

LA4

Waterproof 0/1-10V LED Controller



NFC CE RoHS IP67

The LA4 is a high-performance 0/1-10V signal LED constant-voltage controller with IP67 waterproof rating, specifically designed for precise control of LED lighting fixtures. Supporting standard 0/1-10V dimming signal input, it features 4 signal input channels and 4 PWM load output channels to effortlessly meet diverse control scenarios. With robust output performance—delivering up to 20A maximum output current and 960W maximum output power—it reliably drives various LED constant-voltage fixtures.

By connecting 0/1-10V dimmers to channels 1-4, it flexibly enables dimming, color temperature adjustment, and full-color RGB/RGBW control for diverse lighting requirements. For user convenience, it supports both quick on/off, dimming, and color adjustment via button-operated digital displays, as well as advanced customization through the NFC Lighting app. This app allows configuration of dimming modes, fade times, dimming curves, PWM frequencies, and dimming ranges, balancing intuitive operation with deep customization.

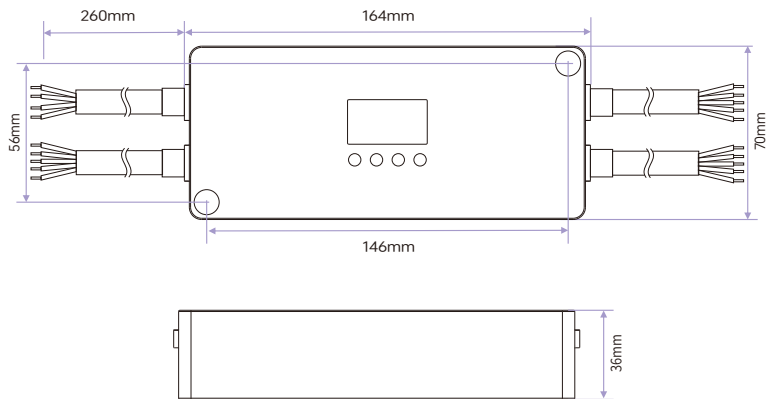
Boasting IP67 waterproof performance and stable operation, the LA4 is suitable for diverse indoor and outdoor environments. It reliably functions even in humid conditions, delivering an efficient and flexible control solution for lighting systems.

Technical Specifications

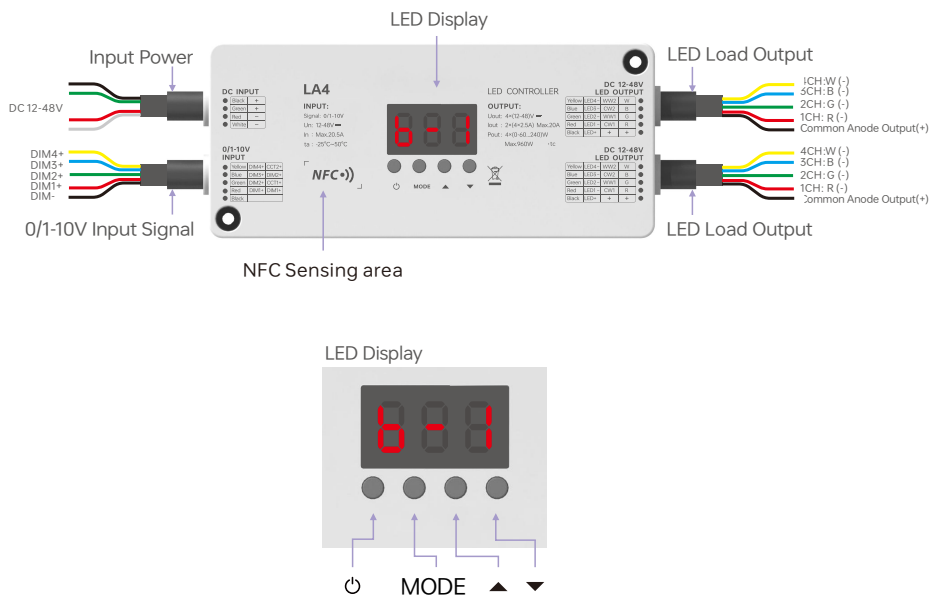
LA4

Input signal:	0/1-10V	Operating temperature:	-25°C-50°C
Input Voltage:	12-48V $\equiv$	Product Weight:	670g
Input current:	Max. 20.5A	Product dimensions:	L164×W70×H36mm
Output Voltage:	4×(12-48)V $\equiv$	Package dimensions:	L230×W95×H47mm
Output Current:	2×(4CH×2.5A) Max. 20A	Waterproof rating:	IP67
Output Power:	4CH×(0-60...240)W Max. 960W	Protect:	Short-circuit, over-temperature, and over-current protection with automatic reset capability

Product Dimensions



Parts Diagram



Key Operation

(1) Power Key: Press once briefly to turn the light on or off.

