

# RF 2.4G Wireless RGB LED Strip Controller Kit

Model: R8-1 Remote + V3 Controller | SKU: CL-RF24G-RGBKIT-V3

The Circ Lighting RF 2.4G Wireless RGB LED Controller Kit delivers seamless, wire-free color control for 12V and 24V RGB LED strip lights. The kit includes the R8-1 touch-wheel remote and the compact V3 receiver/controller. With a 30-meter wireless range, 3-channel independent RGB output, and 10 built-in dynamic modes, it is an ideal solution for residential cove lighting, cabinet lighting, TV backlighting, and commercial accent installations.

## PACKAGE CONTENTS

#	Item	Description
1	R8-1 RF Touch Remote	2.4 GHz touch-wheel remote, CR2032 battery, wall bracket
2	V3 RGB Receiver / Controller	3-channel constant voltage controller, terminal block output

## TECHNICAL SPECIFICATIONS

Specification	Value	Notes
Working Voltage	12V – 24V DC	Compatible with standard 12V and 24V LED drivers
Max Load Current	3A x 3 Channels	9A total combined output
Max Power at 12V	144W	3A x 3CH x 12V
Max Power at 24V	288W	3A x 3CH x 24V
RF Frequency	2.4 GHz	No line-of-sight required
Control Distance	Up to 30 meters	Open environment; indoor ~15–25 m typical
Compatible Strips	RGB LED strips	4-pin common anode (12V or 24V)
Dynamic Modes	10 built-in modes	Jump, fade, strobe, and custom sequences
Remote Battery	CR2032 (included)	Replaceable button cell
Operating Temp.	-10°C to +40°C	For reliable indoor/outdoor use
Product Weight	~350 g	Including retail packaging
Controller Dims.	8.6 x 3.5 x 2.0 cm	V3 receiver unit
Remote Dims.	16.0 x 8.0 x 1.5 cm	R8-1 touch remote
Certifications	CE, RoHS	EU safety and environmental compliance

## KEY FEATURES

Feature	Detail
Full-color RGB Touch Wheel	Ultra-sensitive capacitive wheel for seamless static color selection across the full spectrum.

Feature	Detail
<b>2.4 GHz RF Wireless</b>	Radio frequency signal requires no line-of-sight — operates through walls and obstacles.
<b>30-Meter Control Range</b>	Suitable for large rooms, open-plan spaces, and extended strip installations.
<b>Independent Channel Dimming</b>	R, G, and B channels can be dimmed independently for millions of color combinations.
<b>10 Dynamic Color Modes</b>	Built-in modes include jump change, gradual fade, strobe, and more with adjustable speed.
<b>Auto-Sync Multiple Controllers</b>	Multiple V3 receivers synchronize automatically under one remote.
<b>Memory Function</b>	Controller retains last color/mode setting after power cycle.
<b>Wide Voltage Support</b>	Works with both 12V and 24V DC LED strips — no reconfiguration needed.

## WIRING & INSTALLATION

**Connection sequence:** DC Power Supply → V3 Controller (Input terminals) → RGB LED Strip (Output terminals)

V3 Controller Terminal	Connect To	Wire Color (typical)
<b>V+ (Input +)</b>	PSU Positive (+)	Red
<b>GND (Input -)</b>	PSU Negative (-)	Black
<b>R (Output)</b>	LED Strip R pin	Red
<b>G (Output)</b>	LED Strip G pin	Green
<b>B (Output)</b>	LED Strip B pin	Blue

*Note: This controller is for common-anode RGB LED strips only. Ensure power supply wattage exceeds total strip load. Use the same voltage (12V or 24V) for power supply and LED strip.*

## TYPICAL APPLICATIONS

• Residential cove & tray ceiling lighting	• Under-cabinet and kitchen counter accent lighting
• TV and monitor bias backlighting	• Bedroom ambient mood lighting
• Commercial retail display accent lighting	• Hospitality bar and lounge accent lighting
• Home theater and gaming room lighting	• Staircase and hallway accent strips

<b>Need Help?</b> Visit our support center	<b>Website</b> circlighting.com	<b>Email</b> info@circlighting.com	<b>Product Code</b> CL-RF24G-RGBKIT-V3
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