

SPEC SHEET: AURALUX DMX RGBW ALL-IN-ONE LED DRIVER 120W

The Auralux DMX RGBW All-in-One LED Power Supply/Driver is a sophisticated driver for virtually any single color, RGB or RGBW LED Strip Light. The universal dimmable driver allows for a full 0-100% dimming range, flicker-free output that is compatible with NFC devices to address DMX512 channels and minor voltage adjustments wirelessly. This driver has a universal input of 100-277V AC with a built-in active Power Factor of \geq 0.95, and efficiency up to 89%. The added safety protections like short circuit, overload, over temperature and a fan-free cooling waterproof (IP66) design means you can use this safety in many environments; including dry (indoors), damp and wet locations (outdoors). Ideal for commercial buildings, artistic installations, stage performances, residential, signage, retail and more, this driver is your all-in-one contractor grade LED Strip power supply and driver with an ultra-high frequency, flicker-free performance up to \geq 4KHz (adjustable via NFC) frequency. Works with all Pixel-Free LED and Wavelux LED Products, among most other LED Strip lights.



Model		KVX-12120-4C-J	KVX-24120-4C-J	KVX-36120-4C-J	KVX-48120-4C-J			
Output	DC Voltage	12V	24V	36V	48V			
	Slightly adjustable DC Voltage	12-13.5V	24-26V	36-38V	48-50V			
	Rated Current	4x2.5A	4x1.25A	4x0.833A	4x0.625A			
	Rated Power	120W (4x30W)						
	Voltage Tolerance	±0.5V						
	Voltage Regulation	±0.5%						
	Load Regulation	±2%	±1%	±1%	±1%			
Input	Voltage Range	100-277VAC						
	Frequency Range	47-63Hz						
	Power Factor (Typ.) @ full load	PF≥0.95@230VAC						
	THD (Typ.) @ full load	≤15%						
	Efficiency (Typ.) @ full load	88.5%@230VAC	89%@230VAC	89%@230VAC	89%@230VAC			
	AC Current (Max.)	1.5A	1.5A	1.5A	1.5A			
	Inrush Current (Typ.)	48.5A,164us@50%lpeak						
	Leakage current	<0.50mA						
Protection	Short Circuit	Hiccup mode ,recovers automatically after fault condition is removed						
	Over	≤120% Hiccup mode ,recovers automatically after fault condition is removed						
	Over temperature	100°C±10°C shut down o/p voltage, automatically recover after cooling.						
Environ- ment	Working TEMP.	-40~+70℃ (see below derating curve)						
	Working Humidity	20~90%RH, non-condensing						
	Storage TEMP. Humidity	-40~+80℃,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 standards	andards EN61347-1 EN61347-2-13 (EU) & UL8750 (US)						
Safety	Withstand voltage	I/P-O/P:3.75KVAC						
&	Isolation resistance	I/P-O/P:100MΩ/500VDC/25°C/70%RH						
EMC	EMC EMISSION	EN55015 EN61000-3-2 ,3-3 (EU) & FCC Part 15 B (US) (≥60% loading)						
	EMC Immunity	EN61000-4-2,3,4,5,6,11, EN61547						

COMPANY PROJECT AREA APPROVED BY DATE

V0.3 10.1.22



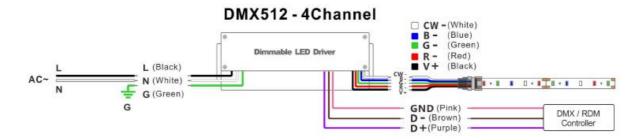
DESIGN

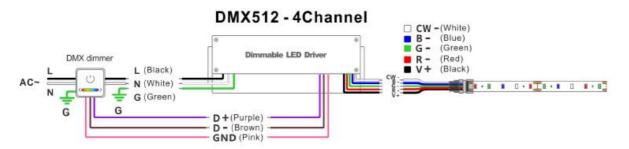
SIZE: 230 x 78 x 25mm



Power Supply features fan-less finned weather resistant IP66 casing for indoor/outdoor grade. Comes with mounting holes for easy installation which can be mounted horizontally or vertically.

WIRING DIAGRAM





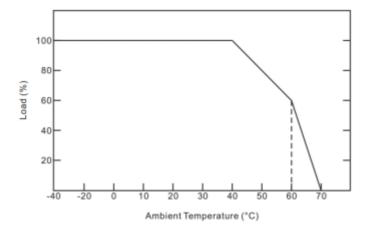
Input Wire: 18AWG Black and White to be connected to AC Line (L) and Neutral (N), Green Wire connect to Ground Output Wire: 18AWG BLACK to LED Positive Side (+), Red, Green, Blue and White to LED Negative side (-). If using single color LEDs, this driver takes up 4 channels from the starting DMX channel. The colored wires are as follows:

If starting DMX Channel is 1: RED: DMX CH 1

RED: DMX CH 1 GREEN: DMX CH2 BLUE: DMX CH3 WHITE: DMX CH4

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DERATING CURVE



ADDRESS SETTING

To set DMX Channels, or to adjust voltage, download the FREE EasyNFC App via <u>Android</u> or <u>iOS</u>. Also works with RDM or NFC Handheld Devices.

OUTPUT VOLTAGE

The driver output voltage can be read and written by EasyNFC or NFC device by placing device close (within 10cm) of driver. Voltage level is adjustable to accommodate for voltage drop across longer spans. Please use table below to select appropriate voltage range. Default voltage level is 1.

Rated Vol.	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10
12V	12.00V	12.16V	12.32V	12.48V	12.64V	12.80V	12.96V	13.12V	13.28V	13.50V
24V	24.00V	24.22V	24.44V	24.66V	24.88V	25.1V	25.32V	25.54V	25.66V	26.00V
36V	36.00V	36.22V	36.44V	36.66V	36.88V	37.10V	37.32V	37.54V	37.66V	38.00V
48V	48.00V	48.44V	48.44V	48.66V	48.88V	49.10V	49.32V	49.54V	49.66V	50.0V

FAQ

Is this capable of being used both indoor and outdoors?

Yes, the rating is IP66 and rated for both indoor and outdoor applications. If encasing into external boxes or structures, make 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, CE, FCC, RoHS, etc).

WARRANTY

This product comes with a 5-YR manufacturer warranty.

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

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