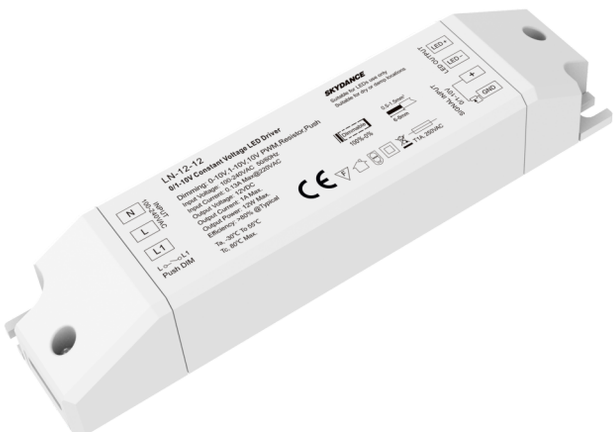
0/1-10V Constant Voltage LED Driver

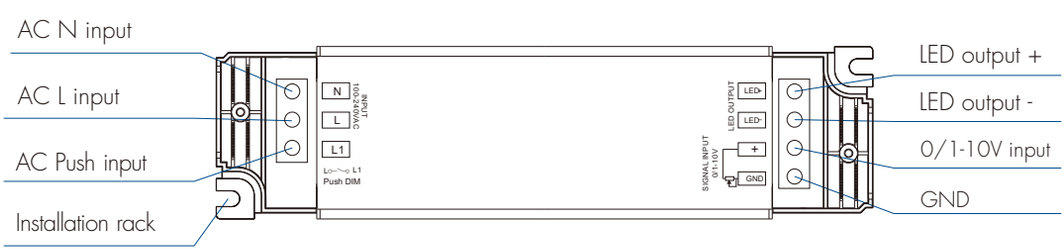
Model No.: LN-12-12

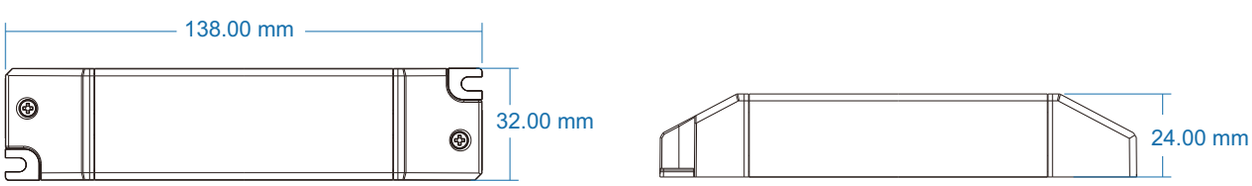


Features

- 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 12W.
- Synchronize on multiple number of LED drivers.
- Over-heat / Over load / 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

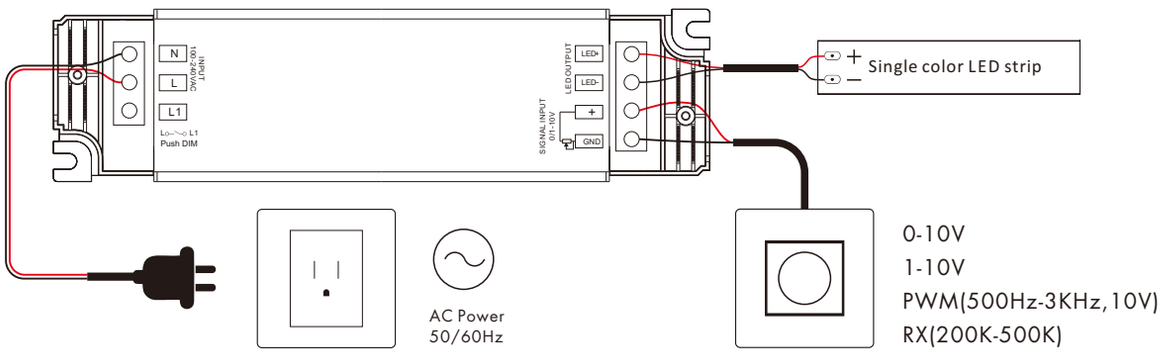
Output	Output Voltage	12VDC
	Output Current	Max. 1A
	Output Power	Max. 12W
	Dimming Range	0～100%
	Ripple & Noise	<=150mV/230VAC
	PWM Frequency	500Hz
	Rise Time	650ms/115VAC, 650ms/230VAC
	Hold Time	1.6ms/115VAC, 1ms/230VAC
Input	Input Voltage Range	100VAC～240VAC
	Frequency Range	50/60Hz
	Efficiency	81%/230VAC
	Alternating Current	0.26A/115VAC, 0.13A/230VAC
	Inrush Current	5A/230VAC
	Leakage Current	<0.5mA/230VAC
	No Load Power	0.8W/115VAC, 1.2W/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℃, auto recovers.
Environment	Woking Temperature	-30℃～50℃
	T-case Max	70℃
	Working Humidity	20%～90%RH, non-condensing
	Storage Temperature/Humidity	-40℃～80℃, 10%～95%RH
	Temperature Coefficient	±0.03%/℃ (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/P-O/P: 3750VAC
	Insulation Resistance	I/P-O/P: 100MΩ/500VDC/25℃/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
	Certications	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.

