V4-T

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).
- 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.



C€ RoHS RED

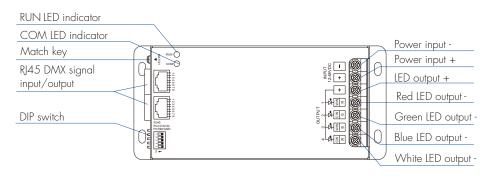
Technical Parameters

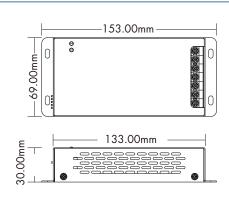
Input voltage	12-48VDC	
	Max 32.5A	
Input current	Max 32.3A	
Output voltage	4 x (12-48)VDC	
	4x8A@12/24V	
Output current	4x6A@36/48V	
	4x96W@12V	
	4x90VV@12V 4x192VV@24V	
Output power	4×216VV@36V	
	4×288VV@48V	
Output type	Constant voltage	

Dimming data			
Input signal	RF 2.4GHz		
Output signal	DMX512 (4 CH, 16 Bit)		
Control distance	15m(Barrier-free space)		
Dimming gray scale	65536 levels		
Dimming range	0-100%		
PWM Frequency	500Hz/2000Hz/8000Hz/16000H		
Package			
Size	L156.5 x W72 x H34mm		
Gross weight	0.34kg		

Safety and EMC	
EMC standard	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
Safety standard	EN 61347-1:2015+A1:2021 EN 61347-2-13:2014+A1:2017
Radio Equipment	ETSI EN 300 328 V2.2.2
Certification	CE RED
Warranty	5 years
Environment	
Operation temperature	Ta: -20 °C ~ +50 °C
Case temperature (Max.)	Tc: +80°C
IP ratina	IP 20

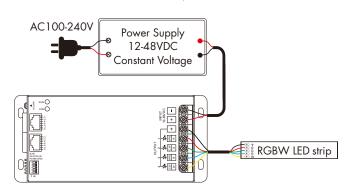
Mechanical Structures and Installations



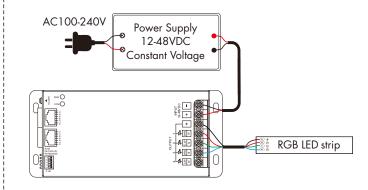


Wiring Diagram

• V4-T connected to RGBW LED strip

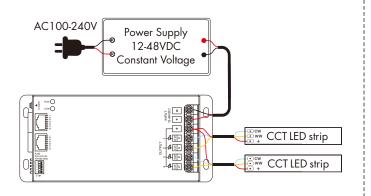


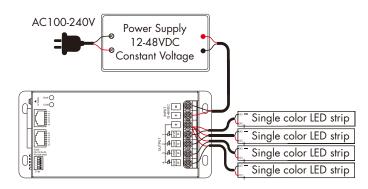
• V4-T connected to RGB LED strip



• 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 ton		
Work mode	Master	Slave

• DIP switch 2-3 set the light type.

2 3 ton				
Light type	DIM	CCT	RGB	RGBW

• DIP switch 4-5 set the PWM frequency.

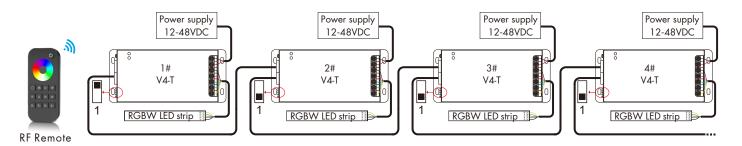
4 5 ton				
PWM frequency	500Hz	2KHz	8KHz	16KHz
lout (12-24V)	4×8A	4×8A	4×5A	4×5A
lout (36-48V)	4×6A	4×6A	4×4A	4×4A

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.
- 4. The master and slave controllers can select the same or different PWM frequency.

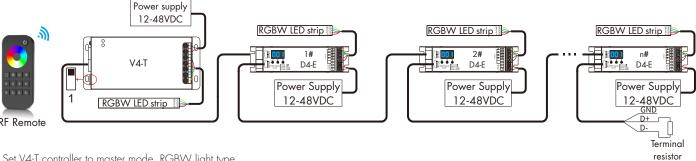
Application Examples

1. Synchronized control of multiple V4-T controllers



- 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.

- 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 90-120 Ω 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.

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