

RF Constant Voltage LED Driver

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



PB-40-12

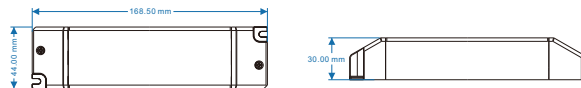
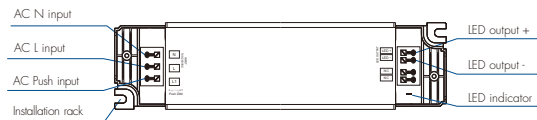
PB-40-24



Features

- Dimming interface: RF Wireless, AC Push-Dim
- Match with Skydance's 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
- Over-heat / Over-load / 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

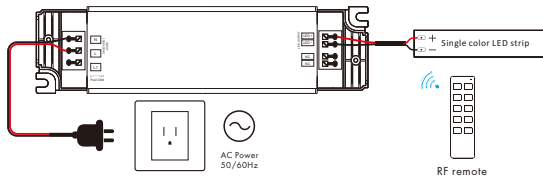
| Model | PB-40-12 | PB-40-24 | |
|----------------|------------------------------|---|----------------------------|
| Output | Output Voltage | 12VDC | 24VDC |
| | Output Current | Max. 3.34A | Max. 1.67A |
| | Output Power | Max. 40W | |
| | Dimming Range | 0~100% | |
| | Ripple & Noise | <=200mV/230VAC | <=280mV/230VAC |
| | PWM Frequency | 500Hz | |
| | Rise Time | 488ms/115VAC, 424ms/230VAC | 424ms/115VAC, 368ms/230VAC |
| Hold Time | 3.6ms/115VAC, 4.5ms/230VAC | 6.5ms/115VAC, 8.2ms/230VAC | |
| Input | Input Voltage Range | 100VAC~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 >= 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 | |
| | Tease Max | 70°C | |
| | Working Humidity | 20%~90%RH, non-condensing | |
| | Storage Temperature/Humidity | -40°C~80°C, 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/PO/P: 3750VAC | |
| | Insulation Resistance | I/PO/P: 100MΩ/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 (Use Power-up)

Match:

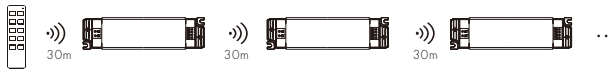
Switch off the power, then switch on power again, immediately short press on/off key(single zone remote) or zone key(multiple zone remote) 3 times on the remote. The light blinks 3 times means match is successful.

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 delete all matched remote.

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 limitless.

Auto-synchronization: Multiple drivers within 30m distance can work synchronously when they are controlled by the same remote.

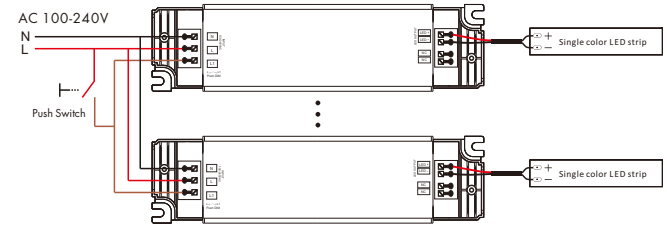
Driver placement may offer up to 30m communication distance. Metals and other metal materials will reduce the range. Strong signal sources such as WiFi routers and microwave ovens will affect the range.

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 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.

Dimming Curve

