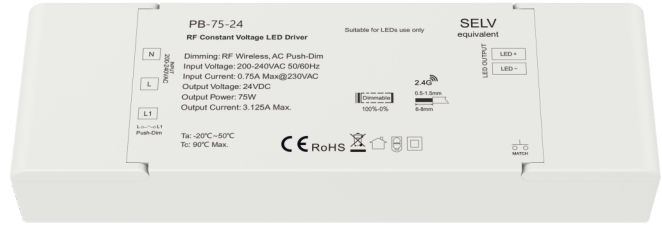# RF Constant Voltage LED Driver
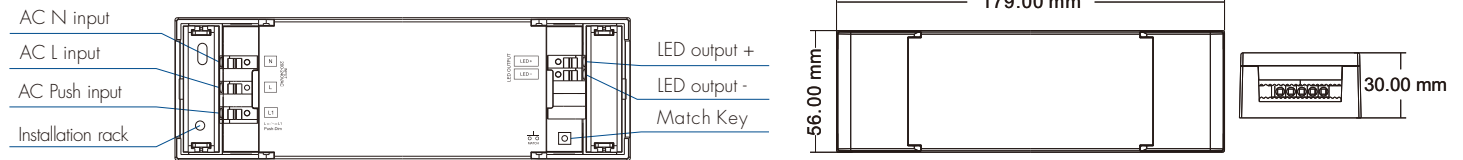
Model No.: PB-75-12, PB-75-24

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 75W
- 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 / Short circuit protection, recover automatically
- Full protective plastic case
- Suitable for indoor LED lighting application
- 3 Year, 30,000hr warranty

| RF 2.4G 30m | Push-Dim | PWM Digital Dimming | Logarithmic Dimming | Synchronization | Over-heat Protection | Over Load Protection | Short Circuit Protection | Warranty 3 years |

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

AC N input
AC L input
AC Push input
Installation rack

LED output +
LED output -
Match Key

179.00 mm
56.00 mm
30.00 mm

Technical Parameters

Model		PB-75-12	PB-75-24
Output	Output Voltage	12VDC	24VDC
	Output Current	Max. 6.25A	Max. 3.125A
	Output Power	Max. 75W	
	Dimming Range	0~100%	
	Ripple & Noise	<=200mV/230VAC	
	PWM Frequency	2000Hz	
Input	Input Voltage Range	200~240VAC	
	Frequency Range	50/60Hz	
	Efficiency	88%/230VAC	
	Alternating Current	0.77A/230VAC	0.75A/230VAC
	Inrush Current	Cold start 27.5A at 230VAC	
	Leakage Current	<5mA	
	Standby Power	1.5W/230VAC	
Protection	Over Load Power	Shut down output voltage, when the load≥120~150%,auto recovers.	
	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	-20℃~50℃	
	T-case 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	
	Withstand Voltage	I/P-O/P: 3750VAC	
	Insulation Resistance	I/P-O/P: 100MΩ/500VDC/25℃/70%RH	
	EMC Emission	EN61000-3-2 Class C, IEC61000-3-3	
	EMC Immunity	EN61000-4-2.3.4.5.6.8.11, EN61547	
	Certications	CE	

Wiring Diagram

1. RF Connection

RF remote   AC200-240V 50/60Hz   + − Single color LED strip

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 than 15m.

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

2. AC Push-Dim connection

AC 200-240V
N
L

Push Switch

+ − Single color LED strip

+ − Single color LED strip
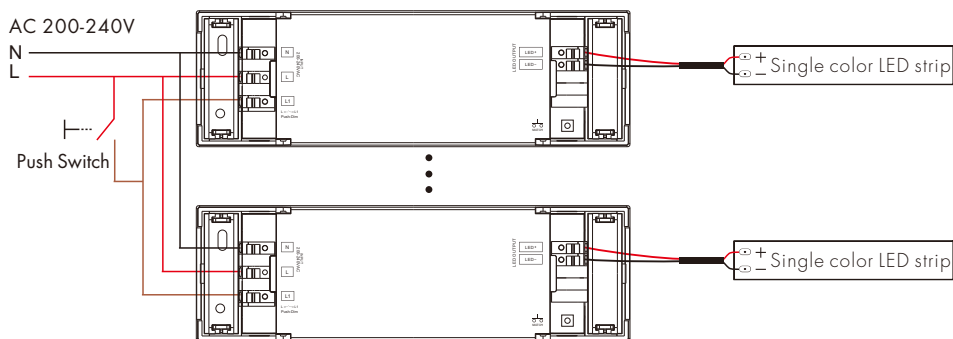
Light on/off fade time

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.

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.

Installation Precautions

1. 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.

2. The installation height shall be ≥ 1m from the floor to avoid shortening the remote control distance due to too weak reception signal.

3. The products are not allowed to be close to or covered by metal objects, with an interval of ≥ 20cm to avoid signal attenuation and shorten the remote control distance.

4. Avoid installation at the corner of the wall or the corner of the beam, with an interval of ≥ 20cm to avoid signal interference.

Dimming Curve

Gamma=1.6

PWM duty(%)

Brightness(%)