BTF-LIGHTING V3 + R8-1 RGB LED Strip Controller Kit User Guide

Contents

BTF-LIGHTING V3 + R8-1 RGB LED Strip Controller Kit

Model No.: V3 + R8-1

3 channels constant voltage/Touch color wheel/Step-less dimming/Wireless remote 30m distance

Features

- Mini style controller with 3 channel constant voltage output.
- Ultra sensitive color adjustment touch wheel.
- Smooth dimming and switch without any flickering.
- Built in 10 dynamic mode, include jump or gradual change style.
- Independent dimming function of each R, G, B channel to achieve millions of colors.
- Auto-transmitting function: Controller automaticly transmit signal to another controller with 30m control distance.
- Synchronize on multiple number of controllers.

Technical Parameters

Dimming data	
Dimming level	4096 levels
Dimming range	0 -100%
Dimming curve	Logarithmic
PWM Frequency	750Hz

Warranty and Protection	
Warranty	5 years
Protection	Reverse Polarity

LED Remote's Input and Output	
Output signal	RF(2.4GHz)
Working voltage	3VDC(CR2032)
Working current	5mA
Standby current	10µA
Standby time	1 year
Remote distance	30m

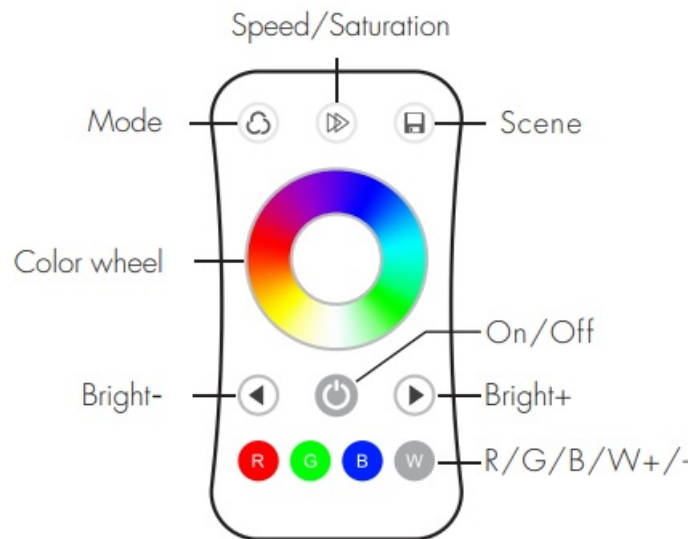| Safety and EMC	
EMC standard (EMC)	EN301 489,EN 62479
Safety standard(LVD)	EN60950
Radio Equipment(RED)	EN300 328
Certification	CE,EMC,LVD,RED

Mechanical Structures and Installations
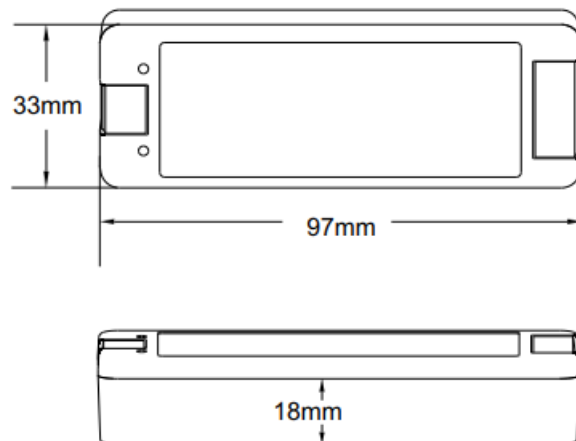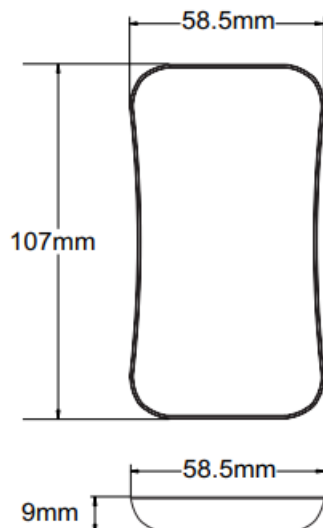
Wiring Diagram
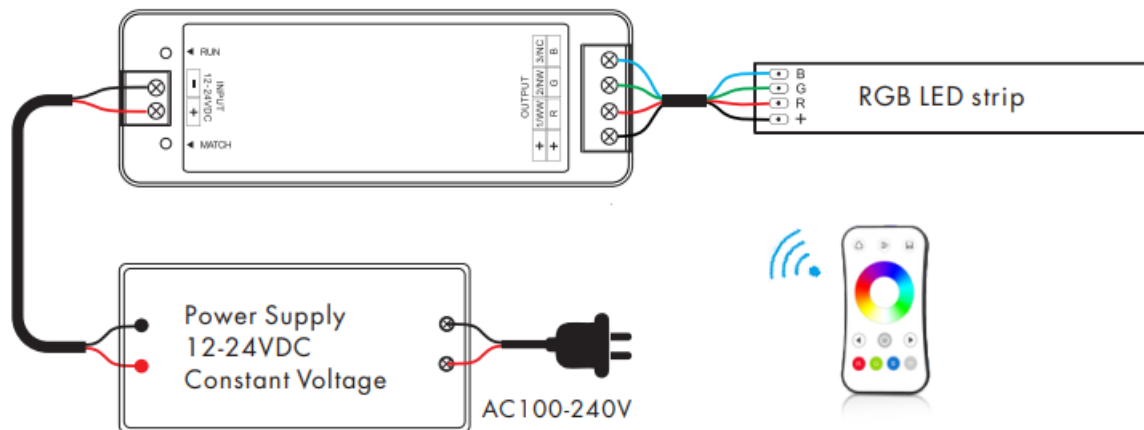
Remote function

