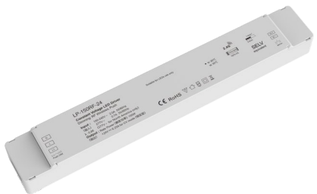
RF Constant Voltage LED Driver

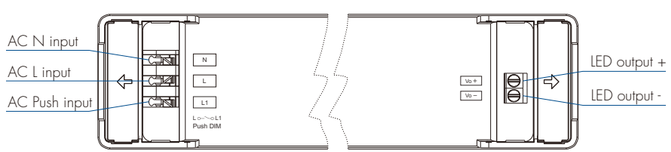
Model No.: LP-150RF-12, LP-150RF-24

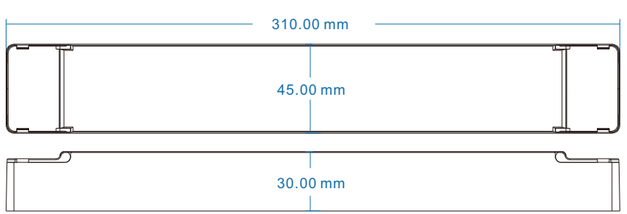


Features

- 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
- 1 channel constant voltage output, Max. total output power 150W
- Built-in active PFC function: 0.98 Typ
- Auto-transmitting function: LED driver automatically transmit signal to another LED driver with 30m control distance
- Synchronize on multiple number of LED drivers
- Light on/off fade time 3s selectable
- Over-heat / Over-load / Over-voltage / Short circuit protection
- Suitable for indoor LED lighting application
- 5 Year, 50,000hr warranty

Mechanical Structures and Installations





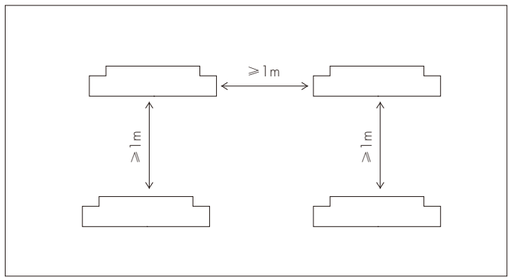
Technical Parameters

Model		LP-150RF-12	LP-150RF-24
Output	Output Voltage	12VDC	24VDC
	Output Current	Max. 12.5A	Max. 6.25A
	Output Power	Max. 150W	
	Startup time	2S/100VAC, 1S/230VAC	
	Dimming Range	0～100%	
	Ripple & Noise	<=150mV /230VAC	
	PWM Frequency	2000Hz	
Input	Input Voltage Range	100～277VAC	
	Frequency Range	50/60Hz	
	Efficiency	92%/230VAC	
	Alternating Current	2A/100VAC, 0.75A/230VAC, 0.7A/277VAC	
	Power Factor	>0.98/230VAC	
	THD	<5%/100VAC, <10%/230VAC@ half load/277VAC@75%load	
	Inrush Current	Cold start 71A at 230VAC	
	Anti Surge	L-N:1KV	
	Leakage Current	<5mA	
	No Load Power	2W/100VAC, 2W/230VAC, 2.5W/277VAC	
Protection	Over Load	Shut down the output Voltage, when the load>=110%～140%, auto recovers.	
	Over Voltage	Shut down the output Voltage, when the Voltage>=110%～140%, re-power on to recover	
	Over Temperature	Shut down the output Voltage, re-power on to recover	
	Short Circuit	Shut down the output Voltage, re-power on to recover	
Environment	Woking Temperature	-30℃～50℃	
	Tcase Max	90℃	
	Working Humidity	20%～90%RH, non-condensing	
	Storage Temperature/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, GB19510.14	
	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	
	Net weight	420g	
	Gross weight	450g	

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.

Installation precautions

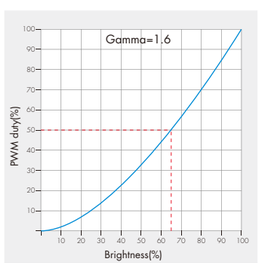


Please do not stack the products.

The distance between two products should be ⩾1m

so as not to affect heat dissipation and lifespan of the products.

Dimming Curve



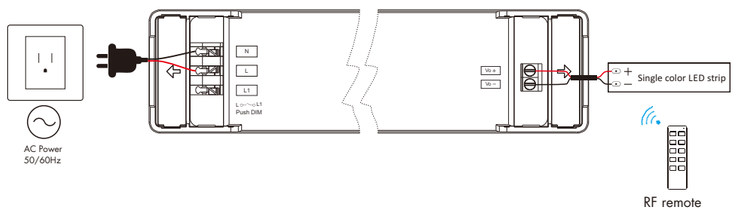
Light on/off fade time

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.

Wiring Diagram

1. RFConnection



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) of the remote.

Delete:
Press and hold match key for 5s to delete all match, The light blinks 5 times means all matched remotes were deleted.

Use Power Restart

Match:
Switch off the power, then switch on power, 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, then switch on power, 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:

1. All the drivers in the same zone.

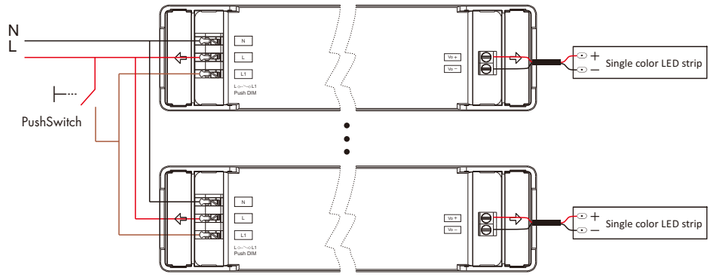
Auto-transmitting: One driver can transmit the signals from the remote to another driver within 30m, as long as there is a driver within 30m, the remote control distance can be extended.

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 than15m.

2. Each driver(one or more) in a different zone, like zone 1, 2, 3 or 4.

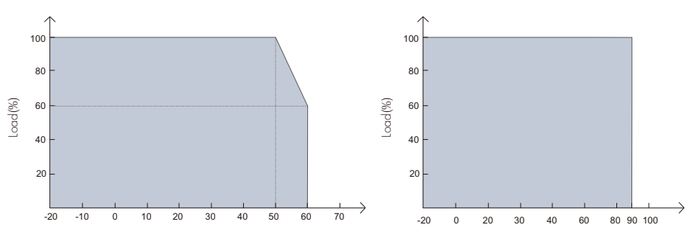
2. AC Push-Dim connection



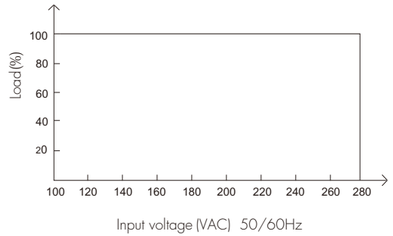
The provided AC Push-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switches.

- **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.

Output Load VS Temperature



Static characteristic



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
Remote control nonresponse	1. run out of battery 2. Beyond remote control range 3. No matching	1. Replace the battery 2. Move the remote to controller closer 3. Match the remote to LED driver
Hiccup flashing light	Overload	Check the power of the light
Series control	Wrong pairing	Delete all pairing and pair with remote again
Multiple LED drivers are out of sync	Inconsistent switch gradients	All initialization, unified setting, switch gradient
Remote control delay	Electromagnetic interference, the power supply is too close to high-power appliances	The installation position is more than 1m away from high-power electrical appliances with the same frequency