

Customer:	Date:	
Project:		



# **POWER SUPPLY**

PS-024-096VTD-DWJ-V2



Weight

Packaging

Enclosure Size (LxWxH)

Built-in PFC, Dimming Range,

Load, Location Suitability

Dimming Function

**Dimming Features** 

PFC Design







### **TEMPERATURES**

## **WORKING TEMPERATURE:**

-13°F to 104°F (-25°C to +40°C) Cooling by free air convection

### WORKING HUMIDITY:

20-95% RH, Non-Condensing

### FIXTURE STORAGE TEMPERATURE:

-40°F to 176°F (-40°C to 80°C) Humidity 10-95% RH

## TEMPERATURE COEFFICIENT:

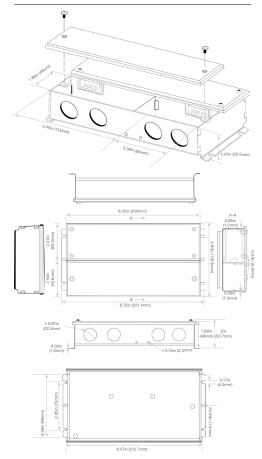
±0.03%/°C (0°C-50°C)

### **CERTIFICATIONS & FEATURES**





## DIAGRAM



### Notes

- All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25°C of ambient temperature.
- Tolerance: includes set us tolerance, line regulation and load regulation.
- Any other request can be customized.

# **CONSTANT VOLTAGE DIMMABLE LED DRIVER**

OUTPUT			
Voltage Tolerance	±0.5V		
Voltage Regulation	±0.5%		
Rated Current	4A		
Load Regulation	±1%		
Rated Power	96W		
INPUT			
Voltage Range	120VAC		
Input Power	100-227 VAC, 50-60 Hz, 1.3A max.		
THD (Typ. @ Full Load)	<20%@120VAC		
AC Current (Max.)	1.3A		
Frequency Range	50-60Hz		
Inrush Current	20A, 1.6ms@50% 120VAC		
Leakage Current	<0.50mA		
Power Factor (Typ.)	>0.95		
Efficiency (Typ. @ Full Load)	≥83%@120VAC, full load, with maximum efficiency up to 86%		
PROTECTION			
Over Temperature	100°C±10°C shuts down o/p voltage, auto-recovery after cooling		
Short Circuit	Shuts down o/p voltage, re-power to recover after fault condition removed		
Over Loading	≤120% constant current limiting, auto-recovery after fault condition removed		
ENVIRONMENT			
Vibration	10-500Hz, 5G, 12min/cycle for 72 min each along X,Y,Z axes		
Application	Suitable for LED lighting and interactive sign applications		
SAFETY & EMC			
Safety Standards	UL379 (Rated for Aqua Neon UL676)		
Withstand Voltage	I/P-O/P: 1.8KVAC I/P-FG:1.8VAC O/P-FG 1.8KVAC		
Isolation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH		
EMC Emmission	FCC 47 CFR Part 15, Subpart B		
OTHER INFORMATION			

8.7" x 4.6" x 2" (221mm x 116.8mm x 50.7mm) (L\*W\*H)

0-10V dimming: 0-10V / 1-10V / Potentiometer / 10V PWM 4-in-1.

Title 24 JA8 compliant, 20kHz PWM frequency, flicker-free

Built-in junction box / Dimming range: 0–10% / Minimum Load:10% / Dry, damp, wet locations

Phase Dimming: Compatible with forward phase, magnetic low voltage (MLV), reverse phase, electronic low voltage (ELV), and TRIAC dimmers.



1.6Kg

10 pcs / CTN

Built-in active PFC function

# **POWER SUPPLY**

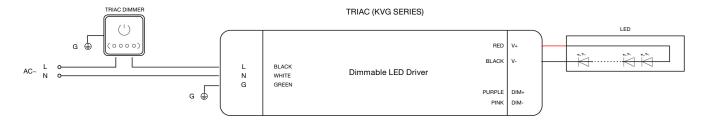
### PS-024-096VTD-DWJ-V2



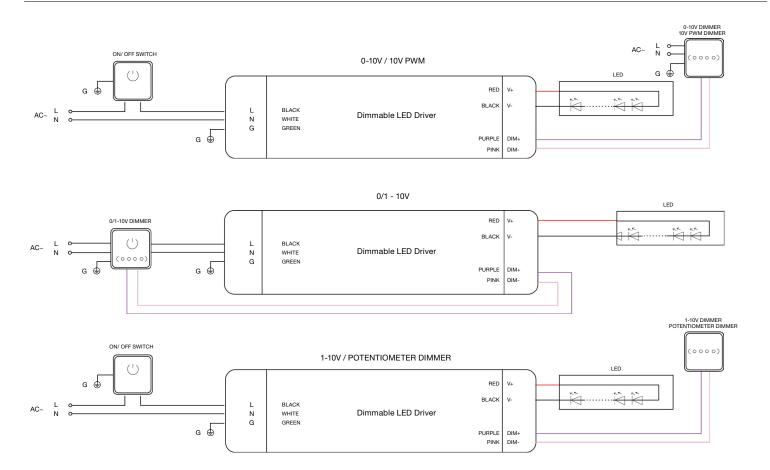
- For the input cable, connect the Green wire to (G), the Black wire to (L), and the White wire to (N) of the AC mains.
- For the output cable, connect the Red wire (+) to the LED positive terminal (+) and the Black wire (-) to the LED negative terminal (-).
- For the dimming cable, connect the Purple wire DIM (+) to the 0/1-10V dimmer signal (+), and the Pink wire DIM (-) to the 0/1-10V dimmer signal (-).
- Please DO NOT connect "DIM-" to "LED-", "DIM+" to "LED+", or other incorrect connection.
- Please make sure your connect these correctly otherwise your product will not function correctly and could be damaged.
- If not using the dimming cable, secure each unused wire with a wire nut or equivalent terminating hardware.

### **USING TRIAC/PHASE CUT DIMMING**

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



### USING 0-10V / 1-10V / 10V PWM / POTENTIOMETER DIMMING





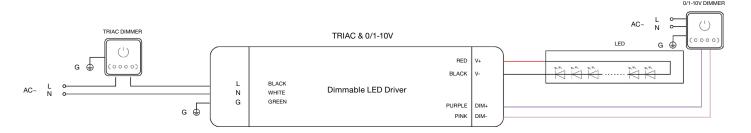
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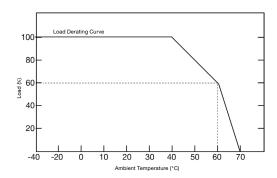


### USING TRIAC/PHASE CUT DIMMING & 0-10V / 1-10V / 10V PWM / POTENTIOMETER DIMMING

When using the two dimming methods simultaneously, ensure that the LED lighting is first set to maximum brightness before operating the second dimming control.



### DERATING CURVE (OUTPUT LOAD VS TEPMPERATURE)



To extend their lifespan, please refer to the Derating Curve and adjust the load according to the operating temperature.

Be aware that the temperature rise of LED fixtures over time can increase their power consumption. We recommend reserving a portion of the power supply's load capacity to prevent overloading.

### INSTRUCTIONS

- 1. This driver should be installed by a qualified and professional person
- 2. Make sure the driver is installed with adequate ventilation to allow for heat dissipation
- Ensure all wiring is correct before testing in order to avoid light and power supply damage
- 4. If the dimmable LED drivers do not perform normally, do not maintain privately. Contact us at: support@glls.com or 1-888-580-6366

