# RF Constant Voltage LED Driver

# Model No.: PB-40-12 / PB-40-24

#### **Features**

- Dimming interface: RF Wireless, AC Push-Dim
- $\bullet$  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 40W
- 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
- 5 Year, 50,000hr warranty



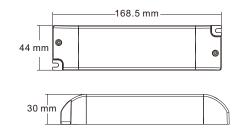


# **Applications**

- 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



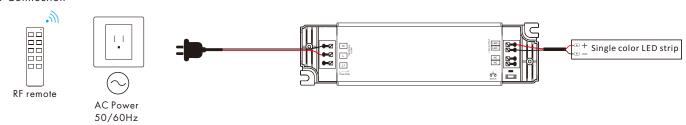


### **Technical Parameters**

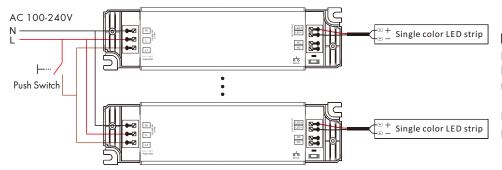
Model		PB-40-12	PB-40-24
Output	Output Voltage	12VDC	24VDC
	Output Current	Max. 3.3A	Max. 1.65A
	Output Power	Max. 40W	
	Dimming Range	0~100%	
	Ripple & Noise	<=200mV/230VAC	<=280mV/230VAC
	PWM Frequency	2000Hz	
Input	Input Voltage Range	100~240VAC	
	Frequency Range	50/60Hz	
	Efficiency	81%/230VAC	86%/230VAC
	Alternating Current	0.70A Max @100VAC, 0.40A Max @230VAC	
	Inrush Current	Cold start 27.5A at 230VAC	
	Leakage Current	<5mA	
	Standby Power	0.8W/115VAC, 1.2W/230VAC	1.6W/115VAC, 2.1W/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 $> 100^\circ$ C, auto recovers.	
Environment	Woking Temperature	-20℃~50℃	
	T-case Max	308	
	Working Humidity	20%~90%RH, non-condensing	
	Storage Temperature/Humidity	-40℃~80℃, 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/PO/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



#### 2. AC Push-Dim connection



### 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.

### 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.

### Installation Precautions

- 1. The products shall not be stacked, the distance should be  $\geq$  20cm, so as not to affect lifespan of the products due to poor heat dissipation.
- 2. The installation height shall be  $\geq 1\,\mathrm{m}$  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  $\geq$  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  $\geq$  20cm to avoid signal interference.

### 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.

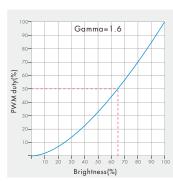
The light blinks 3 times means match is successful.

#### Doloto:

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.

# Dimming Curve



User Manual Ver 1.0.6