- **On/Off:** Turn on/off light.
- **Color wheel:** Touch to change static RGB color.
- **Mode:** Short press run the next dynamic mode, long press 2s run mode cycle.
- **Speed/Saturation:** For dynamic mode, adjust speed, short press 10 levels, long press 2s get the default speed. For static color, adjust saturation, namely change current static RGB color to mixed white slowly, short press 11 levels, long press 1-5s for continuous 256 levels adjustment.
- **Bright+/-:** Adjust brightness, short press 10 levels, long press 1-5s for continuous 256 levels adjustment.
- **R/G/B:** Short press get red, green or blue color directly,
- long press 1-5s adjust R/G/B brightness continuously to achieve millions of colors.
- **W+/-:** Short press turn on/off white(RGB mix), long press 1-5s adjust saturation continuously, namely change current static RGB color to mixed white slowly.
- **Scene:** Short press recall the scene, long press 2s save the current color into the scene.
- When light is on, touch the color wheel, the indicator will display red.
- To extend battery life, no touch or press key operation after a few seconds, the touch wheel will enter sleep state, you need press any key to make touch wheel quit sleep state.

Match Remote Control (two match ways)

End user can choose the suitable match/delete ways. Two 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) 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.
- **Use Power Restart**
  - **Match:**
    Switch off the power, then switch on power again, immediately short press on/off key 3 times on the remote. The light blinks 3 times means match is successful.

- **Delete:**

  Switch off the power, then switch on power again, immediately short press on/off key 5 times on the remote. The light blinks 5 times means all matched remotes were deleted.

Application notes

All the receivers are matched with one RF remote.
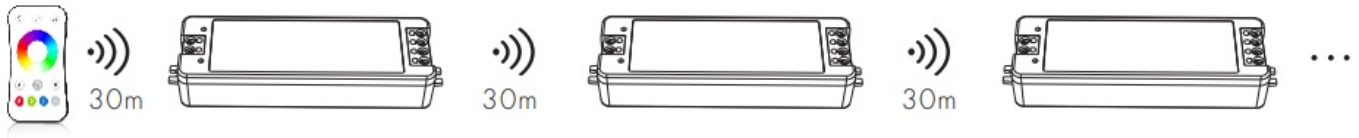
RF remote

- Auto-transmitting: One receiver can transmit the signals from the remote to another receiver within 30m, as long as there is a receiver within 30m, the remote control distance can be limitless.
- Auto-synchronization: Multiple receivers within 30m distance can work synchronously when they are controlled by the same remote, under same dynamic mode and with same speed.
- Receiver placement may offer up to 30m communication distance. However, we recommend for indoor applications that receiver placements should be no further apart than15m.
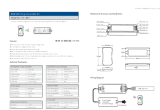
Dynamic mode list

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

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 R/G/B wires.	1. Reconnect R/G/B wires.
Uneven intensity between front and rear,with voltage drop	1. Output cable is too long. 2. Wire diameter is too small. 3. Overload beyond power supply capability. 4. Overload beyond controller capability.	1. Reduce cable or loop supply. 2. Change wider wire. 3. Replace higher power supply. 4. Add power repeater.
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.

Documents / Resources

BTF-LIGHTING V3 + R8-1 RGB LED Strip Controller Kit [pdf] User Guide
V3 R8-1 RGB LED Strip Controller Kit, V3 R8-1, RGB LED Strip Controller Kit, RGB LED, Strip Controller Kit, LED Controller Kit, RGB Controller Kit