# inspired LED Spectrum Series RGB Amplifier

The **RGB Amplifier** is a convenient accessory used to boost the control signal for Inspired LED's RGB Color Changing Spectrum Series. The amplifier receives its input from a compatible RGB Spectrum Series controller, and provides additional power to prevent voltage drop, while the output signal helps to keep the LEDs in sync as they change from color to color.



SKU# 3643

#### **Product Features:**

Used to help boost power and signal from RGB remote to RGB color changing LEDs, preventing voltage drop and ensuring colors remain synced over long or complex runs of light.

Amplifier features low profile aluminum housing with tabs for screw mount on either side, and removable screw terminal blocks for ease of access.

## **Specifications:**

Power- 12-24VDC

Requires 1 plug-in power supply per amplifier (cannot be used with dimmable transformer)

Input/Output- 4 conductor RGBV+

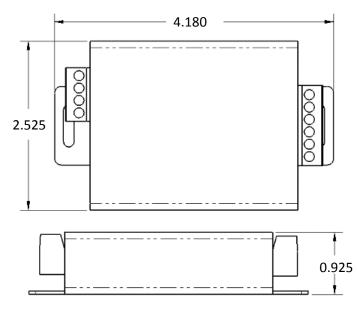
Max Load- 12 Amps

Dimensions- 4.18" x 2.53" x 0.93"

Net Weight-98g

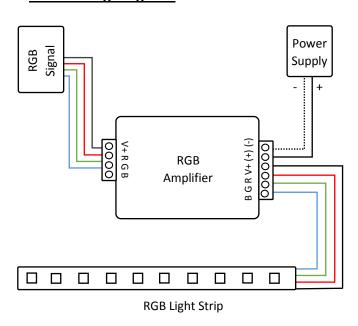
Recommended for use with 20+ feet of Normal Bright RGB or 15+ feet of Super Bright RGB

### **Mechanical Diagram:**



<sup>\*</sup>Dimensions shown in inches

### **Basic Wiring Diagram:**



<u>Instructions:</u> You will need 12V or 24V RGB flexible strips, compatible RGB controller, four-conductor cable, 12VDC or 24VDC power supplies, cable strippers, and small flathead screwdriver

- **1.** Lay out RGB flex system according to design and/or instructions, ensuring proper power requirements will be met. (See RGB Spectrum Series specifications for more detail.)
- **2.** Connect 4-conductor cable from compatible RGB remote to amplifier <u>input</u> by stripping ends of wires back ¼", matching RGB and V+, inserting into corresponding screw terminals and tightening down screws. (Note: wires may be connected directly from remote, or after running through a strip of RGB lights.)
- **3.** Connect 4-conductor cable to amplifier <u>output</u> by stripping ends of wires back ¼", matching RGB and V+, inserting into corresponding screw terminals and tightening down screws. (Note: multiple sets of LEDs may be wired in series or in parallel.)
- **4.** Connect output wires to strips of color changing lights, ensuring RGB and V+ are matched to each strip. (See RGB Spectrum Series specifications for more detail.)
- **5.** Connect plug-in power supply to amplifier by cutting off end connector, stripping cable, matching +/-polarities, inserting into corresponding screw terminals and tightening down screws. (Note: if using Inspired LED plug-in power supplies, the wire marked with white blocks is positive)
- **6.** Plug power supply into wall outlet to ensure all lights turn on, use remote to change colors in sync.





#### **Trouble Shooting:**

- 1. If <u>no</u> lights turn on, check to be sure that power supply is plugged into a live outlet, that connection to amplifier is properly wired with polarities matched, and screw terminals fully tightened.

  Also ensure that RGB remote has been synced, and charged batteries have been inserted.
- 2. If one or more colors are not functioning, check to be sure that 4-conductor cable is properly wired, RGB and V+ remain consistent from run to run, and screw terminals have been fully tightened.
- 3. If lights are flickering sporadically, this may indicate a loose connection, check to be sure all screw terminals have been fully tightened.
- 4. If lights are blinking on and off, this may indicate power supply is overloaded.