

LEDlife V1 Single Color LED Controller Installation Guide

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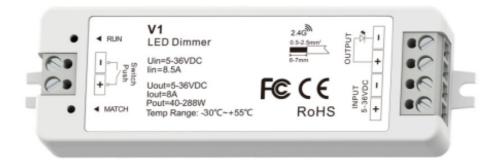
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LEDlife V1 Single Color LED Contr



Product Information

Model No.	V1
Features	Single Color LED Controller, 1 Channel/Step-less dimming/Wireless remote control/Auto-transmitting/Synchronize/Push Dim/Multiple protection
Technical Parameters	Input voltage: 5-36VDC Input current: 8.5A Output voltage: 5-36VDC Output current: 1CH,8A Output power: 40W/96W/192W/288W (5V/12V/24V/36V) Output type: Constant voltage
Safety and EMC	EMC standard (EMC): ETSI EN 301 489-1 V2.2.3 Safety standard (LVD): ETSI EN 301 489-17 V3.2.4 Radio Equipment (RED) Certification: EN 62368-1:2020+A11:2020 EMC, LVD, RED: ETSI EN 300 328 V2.2.2, CE
Weight	Net weight: 0.041kg Gross weight: 0.052kg
Dimming data	Input signal: RF 2.4GHz + Push Dim Control distance: 30m (Barrier-free space) Dimming grayscale: 4096 (2^12) levels Dimming range: 0 – 100% Dimming curve: Logarithmic PWM frequency: 2000Hz (default)
Environment	Operation temperature: -30°C ~ +55°C Case temperature (Max.): +85°C IP rating: IP20
Warranty and Protection	Warranty: 5 years Protection: Reverse polarity, Over-heat, Over-load, Short circuit

Product Usage Instructions

Mechanical Structures and Installations

LED indicator, Push switch com, Push switch in, Installation rack, Match key, LED output, Power input

Wiring Diagram

Match Remote Control (two match ways)

Option 1: Use the controller's Match key

- 1. Short press the match key on the controller.
- 2. Immediately press the on/off key (for single zone remote) or zone key (for multiple zone remote) on the remote.
- 3. If the LED indicator flashes a few times, it means the match is successful.

Option 2: Use Power Restart

- 1. Switch off the power of the receiver, then switch on the power.
- 2. Repeat this step.
- 3. Immediately short press the on/off key (for single zone remote) or zone key (for multiple zone remote) 3 times on the remote.

4. If the light blinks 3 times, it means the match is successful.

Delete Matched Remotes

- 1. Switch off the power of the receiver, then switch on the power.
- 2. Repeat this step.
- 3. Immediately short press the on/off key (for single zone remote) or zone key (for multiple zone remote) 5 times on the remote.
- 4. If the light blinks 5 times, it means all matched remotes were deleted.

Application notes

All the receivers in the same zone RF remote control range: 30m

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

RF remote control range: 30m for each zone

Push Dim Function

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

- Short press: Turn on or off the light.
- Long press (1-6s): Press and hold to step-less dimming. With For every other long press, the light level goes in the opposite direction.
- Dimming memory: Light returns to the previous dimming level when switched off and on again, even after a power failure.
- Synchronization: If more than one controller is connected to the same push switch, do a long press for more
 than 10s to synchronize the system. All lights in the group will dim up to 100%. There is no need for any
 additional synchrony wire in larger installations. We recommend not exceeding 25 pieces of controllers
 connected to a push switch, and the maximum length of the wires from push to controller should be no more
 than 20 meters.

Single Color LED Controller

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

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 accepts up to 10 remote control.
- Auto-transmitting function: The Controller automatically transmits a signal to another controller with a 30m control distance.
- Synchronize on multiple controllers.
- Connect with external push switch to achieve on/off and 0-100% dimming function.
- Light on/off fade time 3s selectable.
- · Over-heat / Over-load / Short circuit protection, recover automatically

Technical Parameters

Input and Output		
Input voltage	5-36VDC	
Input current	8.5A	
Output voltage	5-36VDC	
Output current	1CH,8A	
Output power	40W/96W/192W/288W (5V/12V/24V/36V)	
Output type	Constant voltage	

