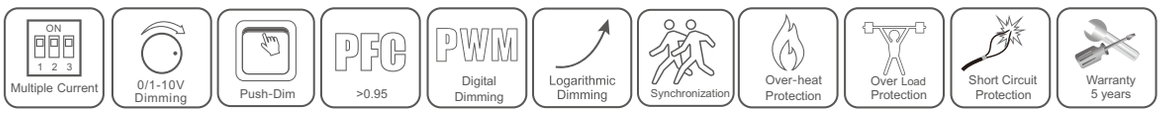
0/1-10V Constant Current LED Driver

Model No.: LF-15A / LF-25A / LF-36A

LF-15A

LF-25A

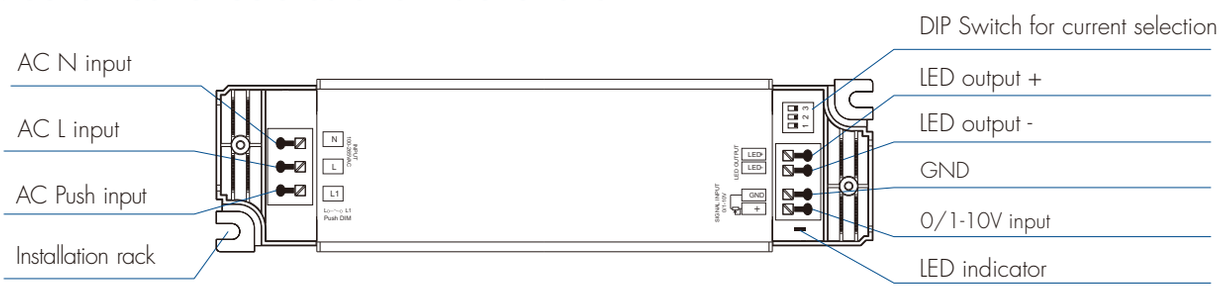
LF-36A

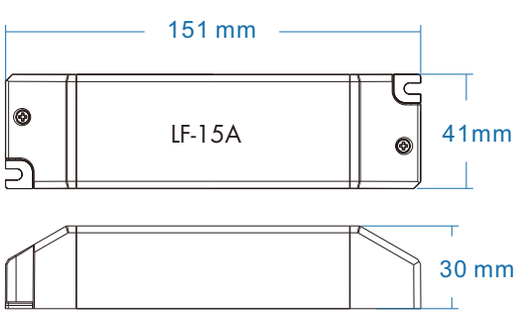


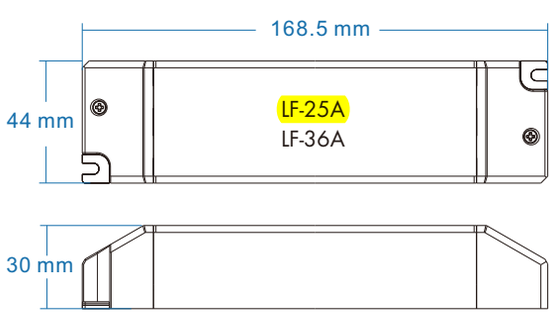
Features

- Dimming interface: 0-10V, 1-10V, 10V PWM, Resistor, AC Push-Dim.
- Universal AC input / Full range.
- 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 / 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

Model		LF-15A	LF-25A	LF-36A
Output	Output Voltage	10-45VDC	10-52VDC	10-52VDC
	Output Current	150-700mA	250-900mA	350-1200mA
	Output Power	Max. 15W	Max. 25W	Max. 36W
	Max Output Voltage	48VDC	52VDC	52VDC
	Dimming Range	0～100%		
	PWM Frequency	500Hz		
	Current Accuracy	±5%	±3%	±3%
	Rise Time	1s (Max 700mA / 22V)	1s (Max 900mA / 28V)	1s (Max1200mA / 30V)
Input	Input Voltage Range	100VAC～265VAC		
	Frequency Range	50/60Hz		
	Efficiency	>80%/115VAC, >80%/230VAC	>80%/115VAC, >80%/230VAC	>82%/115VAC, >84%/230VAC
	Alternating Current	0.15A/115VAC, 0.07A/230VAC	0.28A/115VAC, 0.14A/230VAC	0.38A/115VAC, 0.19A/230VAC
	Power Factor	>0.98/115VAC, >0.93/230VAC	>0.99/115VAC, >0.95/230VAC	>0.99/115VAC, >0.95/230VAC
	THD	>15%/230VAC	>15%/230VAC	>15%/230VAC
	Inrush Current	Cold start 16A at 230VAC	Cold start 16A at 230VAC	Cold start 16A at 230VAC
	Leakage Current	< 0.5mA/230VAC	< 0.5mA/230VAC	< 0.5mA/230VAC
	No Load Power	< 2W	< 2W	< 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℃, auto recovers.		
Environment	Woking Temperature	-30℃～50℃		
	T-case Max	70℃		
	Working Humidity	20%～90%RH, non-condensing		
	Storage Temp/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		

LED Current Selection:

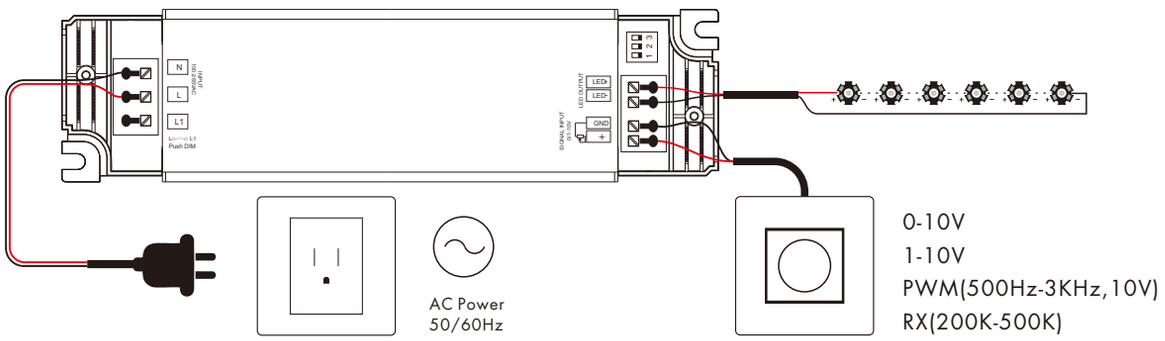
DIP switch	1 2 3	■ ■ ■	■ ■ □	■ □ ■	■ □ □	□ ■ ■	□ ■ □	□ □ ■	□ □ □
LF-15A	Output Voltage	10-45V	10-45V	10-43V	10-38V	10-34V	10-30V	10-23V	10-22V
	Output Current	150mA	200mA	350mA	400mA	450mA	500mA	650mA	700mA
	Output Power	1.5-6.75W	2-9W	3.5-15W	4-15W	4.5-15W	5-15W	6.5-15W	7-15W
LF-25A	Output Voltage	10-52V	10-52V	10-52V	10-52V	10-50V	10-42V	10-36V	10-28V
	Output Current	250mA	300mA	350mA	400mA	500mA	600mA	700mA	900mA
	Output Power	2.5-13W	3-15.6W	3.5-18.2W	4-20.8W	5-25W	6-25.2W	7-25.2W	9-25.2W
LF-36A	Output Voltage	10-52V	10-52V	10-52V	10-52V	10-45V	10-40V	10-35V	10-30V
	Output Current	350mA	500mA	600mA	700mA	800mA	900mA	1050mA	1200mA
	Output Power	3.5-18.2W	5-26W	6-31.2W	7-36.4W	8-36W	9-36W	10.5-36W	12-36W

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.

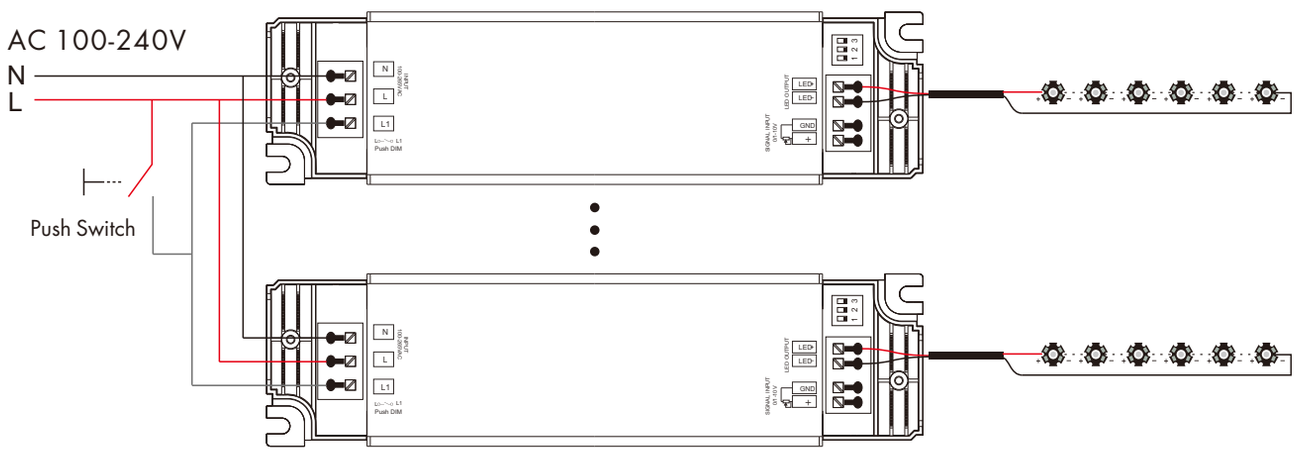
Wiring Diagram

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

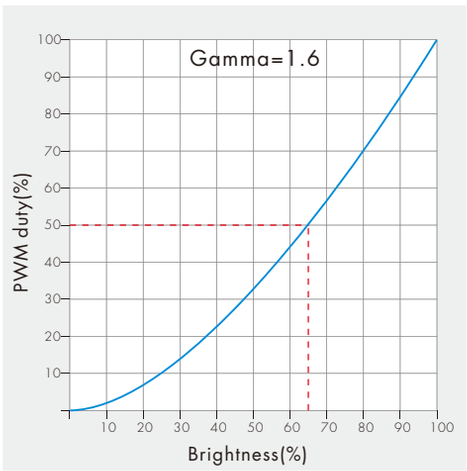


The provided AC Push-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switchs.

- 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