

FIXTURE TYPE \_\_\_\_\_

PROJECT NAME \_\_\_\_\_

LOCATION \_\_\_\_\_



# HLV192

192 WATT (2x96W) – 24 VOLT |  
CLASS 2 POWER SUPPLY



## Description

IP66 Outdoor Dual Output (2x96W) Universal Power Supply with 0-10V, ELV, MLV, DMX, and Incandescent dimming. 100–277V Input

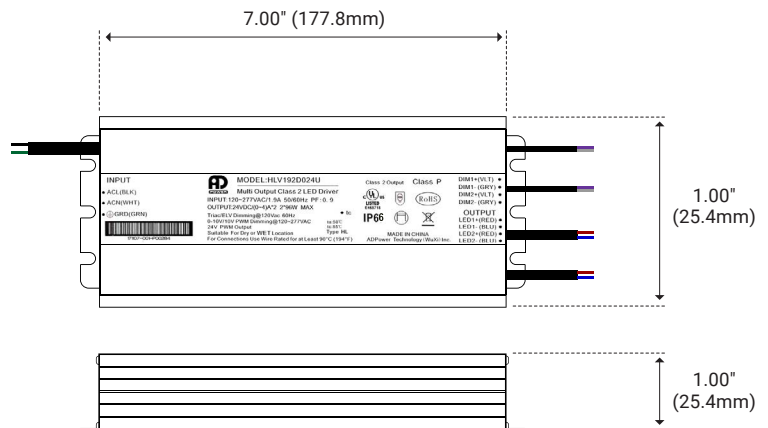
## Features

- 431 Hz / Flicker-free Dimming Down to 5%
- Incandescent, ELV, MLV, or 0-10V Dimming
- Two Independent 0-10V Inputs
- Protections: Short Circuit / Over Current / Over Voltage
- Free Air Convection Cooling
- UL-listed Class 2 for Indoor / Outdoor Use

## Specifications

Series	HLV192
Input Voltage	100–277V AC
Output Voltage	24V DC / Constant Voltage
Max Wattage	192W (2 × 96W)
Temp Range	-20°F(-28°C) – 158°F (70°C)
Dimensions	8.00" × 3.75" × 1.50"
Classification	Class 2
Enclosure	IP66

## Dimensions



## Model List

Model Name	Rated Input Voltage	Rated Output Power	Rated Output Voltage	Output Current	Note
HLV192	120 – 277 VAC	96 W × 2	24 VDC × 2	0-4000 mA × 2	2 Channel Output



## I Specification

Parameters	Symbols	Test Conditions / Comment	Min	Typ	Max	Units
<b>INPUT</b>						
Input Voltage	VIN		108		305	VAC
Rated Input Voltage	VIN RATED	No Phase Cut Dimming	120		277	VAC
		Phase Cut Dimming		120		VAC
Input Frequency	fline		47	50 / 60	63	Hz
Input Current	IIN	Full Load, VIN = 120 VAC			1.9	A
		Full Load, VIN = 230 VAC			1	A
		Full Load, VIN = 277 VAC			0.9	A
Inrush Current	IINRUSH	Cold Start, VIN = 277 VAC			60	A
<b>GENERAL CHARACTERISTICS</b>						
Power Factor	PF	30% – 100% Load, VIN = 120 VAC	0.95			PF
		50% – 100% Load, VIN = 230 VAC	0.9			PF
		60% – 100% Load, VIN = 277 VAC	0.9			PF
Total Harmonic Distortion	THD	30% – 100% Load, VIN = 120 VAC			20	%
		50% – 100% Load, VIN = 230 VAC			20	%
		Full Load, VIN = 277 VAC			20	%
Efficiency	$\eta$	Full Load, VIN = 120 VAC	88	90		%
		Full Load, VIN = 230 VAC	90	92		%
		Full Load, VIN = 277 VAC	90	92		%
Turn On Delay Time	Ton_delay	Cold Start, VIN = 230 VAC		0.3	0.5	S
<b>OUTPUT</b>						
Output Voltage	VOUT		23.5	24	24.5	V
Output Current	IOUT	Per Channel	0		4000	mA
Line Regulation	VOUT-LINE				1	%
Load Regulation	VOUT-LOAD	IOUT from MIN. to MAX.			2	%
Ripple Voltage	VOUT-RIPPLE	Full Load, (pk-to-pk)/2 × Average			3	%
Output Voltage Overshoot	VOVERSHOOT	Turning Power ON			2	%
<b>0-10V OR RESISTOR DIMMING</b>						
<p>The 0-10 V or resistor dimming is a dimming manner that can be used to dim the output voltage via a standard commercial wall dimmer (0-10 VDC) or an external control voltage source (0-10 VDC) or external resistor.</p> <p>The dimming range is 100 % VOUT to 5 % VOUT. When VDIM is 8-10 VDC, the output voltage maintains 100 % VOUT, and when VDIM is below 0.6 V, the output voltage is 5% VOUT.</p>						
Absolute Maximum Voltage on 0-10 V Pin	VDIM		-2		15	V
Source Current on 0-10 V Dimming Pin	IDIM			100		uA
VDIM Voltage for Full Bright	VDIM-MAX		8			V
Output Duty Cycle	V0-10	PWM Output	5		100	%
External Resistor Value at Full Bright	RExternal-MAX			90		kΩ



