M5

RF LED Controller

- 6 button RGB, RGBW or RGB+CCT LED RF controller with 5 channel constant voltage output.
- 6 buttons operation with on/off, adjust brightness, color temperature and RGB color, change dynamic mode and speed.
- Set up 5 light type by button: RGB, RGBW, RGB+W, RGBCCT or RGB+CCT.
- Match with RF 2.4G single zone or multiple zone RGB, RGBW, RGB+CCT remote control optional.
- One RF controller accept up to 10 remote control.
- 4096 levels 0-100% dimming smoothly without any flash.
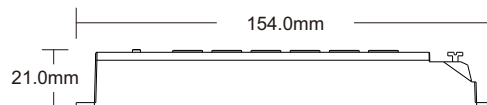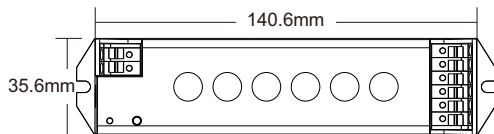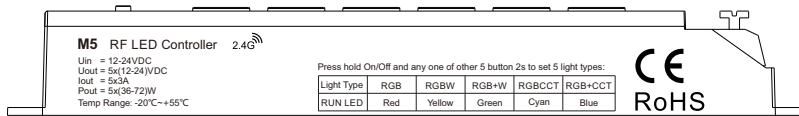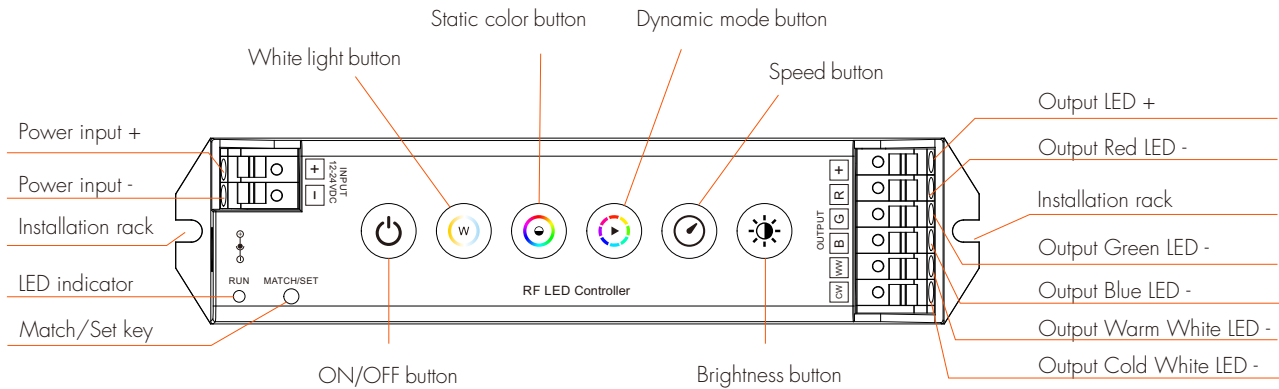- Built in 10 dynamic modes, include jump or gradual change style.

CE   RoHS   emc   RED

Technical Parameters

Input and Output

Input voltage	12-24VDC
Output voltage	5×(12-24)VDC
Output current	5CH,3A/CH
Output power	5×(36-72)W
Output type	Constant voltage

Warranty and Protection

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

Dimming data

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

Package

Size	L162 x W42 x H26mm
Gross weight	0.091kg

Safety and EMC

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

Environment

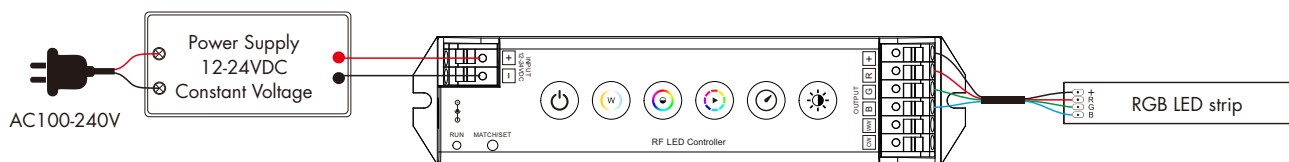|	
Operation temperature	Ta: -20℃ ~ +55℃
Case temperature (Max.)	Tc: +85℃
IP rating	IP20

Mechanical Structures and Installations

Wiring diagram

● For RGB

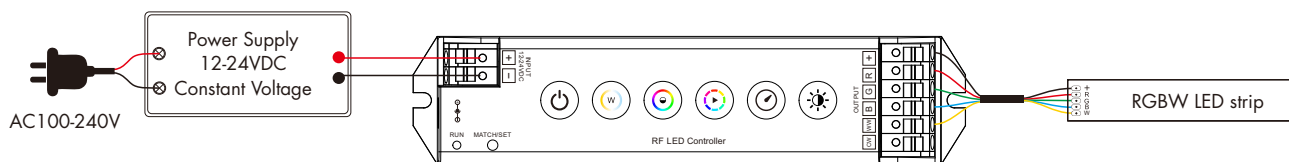Press and hold ⏻ and ⓦ button for 2s, set to RGB light type, LED indicator shows red.

