0/1-10V LED Dimming Driver

Model No.: LV-L

0-10V or 1-10V signal input/PWM Constant voltage output/Four PWM frequencies/Logarithmic or liner dimming/Push Dim

Features

- 1 channel O/1-10V LED dimming driver with push-dim function.
- 1 channel O/1-10V input, 1 channel PVVM constant voltage output.
- Logarithmic or linear dimming curve selectable.
- PWM frequency 500Hz, 2kHz, 8kHz or 16kHz 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 / Over-load / Short circuit protection, recover automatically.





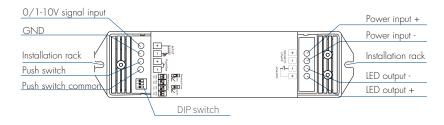
Technical Parameters

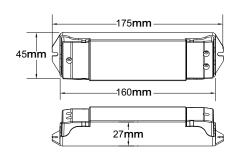
Input and Output		
Input voltage	12-48VDC	
Output voltage	12-48VDC	
Output current	15A@12/24V 10A@36/48V	
Output power	180W@12V 360W@24V 360W@36V 480W@48V	
Output type	Constant voltage	
Warranty		
Warranty	5 years	

Safety and EMC			
EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3		
	ETSI EN 301 489-17 V3.2.4		
Safety standard(LVD)	EN 62368-1:2020+A11:2020		
Radio Equipment(RED)	ETSI EN 300 328 V2.2.2		
Certification	CE,EMC,LVD,RED		
Package			
Size	L178x W150 x H38mm		
Gross weight	0.124kg		

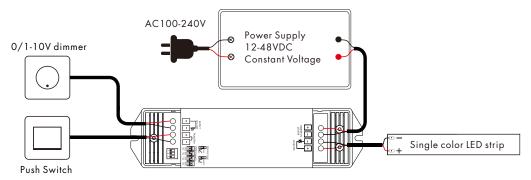
Dimming data		
Input signal	0/1-10V + Push Dim	
Dimming gray scale	4096 (2^12) levels	
Dimming range	O - 1 OO%	
Dimming curve	Logarithmic or linear	
PWM Frequency	500Hz, 2kHz, 8kHz, 16kHz	
Environment		
Operation temperature	Ta: -30 °C ~ +55 °C	
Case temperature (Max.)	Ta: +85°C	
IP rating	IP20	

Mechanical Structures and Installations





Wiring Diagram



Note:

- 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 PVVM, 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 0/1-10 V signal should change over 10% to return 0/1-10 V control.

Push Dim Function

The provided 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 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



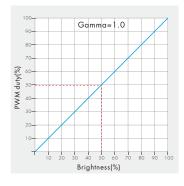




We can select four PWM frequency: 500Hz, 2KHz, 8KHz, 16KHz. Higher PWM frequency, will cause lower output current, higher power noise, but more suitable for camera(No flickers for video).

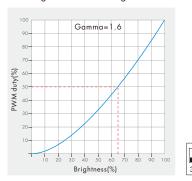
Dimming curve setting

Linear dimming curve





Logarithmic dimming curve



Malfunctions Analysis & Troubleshooting

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

Installation Precautions

- 1. The products shall not be stacked, the distance should be ≥ 20cm, 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 ≥ 20cm to avoid the radiation interference of the switching power supply.

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