

Triac Power Amplifier

US1-A

a010077

U LIGHT

- 1 channel output, output current Max. 2.5A.
- Used for power extension of triac dimmer to increase system power output.
- 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 and vice versa.
- Work with dimmable LED lights or triac dimmable LED drivers.
- Over heat protection, automatic recovery.



CE RoHS emc LVD

Technical Parameters

Input&Output		Safety and EMC		Environment	
Input voltage	100-240VAC	EMC standard (EMC)	EN IEC 55015:2019+A11:2020	Operation temperature	Ta: -20°C ~ +50°C
Input current	Max. 2.5A		EN 61547:2009	Case temperature (Max.)	Tc: +85°C
Input signal	100-240VAC phase-cut signal		EN IEC 61000-3-2:2019+A11:2021	IP rating	IP20
Output voltage	100-240VAC	Safety standard(LVD)	EN 61000-3-3:2013+A11:2019	Package	
Output current	Max. 2.5A	Certification	EN 61347-1:2015+A1:2021	Size	L178x W150 x H38mm
Output power	250-600W	Warranty	EN 61347-2-13:2014+A1:2017	Gross weight	0.14kg
		Protection	CE, EMC, LVD		

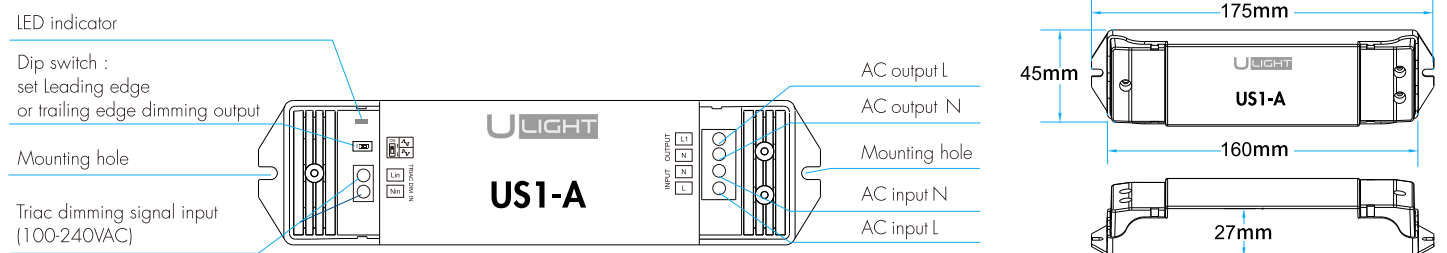
Compatible Load Types

Load type	Maximum load	Remarks
Dimmable LED lamps	300W @ 220V 150W @ 110V	Due to variety of LED lamp designs, maximum number of LED lamps is further dependent on power factor result when connected to dimmer.
Triac dimmable LED drivers	300W @ 220V 150W @ 110V	Maximum permitted number of drivers is 300W divided by driver nameplate power rating, and make sure the surge current is no more than 1.30A.
Incandescent lighting, HV halogen lamps	600W @ 220V 300W @ 110V	

Recommended number of load connection

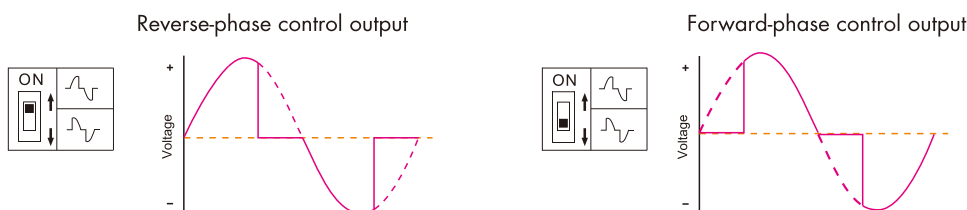
Load type	Output power per load	Quantity
Dimmable downlight	5.5W @ 220V~240V	26
Triac dimmable LED drivers	12W @ 200V~240V	24
Triac dimmable LED drivers	36W @ 200V~240V	6
Triac dimmable LED drivers	75W @ 200V~240V	3

