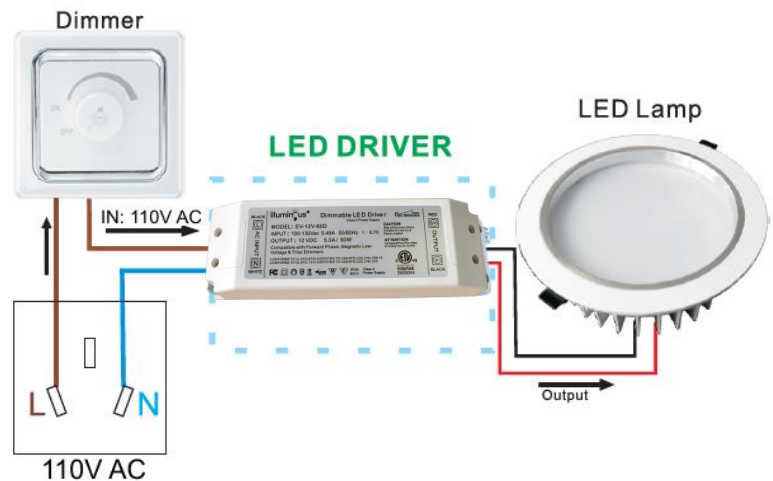




EV-12V-120D

12V DC 120W Dimmable 120V LED Driver ETL (UL) approved

- 120W 12V, IP67 Waterproof, Dimmable from 120V TRIAC / Magnetic dimmer.
- Input Voltage range 100~130V AC, 47-63Hz, PF > 0.7
- Dimmable DC Output: 12V, 120W, Suitable for Leading Edge or Trailing Edge TRIAC & Magnetic dimmers
- Protection: Short-Circuit / Over Current / Over Temperature and Auto-recovery Mode
- IP67 Waterproof for Indoor or outdoor operation, Cooling by free air convection -20C to +45C, full load, max case 60C, 20 to 95% RH NC
- Input Wire Connection: (N, L, Earth), Output Wire connection: +1V, GND
- Approvals: ETL (UL), CE, FCC, RoHS
- Size: 9.06" L x 2.76" W x 1.81" H, (230 x 70 x 46mm)
- 2 year warranty
- Note: Dimming performance optimal at greater than 50% load
- Note: Best Dimmers Leviton Decora Sureslide 6631, Lutron Diva DV-600PR, Lutron Lumea LG-600H, Lutron Skylark SLV-603P, Lutron Diva DLVL-600PH





Specification:

Model		EV-12V-120D	EV-24V-120D
Certificates		ETL, CE, FCC	ETL, CE, FCC
output	DC Voltage	12V	24V
	Voltage Tolerance	±0.5V	
	Rated current	10.0A	5.0A
	Rated power	120W	
input	Voltage Range	100~130VAC	
	Frequency Range	47~63HZ	
	Power Factor (Typ.)	PF≥0.68/110V, 0.79/170V	
	Efficiency (Typ.)	>84%	>84%
	AC Current (Typ.)	1.9A/110V, 1.2A/170V	
	Leakage current	< 0.27mA/110V	
Protection	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed	
	Over Voltage	140V (100~130V)	
Environment	Working TEMP.	-40~+60c	
	Working Humidity	20~90%RH, non-condensing	
	Storage TEMP. Humidity	-40~+80c, 10~95%RH	
	TEMP .coefficient	±0.03%/c (0~50c)	
	Vibration	10~500Hz, 2G 10min./1 cycle, period for 60min. each along X,Y,Z axes	
Safety& EMC	Safety standards	UL1012	
	Withstand voltage	I/P-O/P:3.75KVAC	
	Isolation resistance	I/P-O/P : 100MΩ/500VDC/25°C/70%RH	
	EMC EMISSION	FCC Part 15 B	
others	Net. Weight	1.3Kg	
	Carton Size	9.06" L x 2.76" W x 1.81" H, (230 x 70 x 46mm)	
	packing	329 x 279 x 176mm	
Notes	1) All parameters if NOT specially mentioned are measured at 110VAC input, rated load and 25c ambient temperature. 2) To extend the driver's life, please reduce the loading at lower input voltage. 3) Loading should be 5-100%.		