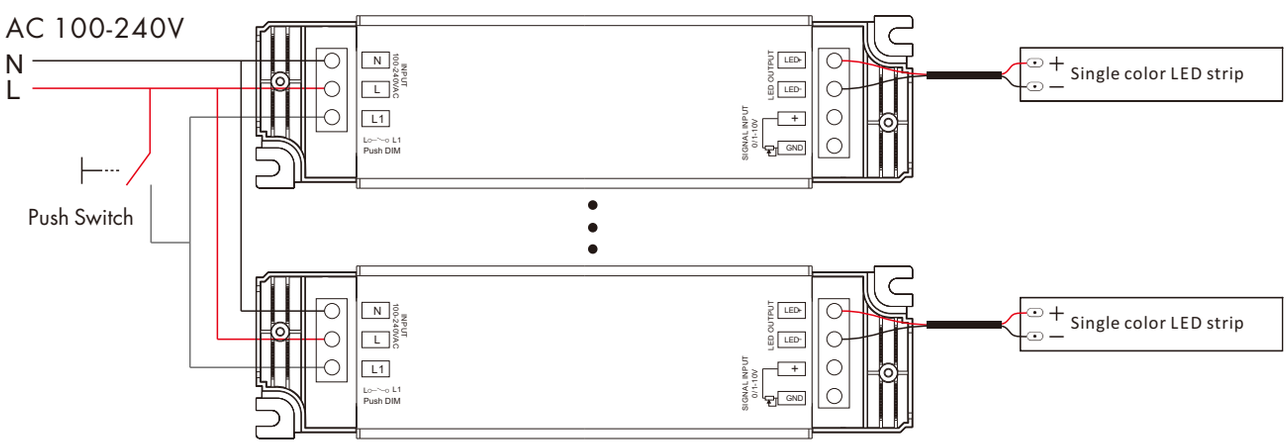
Wiring Diagram

1. 0/1-10V Connection



- The 0/1-10V input is operable via commercially available simple rotary wall switchs designed for 0/1-10V dimming equipment or from decicated 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 15 meters.
- If the LED driver be used with the RF remote or Push-Dim interface prior to using the 0/1-10V interface, the 0/1-10 V signal should change over 10% to return 0/1-10 V control.

2. AC Push-Dim connection

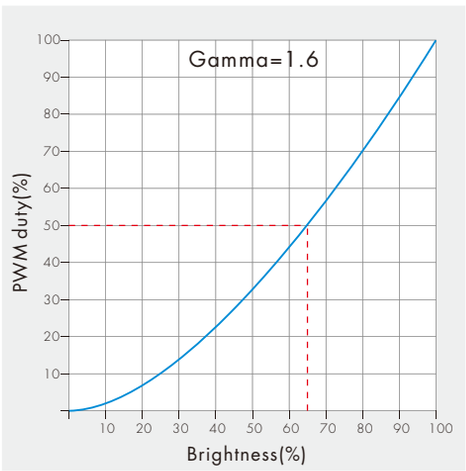


The provided AC Push-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switchs.

- 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 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