0/1-10V Constant Current LED Driver

Model No.: RZ-VD-150-700-15F





Features

- Dimming interface: O-10V, 1-10V, 10V PW/M, Resistor, AC Push-Dim
- Universal AC input / Full range
- Flicker-free
- 1 channel constant current output, configurable current via DIP switch
- Built-in active PFC function: 0.95 Typ
- Synchronize on multiple number of LED drivers
- Over-heat / Over-load / 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



		,		
Output	Output Voltage	10-45VDC		
	Output Current	150-700mA		
	Output Power	Max. 15W		
	Max Output Voltage	48VDC		
	Dimming Range	0~100%, dimmer depth:0.2%		
	PWM Frequency	8000Hz		
	Current Accuracy	±5%		
	Ripple&Noise	< 100mV		
Input	Input Voltage Range	100~240VAC		
	Frequency Range	50/60Hz		
	Efficiency	>80%/230VAC		
	Alternating Current	0.15A/115VAC, 0.07A/230VAC		
	Anti Surge	I-N:1.5KV		
	Startup time	1S/230VAC		
	Power Factor	>0.98/115VAC, >0.93/230VAC		
	THD	<8%		
	Inrush Current	Cold start 13.7A at 230VAC		
	Leakage Current	< 0.5mA/230VAC		
	No Load Power	< 2W		
	Over Load Power	When O/P voltage exceed its range, O/P current declines, auto recovers when the load is reduced.		
Protection	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°C, auto recovers.		
Environment	Woking Temperature	-30°C~-50°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/PO/P: 3750VAC		
	Insulation Resistance	I/PO/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		
	Certications	CE, EMC		

LED Current Selection:

1234						
Output Voltage	9-45V	945V	945V	9-45V	9-43V	9-38V
Output Current	150mA	200mA	250mA	300mA	350mA	400mA
Output Power	1.35-6.75W	1.89W	2.25-11.25W	2.7-13.5W	3.15-15.05W	3.6-15.2W
1234						
Output Voltage	9-33V	9-30V	9-27V	9-25V	9-23V	9-22V
Output Current	450mA	500mA	550mA	600mA	650mA	700mA
Output Power						6.3-15.4 W

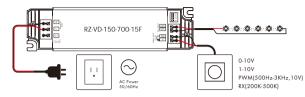
Applications

- Suitable for downlight, spotlight and decorative applications.
- Office / Commercial / Domestic Lighting, Hotels, Classrooms, Warehouse, Health care, Retail and Display.
- Use for retrofit upgrades & new luminaire designs.

User Manual Ver 2.0.2

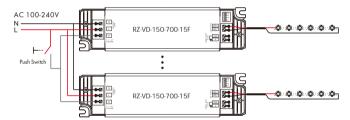
Wiring Diagram

1.0/1-10V Connection



- The 0/1-10V input is operable via commercially available simple rotary wall switchs designed for 0/1-10V dimming equipment or from decicated system central dimming controllers.
- Compliant with 0-10V, 1-10V, 10V PWM, RX(4 in 1).
- We recommend the number of LED drivers connected to 0/1-10V dimmer does not exceed 5 pieces,
- The maximum length of the wires from dimmer to LED driver should be no more than 15 meters.
- If the LED driver be used with Push-Dim interface prior to using the 0/1-10V interface, the 0/1-10 V signal should change over 10% to return 0/1-10 V control.

2. AC Push-Dim connection



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 dimmina.

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%.

nien nie sysiem is synchronized and an ngris in nie group ann up to 100%.

This means there is no need for any additional synchrony wire in larger installations.

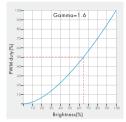
We recommend the number of LED drivers connected to a push switch does not exceed 25 pieces,

The maximum length of the wires from push to LED driver should be no more than 20 meters.

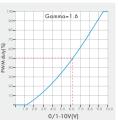
Dimming Curve



Push dimming



0/1-10V dimming



User Manual Ver 2.0.2