Mechanical Structures and Installations



Leading edge or trailing edge dimming output setting

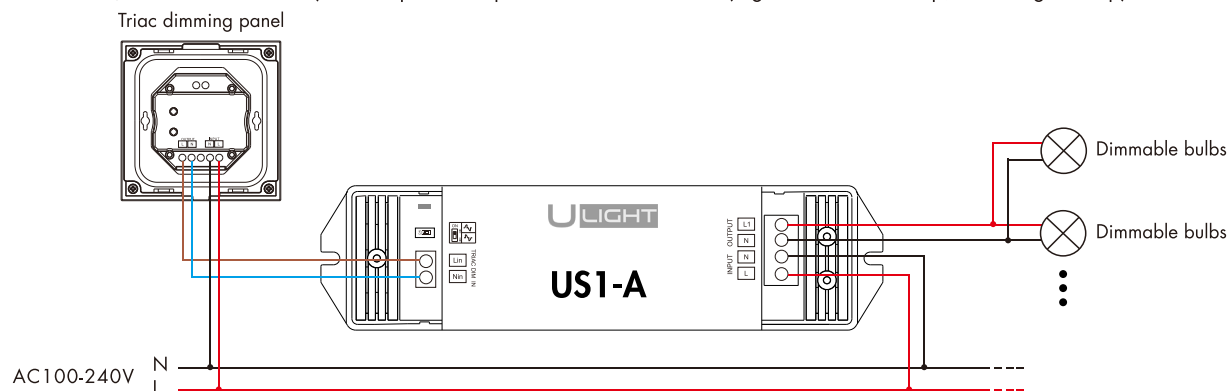
Select leading edge(forward-phase) or trailing edge(reverse-phase) dimming output according to dimmable LED light or driver.



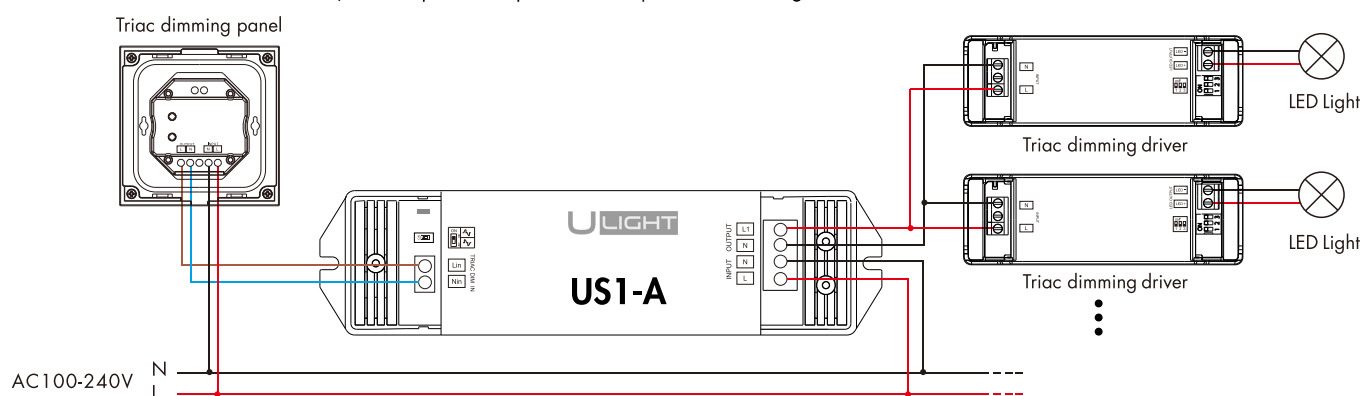
Caution: before power on, you must confirm the selection of dip switch.

