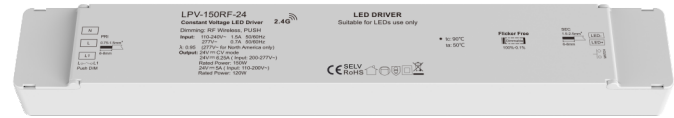


LPV-150RF-12, LPV-150RF-24

RF DIM

RF Constant Voltage LED Driver

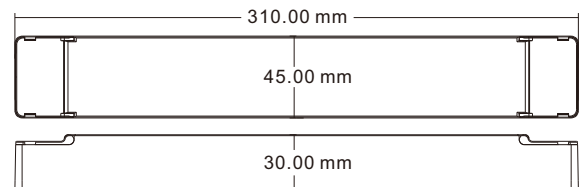
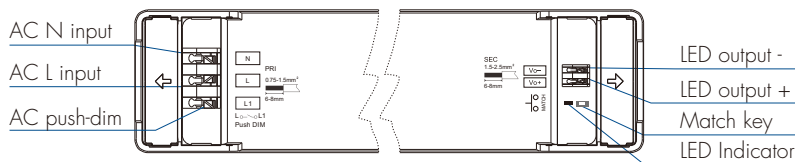
- Dimming interface: RF wireless, AC Push-dim
- Match with RF 2.4G single color remote control, one RF LED driver accepts up to 10 remote controls
- Universal AC input / 110-277VAC
- 1 channel constant voltage output, Max. total output power 150W
- Built-in active PFC function: 0.95 Typ, THD<10%
- Light on/off fade time 3s selectable
- No load/Standby power<0.5W
- Over Load / Over-heat / Short circuit protection
- Suitable for indoor LED lighting application
- 5 Year, 50,000hr warranty



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.

Mechanical Structures and Installations

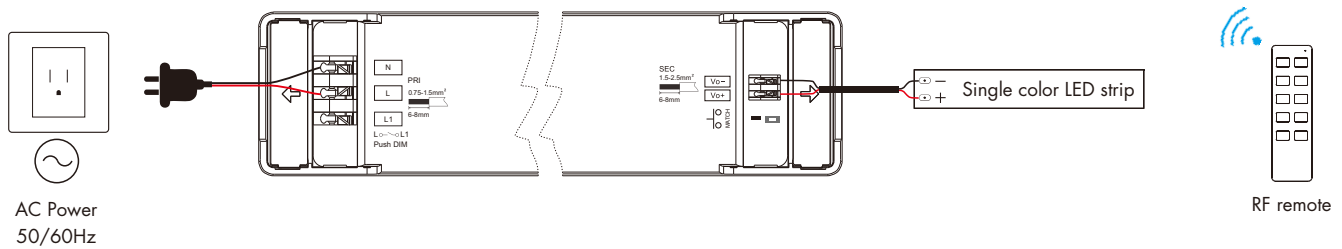


Technical Parameters

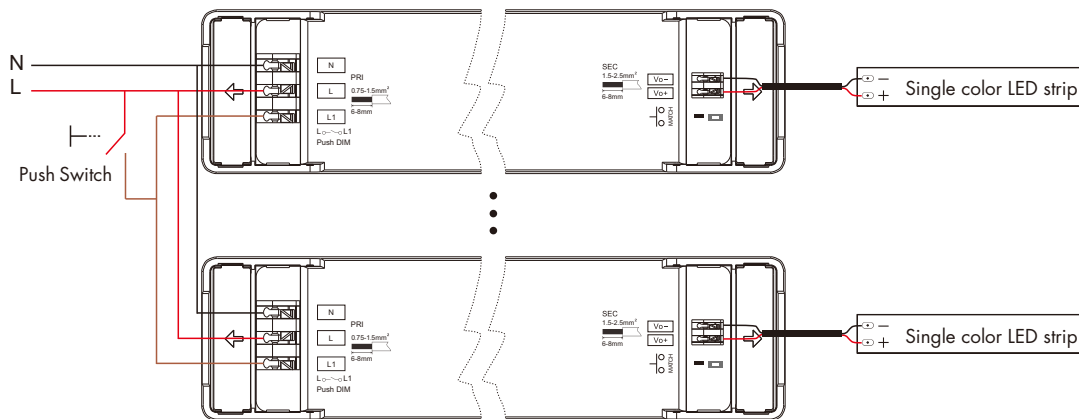
Model		LPV-150RF-12	LPV-150RF-24
Output	Output Voltage	12VDC	24VDC
	Output Current	Max. 12.5A	Max. 6.25A
	Output Power	Max. 150W (Input: 200-277VAC) ; Max. 120W(Input: 110-200VAC)	
	Startup time	1000mS/100VAC, 500mS/230VAC	
	Dimming Range	0~100%	
	Ripple & Noise	150mV	240mV
Input	Input Voltage Range	110~277VAC (Please refer to "Static characteristic" section)	
	Frequency Range	50/60Hz	
	Efficiency	92%/230VAC	
	Alternating Current	1.5A/110VAC, 0.75A/230VAC, 0.7A/277VAC	
	Power Factor	>0.95	
	THD	<10%/110VAC/230VAC, <15%/277VAC@ Full load	
	Inrush Current	Cold start 30A at 230VAC	
	Anti Surge	L-N:1KV	
	Leakage Current	<5mA	
	No Load/Standby Power	<1W	
Protection	Over Load	Output hiccups occur when the load is 110% to 140%, and recovery occurs automatically when the fault condition is removed.	
	Over Temperature	Current decrease when PCB temp>110°C, recovers automatically after fault condition is removed	
	Short Circuit	Shut down the output voltage, recovers automatically after fault condition is removed	
Environment	Working Temperature	-20°C~50°C	
	Tcase Max	90°C	
	Working Humidity	20~90%RH, non-condensing	
	Storage Temperature/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, GB19510.14	
	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	
	Net weight	420g±5%	
	Gross weight	450g±5%	

Wiring Diagram

1. RF Connection



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 15s, 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.

