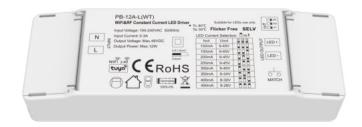
# PB-12A-H(WT), PB-12A-L(WT)

# WiFi & RF Constant Current LED Driver

- Dimming interface: WiFi, RF Wireless
- Tuya APP cloud control, brightness adjust, delay turn on/off light, timer run, scene edit function
- Voice control, support for Amazon Alexa, Google Assistant, Tmall Genie and Xiaodu smart speaker
- Match with RF 2.4G remote or scene panel control optional
- Match key for clearing network connection
- Universal AC input / Full range
- Flicker Free
- 1 channel constant current output, configurable current via DIP switch
- Over-heat / Over-load / Short circuit protection, recover automatically
- Full protective plastic case
- Suitable for indoor LED lighting application
- 5 Year, 50,000hr warranty













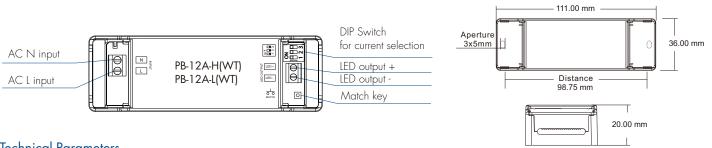




# **Applications**

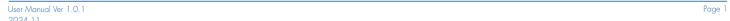
- Suitable for downlight, spotlight and decorative applications.
- Office / Commercial / Domestic Lighting, Hotels, Classrooms, Warehouse, Health care, Retail and Display.
- Use for retrofit upgrades & new luminaire designs.

# Mechanical Structures and Installations



## **Technical Parameters**

Model		PB-12A-H(WT)	PB-12A-L(WT)			
	Output Voltage	3-24VDC	9-45VDC			
	Max Output Voltage	33VDC	48VDC			
	Output Current	350-700mA	100-450mA			
Output	Output Power	Max. 12W				
	Dimming Range	0~100%				
	PWM Frequency	4000Hz				
	Current Accuracy	±5%				
	Ripple & Noise	< 100mV				
	Input Voltage Range	100~240VAC				
	Frequency Range	50/60Hz				
	Efficiency	>79%/230VAC	>80%/230VAC			
	Alternating Current	0.3A/115VAC, 0.15A/230VAC				
Input	Anti Surge	LN:1KV				
	Inrush Current	Cold start 27A at 230VAC				
	Leakage Current	< 0.5mA/230VAC				
	No Load Power	< 2W				
Protection	Over Load Power	Hiccup, recovers automatically after fault condition is removed				
riolection	Short Circuit	Hiccup, recovers automatically after fault condition is removed				
	Over Temperture	Current decrease when PCB temp>100°C , recovers automatically after fault condition is removed				
	Woking Temperature	-20°~50°C				
	T-case Max	308				
	Working Humidity	20%~90%RH, non-condensing				
Environment	Storage Temp/Humidity	-40℃~80℃, 10%~95%RH				
	Temperature Coefficient	±0.03%/℃ [0-50%]				
	Vibration Resistance	10-500Hz, 2G, 6min/cycle, X,Y,Z axes/2min				
	IP Rating	IP20				
Safety&EMC	Security Specifications	EN 60669-1/-2				
	Withstand Voltage	I/P-O/P: 3750VAC				
	Insulation Resistance	I/P-O/P: 100MΩ/500VDC/25℃/70%RH				
	EMC Emission	EN IEC 55015/EN IEC 61547				
	EMC Immunity	ETSI EN 301 489-1/-3/-17				
	Certications	CE				

