

Superlightingled PB-12-12 RF Constant Voltage LED Driver Instruction Manual

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Superlightingled

Superlightingled PB-12-12 RF Constant Voltage LED Driver

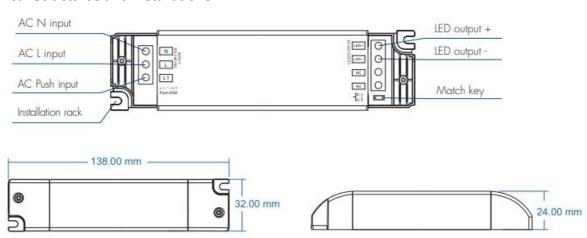


Features

- 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 / 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



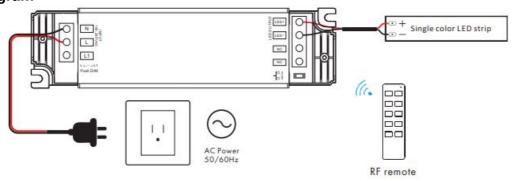
Technical Parameters

| | Output Voltage | 12VDC |
|-------------|------------------------------|--|
| Output | 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 >= 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 $> 100^{\circ}\mathrm{C}$, auto recovers. |
| Environment | Woking Temperature | -30℃~50℃ |
| | T-case Max | 70℃ |
| | 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/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 |
| | Certications | 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



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:

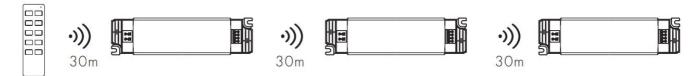
 Switch off the power, then switch on power, repeat again. Immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 3 times on the remote. The light blinks 3 times means match is successful.

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:

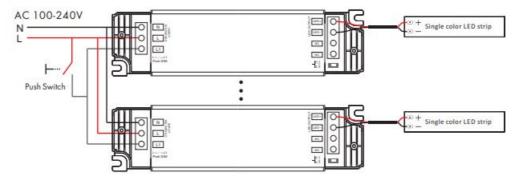
• All the drivers in the same zone.



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



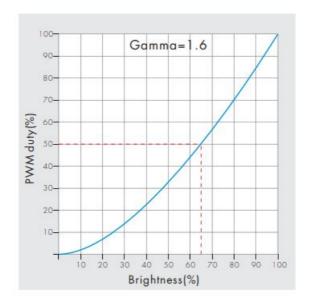
AC Push-Dim connection



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.

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

Documents / Resources



<u>Superlightingled PB-12-12 RF Constant Voltage LED Driver</u> [pdf] Instruction Manual PB-12-12, RF Constant Voltage LED Driver, PB-12-12 RF Constant Voltage LED Driver, Constant Voltage LED Driver, Voltage LED Driver, LED Driver, Driver

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