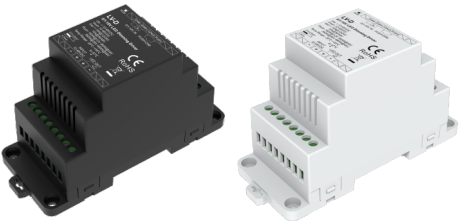


0/1-10V LED Dimming Driver

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.
- 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 / Over-load / Short circuit protection, recover automatically.

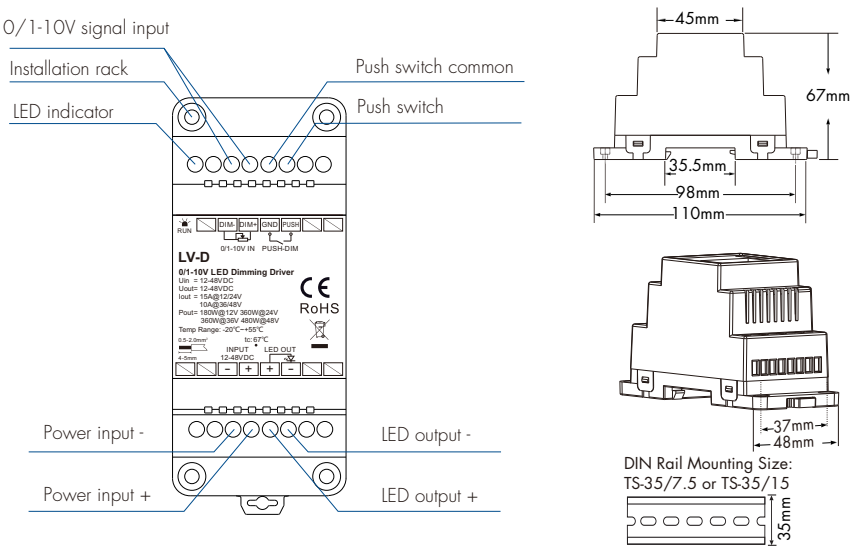


CE RoHS

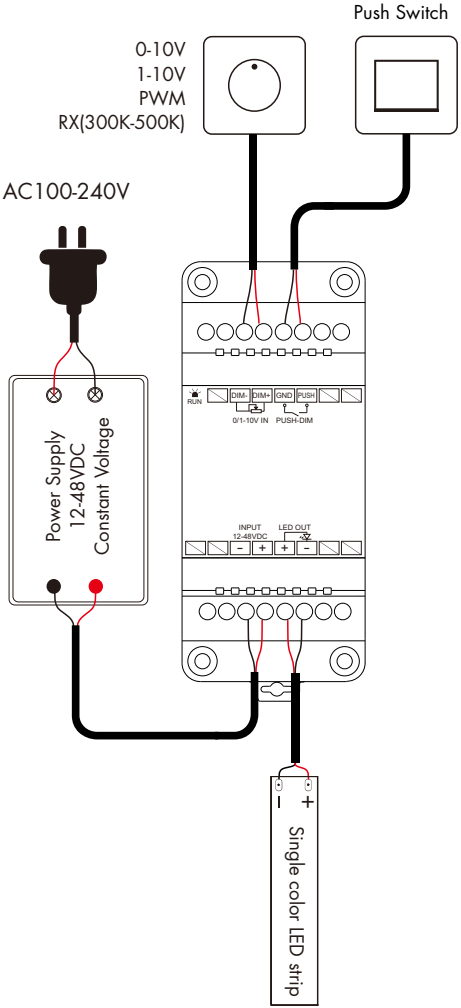
Technical Parameters

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	Safety standard	EN 61347-1/-2 EN 62493
Output current	15A@12/24V 10A@36/48V	Dimming range	0-100%		
Output power	180W@12V	Dimming curve	Logarithmic	Certification	CE RoHS
	360W@24V	PWM Frequency	2KHz(default)		
	360W@36V	Environment		Package	Size L120 x W78 x H55mm
Output type	Constant voltage	Operation temperature	Ta: -20°C ~ +55°C		
Warranty	5 years	Case temperature [Max.]	Tc: +67°C		
Warranty	5 years	IP rating	IP20	Gross weight	0.124kg

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 50 pieces,  
The maximum length of the wires from push to controller should be no more than 50 meters.

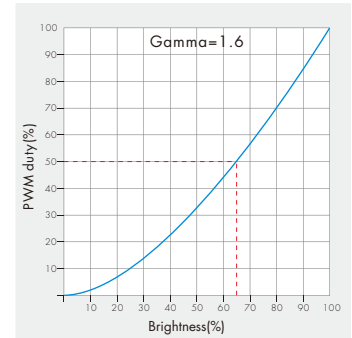
PWM Frequency Setting

Press and hold the push switch and power on, and keep pressing for 5s, the LED indicator fast flashes 3 times, enter the PWM frequency setting state.  
Release the push switch and operate the following steps within 5s to switch the PWM frequency:  
Press and hold the push switch for 2s, set the PWM frequency to 500Hz, the LED indicator flash 1 time.  
Press and hold the push switch for 5s, set the PWM frequency to 2KHz, the LED indicator flash 2 times.  
Press and hold the push switch for 10s, set the PWM frequency to 8KHz, the LED indicator flash 3 times.  
Press and hold the push switch for 15s, set the PWM frequency to 16KHz, the LED indicator flash 4 times.  
The factory default PWM frequency is 2KHz.  
Higher PWM frequency, will cause lower output current, higher power noise, but more suitable for camera(No flickers for video).

PWM frequency and output current mapping:

$\frac{I_{out}}{U_{in}}$ PWM	500Hz	2KHz	8KHz	16KHz
12/24V	15A	12A	10A	10A
36/48V	10A	8A	6A	6A

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.