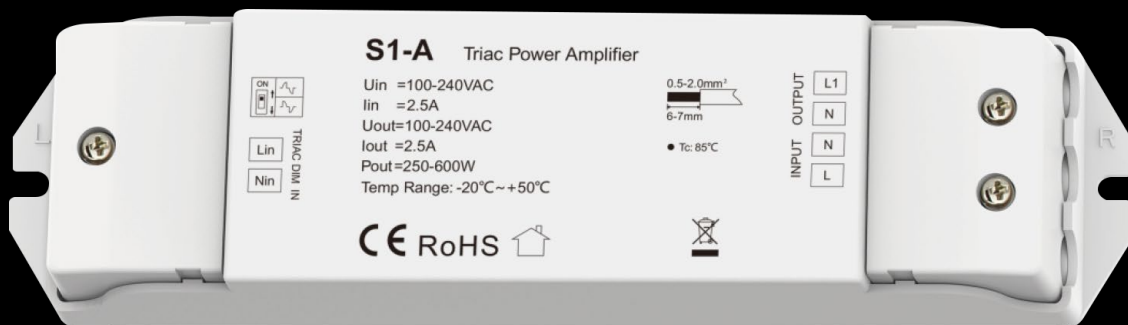


Teralux S1-A User Manual

Terakux TRIAC Power Amplifier

CE RoHS  RED



Teralux Office

Komp. Ruko Harmoni Mas, Jl. Jemb. Dua Raya
No.15 blok A, RT.1/RW.3, Pejagalan, Penjaringan,
North Jakarta City, Jakarta 14450

S1-A

Teralux TRIAC Amplifier

The TERALUX Triac Power Amplifier is a 1-channel power extension module designed to boost the output of triac dimmers up to 2.5A or 600W. It supports both leading-edge and trailing-edge dimming—switchable via DIP settings—and can convert between the two modes as needed. Compatible with dimmable LED lights and triac-dimmable LED drivers, it allows a single input signal to control multiple amplifiers for larger lighting setups. Built with overheat protection and automatic recovery, it ensures stable and reliable performance on 100–240VAC systems.

Features

1 channel output, output current Max. 2.5A.

Work with dimmable LED lights or TRIAC dimmable LED drivers

Used for power extension of triac dimmer to increase system power output.

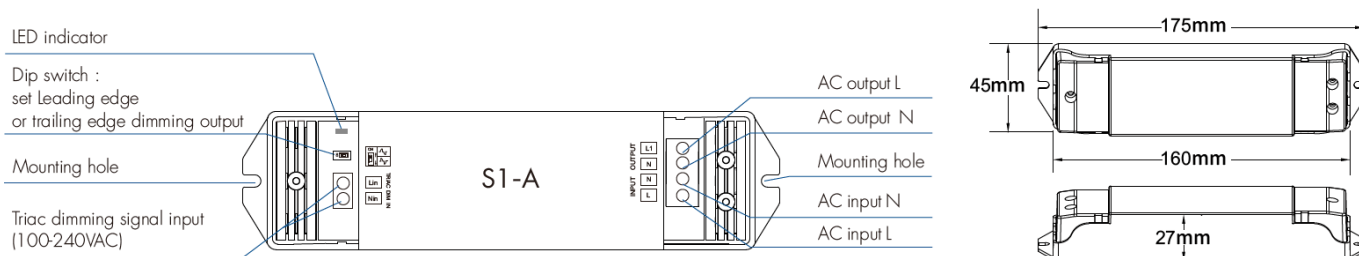
Over heat protection, automatic recovery.

The same input signal can control one or more triac power amplifiers.


Leading edge or trailing edge dimming set by dip switch.

Support converting from leading edge dimming to trailing edge dimming or vice versa.