(2) Switch Key: Performs different operations based on the current device's dimming interface.

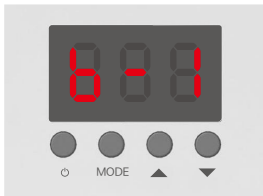
- W: Remains in brightness adjustment mode; no action occurs with a short press.
- CT: Brightness (default)/Color Temperature, short press to toggle;

After 2 minutes of inactivity, it will automatically return to the default state.

(3) Decrease/Increase Button: When the light is on, a short press cycles through settings one at a time. A long press continuously adjusts the current mode. No cycling function.

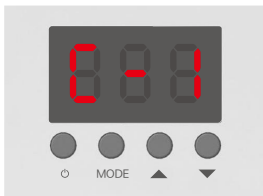
Digital Display Interface Diagram

Brightness Adjustment



- b-1:0.1% Brightness
- b-2:5% Brightness
- b-3:10% Brightness
- b-4:25% Brightness
- b-5:50% Brightness
- b-6:75% Brightness
- b-7:100% Brightness(Default)
- b-P:When in long-press adjustment mode or other adjustment methods, the display shows b-P.

Color Temperature Adjustment



- C-1:2700K
- C-2:3000K
- C-3:4000K(Default)
- C-4:5000K
- C-5:6000K
- C-6:6500K
- C-P:When in long-press adjustment mode or other adjustment methods, the display shows C-P.

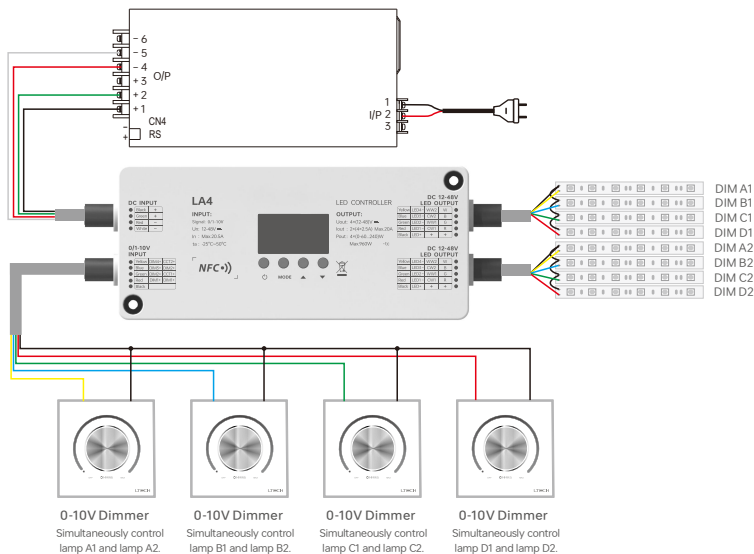
Load Parameters

At different PWM frequencies and different voltages, the max. load current and the total power of each channel vary. Before you do the wiring, please strictly follow the load parameters in the table below to operate.

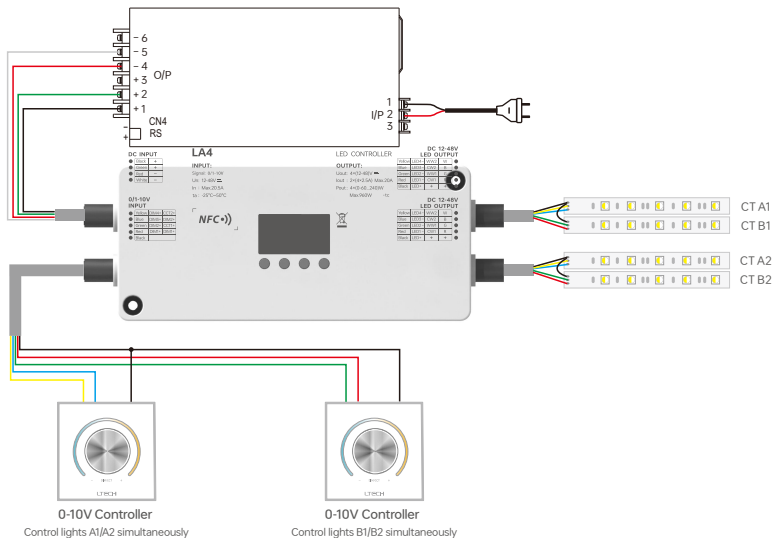
Max. current/ power Voltage	Frequency 300Hz (F=0)	600Hz (F=1)	1.2kHz (F=2)	1.5kHz (F=3)	1.8kHz (F=4)	2.4kHz (F=5)
12V	5A×4CH/240W	5A×4CH/240W	5A×4CH/240W	5A×4CH/240W	5A×4CH/240W	5A×4CH/240W
24V	5A×4CH/480W	5A×4CH/480W	5A×4CH/480W	5A×4CH/480W	5A×4CH/480W	5A×4CH/480W
36V	5A×4CH/720W	5A×4CH/720W	5A×4CH/720W	5A×4CH/720W	5A×4CH/720W	5A×4CH/720W
48V	5A×4CH/960W	5A×4CH/960W	5A×4CH/960W	5A×4CH/960W	5A×4CH/960W	5A×4CH/960W
Max. current/ power Voltage	Frequency 3.6kHz (F=6)	7.2kHz (F=7)	10.8kHz (F=8)	14.4kHz (F=9)	18kHz (F=A)	/
12V	5A×4CH/240W	5A×4CH/240W	4A×4CH/192W	3A×4CH/144W	2.5A×4CH/120W	
24V	5A×4CH/480W	5A×4CH/480W	4A×4CH/384W	3A×4CH/288W	2.5A×4CH/240W	
36V	5A×4CH/720W	5A×4CH/720W	3A×4CH/432W	3A×4CH/432W	2A×4CH/288W	
48V	5A×4CH/960W	4A×4CH/768W	3A×4CH/576W	3A×4CH/576W	2A×4CH/384W	