● For RGBW

Press and hold ⏻ and ⦿ button for 2s,

set to RGBW light type (RGB channel and W channel outputs cannot be turned on at the same time), LED indicator shows yellow.

Press and hold ⏻ and ⦿ button for 2s,

set to RGB+W light type (RGB channel and W channel outputs can be turned on at the same time), LED indicator shows green.
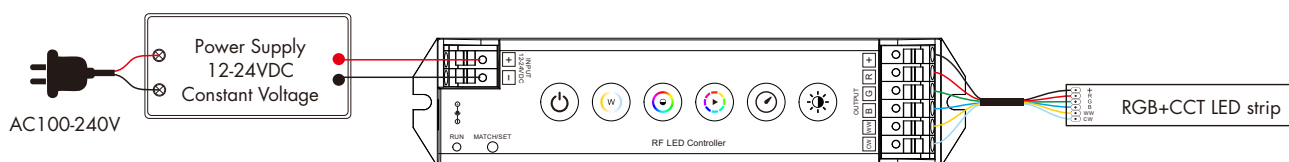

● For RGB+CCT

Press and hold ⏻ and ⊘ button for 2s,

set to RGBCCT light type (RGB channel and WW/CW channel outputs cannot be turned on at the same time), LED indicator shows cyan.

Press and hold ⏻ and ☀ button for 2s,

set to RGB+CCT light type (RGB channel and WW/CW channel outputs can be turned on at the same time), LED indicator shows blue.

Button Function

⏻ : Turn on/off the light.

ⓦ : Adjust the color temperature or white light brightness.
For RGB light type, short press to switch five levels color temperature (RGB mix, warm white - neutral white - cold white sequence); long press 1-6s for continuous 256 levels color temperature adjustment.
For RGBW and RGB+W light type, short press to switch five levels white light brightness (10%, 25%, 50%, 75%, 100%); long press 1-6s for continuous 256 levels white light adjustment, dimming range of 1-100%.
For RGBCCT and RGB+CCT light type, short press to switch five levels color temperature (warm white - neutral white - cold white sequence); long press 1-6s for continuous 256 levels color temperature adjustment.

⦿ : Short press get 24 kinds static RGB color;
long press 1-6s for continuous 256 levels saturation adjustment, namely change current static RGB color to mixed white slowly.

▶ : Short press to change 10 dynamic mode; long press 2s run mode-cycle.

⊘ : For dynamic RGB mode, adjust speed, short press 5 levels, long press 2s get the default speed.
For static RGB color, adjust saturation, short press 5 levels, long press 2s to set minimum saturation (i.e. full 100% for RGB channels).

☀ : Short press to switch five levels brightness (10%, 25%, 50%, 75%, 100%);
long press 1-6s for continuous 256 levels brightness adjustment.

Note:

1. For RGBW light type: When the white light brightness is adjusted by (w) button, the RGB channel auto-off.

2. For RGB+W light type: When the white light brightness is adjusted by (w) button, the RGB channel remains unchanged.

3. For RGBCCT light type: Short press (w) button to switch to the color temperature state, RGB channel auto-off,

          then adjust the brightness of the current color temperature by (*) button.

          Short press (o) button to switch to the color light state, CCT channel auto-off,

          then adjust the brightness of the current color light by (*) button.

4. For RGB+CCT light type: Short press (w) button to switch to the color temperature state, RGB channel remains unchanged,

          then adjust the brightness of the current color temperature by (*) button.

          Short press (o) button to switch to the color light state, CCT channel remains unchanged,

          then adjust the brightness of the current color light by (*) button.

5. Factory parameter setting: Long press the match/set key for 15s to restore the factory parameter setting, light type default is RGBCCT.

Dynamic change mode list

For RGB/RGBW/RGB+W:

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

For RGBCCT/RGB+CCT:

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	Color temperature smooth	10	White fade in and out

Match remote control (Optional)

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

Use the Match/Set key

Match:
Short press match/set 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/set key for 5s,
The LED indicator fast flash a few times 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.

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.