RF Synchronous 4 CH LED Controller

- 4-channel constant voltage PWM output, maximum 8A output current per channel.
- DIP switch set master or slave mode, 4 light types (DIM/CCT/RGB/RGBW),
- 4 output PWM frequency (500Hz/2000Hz/8000Hz/16000Hz).
- \bullet Match with RF 2.4G remote controller.
- When used as an RGB/RGBW LED controller, built in 10 RGB dynamic mode, including jump or gradual change style.
- The master and slave communication adopts RJ45 interface and complies with DMX512 standard protocol.
- The slave can also use a 4-channel DMX512 decoder with 16-bit decoding.
- Over-heat / Over-load / Short circuit protection, recover automatically.

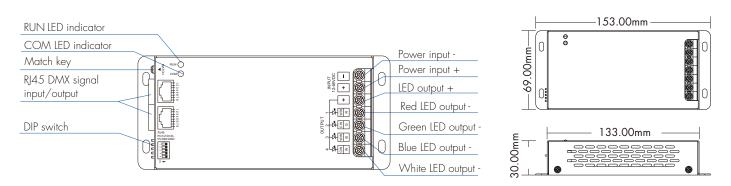


CE RoHS emc RED

Technical Parameters

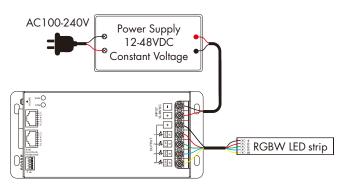
| Input and Output | | Dimming data | | Safety and EMC | |
|------------------|---|--------------------|-----------------------------|-------------------------|---|
| Input voltage | 12-48VDC | Input signal | RF 2.4GHz | EMC standard(EMC) | ETSI EN 301 489-1 V2.2.3 |
| Input current | Max 32.5A | Output signal | DMX512 (4 CH, 16 Bit) | | ETSI EN 301 489-17 V3.2.4 |
| Output voltage | 4 x (12-48)VDC | Control distance | 15m(Barrier-free space) | Safety standard | EN 61348-1:2015+A1:2021 EN 61348-2-13:2014+A1:2017 |
| <u></u> | 4x8A@12/24V 4x6A@36/48V | Dimming gray scale | 65536 levels | Radio Equipment(RED) | ETSI EN 300 328 V2.2.2 |
| Output current | | Dimming range | 0-100% | Certification | CE,EMC,RED |
| Output power | 4x96W@12V 4x192W@24V 4x216W@36V 4x288W@48V | PWM Frequency | 500Hz/2000Hz/8000Hz/16000Hz | Warranty | 5 years |
| | | | | Environment | |
| | | Package | | Operation temperature | Ta: -20 °C ~ +50 °C |
| Output type | Constant voltage | Size | L156.5 x W72 x H34mm | Case temperature (Max.) | Tc: +80°C |
| | | Gross weight | 0.34kg | IP rating | IP 20 |

Mechanical Structures and Installations

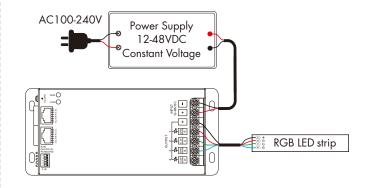


Wiring Diagram

• V4-T connected to RGBW LED strip

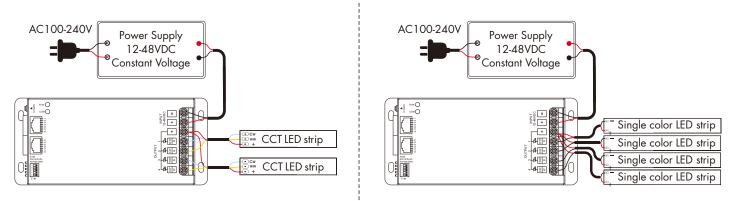


• V4-T connected to RGB LED strip



• V4-T connected to CCT LED strip

• V4-T connected to single color LED strip



DIP Switch Setting

• DIP switch 1 set the master or slave mode.

| 1 ∎ ↓on | | |
|------------|--------|-------|
| Work mode | Master | Slave |

• DIP switch 2-3 set the light type.

| 2 3 ∎ ↓on | | | | |
|--------------|-----|-----|-----|------|
| Light type | DIM | CCT | RGB | rgbw |

• DIP switch 4-5 set the PVVM frequency.

