

# Teralux TRIAC LED Driver 10-45V 15W User manual

Teralux TRIAC LED Driver



**Teralux Office**

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## TE-15A

### Teralux TRIAC LED Driver

The TERALUX Triac LED Driver TE-15A is a 15W constant-current driver designed for smooth Triac/ELV and Push-Dim dimming. It supports adjustable output currents from 150–700mA and a wide 10–45VDC range, making it flexible for various indoor LED fixtures. With PWM flicker-free dimming, full protection features, and a durable enclosed design, it ensures stable, safe, and efficient lighting performance.

## Features

Compatible with leading-edge and trailing-edge dimmers for smooth and stable dimming.

DIP switch selection from 150mA to 700mA for flexible LED fixture compatibility.

Supports 10–45VDC to accommodate various constant-current LED setups.

High-precision 2000Hz PWM ensures smooth dimming without affecting color quality.

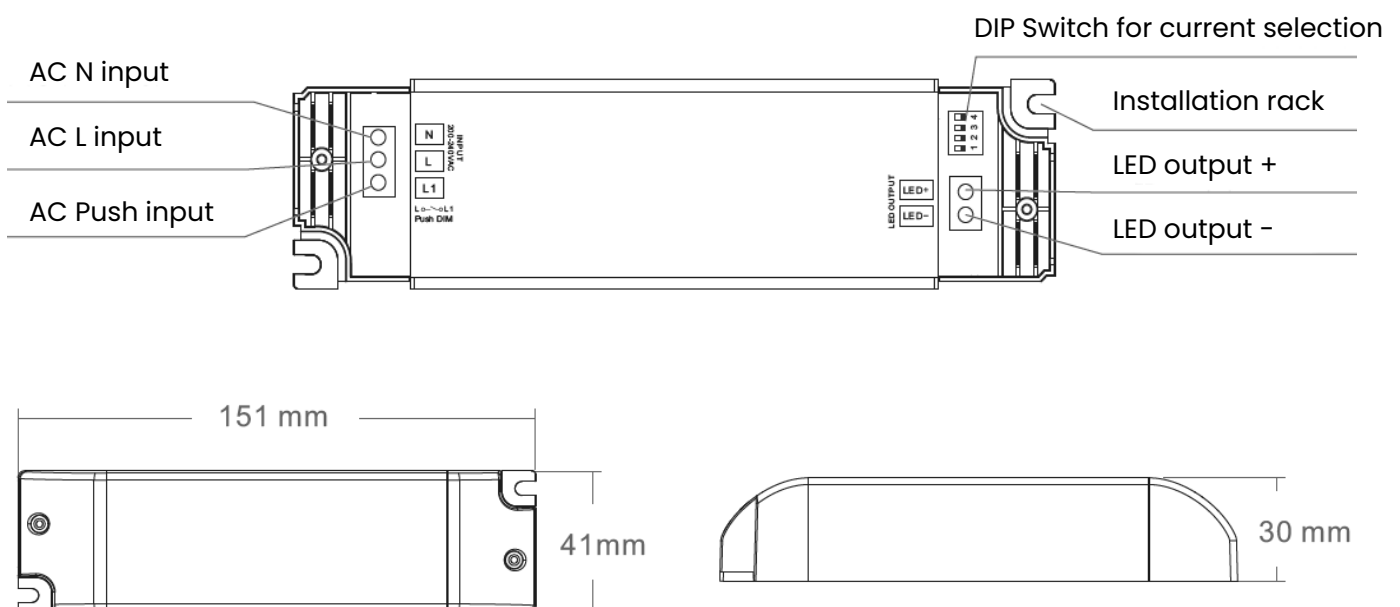
Built-in over-heat, overload, and short-circuit protection with automatic recovery.

Enclosed protective housing for reliable indoor use and long-term stability.

Up to 80% efficiency with low input current for energy-saving performance.

Ensures reliability and long-term support for professional lighting installations.



