

EV2-X

2 Channel Constant Voltage Power Repeater

Power Repeater

Mechanical Structures and Installations



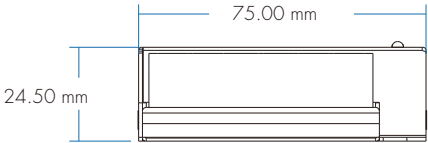
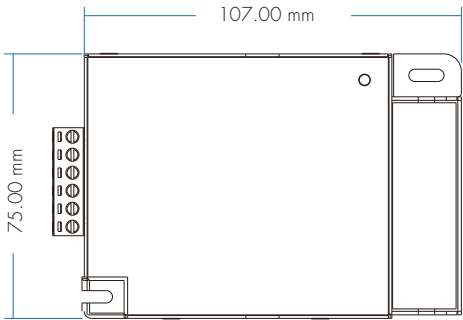
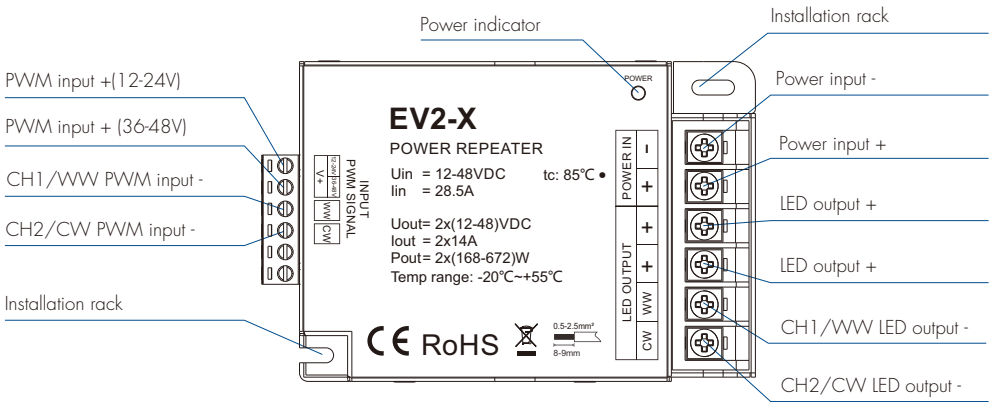
CE RoHS

Features

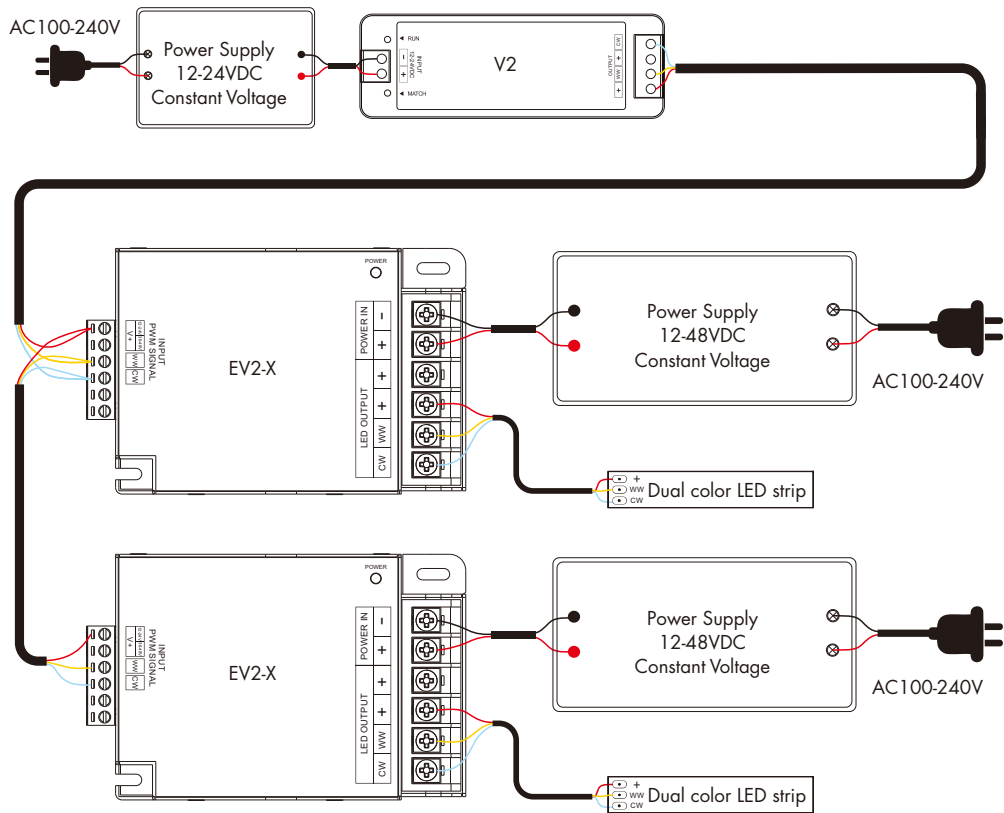
- 12-48V constant voltage power repeater.
- 2 channel, 14A per channel.
- To receive PWM signal control.
- Power repeater in series or in parallel to expand output unlimitedly.
- Apply to single color or color temperature constant voltage LED strip or module.

