GEN LED acolyte® Architectural Lighting Solutions

Date | Project

Notes

150W 4 CHANNEL DIMMABLE DALI DRIVER

The 150W 4 Channel Dimmable DALI Driver is a high efficiency four-channel 24V constant voltage driver for use with color changing LEDs like our RGBW and RGBA products.

- Slender, lightweight polycarbonate housing
- Removable endcap allows length adjustment
- Dimmable with DMX/RDM, DALI-2 DT6/DT8, Push
- Flicker-free dimming from 0-100%, down to 0.1%
- Innovative thermal technology protects power life
- Overheating, over voltage, overload, short circuit protections with automatic recovery
- Suitable for indoor use
- 5-year warranty

Applications:

Commercial	Hospitality	Residential
Entertainment	Museums	Retail
Healthcare	Public Spaces	

RoHS SELV RDM DMX CB

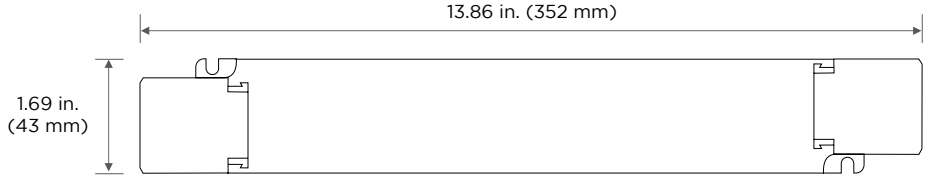
ORDERING GUIDE

Category	Voltage	Wattage	Dimming Option	Number of Channels
DRV	24	150	DALI	4CH
DRV - Driver	**24** - 24 V	**150** - 150W	**DALI** - Dali Dimmable	**4CH** - 4 channels

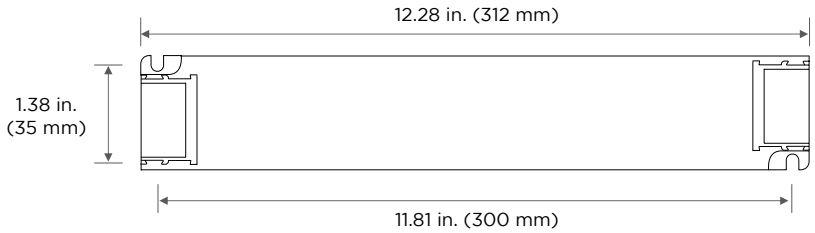
NOTE: When ordering, please specify constant current LED fixture use (wall washer, RibbonLyte, etc.).

DIMENSIONS

Length: 13.86 in. (352 mm)
Width: 1.69 in. (43 mm)
Height: 1.18 in. (30 mm)



WITHOUT ENDCAPS



SPECIFICATIONS

	150W 4 CHANNEL DIMMABLE DALI DRIVER
	
Output Voltage (DC)	24V DC
Output Wattage	150 W
Number of Channels	4
Input Rated Voltage	220-240V AC
Input DC Voltage Range	200-180V DC
Input AC Voltage Range	198-264V AC
Max Power	150 W
Rated Voltage	24V DC
Output Voltage Range	24Vdc ± 0.5Vdc
Ripple & Noise	Switch ripple ≤ 150mV, noise ≤ 300mV
Power Factor	PF > 0.98/230V AC (at full load)
Input Current	≤ 0.75A/230V AC
Output Current	Max. 6.25A (1.56Ax4CH)
Input Frequency	50/60 Hz
PWM Frequency (Output)	3600 Hz
Efficiency (typical)	93%
Safety Standards	Europe: EMEC, BS EN IEC 55015:2019/A11:2020, BS EN 61547:2009, BS EN IEC 61000-3-2:2019, BS EN 61000-3-3:2013/A1:2019 EU: CE, EN61347-1, EN61347-2-13, EN62384, EN61547
IP Rating	IP20
Dimming Range	0-100%, down to 0.1%
Dimming Interface	DMX12/RDM, DALI-2 DT6/DT8, Push
Dimensions (L x W x H)	13.86 x 1.69 x 1.18 in. (352 x 43 x 30 mm)
Weight (gross weight)	0.95 lb (430 g)
Lifetime	50,000 hours
Warranty	5 years

