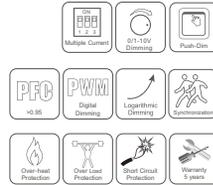


## 0/1-10V Constant Current LED Driver

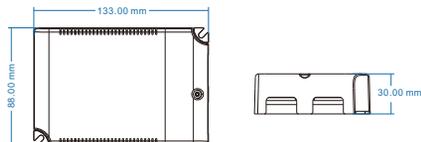
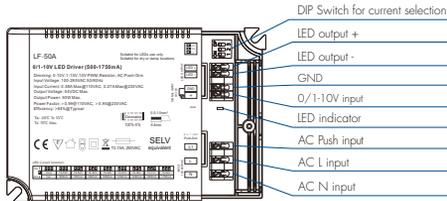
Model No.: LF-50A



### 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 / 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

Output	Output Voltage	10-52VDC
	Output Current	500-1750mA
	Output Power	Max. 50W
	Max Output Voltage	52VDC
	Dimming Range	0~100%
Input	PWM Frequency	4KHz
	Current Accuracy	±3%
	Rise Time	2.4s (Max 1750mA / 29V)
	Input Voltage Range	100VAC~265VAC
	Frequency Range	50/60Hz
	Efficiency	>84%/115VAC, >84%/230VAC
	Alternating Current	0.58A/115VAC, 0.24A/230VAC
	Power Factor	>0.99/115VAC, >0.95/230VAC
	THD	<1.5%/230VAC
	Inrush Current	Cold start 16A at 230VAC
Protection	Leakage Current	< 0.5mA/230VAC
	No Load Power	< 2W
Environment	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.
	Working Temperature	-30°C~50°C
	Tcase Max	70°C
Safety&EMC	Working Humidity	20%~90%RH, non-condensing
	Storage Temp./Humidity	-40°C~80°C, 10%~95%RH
	Temperature Coefficient	±0.03%/°C (0-50°C)
	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	EN55015, EN61000-3-2 Class C, IEC61000-3-3
	EMC Immunity	EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61547
Certifications	CE, EMC	

### LED Current Selection:

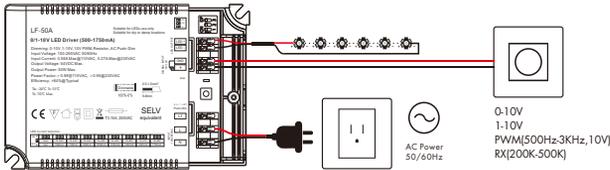
DIP switch	000	001	002	003	004	005	006	007	008
Output Voltage	10-52V	10-52V	10-52V	10-48V	10-42V	10-36V	10-31V	10-29V	
Output Current	500mA	700mA	900mA	1050mA	1200mA	1400mA	1600mA	1750mA	
Output Power	5.26W	7.36.4W	9.46.8W	10.50.4W	12.50.4W	14.50.4W	16.49.6W	20.75-50.7W	

### 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.

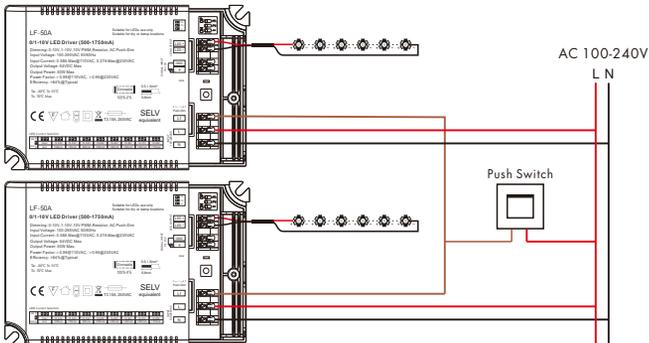
## Wiring Diagram

### 1. 0/1-10V Connection



- The 0/1-10V input is operable via commercially available simple rotary wall 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 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.

### 3. 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

