# 0-10V DIMMABLE POWERSUPPLY 96W

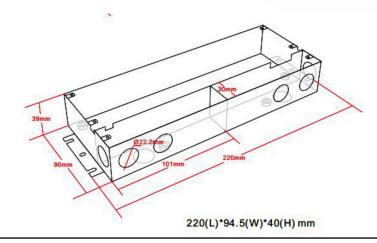


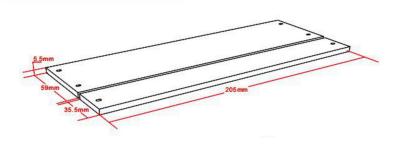
LCPSLCODIM010V-24V-96W











## **FEATURES**

- Output constant voltage
- Range 100-305VAC, Typical: 100-277VAC
- UL, cUL listed, Class 2 unit, Type HL rated. FCC
- Built-in PFC function / PF>0.99
- High efficiency > 86% / Dimming range: 0~100% / Load: 10-100%
- Protections: short circuit / over voltage / over heat
- PWM output, does not change the color index

- Full protection aluminum housing, for dry, damp and wet location
- Cooling by free air convection
- Strong compatibility, flicker-free dimming, PWM output
- Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lightings.
- 0-10V dimming: 0-10V / 1-10V / Potentiometer / 10V PWM 4 in 1
- Phase dimming: work whith forward pase / leading edge, MLV and reverse phase / trailing edge, ELV, TRIAC dimmers



## **TECHNICAL SPECIFICATIONS**

Model		LCPSLCODIM010V-24V-96W
Output	DC Voltage	24V
	Voltage Tolerance	±0.5V
	Voltage Regulation	±0.5%
	Load Regulation	±1%
	Rated Current	4.0A
	Rated Power	96W (class 2)
Input	Voltage Range	100-277VAC
	Frequency Range	47 ~ 63HZ
	Power Factor (Typ.)@full load	0.98@120VAC 0.95@277VAC
	THD(Typ.)@full load	<20%
	Inrush Current(Typ.)	20A, 50%, 1.6ms
	Efficiency(Typ.)@Full Load	83%@120VAC 86%@277VAC
	AC Current (Typ.)	1.3A@100VAC
	Leakage current	<0.50mA
Protection	Short Circuit	shut down o/p voltage, re-power on to recover after fault condition is rem
	Over load	≤120% constant current limiting, auto-recovery
	Over temperature	100°C±10°C shut down o/p voltage, automatically recover after cooling
Environment	Working temp.	-40 ~ +60°€
	Working Humidity	20 ~ 90%RH, non-condensing
	Storage TEM., Humidity	-40 ~ +80°C, 10 ~ 95%RH
	Temp. coefficient	±0.03%/°C (0 ~ 50°C)
	Vibration	10 ~ 500Hz 2G 10min./1 cycle, period for 60min.each along X,Y,Z axes
Safety & EMC	Safety standards	UL8750+UL1310
	Withstand voltage	I/P-O/P: 1.88KVAC
	Isolation resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH
	EMC EMISSION	FCC Part 15 B
Others	Weight	1.3Kg
Notes	<ol> <li>All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25°C of ambient temperature</li> <li>To extend the driver's lifespan, reduce the loading at lower input voltage.</li> </ol>	





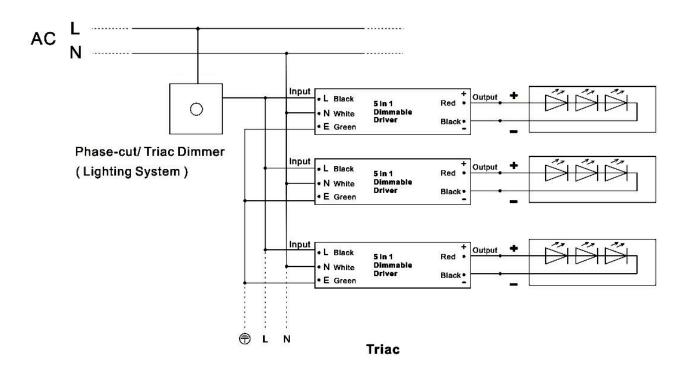


- Connect the black and white input wires to the AC L (live) and N (neutral) respectively, and the green wire to the ground.
- For the output wires, connect the red wire to the positive side (+) of the LED and the black wire to the negative side (-) of the LED.
- Connect the purple DIM (+) cable to the positive (+) terminal of the 0/1-10V dimmer signal, and the grey DIM (-) cable to the negative (-) terminal of the 0/1-10V dimmer signal.
- It is crucial to ensure these connections are made correctly to prevent malfunction and potential damage to the product.

#### CONNECTING DIAGRAM

## Using TRIAC/Phase cut dimming

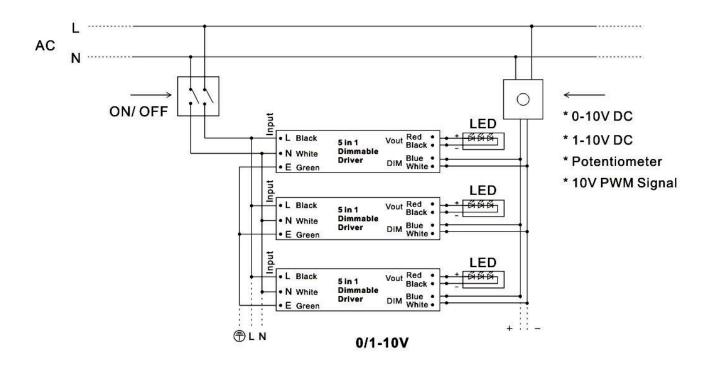
- 1. The Pulse-Width Modulation (PWM) of the output voltage can be adjusted through the input terminal of the AC phase line (L) by connecting to a phase/Triac dimmer of the lighting system.
- 2. Compatible with forward phase/leading edge (MLV) and reverse phase/trailing edge (ELV, TRIAC) dimmers.
- 3. Please ensure to use dimmers with a power rating at least 1.5 times greater than the output power of the driver.

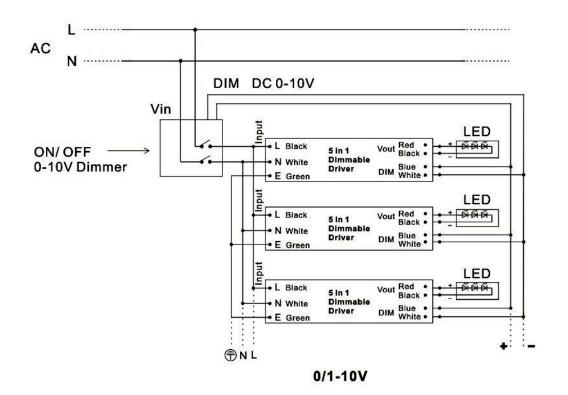




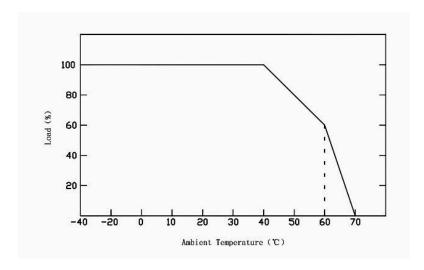


Using 0-10/1-10Vdimming





## **DERATING CURVE**



Make sure to adjust the load based on the load derating curve, which accounts for changes in ambient temperature. This helps prolong the working life of the system.

# **INSTRUCTION**

- This driver should be installed by qualified and professional person;
- Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation.
- Ensure that wiring is correct before test in order to avoid light and power supply damage;