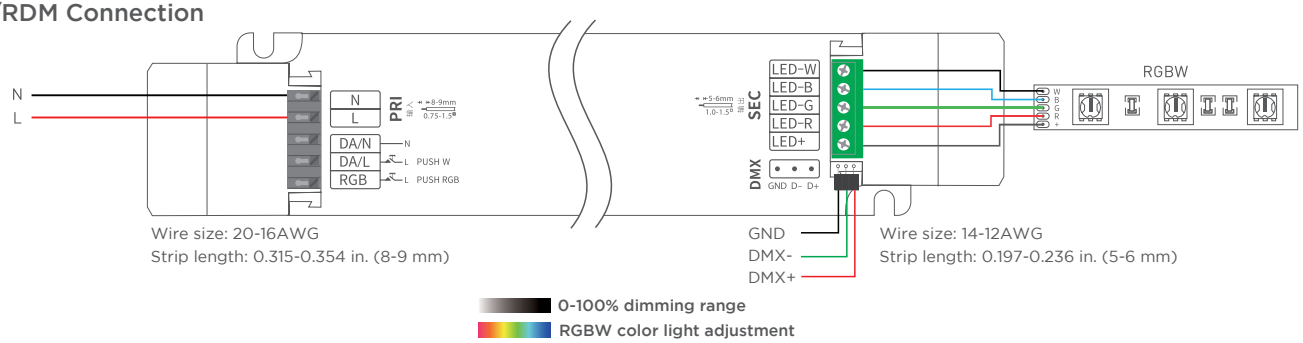
MAX LENGTH BETWEEN DRIVER & RIBBONLYTE AT FULL LOAD

Wire Gauge	Feet	Meters
24 AWG / 0.20 mm²	3.98	1.212
22 AWG / 0.33 mm²	6.73	2.051
20 AWG / 0.52 mm²	10.29	3.137
18 AWG / 0.82 mm²	16.66	5.079
16 AWG / 1.31 mm²	26.91	8.205
14 AWG / 2.08 mm²	42.67	13.008
12 AWG / 3.31 mm²	67.28	20.513
10 AWG / 5.26 mm²	106.02	32.323
8 AWG / 8.37 mm²	166.60	50.794

NOTE: Calculations include a standard 10% buffer

WIRING DIAGRAMS

DMX/RDM Connection

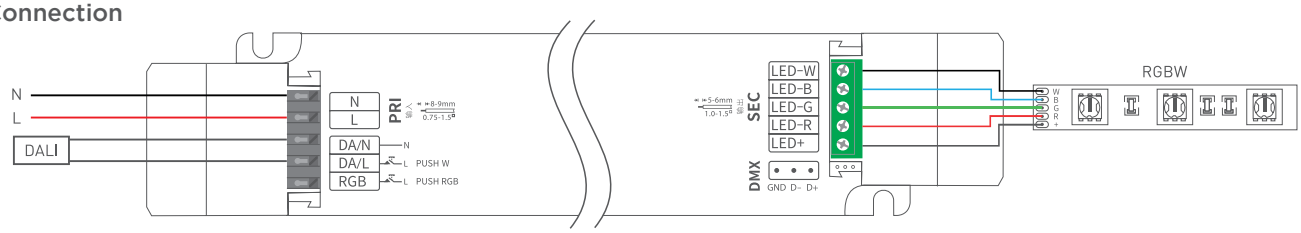


Wire size: 20-16AWG
Strip length: 0.315-0.354 in. (8-9 mm)

Wire size: 14-12AWG
Strip length: 0.197-0.236 in. (5-6 mm)

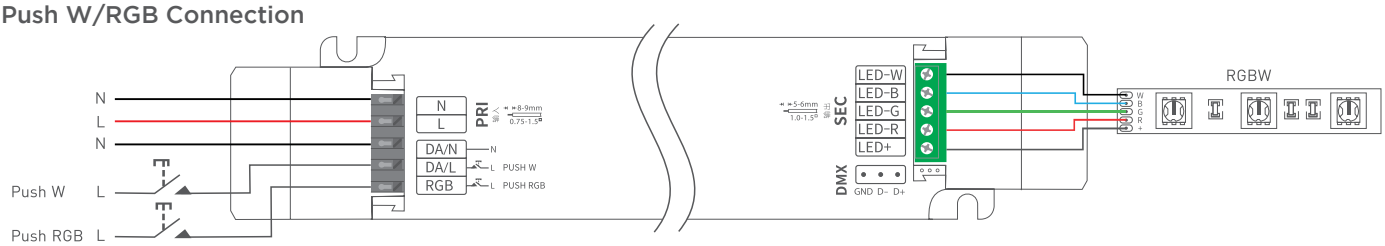
0-100% dimming range
RGBW color light adjustment

DALI Connection



0-100% dimming range
RGBW color light adjustment

Push W/RGB Connection



0-100% dimming range
RGBW color light adjustment

NOTE: Push W/RGB is invalid under DC voltage input.
Dimming interface priority: DMX12/RGM first, DALI-2 DT6/DT8, Push W/RGB next.

