DIODEDRIVE®

User Manual

Important: Read all instructions prior to installation.

DVML-xW-U24V-T

Dimmable LED Constant Voltage Power Supply

Safety and Notes

- This product should be installed and serviced by a certified electrician per applicable national, state, and local building and electrical codes.
- To reduce the risk of electric shock, ensure that the main power source and circuit breakers are switched off before performing any installation or wiring procedures.
- Ensure all mounts are securely attached and will support the weight of the power supply. Failure to properly support may result in damage or injury, for which the manufacturer does not assume responsibility.
- It is recommended that over-voltage and surge protection devices be installed in lamps' power supply circuits to ensure safety during use.
- When adjusting the power supply's output voltage, please ensure that the total output power does not exceed the rated maximum power, as this will void the warranty.
- Do not install in completely sealed enclosures. Enclosures must be ventilated with holes to allow air passage.
- The driver must be mounted with a 5" gap of free-flow air space for proper ventilation. It should never be mounted above heat-radiating objects.
- Suitable for wet locations. Do not expose to corrosive gas or liquids.
- **Ensure the installation of the power supply complies with all driver specifications.**

Specifications

Model	DVML-20W-U24V-T	DVML-40W-U24V-T	DVML-60W-U24V-T	DVML-75W-U24V-T	DVML-96W-U24V-T
Output Wattage (max)	20W	40W	60W	75W	96W
Output Current	.83A	1.6A	2.5A	3.1A	4.0A
Output Voltage	24 VDC				
Input Voltage	120 VAC				
Environmental Rating	NEMA 3R, Suitable for Wet Locations, Weatherproof				
Ambient Operating Temperature	-20–70 °C (-4–158 °F)				
Dimmable	Yes, compatible with most TRIAC (MLV) dimmers				

Installation

1. Before starting installation, ensure power is completely disconnected at the source and cannot be inadvertently reconnected.
2. Select an appropriate and structurally sound mounting location. Secure the driver to the surface using suitable screws. Driver must be mounted vertically and in an area where water cannot pool or collect.
3. Make all connections with suitable wire connectors. For damp or wet installation locations, verify that all connections and housings are tight to prevent water intrusion into the system.
4. Briefly apply power to test for proper function. Once proper operation is confirmed, disconnect the power and complete the installation.
5. If any event occurs, such as tripping a breaker or irregular operation, disconnect the input power and output connections.
   A qualified technician should examine all faults. Please do not attempt to remove the power supply case yourself. For additional support, please see our contact information below.

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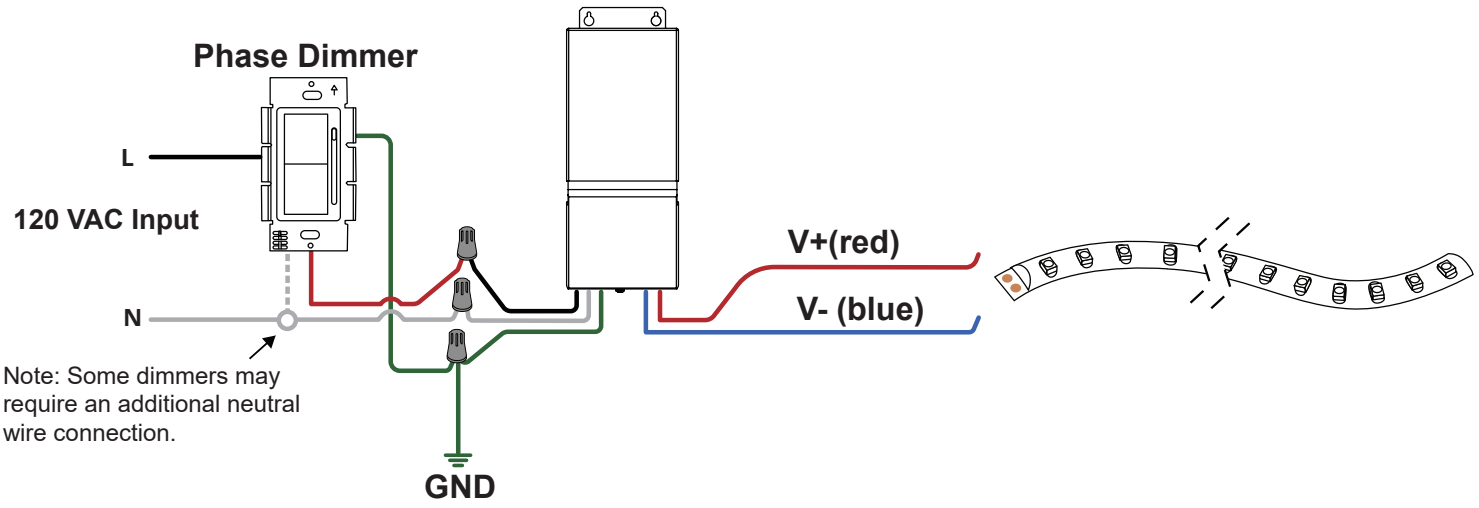
Wiring Examples

Note: 10% minimum load recommended.

TRIAC (MLV) Dimmer Wiring Diagram



Voltage Drop Charts

Wire run distances from driver to the LEDs based on wattage of the load and a 3% allowed voltage drop.

	24V					
24V	Wire Gauge	20W / 0.83A	40W / 1.6A	60W / 2.5A	75W / 3.1A	96W / 4.0A
	20	43 ft.	21 ft.	14 ft.	12 ft.	8 ft.
	18	68 ft.	33 ft.	22 ft.	19 ft.	14 ft.
	16	109 ft.	54 ft.	36 ft.	31 ft.	22 ft.
	14	174 ft.	86 ft.	57 ft.	49 ft.	36 ft.
	12	272 ft.	135 ft.	90 ft.	77 ft.	56 ft.
	10	397 ft.	197 ft.	131 ft.	112 ft.	82 ft.