## Mechanical Structure










## Technical Parameter








Category	Item	Specification
Output	Output Voltage	10-45VDC
	Output Current	150-700mA
	Output Power	Max. 15W
	Max Output Voltage	48VDC
	Dimming Range	0~100%
	PWM Frequency	2000Hz
	Current Accuracy	±6%
Input	Input Voltage Range	200~240VAC
	Frequency Range	50/60Hz
	Efficiency	>80%/220VAC
	Alternating Current	0.15A/220VAC
	Inrush Current	Cold start 16A at 230VAC
	Leakage Current	< 0.5mA/230VAC
	No Load Power	< 1W
Protection	Over Load Power	Auto recovers when the load is reduced.
	Short Circuit	Shut down automatically.
	Over Temperature	if the PCB temp > 100°C, auto recovers.

## Environment & Safety

Category	Item	Specification	
Output	Working Temperature	-30°C~55°C	
	T-case Max	70°C	
	Working Humidity	20%~90%RH, non-condensing	
	Storage Temp/Humidity	-40°C~80°C,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/P-O/P: 3750VAC
		Insulation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/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	
Certifications	 		

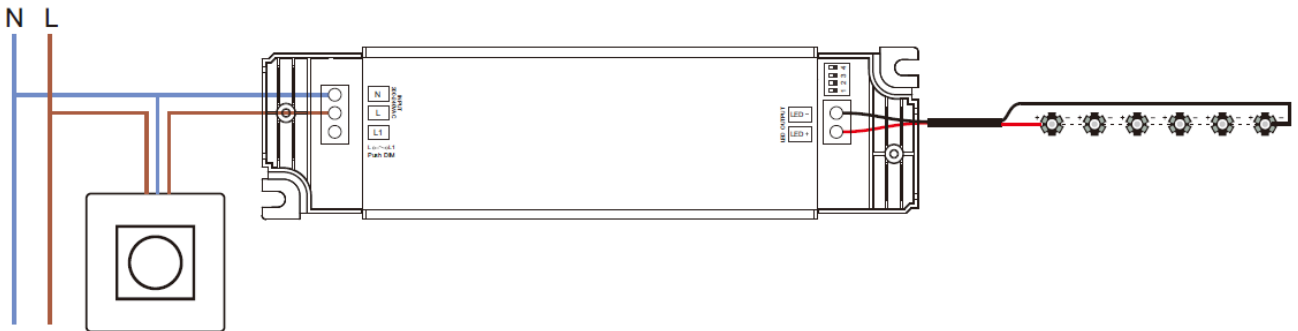
### LED Current Selection

						
Output Voltage	9-45V	9-45V	9-45V	9-45V	9-43V	9-38V
Output Current	150mA	200mA	250mA	300mA	350mA	400mA
Output Power	1.35-6.75W	1.8-9W	2.25-11.25W	2.7-13.5W	3.15-15.05W	3.6-15.2W

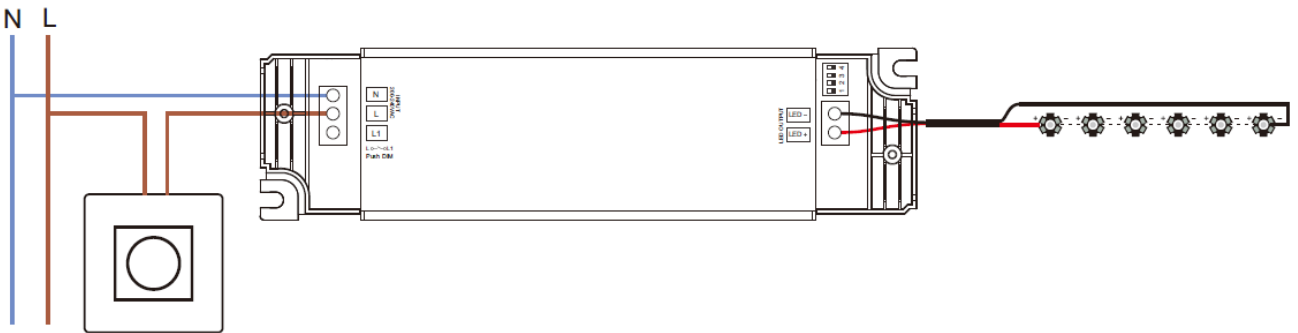
						
Output Voltage	9-33V	9-30V	9-27V	9-25V	9-23V	9-22V
Output Current	450mA	500mA	550mA	600mA	650mA	700mA
Output Power	4.05-14.85W	4.5-15W	4.95-14.85W	5.4-15 W	5.85-14.95 W	6.3-15.4 W

