SV1

Triac

Constant Voltage Triac Dimmer

- Triac dimming, input AC100V-240V dimming signal.
- Apply to leading edge/trailing edge Triac dimmers and dimming system.
- One channel PWM constant voltage output, output current 15A max.
- PWM digital dimming, logarithmic dimming curve.
- Over current protection, short circuit protection, over temperature protection.
- Connect with external AC push switch to achieve on/off and dimming function.

CE RoHS

1 Channel / Constant voltage / Triac dimming / Logarithmic dimmingcurve / AC Push-Dim

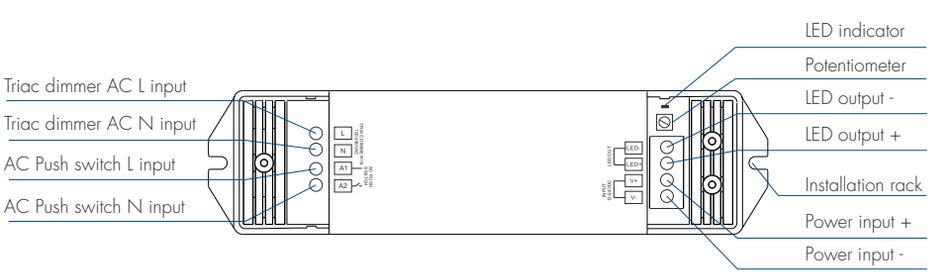
Technical Parameters

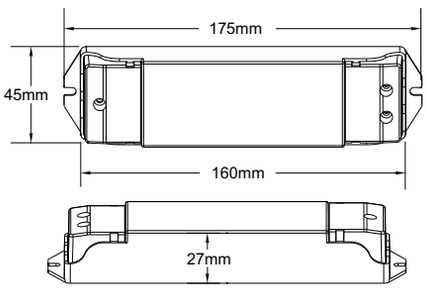
Input and Output	
Input voltage	12-24VDC
Input current	15A
Output voltage	12-24VDC
Output current	1CH,15A
Output power	180W/360W (12V/24V)
Output type	Constant voltage

Dimming data	
Input signal	100-240VAC + AC Push-Dim
Dimming range	0-100%
Dimming curve	Logarithmic
PWM Frequency	500Hz (default)
Environment	
Operation temperature	Ta: -30°C ~ +55°C
Case temperature (Max.)	Tc: +85°C
IP rating	IP20

Safety and EMC	
EMC standard	EN IEC 55015/EN IEC 61547
Safety standard	EN 61347-1/-2 EN 62493
Certification	CE RoHS
Warranty and Protection	
Warranty	5 years
Protection	Reverse polarity, Over current Short circuit,Over temperature

Mechanical Structures and Installations

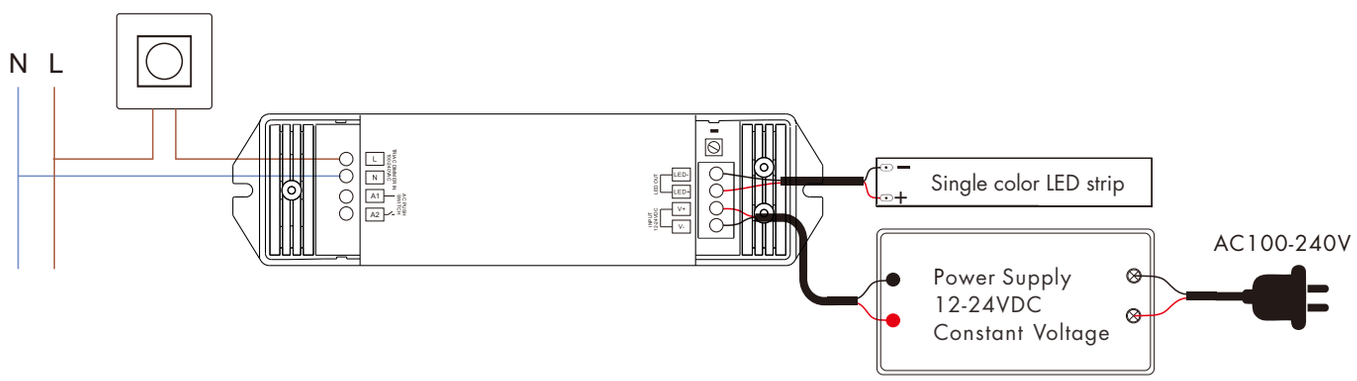




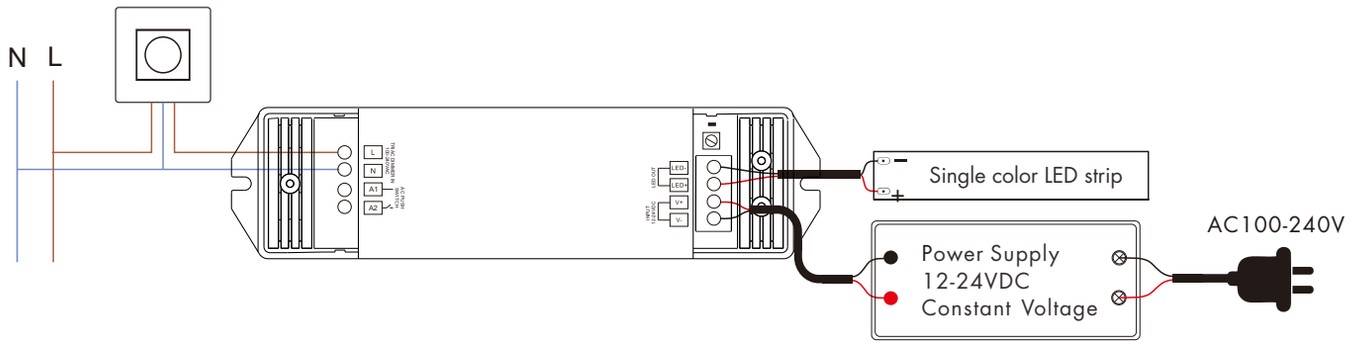
Wiring Diagram

Before connecting the Triac dimmer, look at the input of the dimmer for a neutral line.
Please select the appropriate wiring method according to the type of Triac dimmer.