Push W/RGB

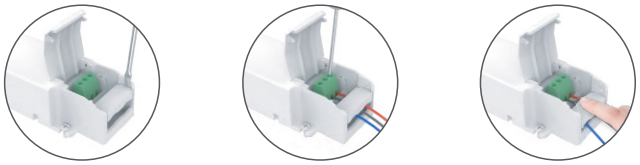
Push W (white):
By pressing the button, the brightness of W and RGB light can be adjusted. You can adjust either W brightness or RGB brightness only. Toggle between W and RGB brightness adjustment by a double press on the button.

W brightness adjustment: Short press to turn on/off, long press to adjust W brightness (RGB brightness and color remain unchanged at this moment).
RGB brightness adjustment: Short press to turn on/off, long press to adjust RGB brightness (W brightness remains unchanged at this moment).

Push RGB (red, green, blue):
Short press to adjust to the full brightness of RGB color and RGB light, long press to change RGB color.

INSTALLATION

Tension Plate

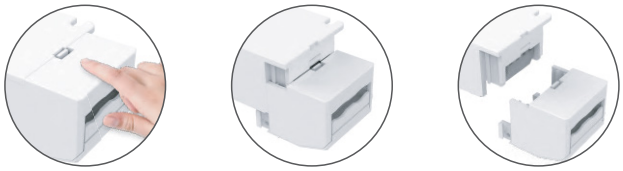


1. Pry up the protecting housing in the side plate position with a tool.

2. Connect to electrical wires with a screwdriver as wiring diagram shows.

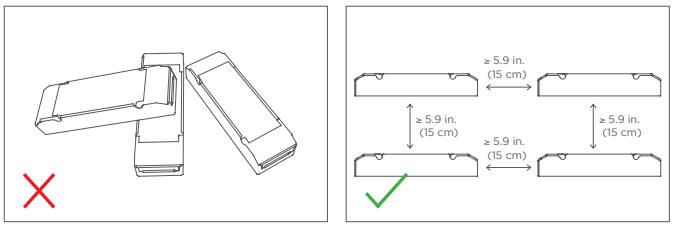
3. Press down the tension plate to fix the the electrical wires, then close the protective housing.

Remove the Protective Housing

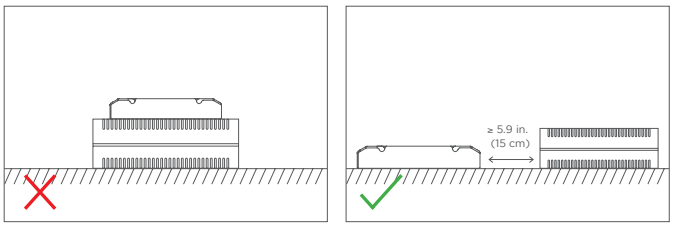


Pull the housing left and right from the bottom to remove it.

Precautions



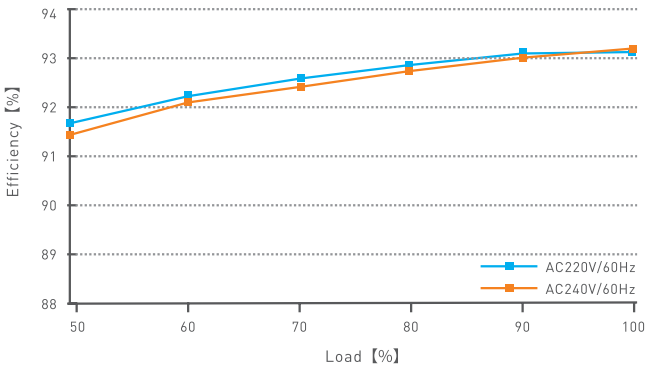
Please do not stack the products. The distance between two products should be ≥ 5.9 in. (15 cm) so as not to affect heat dissipation and the lifespan of the products.