■Dimming Operation

- The Pulse-Width Modulation (PWM) of the output voltage can be adjusted through input terminal of the AC phase line (L) by connection a triac dimmer.
- Leading edge / Forward Phase Triac Dimmers, magnetic low voltage, or trailing edge / reverse phase Triac Dimmers

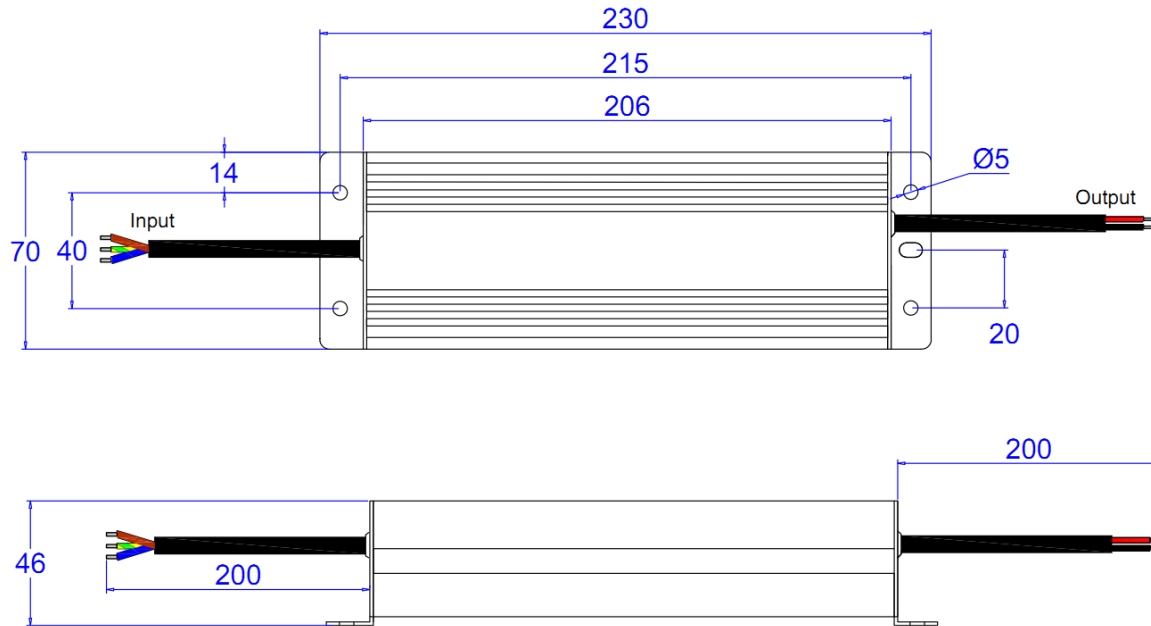
■Warning

- Prevent reverse polarity
- Risk of Electric Shock. When used outdoors, install only on a circuit protected by a Class A GFCI;



- Risk of Fire. Installation involves special wiring methods to run wiring through a building structure. Consult a qualified electrician;
- Risk of Electric Shock. Mount the unit at a height greater than 1 foot from the ground surface.

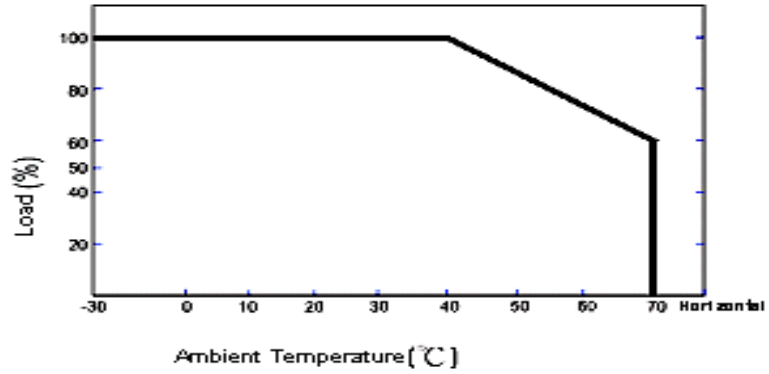
■ **Mechanical Specification**



■



Derating Curve



To extend their life, please refer to the Derating Curve and derate according to the temperature



Note: Best Dimmers: Leviton Decora Sureslide 6631, Lutron Diva DV-600PR, Lutron Lumea LG-600H
 Note: Actual LIGHT (LUX) dimming level achieved is less than POWER dimming level, and a better indicator of real-life performance.