Connection Diagram

- 1.Connect 8 dimmable lights simultaneously, with each of the 4 dimmers controlling 2 dimmable lights.
Set the dimming mode to “Dimming” in the NFC Lighting app.

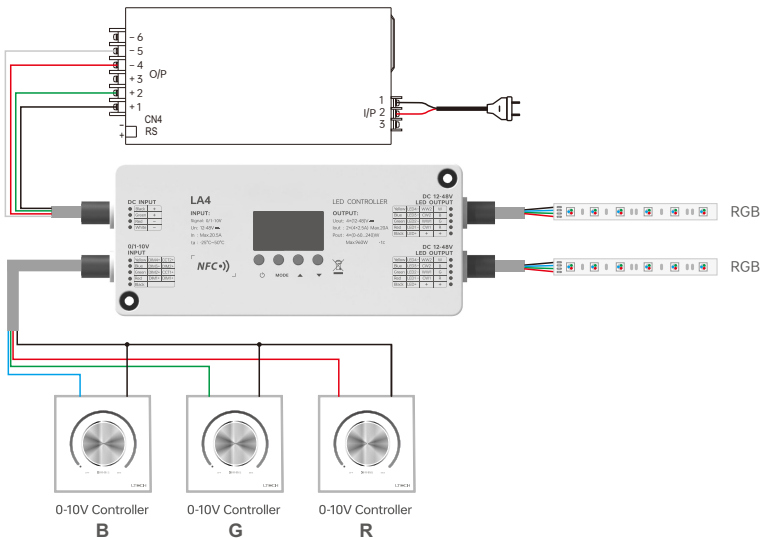


- 2.Connect four color temperature lights simultaneously, with two controllers each controlling two color temperature lights.
Set the dimming mode to “CT” in the NFC Lighting app.



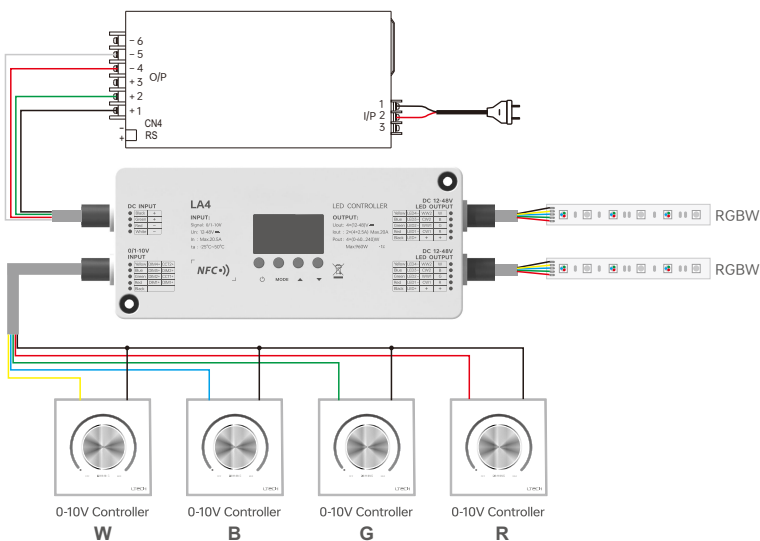
3. Simultaneously connect two RGB lights, with three controllers each managing the R, G, and B channels for each light.