Mechanical Structure

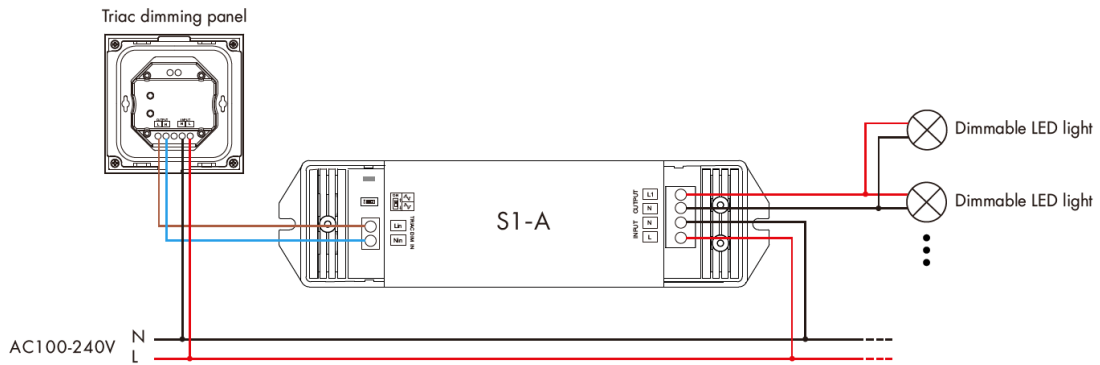


Technical Parameter

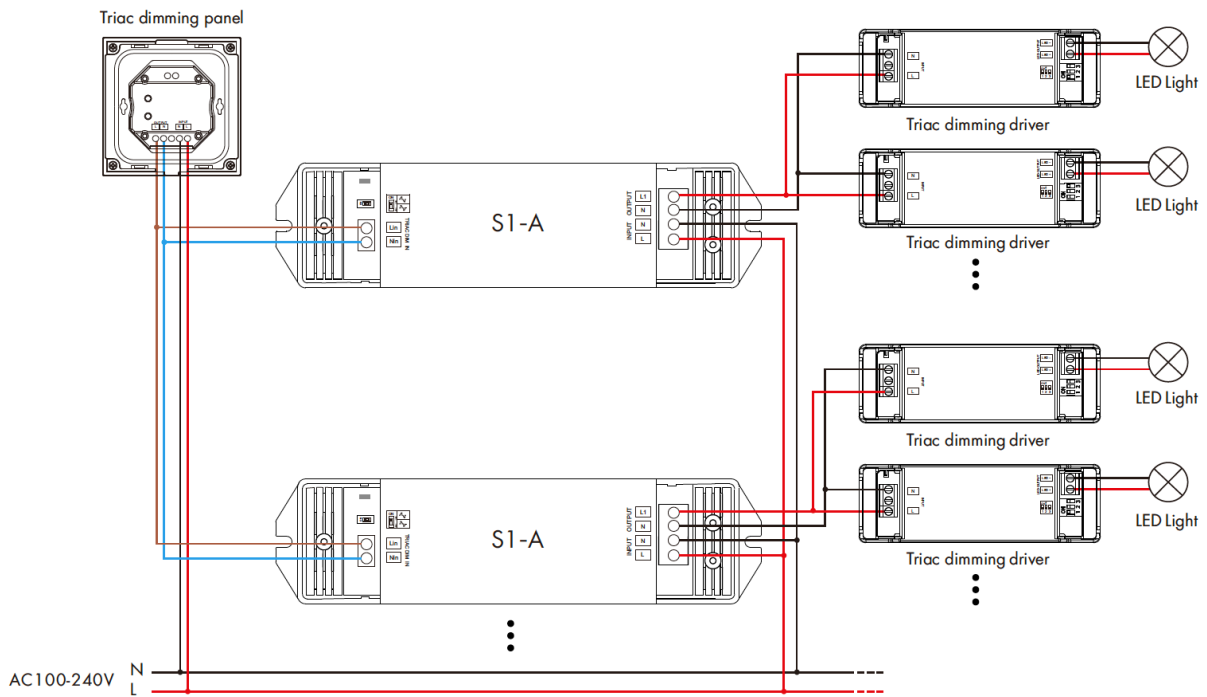
Category	Item	Specification
Input and Output	Input voltage	100–240VAC
	Input current	Max. 2.5A
	Input signal	100–240VAC phase-cut signal
	Output voltage	100–240VAC
	Output current	Max. 2.5A
	Output power	250–600W
Safety and EMC	EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3
		ETSI EN 301 489-17 V3.2.4
	Safety standard	EN 62368-1:2020 + A11:2020
	Certification	CE RoHS  RED
	Protection	Over Heat Protection
Environment	Operation temperature	Ta: -20°C ~ +50°C
	Case temperature (Max.)	Tc: +85°C
	IP rating	IP20
Package	Size	L178 × W150 × H38mm

