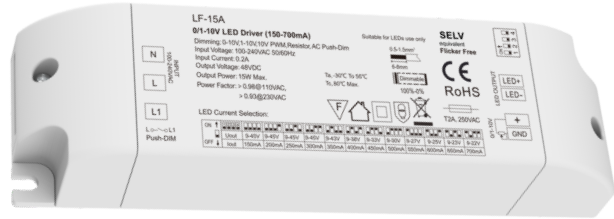


0/1-10V Constant Current LED Driver

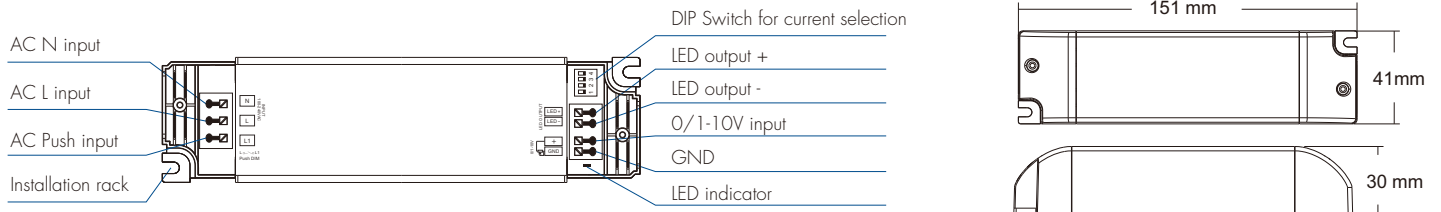
- Dimming interface: 0-10V, 1-10V, 10V PWM, Resistor, AC Push-Dim
- Universal AC input / Full range
- Flicker-free
- 1 channel constant current output, configurable current via DIP switch
- Built-in active PFC function: 0.95 Typ
- Synchronize on multiple number of LED drivers
- Over-heat / Over-load / 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

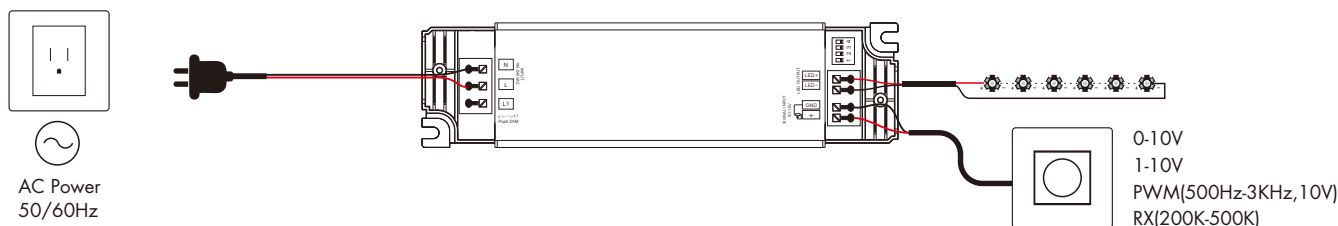
| | | |
|-------------|-------------------------|--|
| Output | Output Voltage | 10-45VDC |
| | Output Current | 150-700mA |
| | Output Power | Max. 1.5W |
| | Max Output Voltage | 48VDC |
| | Dimming Range | 0~100%, dimmer depth:0.2% |
| | PWM Frequency | 8000Hz |
| | Current Accuracy | ±5% |
| | Ripple&Noise | < 100mV |
| Input | Input Voltage Range | 100~240VAC |
| | Frequency Range | 50/60Hz |
| | Efficiency | >80%/230VAC |
| | Alternating Current | 0.15A/115VAC,0.07A/230VAC |
| | Anti Surge | L-N: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:

| | 1 2 3 4 | 5 6 7 8 | 9 10 11 12 | 13 14 15 16 | 17 18 19 20 | 21 22 23 24 | 25 26 27 28 | 29 30 31 32 | 33 34 35 36 | 37 38 39 40 | 41 42 43 44 | 45 46 47 48 |
|----------------|------------|---------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|
| 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 |

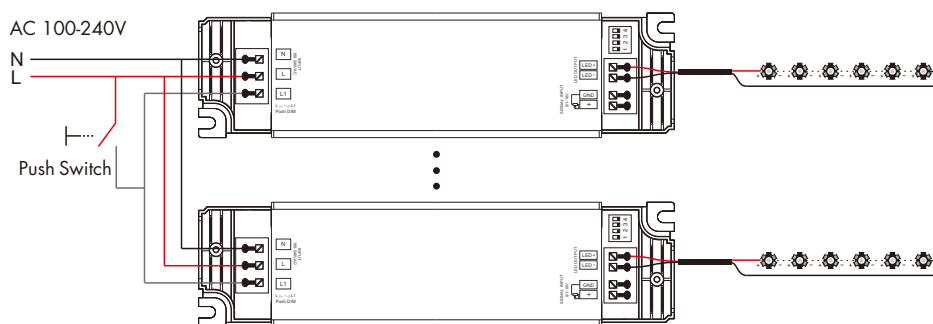
Wiring Diagram

● 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).
- In order to ensure dimming consistency, when the connected 0/1-10V dimmer output signal current is 20mA, the number of LED driver connections does not exceed 50 pcs, when the 0/1-10V dimmer output signal current is 50mA, the number of LED driver connections does not exceed 100 pcs. The maximum length of the wires from dimmer to LED driver should be no more than 50 meters (use copper wire with a cross-sectional area of 0.75 m² for wiring).
- If the LED driver be used with 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.
- The products shall not be stacked, the distance should be ≥ 20cm, so as not to affect lifespan of the products due to poor heat dissipation.

● 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

