

Single Color LED Dimmer

Features

- 4096 levels 0-100% dimming smoothly without any flash.
- Match with RF 2.4G single zone or multiple zone dimming remote control.
- One RF controller accept up to 10 remote control.
- Auto-transmitting function: Controller automatically transmit signal to another controller with 30m control distance.
- Synchronize on multiple number of controllers.
- Connect with external push switch to achieve on/off and 0-100% dimming function.
- Logarithmic or linear dimming curve selectable.
- PWM frequency 250Hz, 500Hz, 2KHz or 8KHz selectable.
- Light on/off fade time 3s selectable.
- Easy to be placed in standard wall junction box behind a push switch.

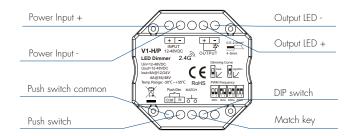


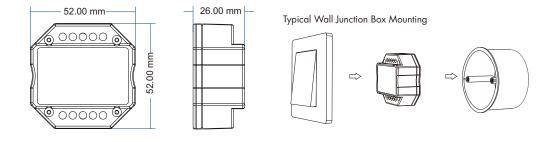
C€ RoHS

Technical Parameters

Input and Output		Dimming Data		Safety and EMC	
Input voltage	12-48VDC	Input signal	RF 2.4GHz+Push Dim		EN IEC 55015/ EN IEC 61547-1/-2
Output voltage	12-48VDC	Control distance	30m(Barrier-free space)	EMC standard	ETSI EN 301 489-1/-17
Output current	8A@12/24V, 4A@36/48V	Dimming gray scale 4096 (2^12) levels		Safety standard	EN 61347-1/-2 EN 62493
Output power	96W/192W/144W/192W (12V/24V/36V/48V)	Dimming range	0 -100%	Radio equipment	ETSI EN 300 440
		Dimming curve	Logarithmic or linear	Certification	CE RoHS
Output type	Constant voltage	PWM frequency	250Hz, 500Hz, 2KHz, 8KHz	z Environment	
Warranty and Protection		Package		Operation temperature	Ta: -30°C ~ +55°C
Warranty	5 years	Size	L60 x W60 x H40mm	Case temperature (Max.) $T_{C:}+85^{\circ}C$	
Protection	Reverse polarity, Short circuit	Gross weight	0.049kg	IP rating	IP20

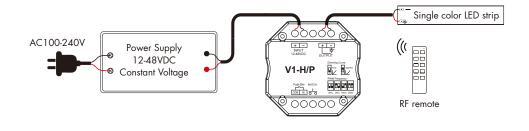
Mechanical Structures and Installations



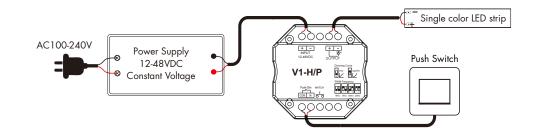


Wiring Diagram

• Match with dimming remote



• Connect with push switch



Match Remote Control (two match ways)

End user can choose the suitable match/delete ways. Two options are offered for selection:

Use the controller's Match key

Match:

Short press match key. immediately press on/off key (single zone remote) or zone key (multiple zone remote) on the remote. The LED indicator fast flash a few times means match is successful.

Delete:

Press and hold match key for 5s to delete all match, The IFD indicator fast flash a few 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.

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.

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.

Push Dim Function

The provided 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 controller 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 controllers connected to a push switch does not exceed 25 pieces,

The maximum length of the wires from push to controller should be no more than 20 meters.

PWM Frequency Setting







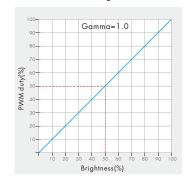


2KHz 500Hz 250Hz

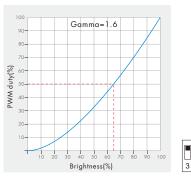
We can select four PWM frequency: 250Hz, 500Hz, 2kHz or 8kHz. Higher PWM frequency, will cause lower output current, higher power noise, but more suitable for camera(No flickers for video).

Dimming Curve Setting

Linear dimming curve



Logarithmic dimming curve



Application Notes

1. All the receivers in the same zone.



Auto-transmitting: One receiver can transmit the signals from the remote to another receiver within 30m, as long as there is a receiver within 30m, the remote control distance can be extended.

3

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

Receiver 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 receiver placements should be no further apart than 15m.

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