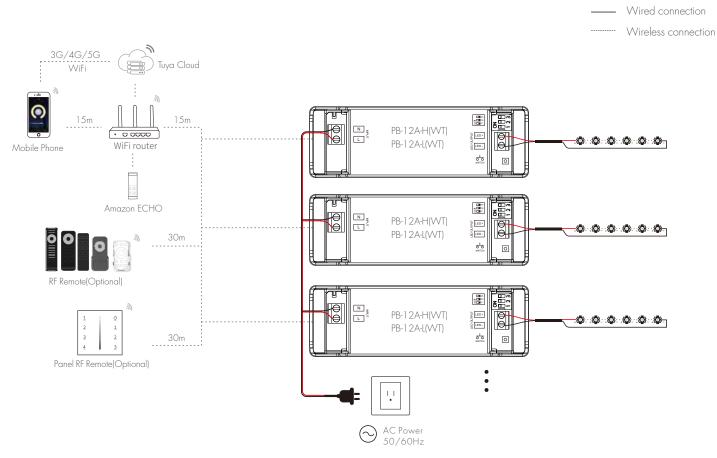






Model	1 2 3								
PB-12A-H(WT)	Output Voltage	3-24V	3-24V	3-24V	3-24V	3-22V	3-20V	3-18V	3-1 <i>7</i> V
	Output Current	350mA	400mA	450mA	500mA	550mA	600mA	650mA	700mA
PB-12A-L(WT)	Output Voltage	9-45V	9-45V	9-45V	9-45V	9-40V	9-34V	9-30V	9-26V
	Output Current	100mA	150mA	200mA	250mA	300mA	350mA	400mA	450mA

# System Wiring



## Note:

- 1. The above distance is measured in spacious (no obstacle) environment, Please refer to the actual test distance before installation.
- 2. Please check if the WiFi router net in 2.4G band, the 5G band is not available, and do not hide your router network.
- 3. Please keep the distance between LED driver and router close, and check the WiFi signals.

# 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 10s 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.

# Tuya Smart APP Network Connection

Press and hold Match key for 5s, or push twice Match key fastly:

Clear previous network connection, enter WiFi config mode, the blue LED indicator flash fastly, the output LED will flash 10 times.

Repeat power on and off for 5 consecutive times, also clear previous network connection, enter WiFi config mode, the output LED will flash 10 times.

When controlling the light with Tuya Smart/Smart Life APP, if the network connection is poor, you can control the light with Bluetooth connection within the Bluetooth control range. Note: The light can not be directly controlled by Bluetooth without WiFi configuration.

If Tuya APP network connection succeed, the blue LED indicator will stop flash, and in Tuya APP, you can find DIM device.

# Tuya Smart APP Interface



## White interface

Touch brightness slide to adjust brightness.



#### Scene interface

The 1-4 scene is static color. the inner color of these scene can be editable.



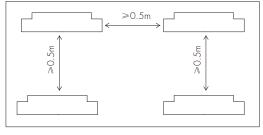
## Music, Timer, Schedule

The music play can use smart phone music player or micro-phone as music signal input.

The Timer key can turn on or turn off light in the next 24 hours.

The Schedule key can add multiple timers to turn on or turn off light according to different time periods.

## Installation Precautions



- The products shall not be stacked, the distance should be ≥ 50cm, 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.
- The products are not allowed to be close to or covered by metal objects, with an interval of ≥ 20cm to avoid signal attenuation and shorten the remote control distance.
- Avoid installation at the corner of the wall or the corner of the beam, with an interval of ≥ 20cm to avoid signal interference.

## Failure Analysis and Troubleshooting

Fault	Cause	Solution			
The light can not be turned on	1. No power 2. Wrong wiring	Check the power supply     Connection test			
Remote control nonresponse	Run out of battery     Beyond remote control range     No matching	Replace the battery     Move the remote to controller closer     Match the remote to LED driver			
Hiccup flashing	Overload	Check the power of the light			
Controlled by other remote	Wrong pairing	Delete all pairing and pair with remote again			
Multiple LED drivers are out of sync	Inconsistent fade on/off time	Set the same fade on/off time			

User Manual Ver 1.0.1