

0/1-10V Constant Voltage LED Driver

Model No.: LN-40-12 / LN-40-24



LN-40-12

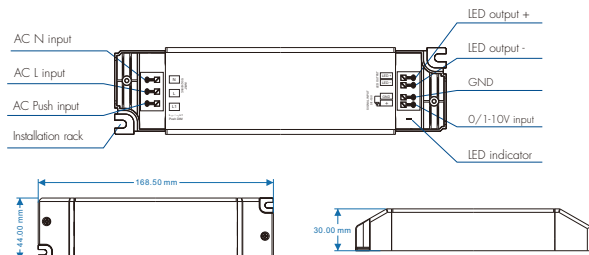
LN-40-24



Features

- Dimming interface: 0-10V, 1-10V, 10V PWM, Resistor, AC Push-Dim
- Universal AC input / Full range
- 1 channel constant voltage output, Max. total output power 40W
- Synchronize on multiple number of LED drivers
- 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

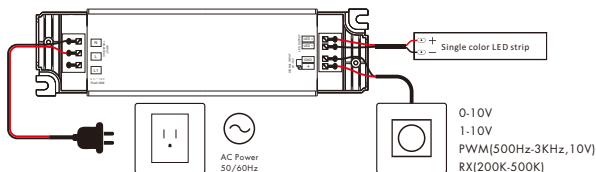
Model		LN-40-12	LN-40-24
Output	Output Voltage	12VDC	24VDC
	Output Current	Max. 3.34A	Max. 1.67A
	Output Power	Max. 40W	
	Dimming Range	0~100%	
	Ripple & Noise	<=200mV / 230VAC	
	PWM Frequency	500Hz	
	Rise Time	488ms/115VAC, 424ms/230VAC	424ms/115VAC, 368ms/230VAC
Input	Hold Time	3.6ms/115VAC, 4.5ms/230VAC	6.5ms/115VAC, 8.2ms/230VAC
	Input Voltage Range	100VAC~240VAC	
	Frequency Range	50/60Hz	
	Efficiency	81%/230VAC	86%/230VAC
	Alternating Current	0.70A/115VAC, 0.41A/230VAC	0.67A/115VAC, 0.40A/230VAC
	Inrush Current	Cold start 27.5A at 230VAC	
	Leakage Current	<5mA	
Protection	No Load Power	0.8W/115VAC, 1.2W/230VAC	1.6W/115VAC, 2.1W/230VAC
	Over Load Power	Shut down the output when current load >= 120%~150%, auto recovers.	
	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	Working Temperature	-30°C~50°C	
	Tcase Max	70°C	
	Working Humidity	20%~90%RH, non-condensing	
	Storage Temperature/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	
Safety&EMC	IP Rating	IP20	
	Security Specifications	IEC/EN61347-1, IEC/EN61347-2-13	
	Withstand Voltage	I/P/O/P: 3750VAC	
	Insulation Resistance	I/P/O/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	
	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.

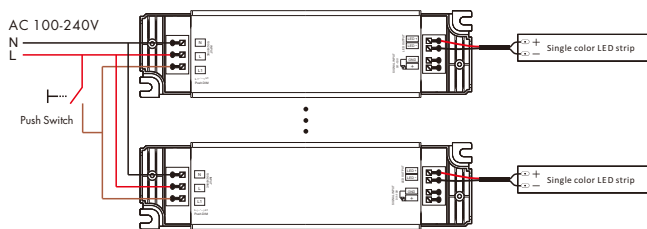
Wiring Diagram

1. 0/1-10V Connection



- 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 5 pieces, The maximum length of the wires from dimmer to LED driver should be no more than 1.5 meters.
- If the LED driver be used with the RF remote or 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.

2. AC Push-Dim connection

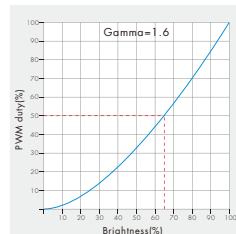


The provided AC Push-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switches.

- **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

Push dimming



0/1-10V dimming