Safety and EMC		
	ETSI EN 301 489-1 V2.2.3	
EMC standard (EMC)	ETSI EN 301 489-17 V3.2.4	
Safety standard(LVD)	EN 62368-1:2020+A11:2020	
Radio Equipment(RED)	ETSI EN 300 328 V2.2.2	
Certification	CE,EMC, LVD,RED	

Weight	
Net weight	0.041 kg
Gross weight	0.052kg

Dimming data		
Input signal	RF 2.4GHz + Push Dim	
Control distance	30m(Barrier-free space)	
Dimming gray scale	4096 (2^12) levels	
Dimming range	0 -100%	
Dimming curve	Logarithmic	
PWM frequency	2000Hz (default)	

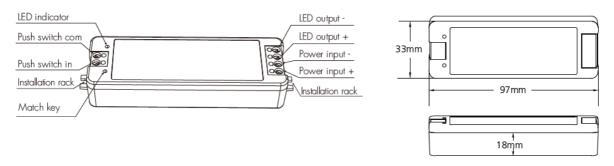
Environment	
Operation temperature	Ta: -30 OC ~ +55 OC
Case temperature (Max.)	T c: +85OC
IP rating	IP20

Warranty and Protection		
Warranty 5 years		
	Reverse polarity	
Protection	Over-heat Over-load Short circuit	

Mechanical Structures and Installations

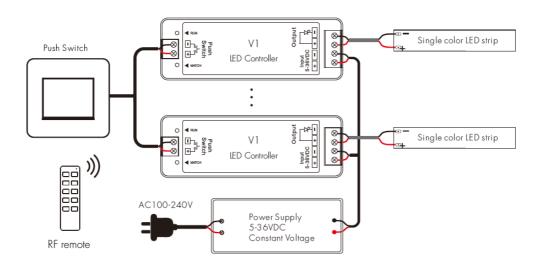
Wiring Diagram

Match Remote Control (two match ways)



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

Use the controller's Match key



Match

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

Delete

Press and hold the match key for 5s to delete all matches, The LED indicator fast flashes a few times means all matched remotes were deleted.

Use Power Restart

Match

Switch off the power of the receiver, then switch on the power.

Repeat again

Immediately short press the on/off key (single zone remote) or zone key (multiple zone remote) 3 times on the remote. The light blinks 3 times means the match is successful.

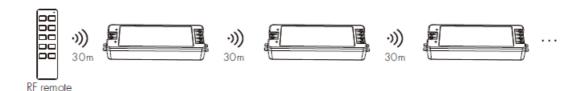
Delete

Switch off the power of the receiver, then switch on the 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 note



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.



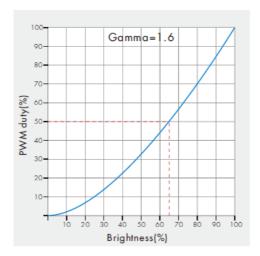
Auto-synchronization: Multiple receivers within a 30m distance can work synchronously when they are controlled by the same remote. Receiver placement may offer up to 30m communication distance. Metals and other metal materials will reduce the range. Strong signal sources such as WiFi routers and microwave ovens will affect the range. We recommend for indoor applications that receiver placements should be no further apart than15m Each receiver(one or more) in a different zone, like zone 1, 2, 3 or 4

Push Dim Function

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

- · Short press
 - Turn on or off the light.
- Long press (1-6s)
 - Press and hold to step-less dimming With every other long press, the light level goes in 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 is connected to the same push switch, do a long press for more than 10, 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.

Dimming Curve



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, and 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.

Malfunctions Analysis & Troubleshooting

Malfunctions	Causes	Troubleshooting
	1. No power.	Check the power.
No light	2. Wrong connection or insecure.	2. Check the connection.
Uneven intensity betwee n front and rear, with volt age drop	1. Output cable is too long.	Reduce cable or loop supply.
	2. Wire diameter is too small.	2. Change wider wire.
	3. Overload beyond power supply capability.	3. Replace higher power supply.
	4. Overload beyond controller capability.	4. Add power repeater.
No response from the re mote	1. The battery has no power.	Replace battery.
	2. Beyond controllable distance.	2. Reduce remote distance.
	3. The controller did not match the remote.	3. Re-match the remote.

Documents / Resources



LEDlife V1 Single Color LED Controller [pdf] Installation Guide V1 Single Color LED Controller, V1, Single Color LED Controller, Color LED Controller, LED Co ntroller, Controller

Manuals+,