

## RF Constant Voltage LED Driver

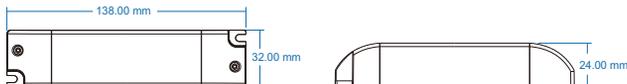
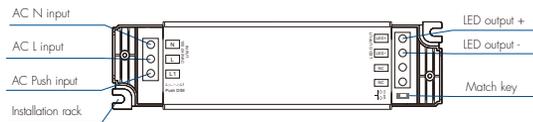
Model No.: PB-12-12



### 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
- Universal AC input / Full range
- 1 channel constant voltage output, Max. total output power 12W
- 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 / 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

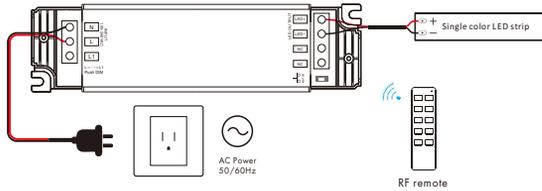
Output	Output Voltage	12VDC
	Output Current	Max. 1A
	Output Power	Max. 12W
	Dimming Range	0~100%
	Ripple & Noise	<=200mV
	PWM Frequency	2000Hz
Input	Input Voltage Range	100~240VAC
	Frequency Range	50/60Hz
	Efficiency	81%/230VAC
	Alternating Current	0.26A/115VAC, 0.13A/230VAC
	Inrush Current	5A/230VAC
	Leakage Current	<0.5mA/230VAC
	No Load Power	0.8W/115VAC, 1.2W/230VAC
Protection	Over Load Power	Shut down the output when current load $\geq$ 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°C, auto recovers.
Environment	Working Temperature	-30°C~50°C
	Tcase Max	70°C
	Working Humidity	20%~90%RH, non-condensing
	Storage Temperature/Humidity	-40°C~80°C, 10%~95%RH
	Temperature Coefficient	$\pm 0.03\%/^{\circ}\text{C}$ (J0.50%)
	Vibration Resistance	10-500Hz, 2G, 6min/cycle, X,Y,Z axes/2min
Safety&EMC	IP Rating	IP20
	Security Specifications	IEC/EN61347-1, IEC/EN61347-2-13
	Withstand Voltage	1/PO/P: 3750VAC
	Insulation Resistance	1/PO/P: 100M $\Omega$ /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	

### 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.

## Wiring Diagram

### 1. RF Connection



#### 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.



RF remote

**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



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 stepless dimming, With every other long press, the light level goes to the opposite direction.

- **Dimming memory:**

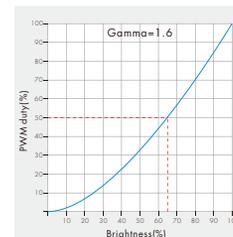
Light returns to the previous dimming level when switched off and on again, even at power failure.

- **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



## 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.