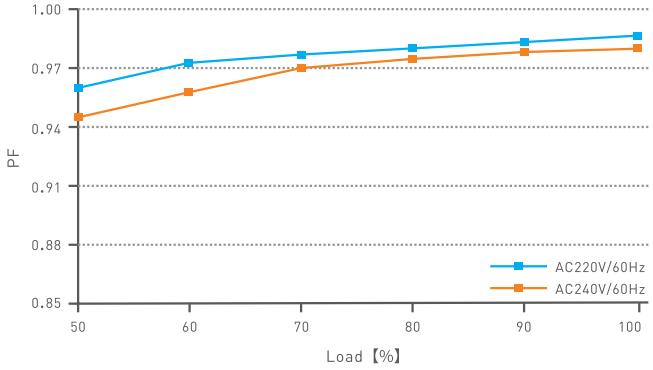
Please do not place the products on LED drivers. The distance between the product and the driver should be ≥ 5.9 in. (15 cm) so as not to affect heat dissipation and shorten the lifespan of the products.

PERFORMANCE

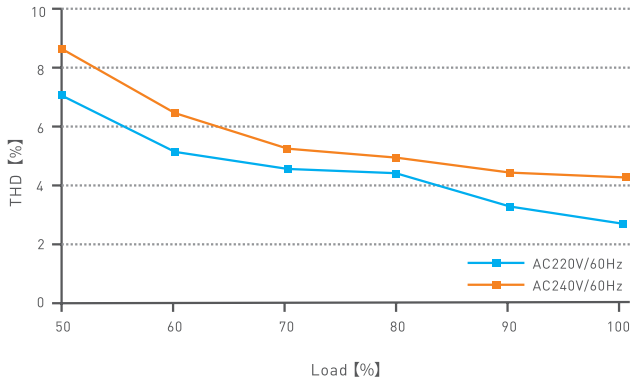
Efficiency vs Load



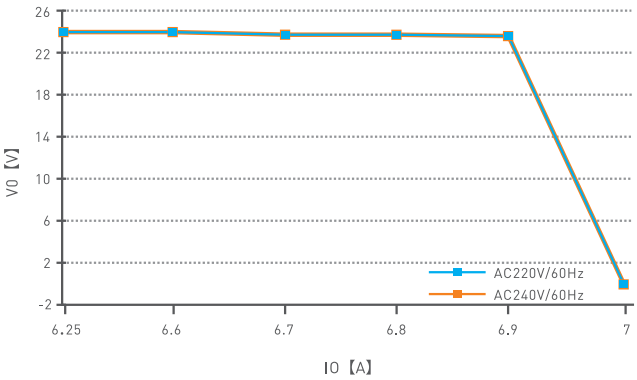
Power Factor Characteristic



THD vs Load

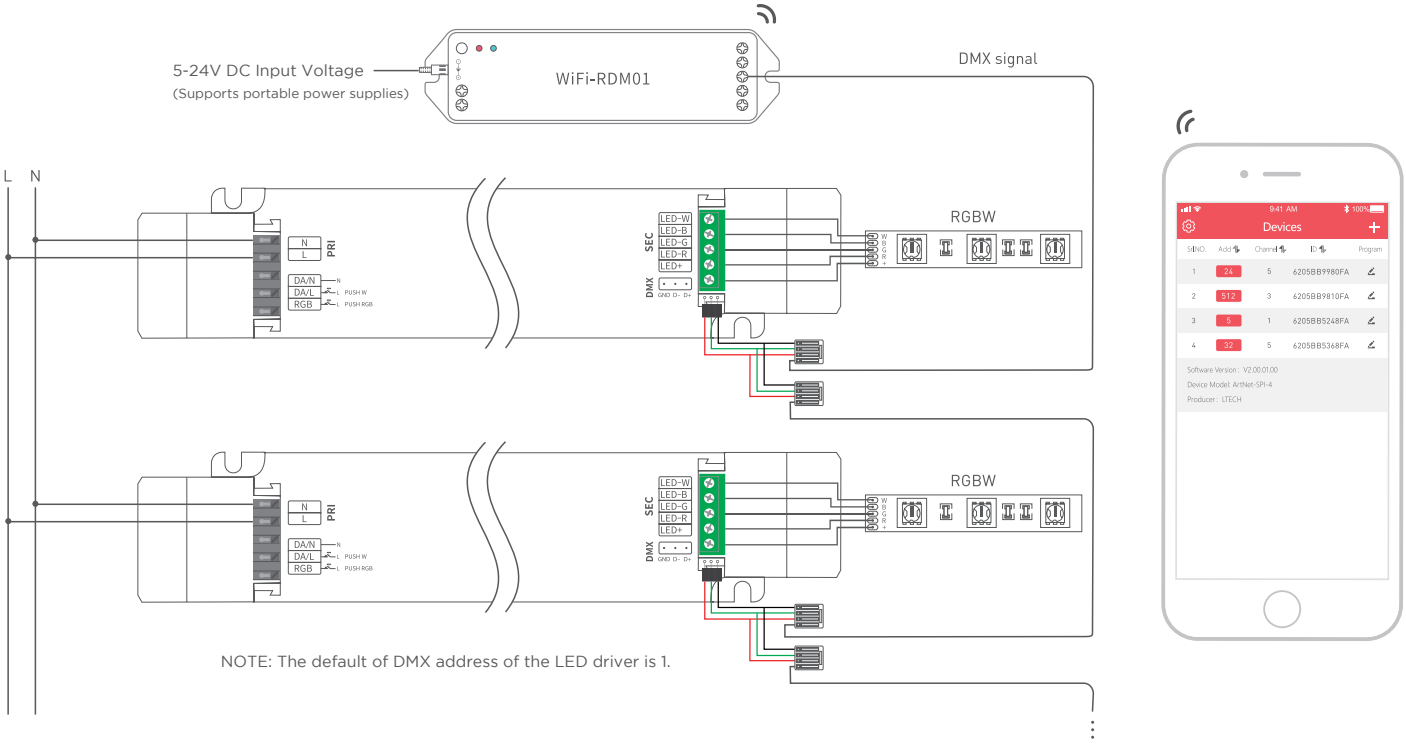


Over Load Diagram



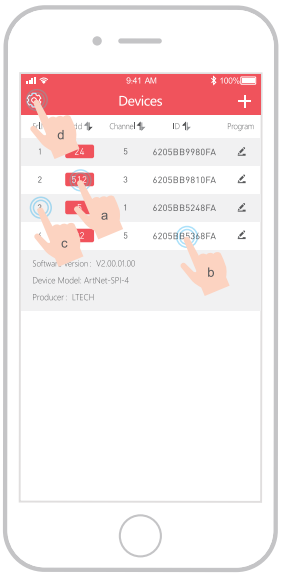
DMX ADDRESS SETTINGS

The DMX driver can work with a DMX address programmer that follows the standard RDM protocol.
It is recommended to use LTECH RDM Programmer (Model: WiFi-RDM01), which allows remote browsing, parameter setting, checking output power and modifying the current value.

