

## 0/1-10V Constant Voltage LED Driver

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



LN-40-12



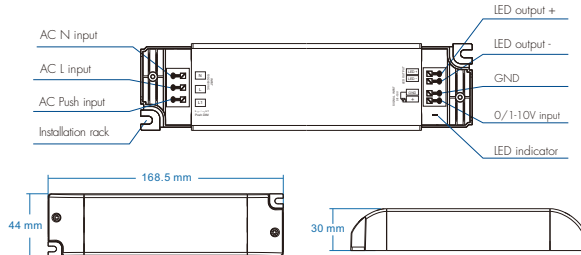
LN-40-24



### 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

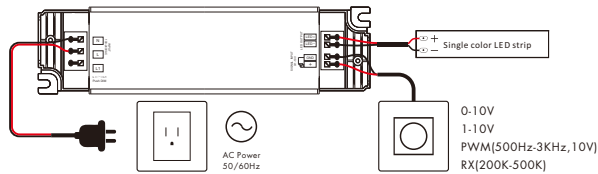
| Model                 |  | LN-40-12  | LN-40-24                        |
|-----------------------|--|---|---------------------------------|
| Output                | Output Voltage                             | 12VDC   | 24VDC                           |
|                       | Output Current                             | Max. 3.34A  | Max. 1.67A                      |
|                       | Output Power                               | Max. 40W  |                                 |
|                       | Dimming Range                              | 0~100%  |                                 |
|                       | Ripple & Noise                             | <=200mV/230VAC  | <=280mV/230VAC                  |
|                       | PWM Frequency                              | 500Hz   |                                 |
| Input                 | Input Voltage Range                        | 100~240VAC  |                                 |
|                       | 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  |                                 |
|                       | No Load Power                              | 0.8W/115VAC, 1.2W/230VAC  | 1.6W/115VAC, 2.1W/230VAC        |
| Protection            | 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. |                                 |
|                       | Working Temperature                        | -30°C~50°C  |                                 |
| Environment           | 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   |                                 |
|                       | 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          | ENS5015, 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.

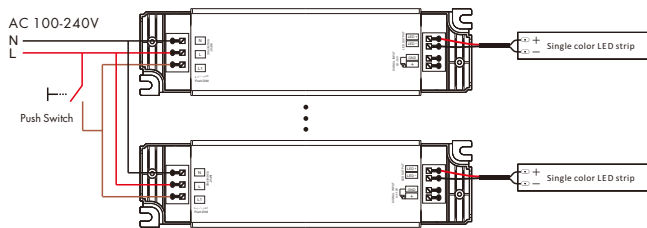
## Wiring Diagram

### 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

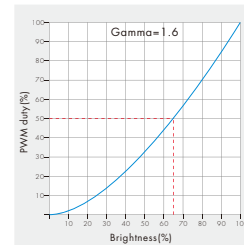


The provided AC Push-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switches.

- **Short press:**  
Turn on or off light.
- **Long press (1-6s):**  
Press and hold to 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 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

