

RF-DMX512 RGB/RGBW LED Controller

- Mini-style RF 2.4G multi-pixel RGB or RGBW LED controller with DMX512 signal output.
- Send international standard DMX512/1990 signal to DMX512 decoders or RGB/RGBW LED lamps with DMX decode chip.
- Match with RF 2.4G RGB/RGBW remote control, such as R9.
- 32 kinds dynamic mode, include horse-race, chase, flow, trail or gradual change style.

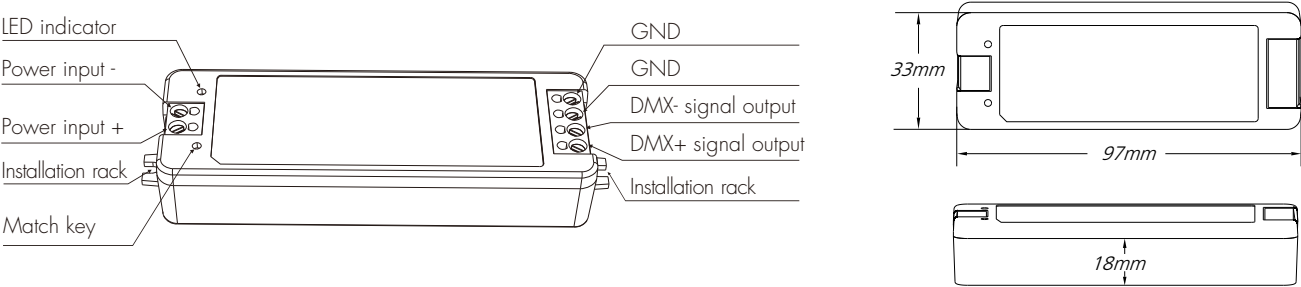


CE RoHS

Technical Parameters

| Input and Output  |                                                     | Safety and EMC  |                                                   | Environment             |                    |
|-------------------|-----------------------------------------------------|-----------------|---------------------------------------------------|-------------------------|--------------------|
| Input voltage     | 5-24VDC                                             | EMC standard    | EN IEC 55015/EN IEC 61547<br>ETSI EN 301 489-1/-3 | Operation temperature   | Ta: -30℃ ~ +55℃    |
| Power consumption | 1W                                                  | Safety standard | EN 61347-1/-2                                     | Case temperature (Max.) | Tc: +65℃           |
| Input signal      | RF 2.4GHz                                           | Radio Equipment | ETSI EN 300 440                                   | IP rating               | IP20               |
| Output signal     | DMX512                                              | Certification   | CE RoHS                                           | <b>Package</b>          |                    |
| Dynamic mode      | 32                                                  | <b>Warranty</b> |                                                   | Size                    | L114 x W38 x H26mm |
| Control dots      | Max 170 RGB pixels or 128 RGBW pixels(512 Channels) | Warranty        | 5 years                                           | Gross weight            | 0.049kg            |