Set the dimming mode to “Dimming” in the NFC Lighting app.



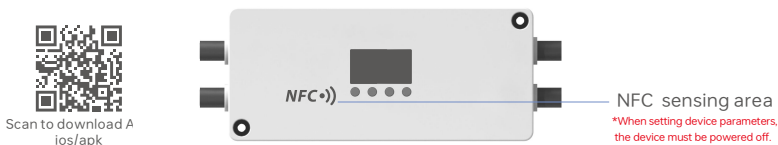
4. Connect two RGBW lights simultaneously, with each of the four controllers managing the R, G, B, and W channels for each light.

Set the dimming mode to “Dimming” in the NFC Lighting app.



Use the NFC Lighting APP

Scan the QR code below with your mobile phone and follow the prompts to complete the APP installation (According to performance requirements, you need to use a NFC-capable Android phone, or an iPhone 8 and later that are compatible with iOS 13 or higher).



1. Read the LED driver

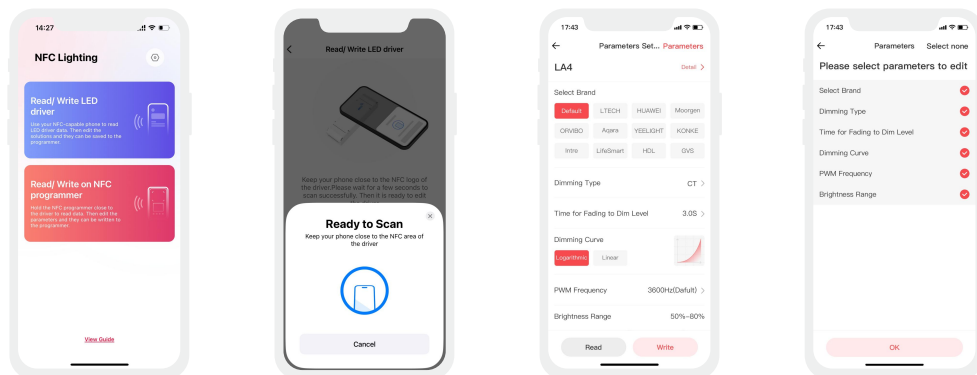
On the APP home page, click **[Read/Write LED driver]** , then keep the programmer's sensing area close to the NFC sensing area to read the driver parameters.

2. Edit parameters

Click **[Parameters]** to edit parameters such as Select Brand, Dimming Type, Time for Fading to Dim Level, Dimming Curve, PWM Frequency, and Brightness Range.

3. Write to the drive

After completing the parameter settings, click **[Write]** in the upper right corner, and keep the programmer's sensing area close to the NFC sensing area, so the parameters can be written to the driver.



Transportation and Storage

1. Transportation

Products can be shipped via vehicles, boats and planes.

During transportation, products should be protected from rain and sun. Please avoid severe shock and vibration during the loading and unloading process.

2. Storage

The storage conditions should comply with the Class I Environmental Standards. The products that have been stored for more than six months are recommended to be re-inspected and can be used only after they have been qualified.

Warranty Agreement

- Warranty periods from the date of delivery: 5 years.
- Free repair or replacement services for quality problems are provided within warranty periods.

Warranty exclusions below:

Following conditions are not within the guarantee range of free repairing or replacement services:

- Beyond warranty periods.
 - Any artificial damage caused by high voltage, overload, or improper operations.
 - Products with severe physical damage.
 - Damage caused by natural disasters and force majeure.
 - Warranty labels and barcodes have been damaged.
 - No any contract signed by our company.
1. Repair or replacement provided is the only remedy for customers. Our company is not liable for any incidental or consequential damage unless it is within the law.
 2. Our company has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.

Attention

- Product installation and commissioning should be done by a qualified professional.
 - Our company products are and not lightningproof non-waterproof(special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure they are mounted in a water proof enclosure or in an area equipped with lightning protection devices.
 - Good heat dissipation will prolong the working life of products. Please ensure good ventilation.
 - Please check if the working voltage used complies with the parameter requirements of products.
 - Avoid installation near large metal surfaces, in thunder-prone areas, strong magnetic fields, or high-voltage zones.
 - The diameter of wire used must be able to load the light fixtures you connect and ensure the firm wiring.
 - Before you power on products, please make sure all the wiring is correct in case of incorrect connection that causes damage to light fixtures.
 - If a fault occurs, please do not attempt to fix products by yourself. If you have any question, please contact your suppliers.
- * This manual is subject to changes without further notice. Product functions depend on the goods. Please feel free to contact our official distributors if you have any question.