Flex Strip (EV-ST-NWP-WHT) Test with 60W Driver (EV-12V-60W)				117% Load			60% Load		
				Flex	Lux	Power	Flex	Lux	Power
	Type	Driver	Length	Min Dim	Min Dim	Length	Min Dim	Min Dim	
Leviton Decora Sureslide	6631	I	60W	332	0%	0%	135	0%	0%
GE Z-Wave Wireless	12724	L,I,C	60W	332	0%	0%	135	0%	0%
Lutron Diva	DV-600PR	I	60W	332	1%	0%	135	1%	1%
Lutron Lumea	LG-600H	I	60W	332	1%	1%	135	1%	1%
Lutron Skylark	SLV-603P	M	60W	332	2%	1%	135	2%	1%
Lutron Diva	DV-LV-600PH	M	60W	332	1%	1%	135	3%	1%
Aspire	9530AW	I,H,M	60W	332	3%	1%	135	3%	1%
Insteon Switchline	2477D	L,C	60W	332	3%	2%	135	3%	2%
Skylark Skylink Home	WR-318	I,C	60W	332	3%	1%	135	3%	2%
Leviton Decora	DSL06-LTW	L,I,C	60W	332	4%	2%	135	4%	2%
Lutron Skylark	SCL-153PR	L,I,C	60W	332	3%	2%	135	3%	2%
Leviton Decora iLumaTech	IPL06	L,I,C	60W	332	3%	2%	135	3%	2%
Lutron Diva	DVWCL-153PH-WH	L,I,C	60W	332	3%	2%	135	3%	3%
Lutron Maestro	MACL-153Mx-xx	L,I,C	60W	332	3%	2%	135	6%	3%
Lutron Diva	DVCL-153PR	L,I,C	60W	332	6%	3%	135	6%	3%
Leviton Decora Sureslide	6674-P	I,L,C	60W	332	6%	3%	135	6%	3%
Lutron Lumea	LGCL-153PLH	I,C	60W	332	7%	4%	135	7%	4%
Lutron Caseta Wireless	PD-6WCL, P-PKG1W-WH-R	L,I,C	60W	332	7%	3%	135	7%	3%
Leviton Tabletop	TBL03	L,I,C	60W	332	7%	3%	135	7%	4%
Leviton Decora Sureslide	6672	L,I,C	60W	332	8%	3%	135	8%	4%
Leviton Decora Vizia	VPI06-1LZ	I	60W	332	5%	2%	135	10%	5%
Lutron Skylark Contour	CTCL-153PDH-WH	L,I,C	60W	332	18%	9%	135	18%	10%