Mechanical Structures and Installations

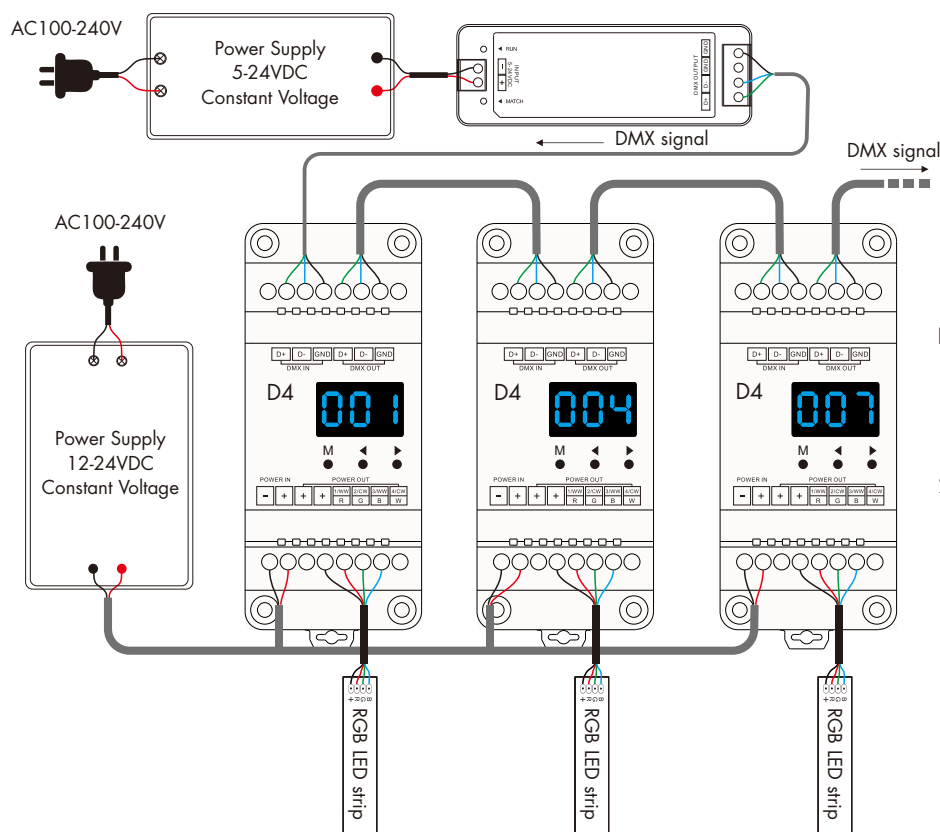


Wiring Diagram

**Note:** If connect with RGBW LED lamps, please long press match key for 15s, the controller will become RGBW type.  
Long press match key for 10s, the controller will return RGB type.

- XC connect with DMX spot light
- XC connect with DMX pixel strip
- XC connect with DMX Digital light tube

- XC connect with DMX-PWM three channel decoder



- Note:**
1. For RGB light, DMX decoder first address set in sequence as 1, 4, 7, 10,...  
For RGBW light, DMX decoder first address set in sequence as 1, 5, 9, 13,...
  2. For D4 decoder, CH1/CH2/CH3/CH4 channel corresponding to R/G/B/W channel output.

Match Remote Control

**Match:** Short press match key, immediately press on/off key of the remote.

**Delete:** Press and hold match key for 5s to delete all match, The light blinks 5 times means all matched remotes were deleted.

- Note (match with R9 remote):**
1. The DMX signals default to RGB color order.  
If the RGB color is not correct, you can press 3 keys (\* + 1 digit + \*) continuously to change the RGB color sequence:  
\*1\*:RGB, \*2\*:RBG, \*3\*:GRB, \*4\*:GBR, \*5\*:BRG, \*6\*:BGR.
  2. DMX signal outputs 512 channels by default, you can press 5 keys (\* + 3 digits + \*) continuously to set the number of channels (024-512),  
for example: \*060\* to set 60 channels output.

Dynamic Mode List

| No. | Name                                  | No. | Name             | No. | Name                       |
|-----|---------------------------------------|-----|------------------|-----|----------------------------|
| P01 | Red horse race white ground           | P12 | Blue White chase | P23 | Purple float               |
| P02 | Green horse race white ground         | P13 | Green Cyan chase | P24 | RGBW float                 |
| P03 | Blue horse race white ground          | P14 | RGB chase        | P25 | Red Yellow float           |
| P04 | Yellow horse race blue ground         | P15 | 7 color chase    | P26 | Green Cyan float           |
| P05 | Cyan horse race blue ground           | P16 | Blue meteor      | P27 | Blue Purple float          |
| P06 | Purple horse race blue ground         | P17 | Purple meteor    | P28 | Blue White float           |
| P07 | 7 color multi horse race              | P18 | White meteor     | P29 | 6 color float              |
| P08 | 7 color horse race close + open       | P19 | 7 color meteor   | P30 | 6 color smooth sectionally |
| P09 | 7 color multi horse race close + open | P20 | Red float        | P31 | 7 color jump sectionally   |
| P10 | 7 color scan close + open             | P21 | Green float      | P32 | 7 color strobe sectionally |
| P11 | 7 color multi-scan close + open       | P22 | Blue float       |     |                            |

Malfunctions analysis & Troubleshooting

| Malfunctions                | Causes                                                                                                          | Troubleshooting                                                              |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| No light                    | 1. No power.<br>2. Wrong connection or insecure.                                                                | 1. Check the power.<br>2. Check the connection.                              |
| Wrong color                 | 1. DMX decoder start address error.<br>2. Wrong connection of R/G/B wires.                                      | 1. Check the DMX start address.<br>2. Reconnect R/G/B wires.                 |
| No response from the remote | 1. The battery has no power.<br>2. Beyond controllable distance.<br>3. The controller did not match the remote. | 1. Replace battery.<br>2. Reduce remote distance.<br>3. Re-match the remote. |