



# LEDYI Lighting V2-X Dual Color LED RF Controller Installation Guide

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**Dual Color LED RF Controller**  
**Model No.: V2-X**

2 Channel/Step-less dimming/Wireless remote control/Auto-transmitting/Synchronize/Push Dim/Multiple protection



 **CE RoHS**  **LVD RED**

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## Feature

- 4096 levels 0-100% dimming smoothly without any flash.
- Match with all 2.4G single zone or multiple zone dual color or single color remote control.
- One RF controller accept up to 10 remote control.
- Auto-transmitting function: Controller automatically transmit signal to another controller with 15m control distance.
- Synchronize on multiple number of controllers.
- Connect with external push switch to achieve on/off and 0-100% dimming function.
- Over load Short circuit / Over heat protection recover automatically.

## Technical Parameters

Input and Output	
Input voltage	12-36VDC
Input current	30.1A
Output voltage	2x(12-36)VDC
Output current	2CH,15A/CH
Output power	2x(180-540)W
Output type	Constant voltage

Environment	
Operation temperature	Ta: -30° C ~ +55° C
Case temperature (Max.)	T c: +85° O C
IP rating	IP20

Warranty and Protection	
Warranty	5 years
protection	Reverse polarity Overload Short circuit Over heat

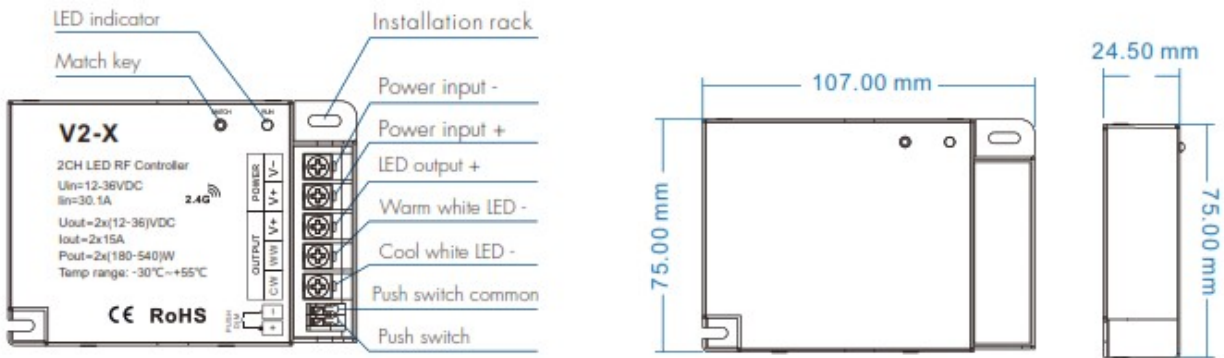
Dimming data

Input signal	RF 2.4GHz + Push Dim
Control distance	15m(Barrier-free space)
Dimming range	4096 (2^12) levels
Dimming gray scale	0 -100%
Dimming curve	Linear
PWM Frequency	2KHz (default)

Safety and EMC

EMC standard (EMC)	EN301 489, EN 62479
Safety standard(LVD)	EN60950
Safety standard(LVD)	EN300 328
Certification	CE,EMC,LVD,RED

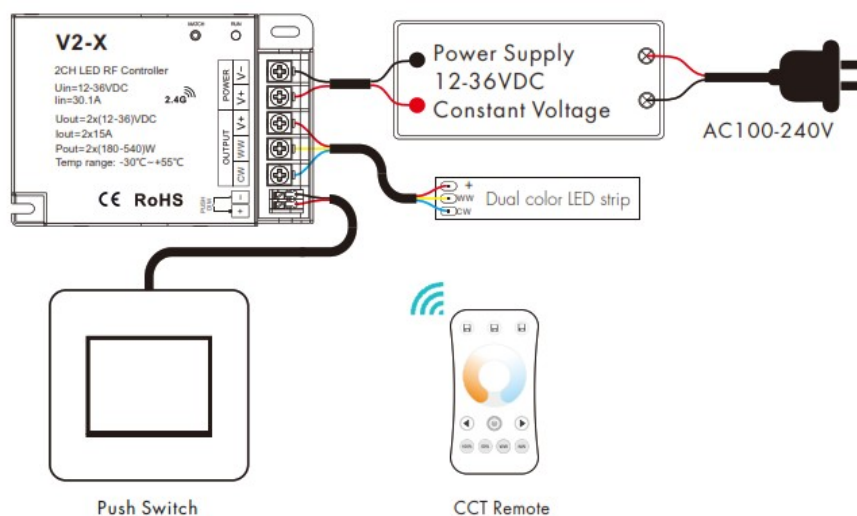
Mechanical Structures and Installations



Wiring Diagram

Push Dim:

Click	ON/OFF
Long press(>1s) from OFF	Color temperature UP/DOWN (turn off and turn on to return dimming)
Long press(>1s) from ON	Dimming UP/DOWN



## 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 zones remote) of 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 LED indicator fast flash a few times means all matched remotes were deleted.

### Use Power Restart

#### Match:

Switch off the power, then switch on power 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 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.

## Application notes

1. All the receivers in the same zone.



### RF remote

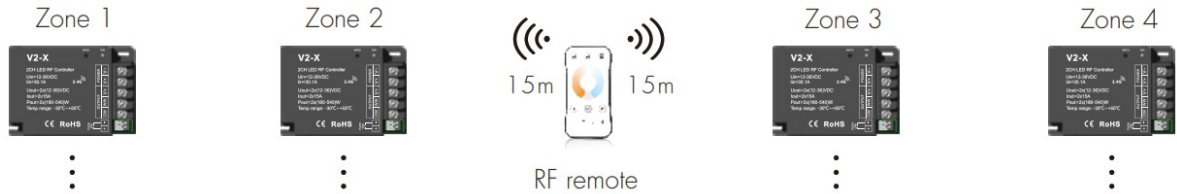
**Auto-transmitting:** One receiver can transmit the signals from the remote to another receiver within 15m, as

long as there is a receiver within 15m, the remote control distance can be limitless.

**Auto-synchronization:** Multiple receivers within 15m distance can work synchronously when they are controlled by the same remote.

Receiver placement may offer up to 15m 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.



## Push Dim with Synchronization

The provided Push-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switches.

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.

## Dual-color control

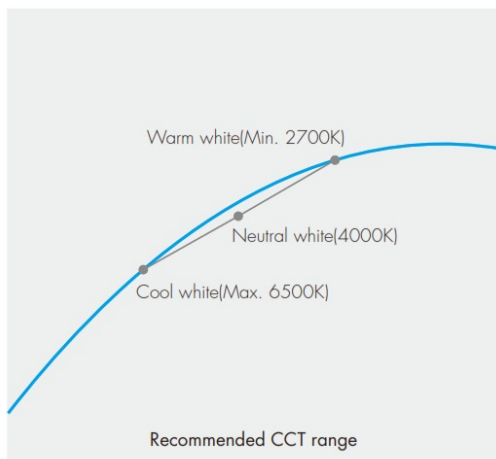
CH1=Warm white LED

CH2=Cool white LED

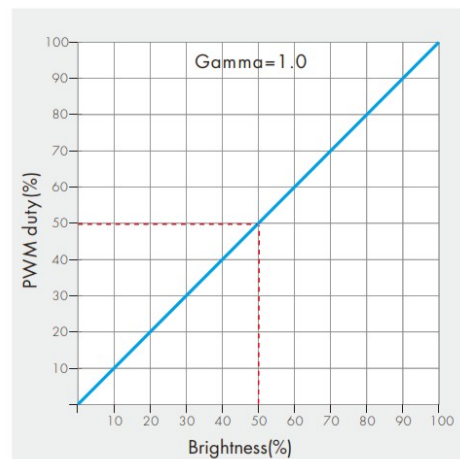
Each channel can supply up to 360W(@24V) and white balance can be controlled as such:

Color temperature	Cool white	Neutral white	Warm white
Power distribution	CH1=0W,CH2=360W	CH1=180W,CH2=180W	CH1=360W,CH2=0W

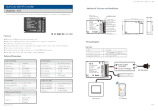
Linear dual color tuning



Dimming curve



## Documents / Resources



[LEDYI Lighting V2-X Dual Color LED RF Controller](#) [pdf] Installation Guide  
V2-X, Dual Color LED RF Controller