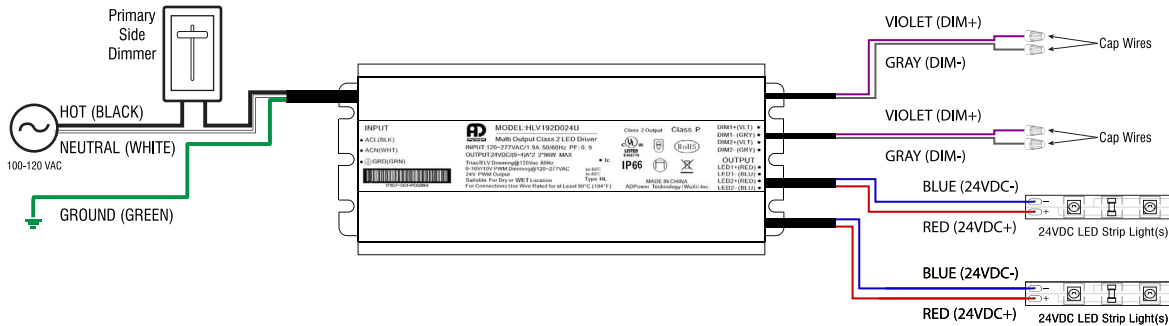
## I Specification

Parameters	Symbols	Test Conditions / Comment	Min	Typ	Max	Units
<b>PWM DIMMING</b>						
The PWM dimming is a dimming manner that can be used to dim the output voltage via the duty cycle of PWM signal. The dimming range is 100 % VOUT to 5 % VOUT. When the duty cycle is 80 % to 100 %, the output voltage reaches 100 % VOUT, and the output voltage maintains 5 % VOUT when the duty cycle below 6 %.						
PWM Frequency	fPWM		0.1		1	KHz
High Level Voltage of PWM Signal	VPWM-High	VPWM-High Affect Output Voltage	8	10	12	V
Lower Level Voltage of PWM Signal	VPWM-Low	VPWM-Low Affect Output Voltage	0		1	V
Output Duty Cycle	DPWM	PWM Output	5		100	%
<b>PHASE CUT DIMMING</b>						
The unit is compatible with leading-edge and trailing-edge dimmer.						
Input Voltage	VIN-TRIAC DIM			120		VAC
Output Duty Cycle	DTRIAC	PWM Output	0	-	100	%
Suggest Load Range	PSuggest	VIN = 120 VAC, Total Load	19.2		192	W
<b>PROTECTION</b>						
Over Voltage Protection	VOVP	Latch Off Mode			30	V
Over Current Protection	IOCP	It will recover automatically after fault condition is removed.	4.0		4.5	A
Over Temperature Protection	TOTP	If the case temperature exceeds OTP point, the output voltage of the driver is automatically reduced.		90		°C
Short Circuit Protection		It will recover automatically after fault conditions is removed.				
<b>ENVIRONMENT</b>						
Storage Temperature	TStorage	Humidity: 5 % RH to 95 % RH	-40	-	+85	°C
Operating Relative Humidity	Ha	Non Condensing	10		90	%
<b>OTHERS</b>						
Life Time	TLife	Full Load, 120 VAC Input, 60 °C Case Temperature	50			kHrs
MTBF	TMTBF		200			kHrs
Net Weight	WNBT					g
Dimension L x W x H	202 mm x 96 mm x 39 mm (7.95" x 3.78" x 1.54")					
<b>SAFETY COMPLIANCE</b>						
UL Listed	UL8750 Compliance to UL1310 Class 2, CSA-C22.2 No. 107.1					
<b>EMC COMPLIANCE</b>						
FCC Part 15B	Conducted Emission Test and Radiated Emission Test					
Note: Unless otherwise specified, all the above parameters are measured at ambient temperature of 25 °C and VIN = 120 VAC.						

