## RF 4 Channel Constant Voltage LED Driver

Model No.: PB-75-12-4, PB-75-24-4


## Features

- Dimmable LED driver with RF control, apply to single color, dual color or RGB/RGBW LED constant voltage strips
- Match with RF 2.4 G single color, dual color and RGB/RGBW remote.

One RF LED driver accepts up to 10 remote controls

- Universal AC input / Full range
- 4 channel constant voltage output, Max. total output power 75 W
- When using with RGB/RGBW 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 30 m control distance
- Synchronize on multiple number of LED drivers
- Connect with external push switch to achieve on/off and 0-100\% dimming function
- Light on/ off fade time 3 s selectable
- Overheat / Over-load / Short circuit protection, recover automatically
- Full protective plastic case
- Suitable for indoor LED lighting application
- 5 Year, $50,000 \mathrm{hr}$ warranty

Mechanical Structures and Installations



## Technical Parameters

| Model |  | PB-75-12-4 | PB-75-24-4 |
| :---: | :---: | :---: | :---: |
| Output | Output Voltage | 12 VDC | 24 VDC |
|  | Output Current | $4 \mathrm{CH} \times 1.56 \mathrm{~A}$ | $4 \mathrm{CH} \times 0.78 \mathrm{~A}$ |
|  | Output Power | Mox. 75W |  |
|  | Dimming Range | 0~100\% |  |
|  | Ripple \& Noise | < $=200 \mathrm{mV} / 230 \mathrm{VAC}$ |  |
|  | PWM Frequency | 1000 Hz |  |
| Input | Input Voltage Range | 200~240VAC |  |
|  | Frequency Range | 50/60 Hz |  |
|  | Efficiency | 90\%/230VAC |  |
|  | Aliernating Current | $0.77 \mathrm{~A} / 230 \mathrm{VAC}$ | 0.75A/230VAC |
|  | Inrush Current | Cold start 27.5A of 230VAC |  |
|  | Leakage Current | $<5 \mathrm{~mA}$ |  |
|  | No Load Power | $1 \mathrm{~W} / 115 \mathrm{VAC}, 1.5 \mathrm{~W} / 230 \mathrm{VAC}$ |  |
| Protection | Over Load Power | Shut down the output when current load $>=120 \% \sim 150 \%$, auto recovers. |  |
|  | Short Circuit | Shut down outomatically if short circuit occurs, auto recovers. |  |
|  | Over Temperature | Intelligently odiust or tum off the output current if the PCB temp $>100^{\circ} \mathrm{C}$, auto recovers. |  |
| Environment | Woking Temperature | $-30^{\circ} \mathrm{C} \sim 50^{\circ} \mathrm{C}$ |  |
|  | T-case Max | $70^{\circ} \mathrm{C}$ |  |
|  | Working Humidily | 20\% $90 \% \mathrm{RH}$, non-condensing |  |
|  | Storage Temperature/Humidity | $-40^{\circ} \sim \sim 80^{\circ} \mathrm{C}, 10 \% \sim 95 \% \mathrm{RH}$ |  |
|  | Temperature Coefficient | $\pm 0.03 \% /{ }^{\circ} \mathrm{C}(0.50 \%)$ |  |
|  | Vibration Resistance | $10.500 \mathrm{~Hz}, 2 \mathrm{G}, 6 \mathrm{~min} / \mathrm{cycle}, \mathrm{X}, \mathrm{Y}, \mathrm{Z}$ axes/ $/ 2 \mathrm{~min}$ |  |
|  | IP Rating | 1P20 |  |
| Safety\&EMC | Security Specifications | IEC/EN61 347-1, IEC/EN6 1 347-2-13 |  |
|  | Withstand Vollage | 1/P.O/P: 3750VAC |  |
|  | Insulation Resistance | 1/P-O/P: $100 \mathrm{MQ} / 500 \mathrm{VDC} / 25^{\circ} \mathrm{C} / 70 \% \mathrm{RH}$ |  |
|  | EMC Emission | EN55015, EN61000-3-2 Class C, IEC61000-3-3 |  |
|  | EMC Immunily | 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 llike LED Decoration or Advertisement devices).
- Office / Commercial / Domestic Lighting, Hotels, Retail and Display
- Use for retrofit upgrades \& new luminaire designs.


## Wiring Diagram



CCT remote


- AC Push-Dim connection


Note: Long press match key 5 s , then short press match key 3 times, the light on/off time will be set to 3 s , the indicator light blink 3 times. Long press match key 5 s , then short press match key 3 times, the light on/ off time will be sef to 3 s , the
Long press match key 10 s , restore factory default parameter, the light on/ off time also restore to 0.5 s .

## 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 5 s 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

Auto-transmitting: One driver can transmit the signals from the remote to another driver within 30 m as long as there is a driver within 30 m , the remote control distance can be extended.
Auto-synchronization: Multiple drivers within 30 m distance can work synchronously when they are controlled
by the same remote
Driver placement may offer up to 30 m 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 15 m .
2. Each driverlone or more) in a different zone, like zone 1, 2, 3 or 4

## Push-Dim function

- 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.

- 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.

RGB/RGBW Dynamic mode list
Dimming Curve

| 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 |