Light on/off fade time

Long press match key 5s, then short press match key 3 times, the light on/off time will be set to 3s, the indicator light blink 3 times.

Long press match key 10s, restore factory default parameter, the light on/off time also restore to 0.5s.

Match Remote Control (two match ways)

End user can choose the suitable match/delete ways. Two options are offered for selection:

Use Match key

Match:

Short press match key, immediately press on/off key (single zone remote) or zone key (multiple zone remote) on the remote. The LED indicator fast flash a few times means match is successful.

Delete:

Press and hold match key for 5s to delete all match, The LED indicator fast flash a few times means match was deleted.

Use Power Restart

Match:

Switch off the power 5s, then switch on power 2s, repeat again. Immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 3 times on the remote. The light blinks 3 times means match is successful.

Delete:

Switch off the power 5s, then switch on power 2s, repeat again. Immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 5 times on the remote. The light blinks 5 times means all matched remotes were deleted.

When use multiple RF drivers, two application method:

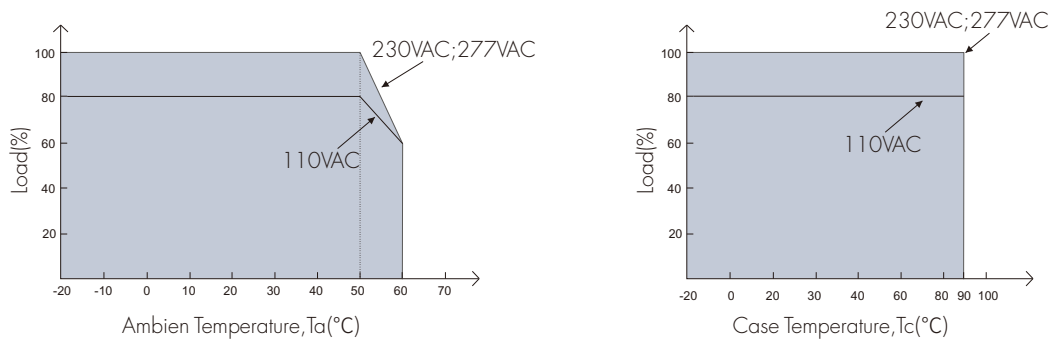
Auto-transmitting: One driver can transmit the signals from the remote to another driver within 30m, as long as there is a driver within 30m, the remote control distance can be extended.

Auto-synchronization: Multiple drivers within 30m distance can work synchronously when they are controlled by the same remote.

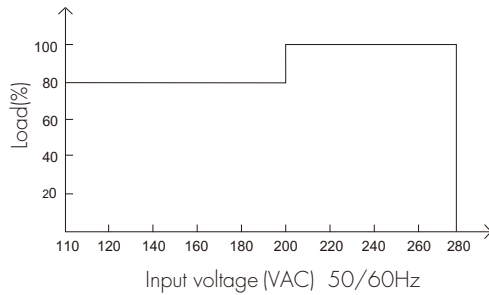
Driver placement may offer up to 30m communication distance. Metals and other metal materials will reduce the range. Strong signal sources such as WiFi routers and microwave ovens will affect the range.

We recommend for indoor applications that driver placements should be no further apart than 15m.

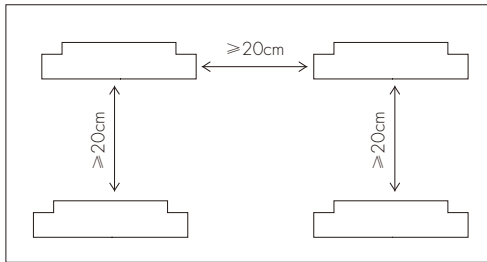
Output Load VS Temperature



Static characteristic

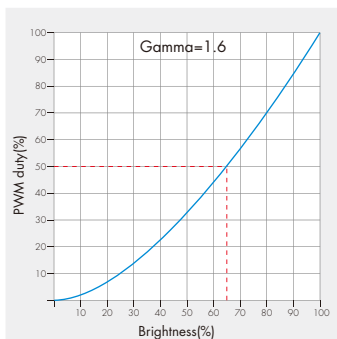


Installation precautions



1. This product must be installed and adjusted by a qualified professional.
2. This product is non-waterproof.
When installed outdoors, please ensure it is mounted in a water proof enclosure.
3. The ambient temperature in which the product is installed must not exceed the value of T_a at any time.
4. LED driver should keep a certain distance from the heating stuff (such as the luminaries radiator).
The installation interval between the product and the product is recommended to be 20cm, so as not to affect the service life due to poor heat dissipation.
5. The installation height shall be $\geq 1\text{m}$ from the floor
to avoid shortening the remote control distance due to too weak reception signal.
6. The products are not allowed to be close to or covered by metal objects, with an interval of $\geq 20\text{cm}$ to avoid signal attenuation and shorten the remote control distance.
7. Avoid installation at the corner of the wall or the corner of the beam, with an interval of $\geq 20\text{cm}$ to avoid signal interference.

Dimming Curve



Failure analysis and troubleshooting

Fault	Cause	Solution
The light can not be turned on	1. No power 2. Wrong wiring	1. Check the power supply 2. Connection test
Brightness of the light is inconsistent	1. Output cable is too long 2. Wire diameter is too small	1. Reduce wire length or loop power supply 2. Replace Replace to thicker wires
Hiccup flashing light	Overload	Check the power of the LED light