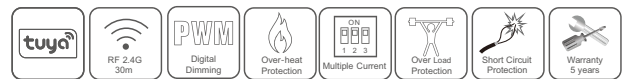
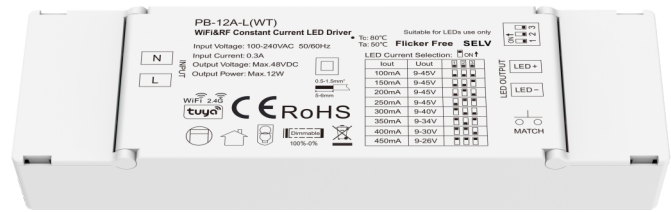


# WiFi & RF Constant Current LED Driver

Model No.: PB-12A-H(WT), PB-12A-L(WT)

## Features

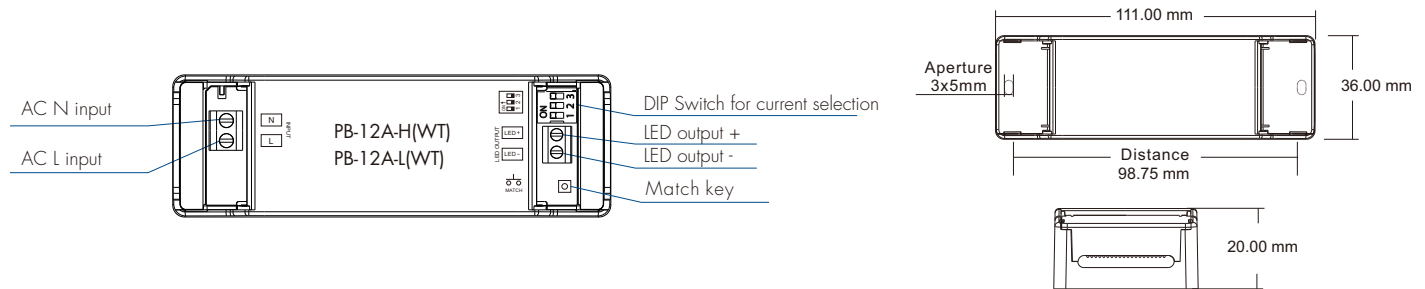
- Dimming interface: WiFi, RF Wireless
- Tuya APP cloud control, brightness adjust, delay turn on/off light, timer run, scene edit function
- Voice control, support amazon ECHO and TmallGenie smart speaker
- Match with RF 2.4G remote or scene panel control optional
- Match key for clearing network connection
- 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



