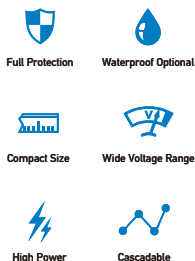


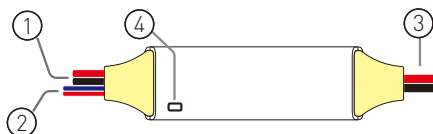
Single Color LED Amplifier

Model: R2032/R2032-S



Introduction

Thank you for purchasing our product. R-2032 series single color LED amplifier is designed to drive constant voltage LED products in voltage range of DC5V-24V. It regenerates PWM driving signal and can expand the LED driving range at synchronous mode.



Functions

1. Power Supply

The R2032 amplifier can work from DC 5V to 24V. The red power cable should be connected to power supply positive and black to negative. Please make sure the power supply voltage is same as the LED load and the LED input voltage, the power need to be capable for the load wattage.

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2. LED Input

Connect to the LED signal need to be amplified. The red cable should be connected to LED input positive and blue cable connect to LED input negative.

3. LED Output

Connect to LED load. The amplifier supports constant voltage LED products. The red cable on the output side should be connected to positive of LED load, and the black cable should be connected to negative of LED load. The red cable is also directly connected to the power supply positive inside the controller.

The controller unit has output overload and short circuit protection function, please check whether the output is short circuit or over loaded if the controller stop working.

4. Status Indicator

This is a multi color status indicator. It displays all working status of the amplifier. It indicates different events as following:

Blue: normal working.

Red flash: overload or output short circuit protected.

Yellow flash: overheat protected.

Installing

1. Wiring

Connect the power, LED input and LED output cable to power supply, LED input signal and LED loads. Please make sure the cable is correctly connected without short circuit before power on.

2. Voltage Range

This amplifier can work in DC5-24V range. But please make sure the input signal, power supply and LED load is at same voltage. The amplifier can not work with different voltage input and output, also wrong voltage may damage the LED output loads.

3. Waterproof

The waterproof version is designed with IP-68 standard and can be used under water for not exceed 30 meters depth. When installing under water, please make sure the cable connection is also waterproof.

4. Protection

This series amplifiers have full protection function for output short circuit, overload, and overheat. The indicator will flash red at overload or short circuit protection and flash yellow at over heat. Amplifier will automatically recover from protection when working status is good.

Please ensure the LED loads are in rated range, not shorted and the amplifier is in a good heat dissipation environment to avoid protection.

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■ Specification

Model	R2032	R2032-S
Working Voltage	5-24V	
Rated Output Current	15A	
Efficiency	>97%	
Input Voltage Swing	Power Voltage $\pm 3V$	
Rising Edge Time Shift	<3 μ S	
Falling Edge Time Shift	<2 μ S	
Protection Function	Wrong wiring / Overload / Short circuit / Over heat	
Working Temperature	-30°C to +60°C	
IP Grade	IP-63	IP-68