Flex Strip (EV-ST-NWP-WHT) Test with 120W Driver (EV-12V-120W)				240% Load			117% Load		
				Flex	Lux	Power	Flex	Lux	Power
	Type	Driver	Length	Min Dim	Min Dim	Length	Min Dim	Min Dim	
Leviton Decora Sureslide	6631	I	60W	675	0%	0%	332	0%	0%
Lutron Diva	DV-600PR	I	60W	675	1%	0%	332	0%	0%
Lutron Diva	DV-LV-600PH	M	60W	675	1%	0%	332	0%	0%
Lutron Lumea	LG-600H	I	60W	675	1%	0%	332	1%	0%
Lutron Skylark	SLV-603P	M	60W	675	0%	0%	332	2%	1%
GE Z-Wave Wireless	12724	L,I,C	60W	675	1%	0%	332	3%	1%
Skylark Skylink Home	WR-318	I,C	60W	675	3%	0%	332	3%	1%
Aspire	9530AW	I,H,M	60W	675	3%	0%	332	3%	1%
Leviton Decora	DSL06-LTW	L,I,C	60W	675	3%	0%	332	3%	1%
Leviton Decora Vizia	VPI06-1LZ	I	60W	675	4%	1%	332	4%	1%
Leviton Decora iLumaTech	IPL06	L,I,C	60W	675	4%	1%	332	4%	2%
Lutron Skylark	SCL-153PR	L,I,C	60W	675	4%	0%	332	4%	2%
Lutron Diva	DVWCL-153PH-WH	L,I,C	60W	675	3%	1%	332	3%	2%
Lutron Maestro	MACL-153Mx-xx	L,I,C	60W	675	3%	1%	332	3%	2%
Insteon Switchline	2477D	L,C	60W	675	3%	0%	332	3%	2%
Lutron Diva	DVCL-153PR	L,I,C	60W	675	3%	1%	332	3%	2%
Leviton Decora Sureslide	6674-P	I,L,C	60W	675	3%	1%	332	6%	2%
Lutron Caseta Wireless	PD-6WCL, P-PKG1W-WH-R	L,I,C	60W	675	10%	2%	332	6%	2%
Leviton Tabletop	TBL03	L,I,C	60W	675	7%	1%	332	7%	2%
Leviton Decora Sureslide	6672	L,I,C	60W	675	7%	1%	332	8%	3%
Lutron Lumea	LGCL-153PLH	I,C	60W	675	9%	2%	332	9%	4%
Lutron Skylark Contour	CTCL-153PDH-WH	L,I,C	60W	675	15%	4%	332	16%	7%

Flex Strip (EV-ST-NWP-WHT) Test with 200W Driver (EV-12V-200W)				364% Load			220% Load		
				Flex	Lux	Power	Flex	Lux	Power
	Type	Driver	Length	Min Dim	Min Dim	Length	Min Dim	Min Dim	
Leviton Decora Sureslide	6631	I	60W	984	0%	0%	675	0%	0%
Lutron Diva	DV-600PR	I	60W	984	0%	0%	675	0%	0%
GE Z-Wave Wireless	12724	L,I,C	60W	984	0%	0%	675	0%	0%
Lutron Lumea	LG-600H	I	60W	984	1%	0%	675	2%	0%
Lutron Skylark	SLV-603P	M	60W	984	2%	0%	675	2%	0%
Lutron Diva	DV-LV-600PH	M	60W	984	2%	0%	675	2%	0%
Insteon Switchline	2477D	L,C	60W	984	2%	0%	675	3%	1%
Aspire	9530AW	I,H,M	60W	984	3%	0%	675	4%	1%
Skylark Skylink Home	WR-318	I,C	60W	984	3%	0%	675	4%	1%
Leviton Decora	DSL06-LTW	L,I,C	60W	984	4%	1%	675	4%	1%
Lutron Skylark	SCL-153PR	L,I,C	60W	984	3%	1%	675	3%	1%
Leviton Decora Vizia	VPI06-1LZ	I	60W	984	3%	1%	675	3%	1%
Leviton Decora iLumaTech	IPL06	L,I,C	60W	984	3%	1%	675	3%	1%
Lutron Diva	DVWCL-153PH-WH	L,I,C	60W	984	3%	1%	675	6%	1%
Lutron Maestro	MACL-153Mx-xx	L,I,C	60W	984	3%	1%	675	6%	1%
Leviton Decora Sureslide	6674-P	I,L,C	60W	984	6%	1%	675	6%	1%
Lutron Caseta Wireless	PD-6WCL, P-PKG1W-WH-R	L,I,C	60W	984	6%	1%	675	7%	1%
Lutron Diva	DVCL-153PR	L,I,C	60W	984	6%	1%	675	7%	1%
Leviton Tabletop	TBL03	L,I,C	60W	984	6%	14%	675	8%	1%
Leviton Decora Sureslide	6672	L,I,C	60W	984	8%	1%	675	8%	1%
Lutron Lumea	LGCL-153PLH	I,C	60W	984	9%	2%	675	9%	2%
Lutron Skylark Contour	CTCL-153PDH-WH	L,I,C	60W	984	17%	3%	675	18%	3%



