

The **RGBW Amplifier** is a convenient accessory used to boost the control signal for Inspired LED's RGBW color changing flexible LED strips. Combined with a compatible RGBW controller and power supply, this amplifier helps to combat voltage drop while keeping LEDs in sync as they change from one shade to the next.



SKU# 8519

Product Features:

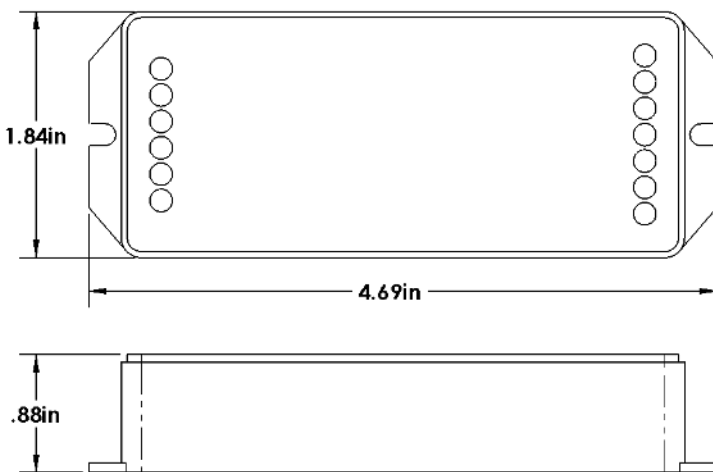
- Used to help boost power and signal from RGBW remote to RGBW color changing LEDs, preventing voltage drop and ensuring colors remain synced over long or complex runs. (recommended for systems using 16+ feet of RGBW)
- Amplifier features low profile plastic housing with tabs for screw mount on either side.
- Incorporate multiple amplifiers on a single RGBW color changing system
- CE & RoHS Certified.



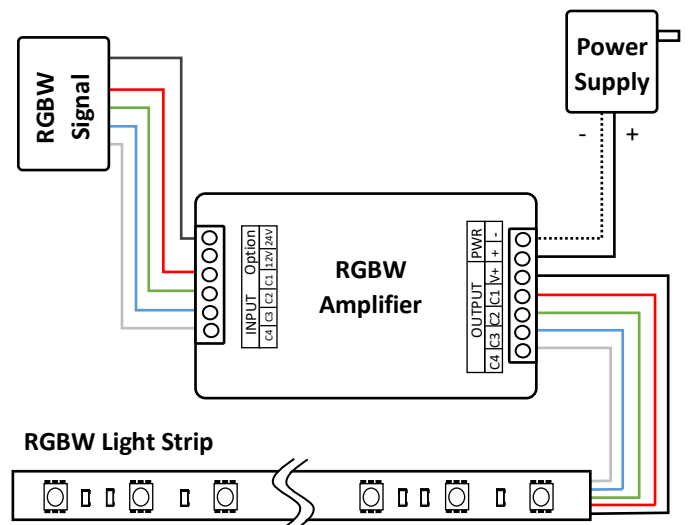
Specifications:

- Working Voltage- 12V/24V DC
- Total output max- 6A
- Max output (per channel)- 6A
- Operating Temp- (-)20°C to 60°C
- Dimensions- 4.69" x 1.85" x 0.94"
- Net Weight- 69g
- Input/Output- 5 conductor RGBW V+ (Red (CH1), Green (CH2), Blue (CH3), White (CH4), Black (V+)) Requires 1 power supply per amplifier (cannot be used with hardwire transformers)

Mechanical Diagram:



Basic Wiring Diagram:



**See installation instructions on next page for more detail*



Instructions: You will need 24V RGBW flexible strips, compatible RGBW controller, 5-conductor cable, 24VDC power supplies, cable strippers, and small flathead screwdriver

1. Lay out RGBW system according to design and/or instructions, ensuring proper power requirements will be met. (See RGBW Flexible Strip specifications for more detail.)

2. Connect 5-conductor cable from compatible RGBW receiver to amplifier input by stripping ends of wires back about ¼", matching RGBW (CH1, CH2, CH3, CH4) and V+, inserting into corresponding screw terminals and tightening down screws. (Note: wires may be connected directly from remote, or after running through a series of RGBW strips.)

3. Connect 5-conductor cable to amplifier output by stripping ends of wires back ¼", matching RGBW (CH1, CH2, CH3, CH4) and V+, inserting into corresponding screw terminals and tightening down screws. (Note: multiple sets of LEDs may be wired in series or in parallel by matching polarity and stacking outputs.)

4. Connect output wires to strips of color changing lights, ensuring RGBW (CH1, CH2, CH3, CH4) and V+ are matched to each strip.

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. (If using Inspired LED power supplies, see spec sheets for info on polarity.)

6. Plug power supply into wall outlet to ensure all lights turn on, use remote to change colors in sync.

Troubleshooting:

1. If no 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 RGBW remote has been synced, and charged batteries have been inserted.
2. If one or more colors are not functioning, check to be sure that 5-conductor cable is properly wired, RGBW 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.

Fig. 1: Sample system design

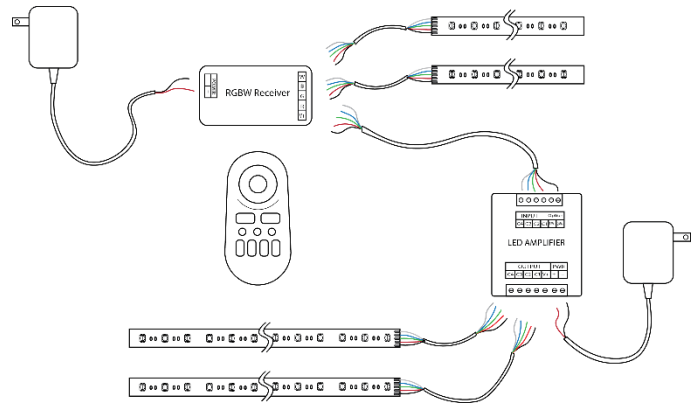


Fig. 2: Step 2

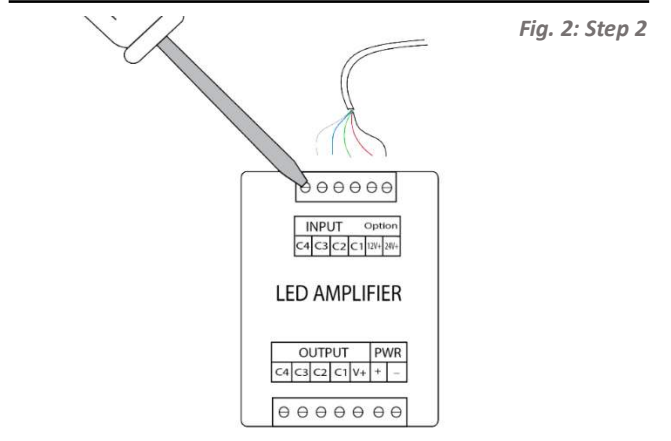


Fig. 3: Step 3, 5