Wiring Diagram

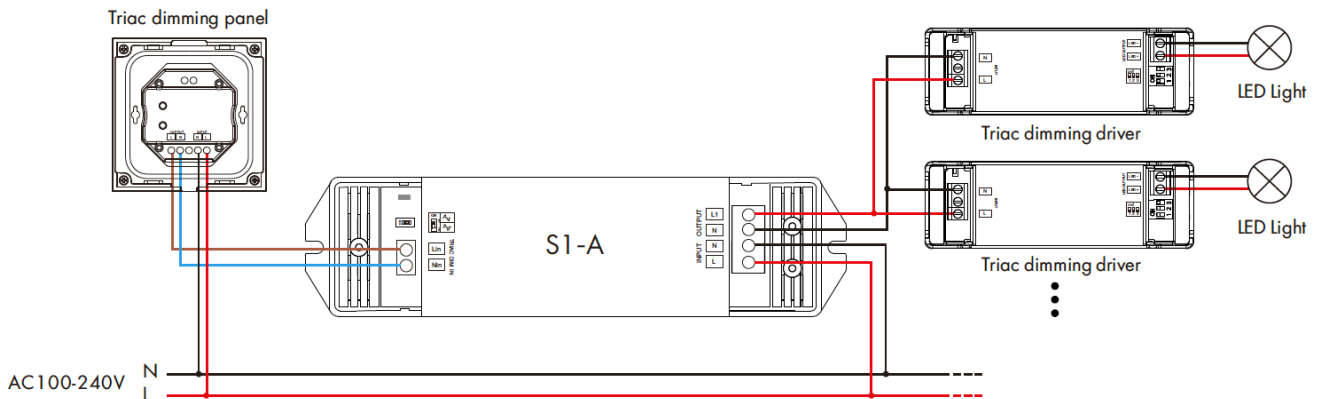
- TRIAC Dimmer (With Null & live Line) + Triac Power amplifier + Single Color LED Light



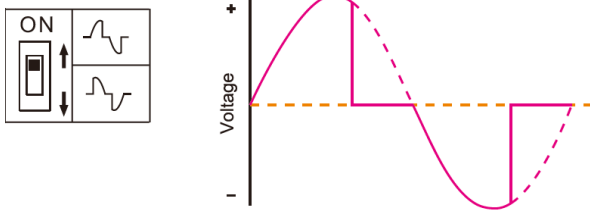
- TRIAC Dimmer (With Null & Live Line) + Multiple Amplifier + Multiple Driver



- TRIAC Dimmer (With Null & Live Line) + Triac Power Amplifier + Single Color LED Light



Reverse-phase control output



Forward-phase control output



Safety and Warnings:

The product should be installed and repaired only by professional personnel.

This product is not waterproof, so avoid exposing it to direct sun or rain.

Proper heat dissipation is important for extending the lifespan of the power amplifier, so ensure it has good ventilation.

Before use, confirm that the power supply voltage matches the product's working voltage.

Make sure all wire connections and polarity are correct and secure before powering on to prevent damage to the product and LED lights.

If a malfunction occurs, return the product to the supplier. Do not attempt to repair it yourself.



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teraluxliving.com