

## RF 3 Channel Constant Voltage LED Driver

Model No.: PB-40-12-3 / PB-40-24-3



PB-40-12-3



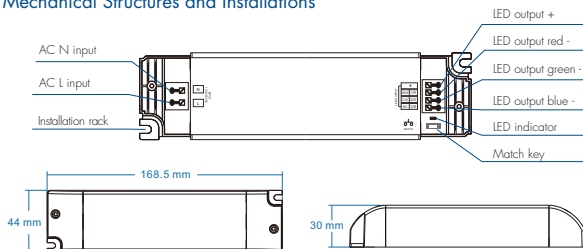
PB-40-24-3



### Features

- Dimmable LED driver with RF control, apply to single color, dual color or RGB LED constant voltage strips
- Match with RF 2.4G single color, dual color and RGB/RGBW remote.  
One RF LED driver accepts up to 10 remote controls
- Universal AC input / Full range
- 3 channel constant voltage output, Max. total output power 40W
- When using with RGB light, built in 10 dynamic mode, include jump or gradual change style
- Auto-transmitting function: LED driver automatically transmit signal to another LED driver with 30m control distance
- Synchronize on multiple number of LED drivers
- 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

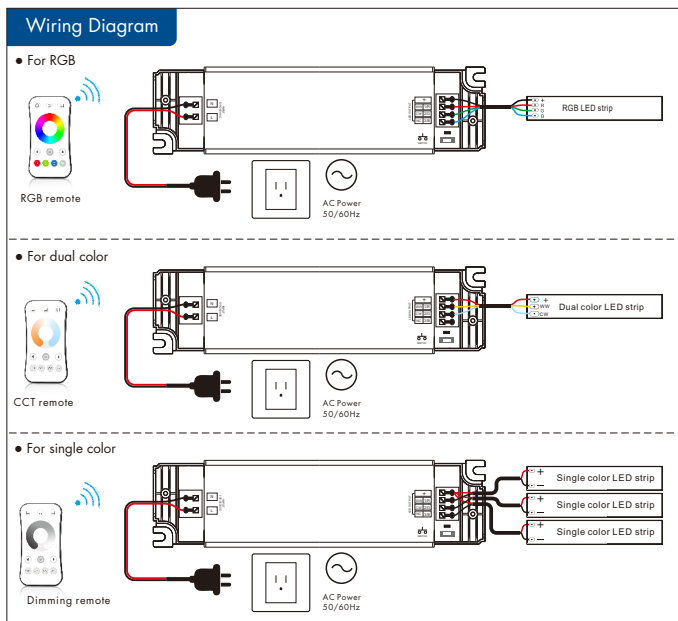


### Technical Parameters

Model		PB-40-12-3	PB-40-24-3
Output	Output Voltage	12VDC	24VDC
	Output Current	3CH x 1.11A	3CH x 0.56A
	Output Power	Max. 40W	
	Dimming Range	0~100%	
	Ripple & Noise	<=200mV/230VAC	<=280mV/230VAC
	PWM Frequency	750Hz	
Input	Input Voltage Range	100~240VAC	
	Frequency Range	50/60Hz	
	Efficiency	81%/230VAC	86%/230VAC
	Alternating Current	0.70A/115VAC, 0.41A/230VAC	0.67A/115VAC, 0.40A/230VAC
	Inrush Current	Cold start 27.5A at 230VAC	
	Leakage Current	<5mA	
	No Load Power	0.8W/115VAC, 1.2W/230VAC	1.6W/115VAC, 2.1W/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%/°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/P/O/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.



## 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 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.

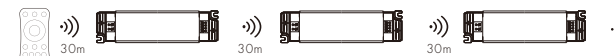
**Delete:**  
Switch off the power, then switch on power again, immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 5 times on the remote. The light blinks 5 times means all matched remotes were deleted.

## RGB Dynamic mode list

No.	Name	No.	Name
1	RGB jump	6	RGB fade in and out
2	RGB smooth	7	Red fade in and out
3	6 color jump	8	Green fade in and out
4	6 color smooth	9	Blue fade in and out
5	Yellow cyan purple smooth	10	White fade in and out

## Application notes

1. All the receivers in the same zone.



RF remote

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

**Auto-synchronization:** Multiple receivers within 30m distance can work synchronously when they are controlled by the same remote, under same dynamic mode and with same speed.

Receiver 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 receiver placements should be no further apart than 1.5m.

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



## Dual color control

CH1=Warm white LED

CH2=Cool white LED

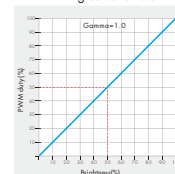
Each channel can supply up to 40W and white balance can be controlled as such:

Color temperature	Cool white	Neutral white	Warm white
Power distribution	CH1=0W,CH2=40W	CH1=20W,CH2=20W	CH1=40W,CH2=0W

Linear dual color tuning



Dimming curve for CCT



Dimming curve for RGB/DIM