# Wiring Diagram

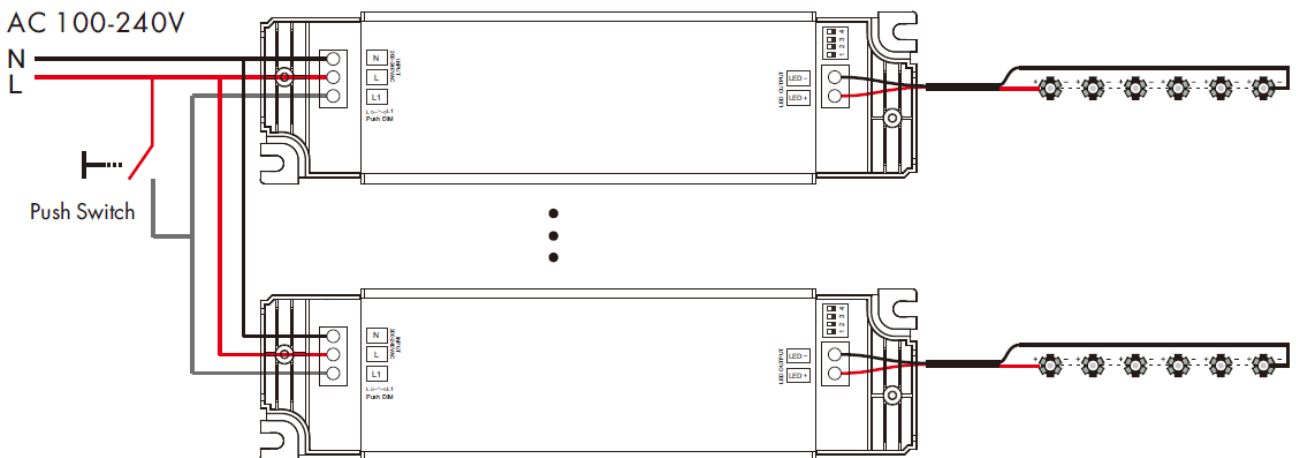
## Connected To Triac dimmer (No Neutral wire)



## Connected To Triac dimmer (With Neutral wire)



## Connected To AC Push switch



## TRIAC Dimming Output

While connected with a Triac dimmer, such as Lutrom, Clipsal, Dynalite dimmer, different Triac dimmers from different you 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

### 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:

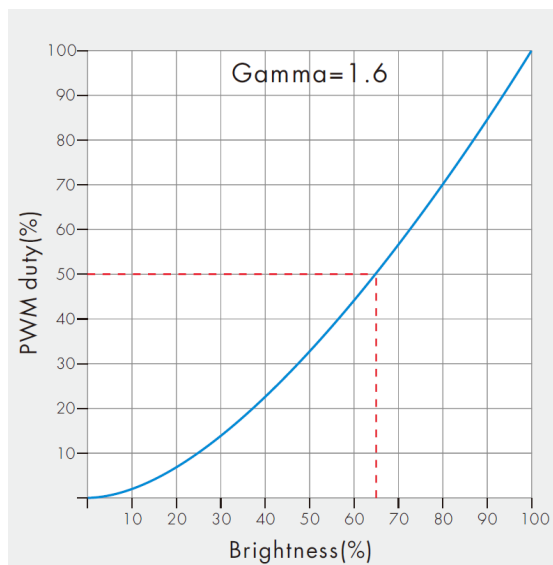
Light returns to the previous dimming level when switched off and on again, even at power failure.

### 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:





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