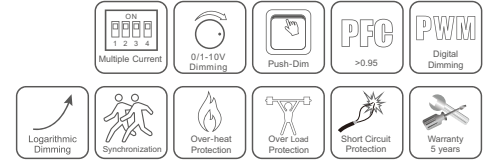


# 0/1-10V Constant Current LED Driver

Model No.: LF-15A

## Features

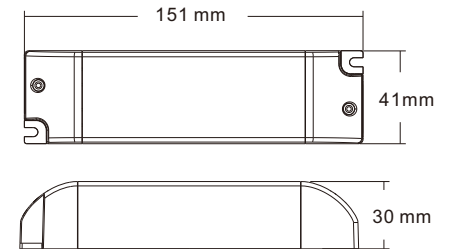
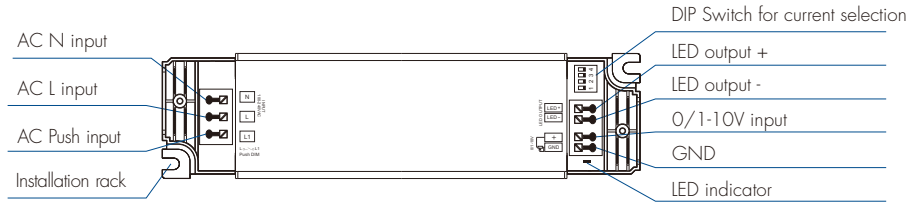
- Dimming interface: 0-10V, 1-10V, 10V PWM, Resistor, AC Push-Dim
- Universal AC input / Full range
- Flicker-free
- 1 channel constant current output, configurable current via DIP switch
- Built-in active PFC function: 0.95 Typ
- Synchronize on multiple number of LED drivers
- Over-heat / Overload / Short circuit protection, recover automatically
- Full protective plastic case
- Suitable for indoor LED lighting application
- 5 Year, 50,000hr warranty



## Applications

- Suitable for downlight, spotlight and decorative applications.
- Office / Commercial / Domestic Lighting, Hotels, Classrooms, Warehouse, Health care, Retail and Display.
- Use for retrofit upgrades & new luminaire designs.

## Mechanical Structures and Installations



## Technical Parameters

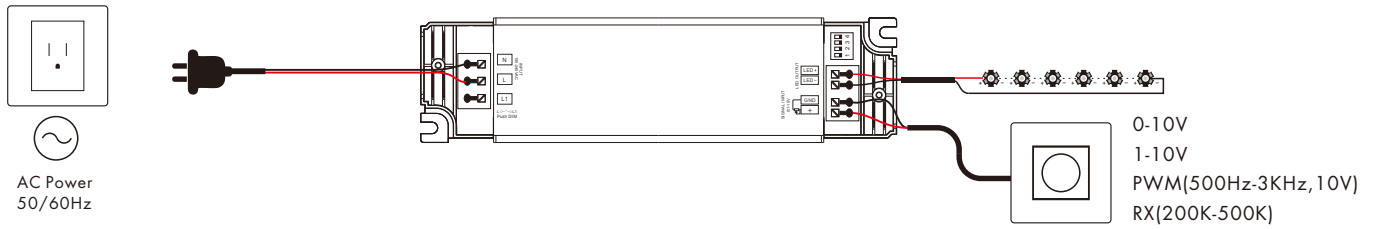
Output	Output Voltage	10-45VDC
	Output Current	150-700mA
	Output Power	Max. 15W
	Max Output Voltage	48VDC
	Dimming Range	0~100%, dimmer depth:0.2%
	PWM Frequency	8000Hz
	Current Accuracy	±5%
	Ripple&Noise	< 100mV
Input	Input Voltage Range	100~240VAC
	Frequency Range	50/60Hz
	Efficiency	>80%/230VAC
	Alternating Current	0.15A/115VAC, 0.07A/230VAC
	Anti Surge	LN:1.5KV
	Startup time	1S/230VAC
	Power Factor	>0.98/115VAC, >0.93/230VAC
	THD	<8%
	Inrush Current	Cold start 13.7A at 230VAC
	Leakage Current	< 0.5mA/230VAC
No Load Power	< 2W	
Protection	Over Load Power	When O/P voltage exceed its range, O/P current declines, auto recovers when the load is reduced.
	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	-20°C~50°C
	Tcase Max	80°C
	Working Humidity	20%~90%RH, non-condensing
	Storage Temp/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/P-O/P: 3750VAC
	Insulation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH
	EMC Emission	EN61000-3-2 Class C, IEC61000-3-3
	EMC Immunity	EN61000-4-2,3.4.5.6.8.11, EN61547
	Certifications	CE

## LED Current Selection:

Output Voltage	9-45V	9-45V	9-45V	9-45V	9-43V	9-38V	9-33V	9-30V	9-27V	9-25V	9-23V	9-22V	
Output Current	150mA	200mA	250mA	300mA	350mA	400mA	450mA	500mA	550mA	600mA	650mA	700mA	
Output Power	1.35-6.75W	1.8-9W	2.25-11.25W	2.7-13.5W	3.15-15.05W	3.6-15.2W	4.05-14.85W	4.5-15W	4.95-14.85W	5.4-15 W	5.85-14.95 W	6.3-15.4 W	

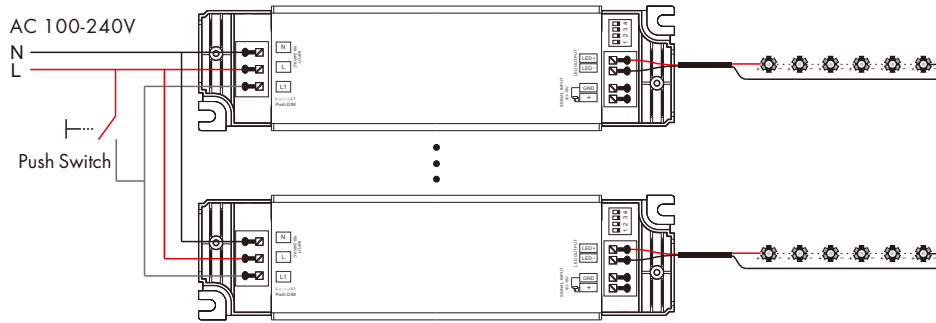
## Wiring Diagram

### 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 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 0/1-10 V interface, the 0/1-10 V signal should change over 10% to return 0/1-10 V control.
- The products 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. AC Push-Dim connection

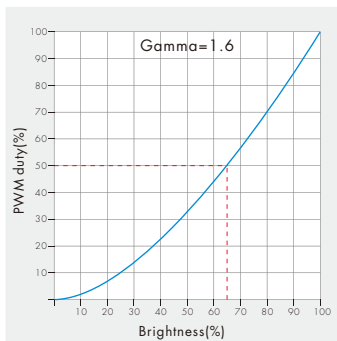


The provided AC Push-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switches.

- **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