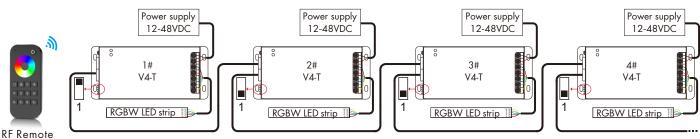
| 4 5 ∎ ₊∘∾ | | | | |
|-------------------|-------|------|------|-------|
| PVVM frequency | 500Hz | 2KHz | 8KHz | 16KHz |

NOTE:

- 1. When using multiple controllers at the same time, only one controller can be set to the master, and the other controllers should be set to the slave mode.
- 2. The Master controller sets the lighting type, controls 4 channels of constant voltage output, and outputs 4 channels of 16-bit DMX data.
- 3. The slave controller doesn't need to set the lighting type and receives 4 channels of 16-bit DMX data from master controller for controlling the 4 channels of constant voltage output.
- The master and slave controllers can select the same or different PWM frequency.

Application Examples

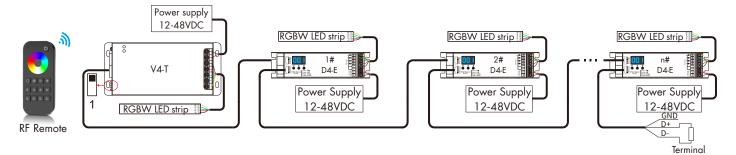
1. Synchronized control of multiple V4-T controllers



Ki Kelliole

- Set 1 # V4-T controller to master mode, RGBW light type. Set other V4-T controllers (2#, 3#, 4#...) to slave mode.
- Master controller: RUN indicator and COM indicator are always on. RUN indicator flash when master controller receives the RF signal.
- Slave controller: RUN indicator is always on, COM indicator is always off. COM indicator flash when the RJ45 port receives the DMX data.

2. One V4-T controller as master and multiple 4-channel DMX512 decoders as slaves for synchronized control



- Set V4-T controller to master mode, RGBW light type.
- For all 4-channel DMX512 decoders, set the start decoding address to 001 and 16 bit decoding.
- Master controller: RUN indicator and COM indicator are always on. RUN indicator flash when master controller receives the RF signal.
- Slave decoder: When the RJ45 port receives the DMX data, the digital display 001 is always on; When the RJ45 port doesn't receive the DMX data, the digital display 001 is flashing.

NOTE:

- 1. If more than 32 slaves are connected, or if extra-long signal wires are used, a DMX signal amplifier needs to be connected, and the signal should not be amplified more than five times.
- 2. If overshoot effect happens due to long signal wires or poor wire quality, please connect a 0.25W 90-120Ω terminal resistor at the end of each DMX signal wire.

Master Controller Match With RF Remote

There are two ways to match/delete:

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. The RUN indicator blinks means match is successful.

Delete:

Press and hold match key for 5s to delete all match, The RUN indicator blinks 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.

resistor

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.

RGB/RGBW Lighting Dynamic Mode (RF Remote Control)

| No. | Name | No. | Name |
|-----|---------------------------|-----|-----------------------|
| 1 | RGB jump | 6 | RGB fade in and out |
| 2 | RGB smooth | 7 | Red fade in and out |
| 3 | 6 color jump | 8 | Green fade in and out |
| 4 | 6 color smooth | 9 | Blue fade in and out |
| 5 | Yellow cyan purple smooth | 10 | White fade in and out |