Triac Constant Voltage LED Driver

Model No.: TE-150-12 / TE-150-24

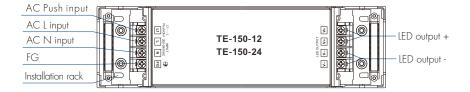




Features

- Dimming interface: Triac/ELV, AC Push-Dim
- Apply to leading edge/trailing edge Triac dimmers and dimming system
- PWM digital dimming, no alter LED color rending index
- 1 channel constant voltage output, Max. total output power 150W
- Over-load / Short circuit protection, recover automatically
- Suitable for indoor LED lighting application
- 3 Year, 30,000hr warranty

Mechanical Structures and Installations







Technical Parameters

Model		TE-150-12	TE-150-24
Output	Output Voltage	12VDC (±0.5V)	24VDC (±0.5V)
	Output Current	Max.12.5A	Max. 6.25A
	Output Power	0~150W 150W Max.	
	Dimming Range	0~100%	
	Ripple & Noise	<=220mV/230VAC	
	PWM Frequency	2000Hz	
Input	Input Voltage Range	200~240VAC	
	Frequency Range	50/60Hz	
	Efficiency	85%/230VAC	
	Alternating Current	<=1.5A/230VAC	
	Inrush Current	Cold start 38A at 230VAC	
	Leakage Current	<5mA	
	No Load Power	1W/230VAC	
Protection	Over Load Power	Shut down the output when current load >= 110% \sim 140%, auto recovers.	
	Short Circuit	Shut down automatically if short circuit occurs, auto recovers.	
	Over Temperature	Intelligently adjust or turn off the output current if the PCB temp $> 100 ^{\circ} \mathrm{C}$, auto recovers.	
	Woking Temperature	-20℃~45℃	
Environment	T-case Max	90°C	
	Working Humidity	20%~90%RH, non-condensing	
	Storage Temperature/Humidity	-40℃~80℃, 10%~95%RH	
	Temperature Coefficient	±0.03%/°C (0-50%)	
	Vibration Resistance	10-500Hz, 2G, 6min/cycle, X,Y,Z axes/2min	
	IP Rating	IP20	
Safety&EMC	Security Specifications	IEC/EN61347-1, IEC/EN61347-2-13	
	Withstand Voltage	I/PO/P: 3750VAC	
	Insulation Resistance	I/PO/P: 100MΩ/500VDC/25℃/70%RH	
	EMC Emission	EN55015, EN61000-3-2 Class C, IEC61000-3-3	
	EMC Immunity	EN61000-4-2.3.4.5.6.8.11, EN61547	
	Certications	CE, EMC	
	Net weight	590g	
	Gross weight	620g	

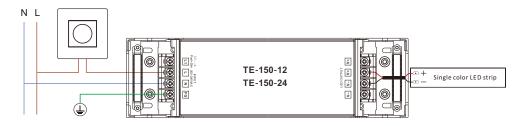
Applications

- Suitable for LED related fixture or appliance which use LED light bar and LED tape (like LED Decoration or Advertisement devices).
- Office / Commercial / Domestic Lighting, Hotels, Retail and Display.
- Use for retrofit upgrades & new luminaire designs.

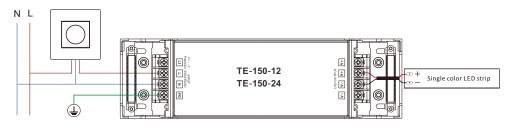
User Manual Ver 1.0.2

Wiring Diagram

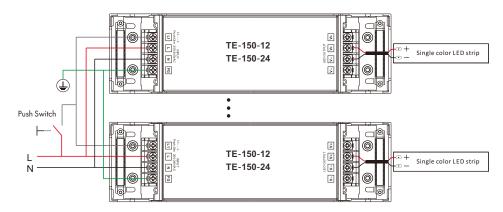
1. Connect Triac dimmer(no Neutral wire)



2. Connect Triac dimmer(with Neutral wire)



3. Connect AC Push switch



NOTE:

- 1.FG need to be well grounded
- 2.Recommended maximum load is less than 80% of the power supply"s output

Triac Dimming Input

While connected with a Triac dimmer, such as Lutrom, 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.

AC Push-Dim input

The provided AC Push-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switchs.

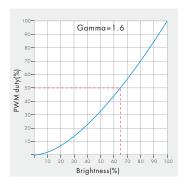
- Short press:
- Turn on or off light.
- Long press (1-6s):
- Press and hold to step-less dimming,
- With every other long press, the light level goes to the opposite direction.
- Dimming memory:
- Light returns to the previous dimming level when switched off and on again, even at power failure.
- Synchronization:

If more than one LED driver 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 LED drivers connected to a push switch does not exceed 25 pieces, The maximum length of the wires from push to LED driver should be no more than 20 meters.

Dimming Curve



Malfunctions Analysis & Troubleshooting

Malfunctions	Causes	Troubleshooting
No light	No power. Wrong connection or insecure.	Check the power. Check the connection.
Hiccup, light flashing	Overload beyond power supply capability.	Reduce load to meet specifications
Uneven intensity between front and rear, with voltage drop	Output cable is too long. Wire diameter is too small.	Reduce cable or loop supply. Change wider wire.