Wiring diagram

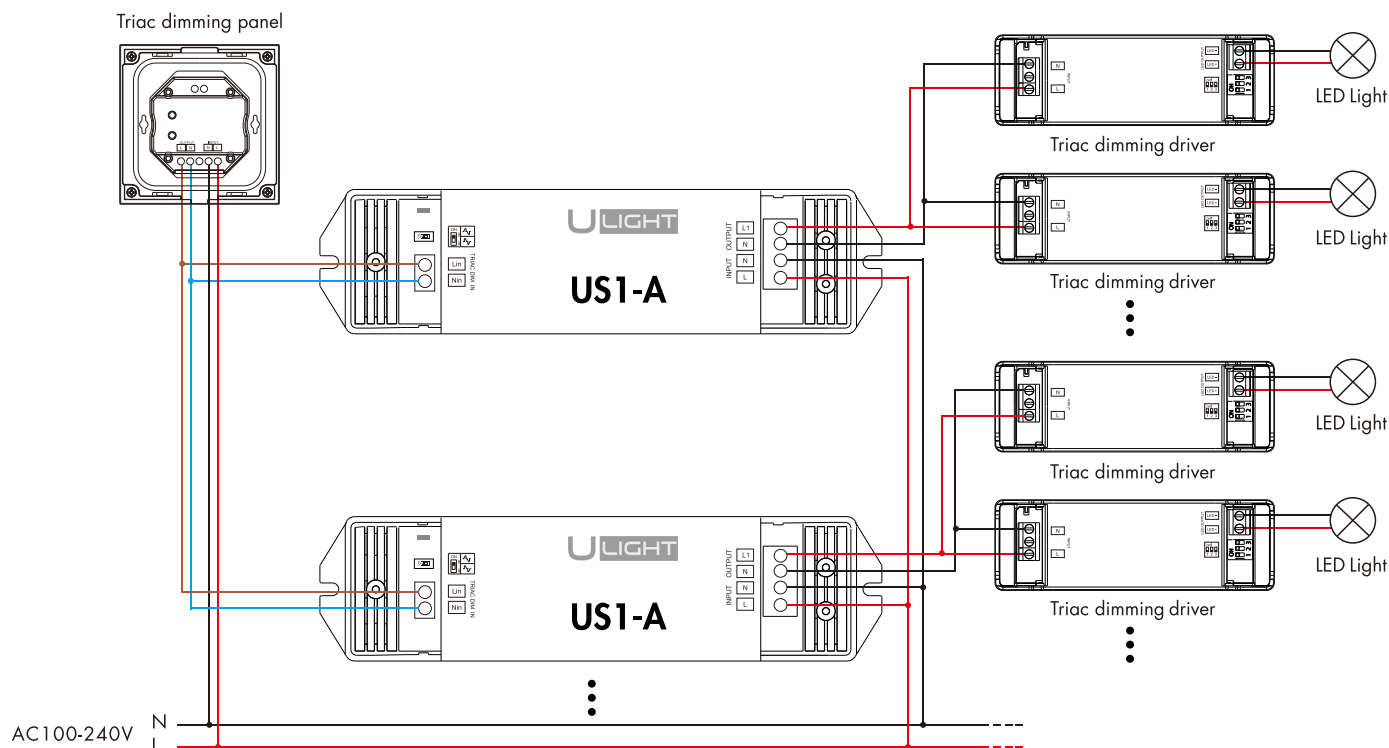
- Triac dimmer (with null and live line) + Triac power amplifier + dimmable bulbs (e.g. incandescent lamp, HV halogen lamp)



- Triac dimmer (with null and live line) + Triac power amplifier + Multiple triac dimming drivers



- Triac dimmer (with null and live line) + Multiple triac power amplifiers + Multiple triac dimming drivers



Note:
The brightness of the LED indicator follows the brightness of the triac dimmer;
When no triac dimming signal is input, the LED indicator goes out.

Safety and warnings

1. The product should be installed and repaired by professional personnel.
2. This product is not waterproof, please avoid exposure to sunning and rain.
3. Good heat dissipation can extend the service life of power amplifiers, please ensure good ventilation.
4. Please check if the output voltage of the power supply used matches the working voltage of the product.
5. Ensure that all wire connections and polarity are correct and secure before powering on to avoid damaging the product and LED lights.
6. If a malfunction occurs, please return the product to the supplier. Don't attempt to repair this product on your own.