



SPEC SHEET: WAVELUX 300W UNIVERSAL DIMMABLE LED POWER SUPPLY

The Wavelux 300W Indoor/Outdoor Universal Dimmable LED Power Supply is a sophisticated driver for virtually any single color 24V LED Strip Light. The universal dimmable driver allows for a full 0.1-100% dimming range, flicker-free output that is compatible with Forward Phase, Reverse Phase, Triac, MLV, ELV, and 0-10V dimmers and the full protective IP66 housing allows for dry (indoors), damp and wet locations (outdoor). Ideal for schools, commercial buildings, residential, signage, retail and more, this driver is your all-in-one contractor grade LED Strip power supply that works with most brands of LED wall dimmers. With built-in safety features like short circuit protection, overload, no-load, and over temperature control, the fan-less design means a quiet, flicker-free operation. Works with all 24V Pixel-Free LED and Wavelux LED Products, among most other LED Strip lights. A high power-factor (up to 0.95), and a high efficiency (up to 90%), this Class P LED Driver is recommended for a load from 10-90% of the LED strips' listed power consumption.

NOTE: This driver uses a single output (24V), system so the max power draw from should be 300W (12.5A) per LED Strip. Do not combine multiple output channels to increase power through a single LED Strip.

SPECIFICATIONS

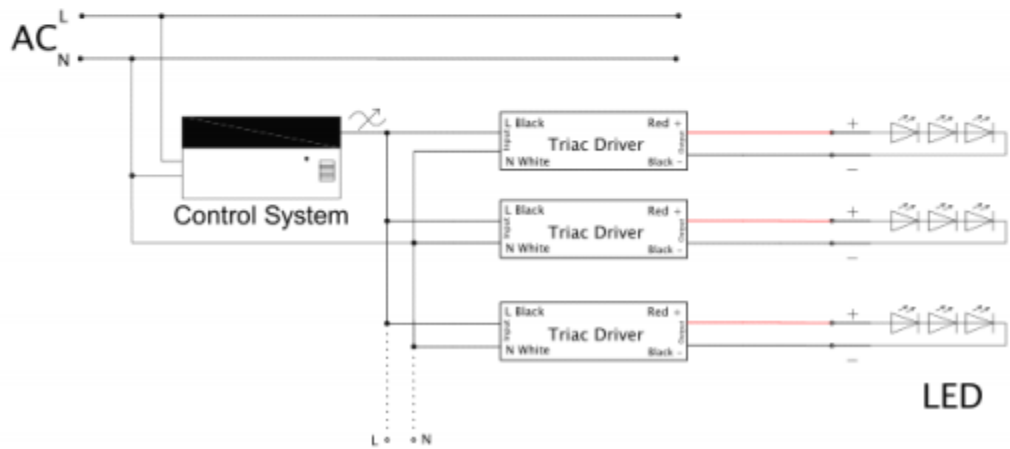
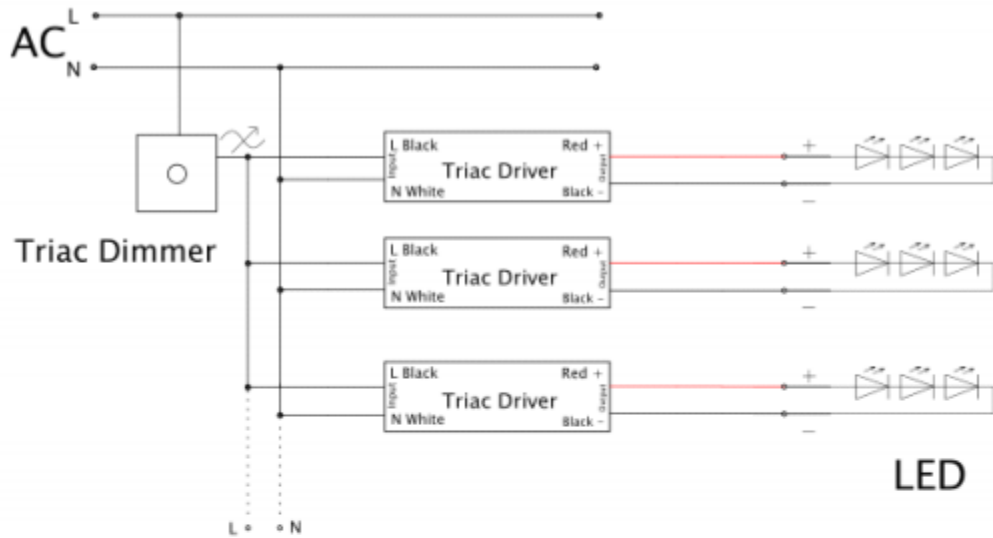
Model	KVG-24300-DW
Input voltage	100-277V AC
Frequency	50-60 Hz
Output voltage	24V
Output current	12.5A
Dimming way	Triac/Phase/0-10V/1-10V/PWM
Rated power	300W
Dimensions (L*W*D)	276*78*48mm
N.W./CTN/ G.W.	1.7kg