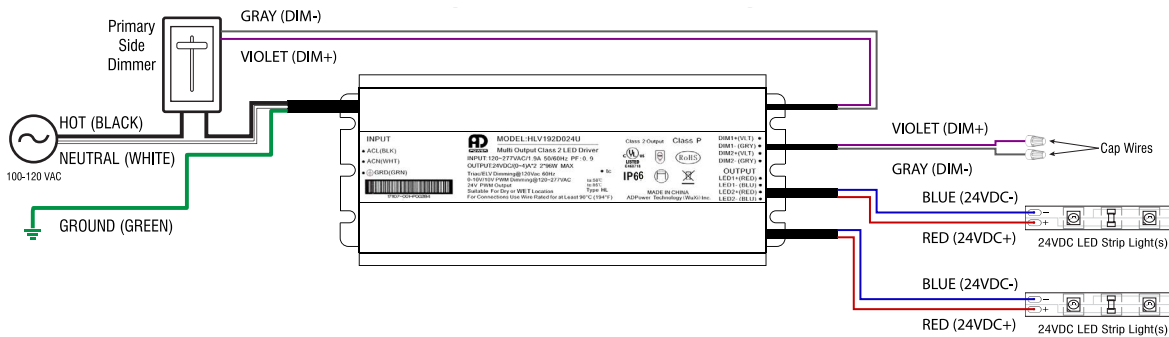


# I Typical Application

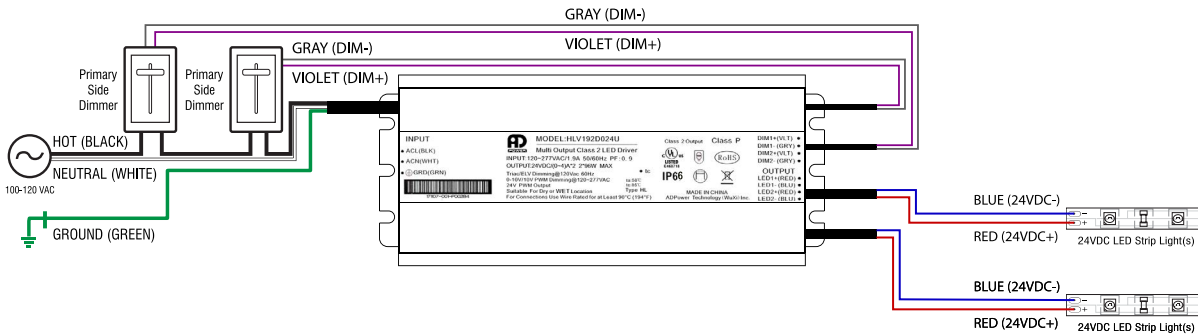
## Primary Side Dimming (120V)



## Secondary Side Dimming (0-10V, 1-Circuit)



## Secondary Side Dimming (0-10V, 2-Circuit)



## Secondary Side Dimming (DMX)

