

0/1-10V LED Dimming Driver

Features

- 1 channel 0/1-10V LED dimming driver with push-dim function.
- 1 channel 0/1-10V input, 1 channel PWM constant voltage output.
- Logarithmic or linear dimming curve selectable.
- Compatible with active or passive 0-10V, 1-10V dimmer, can solve the fluorescent lamp dimming system compatible with LED lighting.
- PWM frequency 500Hz, 2kHz, 8kHz or 16kHz selectable
- Over-heat / Overload / Short circuit protection, recover automatically.

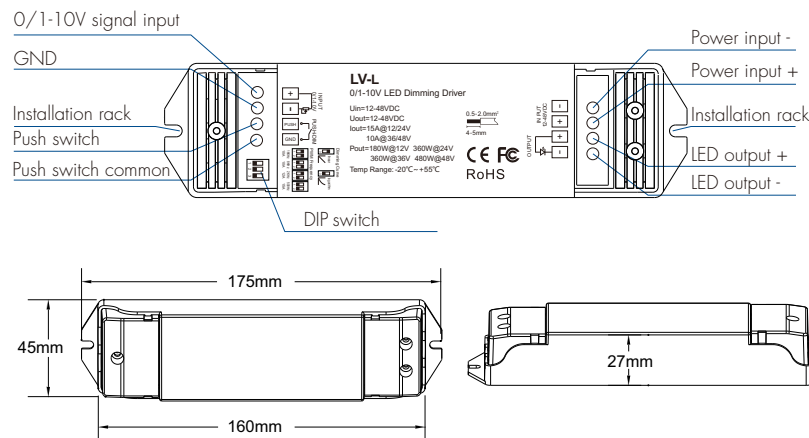


FC CE RoHS

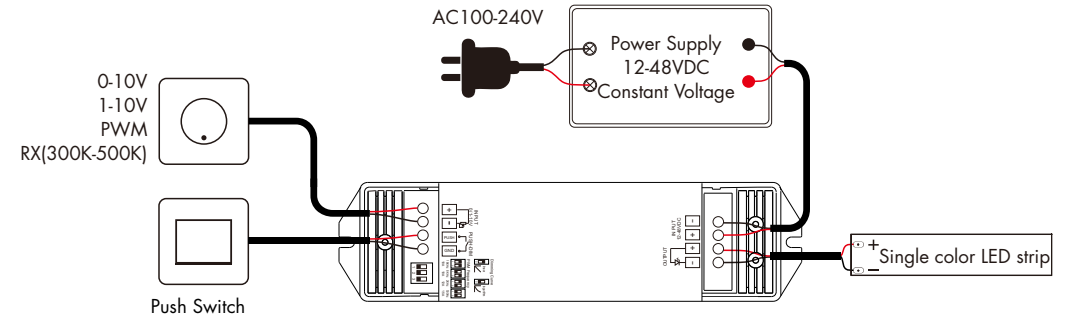
Technical Parameters

Input and Output		Dimming data		Safety and EMC	
Input voltage	12-48VDC	Input signal	0/1-10V + Push Dim	EMC standard	EN IEC 55015 EN IEC 61547
Output voltage	12-48VDC	Dimming gray scale	4096 (2 ¹²) levels		
Output current	15A@12/24V 10A@36/48V	Dimming range	0-100%	Safety standard	EN 61347-1/-2 EN 62493
Output power	180W@12V 360W@24V 360W@36V 480W@48V	Dimming curve	Logarithmic or linear	Certification	CE RoHS FCC
Output type	Constant voltage	Environment		Package	
Warranty		Operation temperature	Ta: -20°C ~ +55°C	Size	L178 x W50 x H38mm
Warranty	5 years	Case temperature (Max.)	Tc: +85°C	Gross weight	0.124kg
		IP rating	IP20		

Mechanical Structures and Installations



Wiring Diagram



Note:

- The 0/1-10V input is operable via commercially available simple rotary wall switches designed for 0/1-10V dimming equipment or from dedicated 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 50 pieces, the maximum length of the wires from dimmer to LED driver should be no more than 50 meters.
- If the LED driver be used with Push-Dim interface prior to using the 0/1-10V interface, the 0/1-10V signal should change over 10% to return 0/1-10V control.

Push Dim Function

The provided Push-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switches.

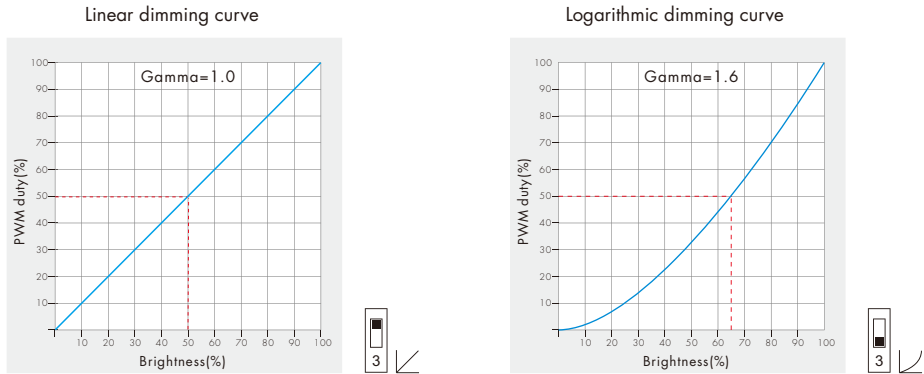
- **Short press:**
Turn on or off light.
- **Long press (1-6s):**
Press and hold to step-less dimming,
With every other long press, the light level goes to the opposite direction.
- **Dimming memory:**
Light returns to the previous dimming level when switched off and on again, even at power failure.
- **Synchronization:**
If more than one controller 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 controllers connected to a push switch does not exceed 25 pieces,
The maximum length of the wires from push to controller should be no more than 20 meters.

PWM Frequency Setting

16KHz	8KHz	2KHz	500Hz
10A	10A	12A	15A (12-24V)
6A	8A	10A	10A (36-48V)

We can select four PWM frequency: 500Hz, 2KHz, 8KHz, 16KHz.
Higher PWM frequency, will cause lower output current, higher power noise,
but more suitable for camera (No flickers for video).

Dimming Curve Setting



Malfunctions Analysis & Troubleshooting

Malfunctions	Causes	Troubleshooting
No light	1.No power. 2.Wrong connection or insecure.	1. Check the power. 2. Check the connection.
Uneven intensity between front and rear,with voltage drop	1. Output cable is too long. 2. Wire diameter is too small. 3. Overload beyond power supply capability. 4. Overload beyond controller capability.	1. Reduce cable or loop supply. 2. Change wider wire. 3. Replace higher power supply. 4. Add power repeater.

Installation Precautions

1. The product shall not be stacked, the distance should be $\geq 20\text{cm}$, so as not to affect lifespan of the products due to poor heat dissipation.
2. The product shall not be installed close to the switching power supply with an interval of $\geq 20\text{cm}$ to avoid radiation interference of the switching power supply.