WIRING DIAGRAM:

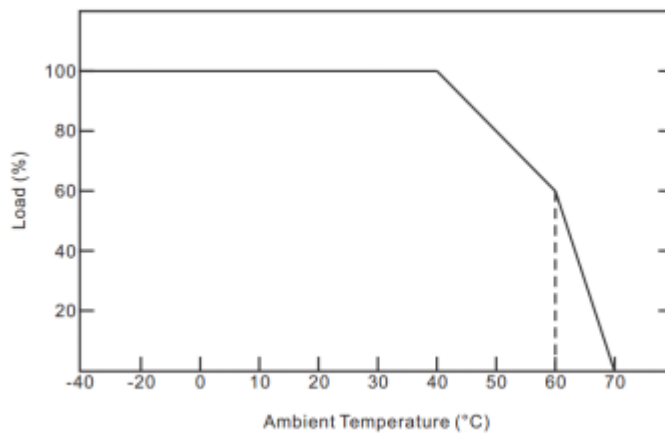


Input Wire: 18AWG Black and White to be connected to AC Line (L) and Neutral (N), Green Wire connect to Ground
Output Wire: 16AWG Red to LED Positive Side (+), Black to LED Negative side (-). Purple (+) and Gray (-) Wires to 0-10V Dimming

OTHER WIRING DIAGRAM



DERATING CURVE





DIMMING OPERATION

The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of AC phase line (L) by connecting a phase/triac dimmer.

Typically this driver is paired with compatible with Forward phase, leading edge, Magnetic Low Voltage (MLV), Triac, trailing edge, Reverse Phase, Electronic Low Voltage (ELV) Dimmers, see connecting diagram on dimmer switch for proper wiring.

0-10V Dim: Use the Purple (+) and Gray (-) Wires to hook the dimming control of your 0-10V Dimmer

PRO-TIP: Match dimmers with at least 1.5x the output power of the driver. For instance, use dimmer switch with compatibility of 400W or more for best results.

FAQ

Is this capable of being used both indoor and outdoors?

Yes, the rating is IP66 and rated for both indoor and outdoor applications. Be sure to use proper ventilation when using to avoid the power supply overheating.

Will this power supply be suitable for contractor use?

YES! This driver should be the go-to driver in any electrical contractor's bag. It's compatible with most LEDs and wall dimmer switches, has all the certifications most contractors will require (UL, cUL, FCC, RoHS, Class 2, Type HL, etc).

Can I combine multiple outputs to increase the power per LED strip?

No. We do not recommend tying multiple outputs together to power larger loads. Instead, it is preferred to break up the load into smaller segments that will be under the max power threshold (300W for 24V LED Strips).

Why is this different than a more common power supply?

This specifically designed LED Strip Universal dimming driver can control a wide range of LED strips, through many off-the-shelf dimmers found at local hardware stores. Most LED power supplies are either not dimmable without extra hardware, or dimmable only with specific dimmers. This power supply gives you far more control and wider dimming range than nearly any other power supply on the market.

PRECAUTIONS

- In order to guarantee sufficient voltage is available to drive LED Strip in all conditions, make sure power supply is rated for 20% more than LED Strip consumption.
- For best results, make sure load (LED Strip power consumption) is within 10-80% of this driver
- Do not touch AC Power Supply when powered on
- Polarity Matters! Make sure to wire positive and negative poles of wires during installation to avoid damage to the strip
- Make sure driver is installed with adequate ventilation around it to allow for heat dissipation
- Product is not intended to be submerged and used in swimming pools or hot tubs
- Professional installation recommended