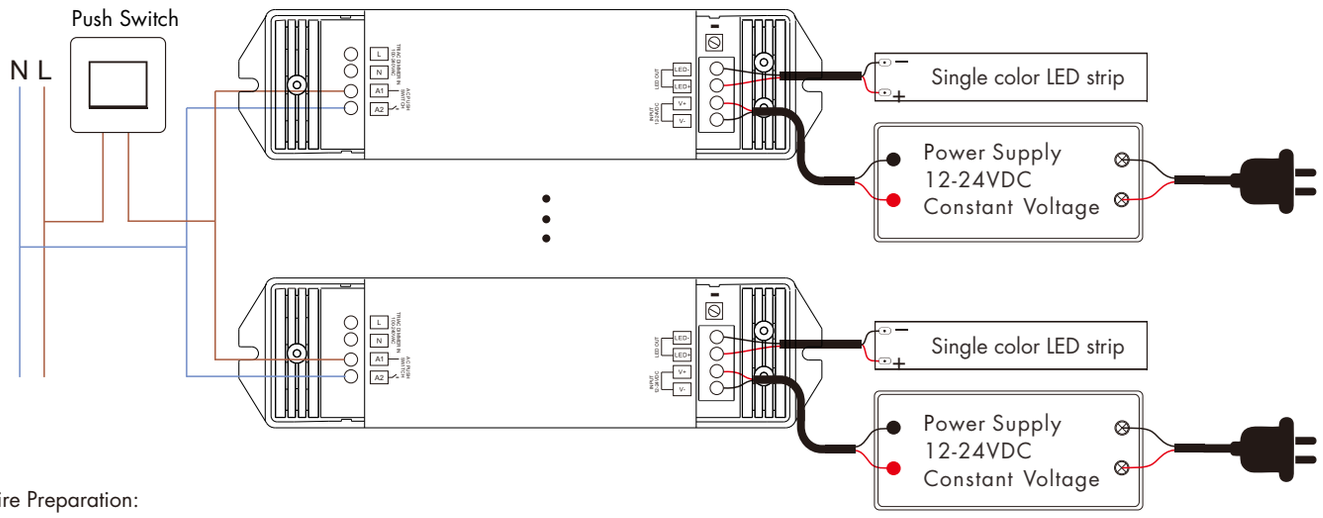
- Connect single wire Triac dimmer without neutral wire



- Connect Triac dimmer with neutral wire input

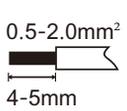


- Connect with AC push switch



Wire Preparation:

1. The wiring can be solid or stranded with a cross-sectional area of 0.5 to 2 mm².
   Conventional 1mm² can withstand 10A output current.
2. When wiring is installed, the terminals must be tightened.
   If they are not tightened, the contact point resistance will be too high and the terminals will easily burn due to heat when used at full load for a long time.

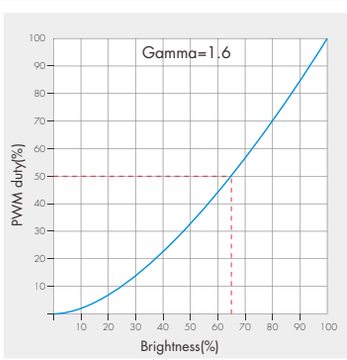


Note: The output power of a constant voltage power supply should be at least 1.2 times that of the output load (light strip), otherwise the full power output of the load can easily cause automatic flickering or shaking of the light.

AC Push-Dim Function

- **Short press:** Turn on or off light.
- **Long press (1-6s):**
  Press and hold to step-less dimming, With every other long press, the light level goes to the opposite direction.
- **Dimming memory:**
  Light returns to the previous dimming level when switched off and on again, even at power failure.
- **Synchronization:**
  If more than one controller are connected to the same push switch, do a long press for more than 10s, then the system is synchronized and all lights in the group dim up to 100%.
  This means there is no need for any additional synchrony wire in larger installations.
  We recommend the number of controllers connected to a push switch does not exceed 25 pieces,
  The maximum length of the wires from push to controller should be no more than 20 meters.

Dimming curve



Triac Dimming Input

- AC100-240V dimming signal input can get 0%-100% brightness output, and the brightness is proportional to the input dimming signal.
  If the brightness can not go to 0% or 100%, please check the input voltage whether can get to the lowest or highest voltage.
- While connected with a Triac dimmer, such as Lutron, Clipsal, Dynalite dimmer, different Triac dimmers from different suppliers may have different minimum dimming levels which the driver can not be dimmed below.
  To dim to 1%, please make sure the dimmer supports 1% minimum dimming level.
- The product adopt analog method detect dimming signal input, adjust brightness consistency between different Triac dimmer through potentiometer.
- The Triac dimmer or Push switch can be connected at the same time, which makes the product more user-friendly and more options to fit for some extra-ordinary demands.
- If the product be used with the Push-Dim interface prior to using the Triac interface, the Triac dimming signal should change over 10% to return Triac control.

Installation Precautions

1. The products shall not be stacked, the distance should be ≥ 20cm, so as not to affect lifespan of the products due to poor heat dissipation.
2. The product shall not be installed close to the switching power supply with an interval of ≥ 20cm to avoid radiation interference of the switching power supply.