MR16 (EV-LED-MR16COB5W) Test with 60W Driver (EV-12V-60W)				467% Load			264% Load				
				Qty of	Lux		Power	Qty of	Lux		Power
				MR16	Min	Dim	Min Dim	MR16	Min	Dim	Min Dim
Type	Driver										
Leviton Decora SureSlide	6631	I	12W	8	0%	0%	4	1%	0%		
Lutron Skylark	SLV-603P	M	12W	8	4%	0%	4	3%	0%		
Lutron Diva	DV-600PR	I	12W	8	3%	0%	4	3%	0%		
Lutron Diva	DVVLV-600PH	M	12W	8	5%	0%	4	6%	1%		
Lutron Lumea	LG-600H	I	12W	8	5%	0%	4	6%	1%		
Insteon Swithline	2477D	L,C	12W	8	5%	0%	4	7%	1%		
Aspire Cooper	9330AW	I,H,M	12W	8	8%	1%	4	10%	1%		
Skylark Skylink Home	WR-318	I,C	12W	8	9%	0%	4	11%	0%		
Leviton Decora	DSL06-1TW	L,I,C	12W	8	10%	1%	4	12%	2%		
Leviton Tabletop	TBL03	L,I,C	12W	8	11%	1%	4	14%	2%		
Leviton Decora iLumaTech	IFL06	L,I,C	12W	8	12%	1%	4	15%	1%		
Leviton Decora Vizia	VPI06-1LZ	I	12W	8	13%	1%	4	15%	2%		
Lutron Skylark	SCL-153PR	L,I,C	12W	8	13%	1%	4	15%	1%		
Lutron Diva	DVWCL-153PH-WH	L,I,C	12W	8	13%	1%	4	16%	2%		
Lutron Maestro	MACL-153Mx-xx	L,I,C	12W	8	14%	1%	4	16%	1%		
Leviton Decora SureSlide	6674-P	I,L,C	12W	8	14%	1%	4	16%	1%		
Lutron Diva	DVCL-153PR	L,I,C	12W	8	14%	1%	4	17%	1%		
Leviton Decora SureSlide	6672	L,I,C	12W	8	17%	1%	4	19%	2%		
Lutron Lumea	LGCL-153PLH	I,C	12W	8	19%	3%	4	21%	2%		
Lutron Caseta Wireless	PD-6WCL, P-PKG1W-WH-R	L,I,C	12W	8	18%	1%	4	22%	2%		
GE Z-Wave Wireless	12724	L,I,C	12W	8	12%	1%	4	24%	3%		
Lutron Skylark Contour	CTCL-153PDH-WH	L,I,C	12W	8	27%	3%	4	30%	4%		
MR16 (EV-LED-MR16COB5W) Test with 120W Driver (EV-12V-120W)				401% Load			252% Load				
				Qty of	Lux		Power	Qty of	Lux		Power
				MR16	Min	Dim	Min Dim	MR16	Min	Dim	Min Dim
Type	Driver										
Lutron Diva	DV-600PR	I	26W	20	2%	0%	10	0%	0%		
Lutron Skylark	SLV-603P	M	26W	20	2%	0%	10	2%	0%		
Leviton Decora SureSlide	6631	I	26W	20	2%	0%	10	4%	0%		
Lutron Lumea	LG-600H	I	26W	20	4%	1%	10	4%	0%		
Lutron Diva	DVVLV-600PH	M	26W	20	3%	0%	10	5%	1%		
Aspire Cooper	9330AW	I,H,M	26W	20	6%	1%	10	8%	1%		
Skylark Skylink Home	WR-318	I,C	26W	20	6%	1%	10	8%	1%		
Leviton Decora	DSL06-1TW	L,I,C	26W	20	7%	1%	10	9%	1%		
Leviton Decora Vizia	VPI06-1LZ	I	26W	20	8%	1%	10	10%	1%		
Lutron Skylark	SCL-153PR	L,I,C	26W	20	9%	1%	10	11%	1%		
Leviton Tabletop	TBL03	L,I,C	26W	20	8%	1%	10	11%	1%		
Leviton Decora iLumaTech	IFL06	L,I,C	26W	20	10%	1%	10	12%	1%		
