RF + Push Single Color LED Mini Controller

Model No.: V1-N

1 channel constant voltage/Push-Dim/Max 75W/Step-less dimming/Wireless remote control



Features

- 1 channel constant voltage single color LED mini RF controller.
- 3A per channel, output connect with 5 meters single color LED strip, max output power 75W.
- Connect with push switch to achieve on/off and 0-100% dimming function.
- Match with RF 2.4G single zone or multiple zone dimming remote control optionally.
- One RF controller accept up to 10 remote control.
- 4096 levels 0-100% dimming smoothly without any flash.
- Auto-transmitting function: Controller automatically transmit signal to another controller with 30m control distance.
- Synchronize on multiple number of controllers.

Technical Parameters

Input and Output		Dimming data
Input voltage	12-24VDC	Input signal
Output voltage	12-24VDC	Control distance
Output power	Max. 75W	Dimming gray scale
Output type	Constant voltage	Dimming range
		Dimming curve
Safety and EMC		PWM Frequency
EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4	Environment
	E101E14 001 407 17 40.2.4	Environment
Safety standard(LVD)	EN 62368-1:2020+A11:2020	Operation temperature
Safety standard(LVD) Radio Equipment(RED)		
7	EN 62368-1:2020+A11:2020	Operation temperature
Radio Equipment(RED)	EN 62368-1:2020+A11:2020 ETSI EN 300 328 V2.2.2 CE,EMC,IVD,RED	Operation temperature Case temperature (Max.)

Reverse Polarity

Dimming data	
Input signal	RF 2.4GHz + Push switch
Control distance	30m(Barrier-free space)
Dimming gray scale	4096 (2^12) levels
Dimming range	O - 1 OO%
Dimming curve	Logarithmic
PWM Frequency	500Hz (default)
nvironment	
Operation temperature	Ta: -30 °C ~ +55 °C
Case temperature (Max.)	Tc:+85°C
P rating	IP20
Weight	
Net weight	0.007kg
Gross weight	0.013kg

Dimension



Wiring Diagram



Push Dim function:

Click	ON/OFF
Double Click	Turn on at 100% or 10%(night light) and vice-versa
Long press(>1s) from OFF	Dimming UP/DOWN
Long press(>1s) from ON	Dimming UP/DOWN

Match Remote Control

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.

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 30m, as long as there is a receiver within 30m, the remote control distance can be extended.

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

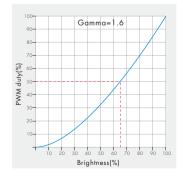
. Receiver placement may offer up to 30m communication distance. Metals and other metal materials will reduce the range. Strong signal sources such as WiFi routers and microwave ovens will affect the range.

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.



Dimming Curve



Malfunctions analysis & troubleshooting

Malfunctions	Causes	Troubleshooting
No light	 No power. Wrong connection or insecure. 	1. Check the power. 2. Check the connection.
No response from the remote	 The battery has no power. Beyond controllable distance. The controller did not match the remote. 	 Replace battery. Reduce remote distance. Rematch the remote.