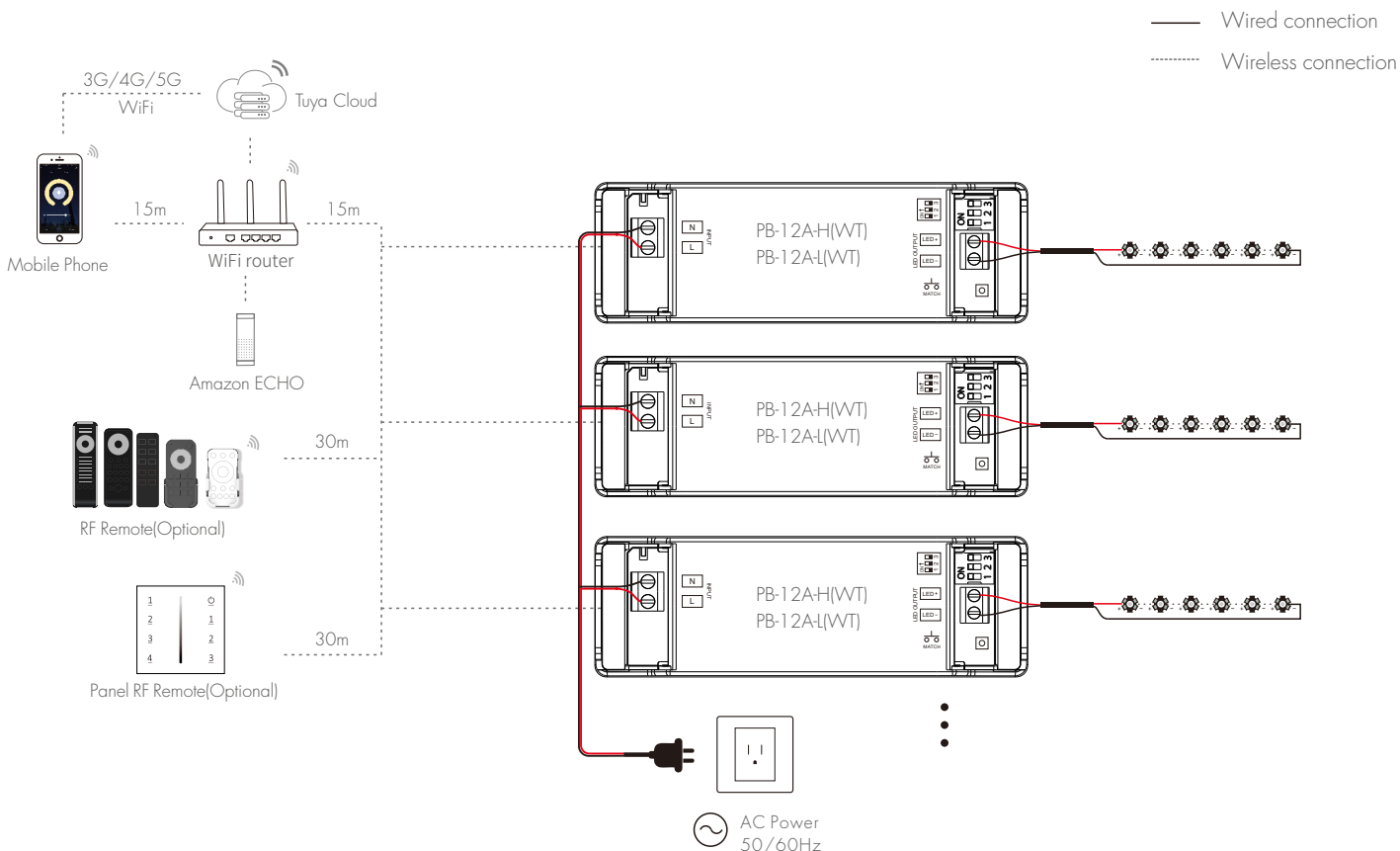
## Technical Parameters

Model		PB-12A-H(WT)	PB-12A-L(WT)
Output	Output Voltage	3.24VDC	9.45VDC
	Max Output Voltage	33VDC	48VDC
	Output Current	350-700mA	100-450mA
	Output Power	Max. 12W	
	Dimming Range	0~100%	
	PWM Frequency	4000Hz	
	Current Accuracy	± 5%	
	Ripple & Noise	< 100mV	
Input	Input Voltage Range	100~240VAC	>80%/230VAC
	Frequency Range	50/60Hz	
	Efficiency	>79%/230VAC	
	Alternating Current	0.3A/115VAC, 0.15A/230VAC	
	Anti Surge	L-N: 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	
	Short Circuit	Hiccup, recovers automatically after fault condition is removed	
	Over Temperature	Current decrease when PCB temp>100°C, recovers automatically after fault condition is removed	
Environment	Working Temperature	-20°C~50°C	
	T-case Max	80°C	
	Working Humidity	20%~90%RH, non-condensing	
	Storage Temp/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/P-O/P: 3750VAC	
	Insulation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH	
	EMC Emission	EN61000-3-2 Class C, IEC61000-3-2	
	EMC Immunity	EN61000-4-2:3.4.5.6.8.11, EN61347	
	Certifications	CE	

LED Current Selection: 

Model	  	  	  	  	  	  	  	  	  
PB-12A-H(WT)	Output Voltage	3-24V	3-24V	3-24V	3-24V	3-22V	3-20V	3-18V	3-17V
	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 APP network connection

Press and hold Match key for 2s, or push twice Match key fastly:

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

Press and hold Match key for 5s:

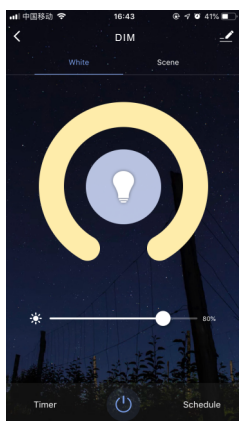
Clear previous network connection, enter AP config mode, the blue LED indicator flash slowly.

If smart config failed, please try AP config.

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

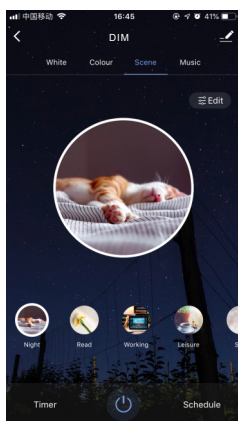
If Tuya APP network connection succeed, the blue LED indicator will stop flash, and in Tuya APP, you can find DIM device.

## Tuya APP interface



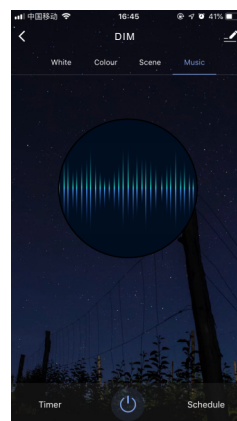
White interface

Touch brightness slide to adjust brightness.



Scene interface

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



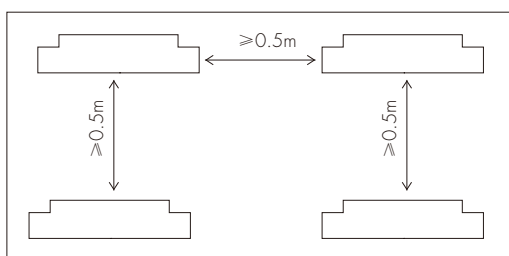
Music, Timer, Schedule

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



1. The products shall not be stacked, the distance should be  $\geq 50\text{cm}$ , so as not to affect lifespan of the products due to poor heat dissipation.
2. The installation height shall be  $\geq 1\text{m}$  from the floor to avoid shortening the remote control distance due to too weak reception signal.
3. The products are not allowed to be close to or covered by metal objects, with an interval of  $\geq 20\text{cm}$  to avoid signal attenuation and shorten the remote control distance.
4. Avoid installation at the corner of the wall or the corner of the beam, with an interval of  $\geq 20\text{cm}$  to avoid signal interference.

## Failure analysis and troubleshooting

Fault	Cause	Solution
The light can not be turned on	<ol style="list-style-type: none"> <li>1. No power</li> <li>2. Wrong wiring</li> </ol>	<ol style="list-style-type: none"> <li>1. Check the power supply</li> <li>2. Connection test</li> </ol>
Remote control nonresponse	<ol style="list-style-type: none"> <li>1. Run out of battery</li> <li>2. Beyond remote control range</li> <li>3. No matching</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace the battery</li> <li>2. Move the remote to controller closer</li> <li>3. Match the remote to LED driver</li> </ol>
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