Technical Parameters

Input and Output		Warranty and Protection		Safety and EMC	
Input voltage	12-48VDC	Warranty	5 years	EMC standard	EN IEC 55015/ EN IEC 61547
Input current	28.5A	Protection	Reverse polarity, Overload, Overheat, Short circuit	Safety standard	EN 61347-1/-2 EN 62493
Input signal	PWM	Environment		Certification	CE RoHS
Output voltage	2 x (12-48)VDC	Operation temperature	Ta: -20 °C ~ +55 °C	Package	
Output current	2CH, 14A/CH	Case temperature (Max.)	Tc: +85 °C	Size	L120 x W90 x H30mm
Output power	2 x (168-672)W	IP rating	IP20	Gross weight	0.277kg
Output type	Constant voltage				



Wiring Diagram



- Note:
- 1. The PWM input can be either 12-24V or 36-48V. Please select the correct V+ terminal.
Incorrect wiring may result in failure to illuminate properly or component burn out.
 - 2. If the input PWM frequency is $\geq 8000\text{Hz}$, it is recommended to reduce the output current to below 70% for use to avoid the product overheating to activate overheat protection.
 - 3. Over-heat: When the temperature exceeds 105°C , the indicator light flashes rapidly.
As the temperature decreases, the power expander automatically resumes output, and the indicator light remains steady.
 - 4. Short circuit: When a circuit short occurs, the indicator light flashes slowly.
After 5s, once the short-circuit is resolved, the power expander automatically resumes output and the indicator light remains steady.
If 3 consecutive short circuits occur within 15s, power off and restart the device.

Malfunctions Analysis & Troubleshooting

Malfunctions	Causes	Troubleshooting
No light	1.No power. 2.Wrong connection or insecure.	1. Check the power. 2. Check the connection.
Wrong color	1. Wrong connection of WW/CW wires.	1. Reconnect WW/CW wires.
Uneven intensity between front and rear,with voltage drop	1. Output cable is too long. 2. Wire diameter is too small. 3. Overload beyond power supply capability. 4. Overload beyond controller capability.	1. Reduce cable or loop supply. 2. Change wider wire. 3. Replace higher power supply. 4. Add power repeater.

Safety & Warnings

- 1. The product shall be installed and serviced by a qualified person.
- 2. This product is non-waterproof. Please avoid the sun and rain.
- 3. Good heat dissipation will prolong the working life of the controller, Please ensure good ventilation.
- 4. Please check if the output voltage of any power supplies used comply with the working voltage of the product.
- 5. Ensure all wire connections and polarities are correct and secure before applying power to avoid any damages to the LED lights.
- 6. If a fault occurs please return the product to your supplier. Do not attempt to fix this product by yourself.