Lutron Diva	DVWCL-153PH-WH	L,I,C	26W	20	9%	1%	10	12%	1%		
Lutron Maestro	MACL-153Mx-xx	L,I,C	26W	20	10%	1%	10	12%	1%		
Insteon Swithline	2477D	L,C	26W	20	10%	1%	10	12%	1%		
Lutron Diva	DVCL-153PR	L,I,C	26W	20	11%	1%	10	13%	1%		
Leviton Decora SureSlide	6674-P	I,L,C	26W	20	11%	0%	10	13%	2%		
GE Z-Wave Wireless	12724	L,I,C	26W	20	19%	2%	10	15%	2%		
Lutron Caseta Wireless	PD-6WCL, P-PKG1W-WH-R	L,I,C	26W	20	14%	2%	10	15%	2%		
Leviton Decora SureSlide	6672	L,I,C	26W	20	14%	2%	10	16%	2%		
Lutron Lumea	LGCL-153PLH	I,C	26W	20	17%	4%	10	20%	4%		
Lutron Skylark Contour	CTCL-153PDH-WH	L,I,C	26W	20	24%	3%	10	26%	3%		
MR16 (EV-LED-MR16COB5W) Test with 200W Driver (EV-12V-200W)				230% Load			142% Load				
				Qty of	Lux		Power	Qty of	Lux		Power
				MR16	Min	Dim	Min Dim	MR16	Min	Dim	Min Dim
Type	Driver										
Lutron Diva	DV-600PR	I	48W	20	1%	0%	10	1%	0%		
Leviton Decora SureSlide	6631	I	48W	20	1%	0%	10	2%	0%		
GE Z-Wave Wireless	12724	L,I,C	48W	20	1%	0%	10	4%	0%		
Lutron Lumea	LG-600H	I	48W	20	4%	0%	10	5%	1%		
Insteon Swithline	2477D	L,C	48W	20	2%	0%	10	5%	1%		
Lutron Skylark	SLV-603P	M	48W	20	4%	1%	10	6%	1%		
Lutron Diva	DVVLV-600PH	M	48W	20	5%	1%	10	6%	1%		
Aspire Cooper	9330AW	I,H,M	48W	20	8%	1%	10	10%	0%		
Skylark Skylink Home	WR-318	I,C	48W	20	8%	1%	10	10%	1%		
Leviton Decora	DSL06-1TW	L,I,C	48W	20	9%	1%	10	11%	1%		
Leviton Decora Vizia	VPI06-1LZ	I	48W	20	10%	1%	10	13%	1%		
Lutron Skylark	SCL-153PR	L,I,C	48W	20	11%	1%	10	13%	1%		
Leviton Decora iLumaTech	IFL06	L,I,C	48W	20	11%	1%	10	14%	2%		
Lutron Diva	DVWCL-153PH-WH	L,I,C	48W	20	12%	1%	10	14%	2%		
Lutron Diva	DVCL-153PR	L,I,C	48W	20	13%	1%	10	15%	2%		
Lutron Maestro	MACL-153Mx-xx	L,I,C	48W	20	13%	1%	10	16%	2%		
Leviton Decora SureSlide	6674-P	I,L,C	48W	20	13%	1%	10	16%	2%		
Leviton Tabletop	TBL03	L,I,C	48W	20	13%	1%	10	16%	2%		
Leviton Decora SureSlide	6672	L,I,C	48W	20	16%	2%	10	18%	2%		
Lutron Caseta Wireless	PD-6WCL, P-PKG1W-WH-R	L,I,C	48W	20	17%	2%	10	19%	2%		
Lutron Lumea	LGCL-153PLH	I,C	48W	20	17%	3%	10	20%	3%		
Lutron Skylark Contour	CTCL-153PDH-WH	L,I,C	48W	20	27%	3%	10	29%	3%		

Note: Best Dimmers: Leviton Decora SureSlide 6631, Lutron Diva DV-600PR, Lutron Lumea LG-600H
 Note: Actual LIGHT (LUX) dimming level achieved is less than POWER dimming level, and a better indicator of real-life performance.