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RGB LinkUp LED Controller

Part No. linkup-rgb

The RGB LinkUp LED Controller is an exciting and user friendly way to control RGB lighting systems. Choose any color from the color wheel or utilize any of the pre-programmed modes for a unique effect. Each remote can control an unlimited number of receivers allowing you to easily create grand effects.

This set contains an intuitive remote controller and RGB receiver, which works with RGB LED lighting systems to create extraordinary effects. Utilization of radio frequency wireless communication allows you to customize settings in real time and through walls, within 100 feet (30 meters) of the receivers.

The receiver is rated at 6 amps per individual channel or 15A total maximum, which is 180 watts per receiver at 12 volts or 360 watts per receiver at 24 volts. Our regular density RGB LED strip uses up to 30 watts per 5 meter reel and the double density RGB LED strip uses up to 40 watts per 5 meter reel. Therefore, you can control 6 reels of regular density RGB LED strip or 4.5 reels of double density LED strip at 12 volts.

Features

- Touch sensitive wheel can be used to specify 50 hues of color.
- 20 pre-programmed modes available, with adjustable speed and brightness.
- RF hand-held remote controller - adjust lights through walls from 30 meters (100 feet) away in benign electromagnetic field.
- Each remote controller can direct an unlimited amount of compatible receivers simultaneously.
- Each receiver or group of receivers can be controlled by up to four remote controllers.
- Power off memory function.
- Three signal outputs: Red, Green and Blue. Common anode takes 12 or 24 VDC.

Applications

- Easily adjustable and energy efficient.
- Create the perfect ambiance for any home or business.
- Eliminate wiring: unlimited receivers can be controlled by a single wireless remote.
- Hotels, restaurants, office buildings, homes and casinos, wine cellars, bars, home entertainment centers.

Specifications

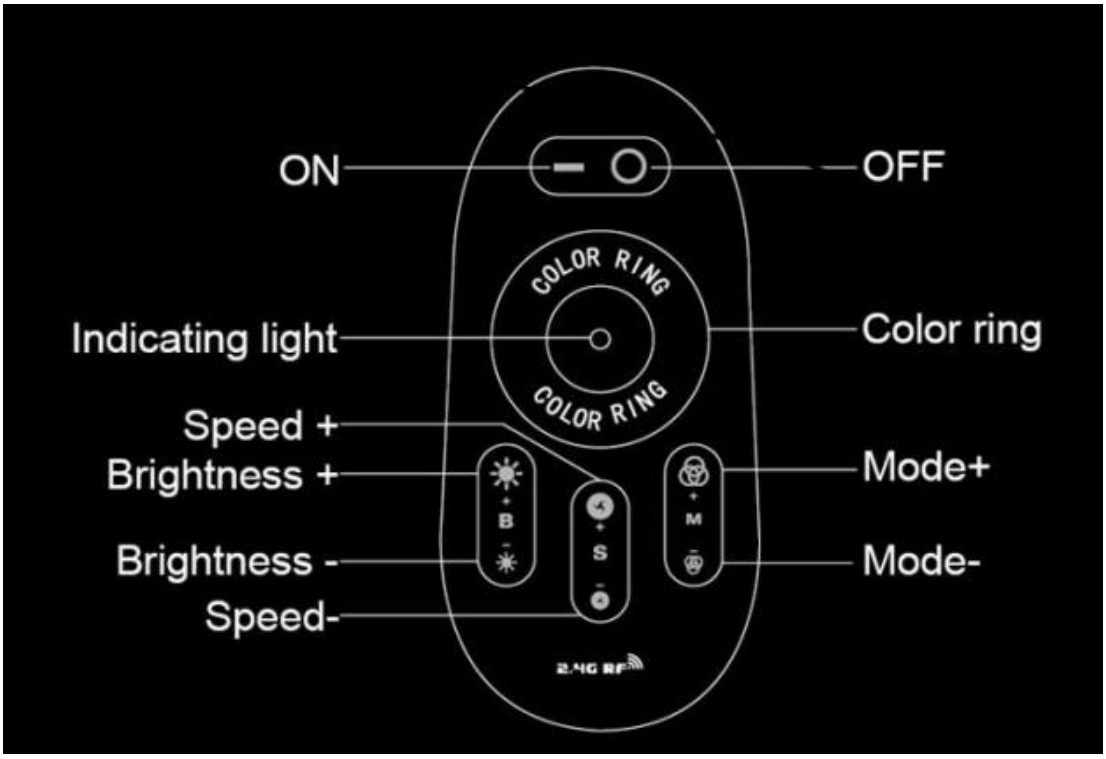
Remote Controller

Dimensions:	4.33” x 2.04” x 0.79”
	110 mm x 52 mm x 20 mm
Power:	2 AAA batteries
Working Frequency:	2.4 GHz
RF Remote Distance:	100 feet (30 m)

