

## Triac Constant Voltage LED Driver

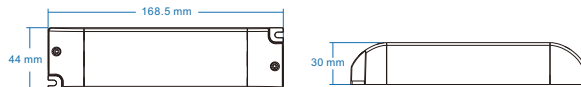
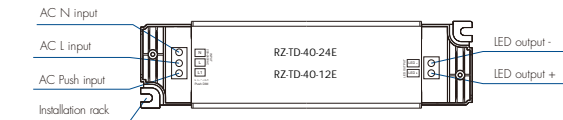
Model No.: RZ-TD-40-24E; RZ-TD-40-12E



### 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 rendering index
- 1 channel constant voltage output, Max. total output power 40W
- Over-heat / Overload / Short circuit protection, recover automatically
- Full protective plastic case
- Suitable for indoor LED lighting application
- 5 Year, 50,000hr warranty

### Mechanical Structures and Installations



### Technical Parameters

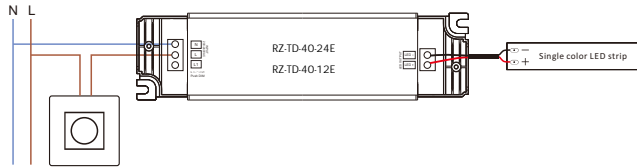
Model	RZ-TD-40-12E	RZ-TD-40-24E	
Output	Output Voltage	12VDC	24VDC
	Output Current	Max. 3.34A	Max. 1.67A
	Output Power	Max. 40W	
	Dimming Range	0~100%	
	Ripple & Noise	$\leq 20\text{mV}/230\text{VAC}$	$\leq 132\text{mV}/230\text{VAC}$
	PWM Frequency	500Hz	
Input	Input Voltage Range	200~240VAC	
	Frequency Range	50/60Hz	
	Efficiency	82%/230VAC	85%/230VAC
	Alternating Current	0.41A/230VAC	0.39A/230VAC
	Inrush Current	Cold start 27.5A at 230VAC	
	Leakage Current	$< 5\text{mA}$	
Protection	No Load Power	$< 1\text{W}$	$< 1\text{W}$
	Over Load Power	Shut down the output when current load $\geq 120\% \sim 150\%$ , auto recovers.	
	Short Circuit	Shut down automatically if short circuit occurs, auto recovers.	
Environment	Over Temperature	Intelligently adjust or turn off the output current if the PCB temp $> 100^\circ\text{C}$ , auto recovers.	
	Working Temperature	$-30^\circ\text{C} \sim 55^\circ\text{C}$	
	Tcase Max	$70^\circ\text{C}$	
	Working Humidity	$20\% \sim 90\%\text{RH}$ , non-condensing	
	Storage Temperature/Humidity	$-40^\circ\text{C} \sim 80^\circ\text{C}$ , $10\% \sim 95\%\text{RH}$	
	Temperature Coefficient	$\pm 0.03\%/^\circ\text{C}$ (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: 100M $\Omega$ /500VDC/25 $^\circ\text{C}$ /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	CE, EMC		

### Applications

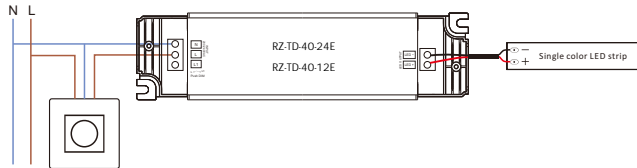
- Suitable for LED related fixture or appliance which use LED light bar and LED tape (like LED Decoration or Advertisement devices).
- Office / Commercial / Domestic Lighting, Hotels, Retail and Display.
- Use for retrofit upgrades & new luminaire designs.

## Wiring Diagram

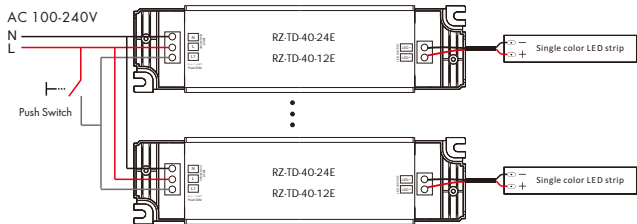
### 1. Connect Triac dimmer(no Neutral wire)



### 2. Connect Triac dimmer(with Neutral wire)



### 3. Connect AC Push switch



## 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 switches.

- **Short press:**  
Turn on or off light.
- **Long press (1-6s):**  
Press and hold to stepless 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

