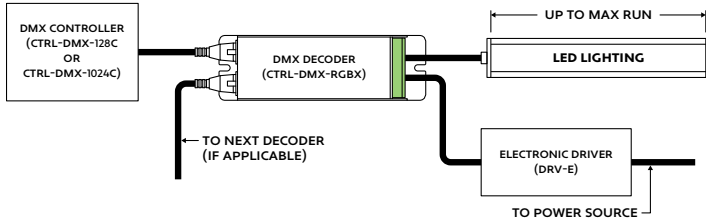
- Dynamic color LEDs work best when using a DMX controller (CTRL-DMX-128C or CTRL-DMX-1024C). A third-party DMX controller may also be used.
- Scenes can be set using DIP Switches on DMX Decoder (DMX-RGBX) but are greatly limited. It is recommended to use a controller.
- A single DMX Decoder can be loaded up to 180 Watts.
- Up to 28 Decoders may be daisy chained together using RJ45 cables.

NOTE

- Diagrams on this page are for conceptual purposes only and are not to be used for wiring. Always refer to wiring diagrams before connecting wires or parts.
- Only make connections based on the provided diagrams.
- Consult factory for advanced wiring applications.

SINGLE RUN

- Each fixture has its own Decoder and Driver.
- The DMX signal from the controller can be relayed from Decoder to Decoder using RJ45 cables.
- The total wattage of the run is limited to the Decoder's maximum load (180W).

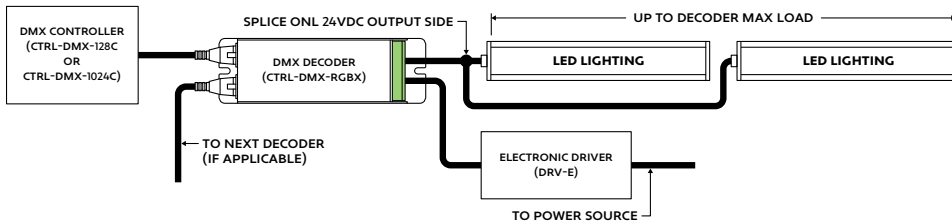


SPLIT RUN

- Multiple fixtures that compose a single run can share a Decoder and Driver. This is typical when a run exceeds maximum run length limitations.
- Wire low voltage output connections in parallel if multiple fixtures share a decoder, given they are collectively within the max load of the Decoder.
- The DMX signal from the controller can be relayed from Decoder to Decoder using RJ45 cables.
- The total wattage of the run is limited to the Decoder's maximum load (180W).

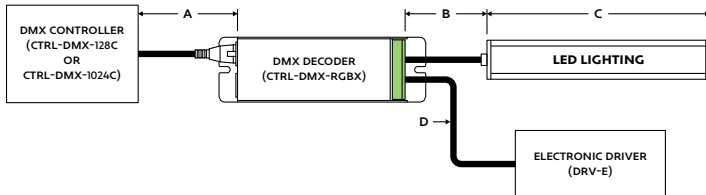
HOW TO CALCULATE LOADS

- 30' Run (21' + 9') @ 4.5W (Class 2)
- Calculate Load of Fixture Segments:
 $21' \times 4.5W = 94.5W$
 $9' \times 4.5W = 40.5W$
 $94.5W + 40.5W = 135W$
- Both fixtures segments can share a decoder because the combined wattage is within the decoder's maximum load.
- Both fixture segments can share a driver.
- For best performance, only load drivers to 80%.



MAXIMUM DISTANCES

- Refer to the diagram & table below for descriptions of distance limitations.

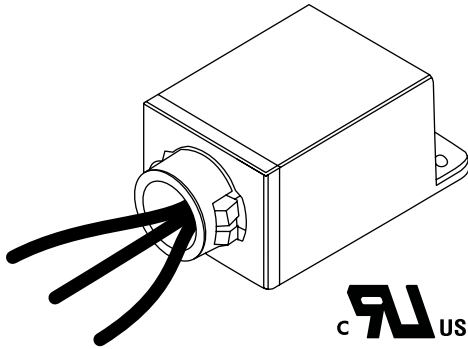


Key	Description	Maximum Distance
A	Distance from DMX Controller to First Decoder	300' ¹
B	Distance from Decoder to First LED	Determined by load of lighting ²
C	Maximum Run of LED Lighting	Refer to Specification Submittal
D	Distance from Driver Output to Decoder Input	1'

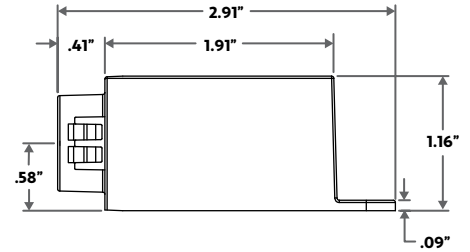
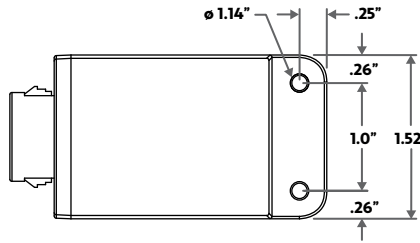
¹ Maximum distance from DMX Controller to first Decoder is 300'. The maximum distance of cumulative signal run is 1000'.

² Refer to Driver installations instructions for maximum distances.

SURGE PROTECTION



CASE DIMENSIONS



SURGE PROTECTOR SPECIFICATIONS

Model	Input Voltage	Surge Protection Level	Mounting	Enclosure Material	Input Needs	Input Frequency
ALS-SP	120V - 277V	0kV, 10kA, ANSI C62.41 Category C	SnapLOCK / Footed	Polycarbonate	6", 18AWG stranded, 105°C stripped, 3/8" tinned	60Hz

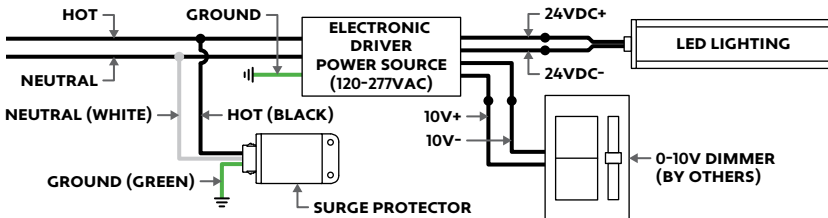
PRODUCT FEATURES

The Surge Series are 3-leaded devices that protect Line-Ground, Line-Neutral, and Neutral-Ground in accordance with IEEE / ANSI C62.41.2 guidelines. Protects against surges according to IEEE C62.41.2 C High (10kA and 10kV). Surge current rating = 10,000 Amps using industry standard 8/20 Sec wave. Surge Location Rated Category C3. UL Recognized Component in the United States and Canada (UL1449). Type 4 Surge Protection Device. High temperature, flame retardant plastic enclosure, 85°C maximum surface temperature rating. Thermally Protected Transient Over-voltage Circuit.

PRODUCT SPECIFICATIONS

The Surge series of products are designed to be used in conjunction with LED Drivers and fixtures to provide an additional level of protection against powerline disturbances in industrial, commercial and residential applications where surge protection to IEEE C62.41.2 is required.

0-10V WIRING DIMMING DIAGRAM



FORWARD / REVERSE PHASE DIMMING WIRING DIAGRAM