Receiver

Dimensions:	3.35” x 1.77” x 0.91”
	85 mm x 45 mm x 23 mm
Output Frequency:	130 Hertz
Input Voltage:	12-24 VDC
Maximum Load:	15A maximum total, up to 6A per individual channel
Maximum Power:	180W/360W (12VDC/24VDC)

Remote Controller Functions:

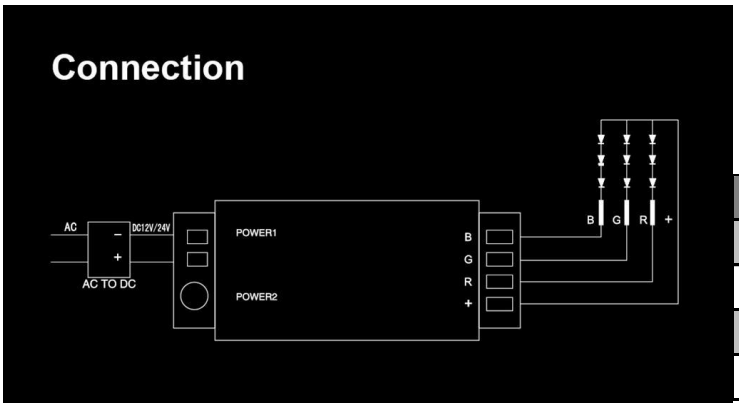


Operation

Powering Up

Remove the back cover of the remote and insert two AAA batteries. Connect the LED load to the controller using either the terminal blocks (as shown below, Power 1) or the barrel connector (Power 2). Do not apply voltage to both Power 1 and Power 2 at the same time. Apply 12 or 24 VDC depending on the LED load being powered.

Do not press the touch wheel while loading the batteries. This will affect the sensitivity of the touch wheel. Loss of sensitivity in the touch wheel is also an indicator of low battery charge.



Wire Name	Connection
B	Blue
G	Green
R	Red
+	Power

Pairing Receiver to Remote

Each receiver must be paired with the remote in order to function. Turn the power to the receiver off, wait 10 seconds, and return power. Tap the (Speed) S+ button on the remote as soon as the lights turn on. The LED will blink to confirm the match. Repeat this, pairing an unlimited number of receivers within working distance to your remote. Each receiver may be paired with up to four remotes. To delete the pairing, turn off power to the receiver. When you restore power, hold down the S+ button for five seconds. Lights will blink to confirm.

Setting and Adjusting Lights

To select a color, simply touch a point on the color wheel. From there, the (Brightness) B+/- buttons can be used to further adjust the light.

Press the (Mode) M+/- button to scroll through the pre-programmed modes listed below. When you reach mode 20 you will have to use the M- button to return to the previous modes on the list. Brightness can be increased or decreased in modes as with a static color.

For non-static modes, the speed of the function can be adjusted using the S+/- buttons. Each mode has its own speed memory; so when you come back to the mode it will remember the speed it was left at the last time. Press the color wheel at any time to return lights to a static color of your choice.

Pre-Programmed Modes

Please note: Dynamic modes (2-20) can become out of sync when multiple receivers are controlled by the same remote controller. This is due to the inherent characteristics of each receiver.

Mode Number	Mode Description	Mode Number	Mode Description
1	Static white	11	White color blinks short pulse
2	White fade pulse	12	Red color blinks long pulse
3	All color gradual fade	13	Red color blinks short pulse
4	RGB three colors gradual change	14	Green color blinks long pulse
5	Seven colors jump to change	15	Green color blinks short pulse
6	Three colors jump to change	16	Blue color blinks long pulse
7	Red/green jumps to change	17	Blue color blinks short pulse
8	Red/blue jumps to change	18	Yellow color blinks long pulse
9	Blue/green jumps to change	19	Yellow color blinks short pulse
10	White color blinks long pulse	20	Combination mode – cycles through modes 1-19

Instructions

Please take the following precautions:

1. This equipment, like all electrical equipment, should be installed by a qualified person.
2. Do not expose these LEDs, dimmers or power supplies to intense electro-magnetic fields, including lightning.
3. The controllers and power supplies are not waterproof. Keep them dry.
4. Always observe proper polarity.

When installing LED lighting, it is a good idea to follow this "dry-run" procedure:

1. Be sure you have everything you need before you start.
2. Lay out your lights and power supply on the floor or table.
3. There is some resistance in the LED lighting. If you see any color fading or dimming at the end of a long run, you may have too many LEDs for your power supply and you might need a bigger supply or shorter runs. Use a bus structure as described in rgb_manual.pdf. Call if you need assistance with larger projects.
4. Connect everything and test it to be sure it works and you have it connected properly. It is unlikely, but possible, that some part of your system is defective or was damaged during shipment. If that is the case, it will be very helpful to you to know that before you do all the work involved in installing custom LED lighting systems. You will also know if you damage anything during installation, which is really helpful in trouble-shooting because manufacturing defects and installation damage typically have very different solutions.

Once you have tested the system successfully, you are ready to install it. We recommend you install LEDs, electronic controls and dimmers in such a way that you have access to them in case they fail. All electrical components can fail.