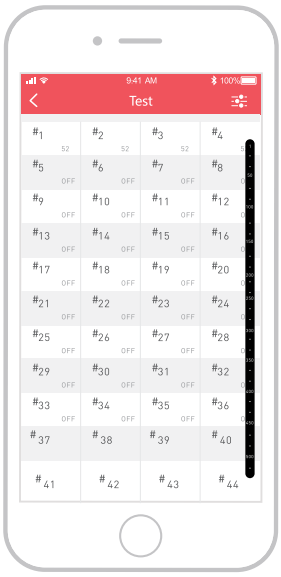


MOBILE APP INTERFACE FOR THE RDM PROGRAMMER

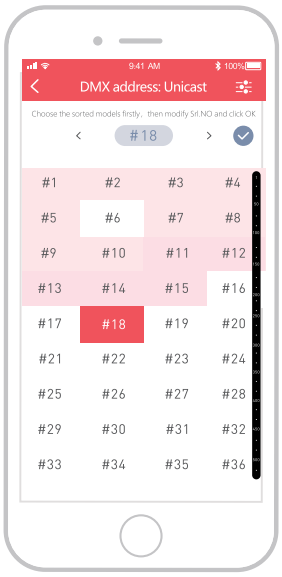
Download the App with your mobile phone and connect the RDM Programmer successfully, then you are allowed to set parameters through the APP.
Please refer to the WiFi-RDM01 manual for more details.
a. At the homepage, click “Add” of the device you are going to operate to edit the address, as shown below in the interface.
b. Click “ID” to get more details for devices.
c. Click “No” to issue an recognizing command.
d. Click “⚙” in the upper left corner to access the settings which allows you to test, edit DMX addresses, set WiFi for devices and upgrade firmware.



Home page



Test



DMX address setting

REV.23APR2024