

TRONIX

213-012

RF

Dual Color LED Mini RF Controller

- 2 channel constant voltage dual color LED mini RF controller.
- 2.5A per channel, output connect with 5 meters dual color LED strip.
- Match with RF 2.4G single zone or multiple zone dual color remote control.
- One RF controller accept up to 10 remote control.
- 4096 levels 0-100% dimming smoothly without any flash.
- Light on/off fade time 3s selectable.
- Auto-transmitting function: Controller automatically transmit signal to another controller with 30m control distance.
- Synchronize on multiple number of controllers.



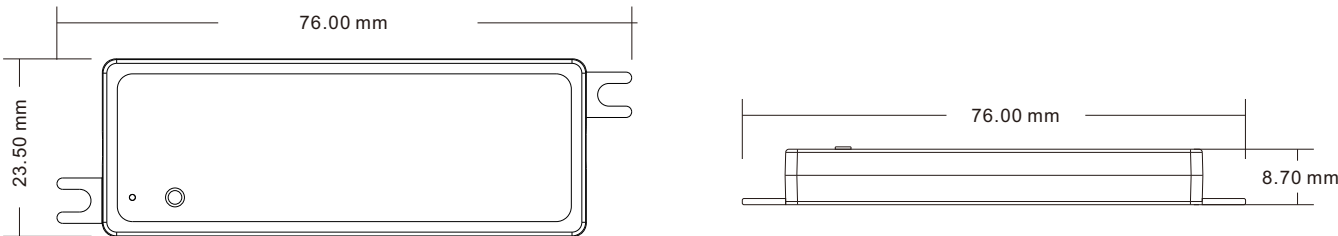
CE RoHS

2 channel constant voltage / Max 5A output / Step-less dimming / Wireless remote control

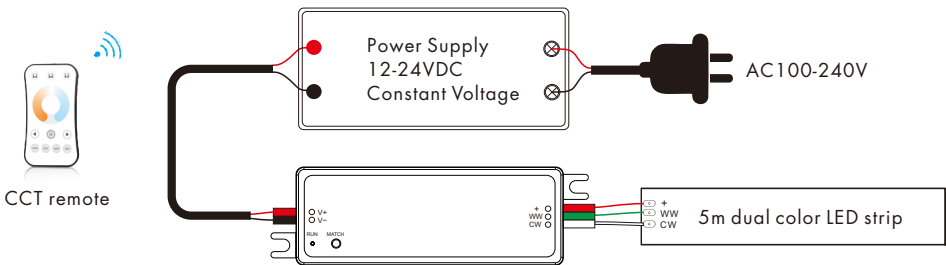
Technical Parameters

Input and Output		Dimming data		Safety and EMC	
Input voltage	12-24VDC	Input signal	RF 2.4GHz	EMC standard	EN IEC 55015/ EN IEC 61547-1/-2 ETSI EN 301 489-1/-17
Output voltage	12-24VDC	Control distance	30m(Barrier-free space)	Safety standard	EN 61347-1/-2 EN 62493
Output current	2.5A/CH, Total Max. 5A	Dimming gray scale	4096 (2^12) levels	Radio Equipment	ETSI EN 300 328 ETSI EN 300 440
Output type	Constant voltage	Dimming range	0-100%	Certification	CE RoHS
Environment		Dimming curve	Linear	Package	
Operation temperature	Ta: -30℃ ~ +55℃	PWM frequency	2000Hz (default)	Size	190x H130mm
Case temperature (Max.)	Tc: +85℃	Warranty		Gross weight	0.021kg
IP rating	IP20	Warranty	5 years		

Dimension



Wiring Diagram



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, 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.

Match Remote Control

End user can choose the suitable match/delete ways. Three 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 zone remote) on 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 of the receiver, then switch on power. 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 of the receiver, then switch on power. 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.

Another way to match:
The receiver is power on for five consecutive times, the LED strip light start blinking slowly for 10s, Immediately short press on/off key (single zone remote) or zone key (multiple zone remote) on the remote. The light blinks 3 times means match is successful.

Dual color control

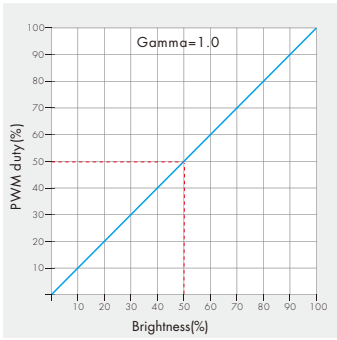
WW=Warm white LED
CW=Cool white LED
Each channel can supply up to 120W(@24V) and white balance can be controlled as such:

Color temperature	Cool white	Neutral white	Warm white
Power distribution	WW=0W,CW=120W	WW=60W,CW=60W	WW=120W,CW=0W

Linear dual color tuning



Dimming curve



Malfunctions analysis & troubleshooting

Malfunctions	Causes	Troubleshooting
No light	1. No power. 2. Wrong connection or insecure.	1. Check the power. 2. Check the connection.
Wrong color	1. Wrong connection of WW/CW wires.	1. Reconnect WW/CW wires.
No response from the remote	1. The battery has no power. 2. Beyond controllable distance. 3. The controller did not match the remote.	1. Replace battery. 2. Reduce remote distance. 3. Re-match the remote.

Installation Precautions

1. The products shall not be stacked, the distance should be $\geq 20\text{cm}$, so as not to affect lifespan of the products due to poor heat dissipation.
2. The product shall not be installed close to the switching power supply with an interval of $\geq 20\text{cm}$ to avoid radiation interference of the switching power supply.
3. The installation height shall be $\geq 1\text{m}$ from the floor to avoid shortening the remote control distance due to too weak reception signal.
4. The products are not allowed to be close to or covered by metal objects, with an interval of $\geq 20\text{cm}$ to avoid signal attenuation and shorten the remote distance.
5. Avoid installation at the corner of the wall or the corner of the beam, with an interval of $\geq 20\text{cm}$ to avoid signal interference.