

Ribbon Star, RGB 180 LED Strip Light - 24VDC

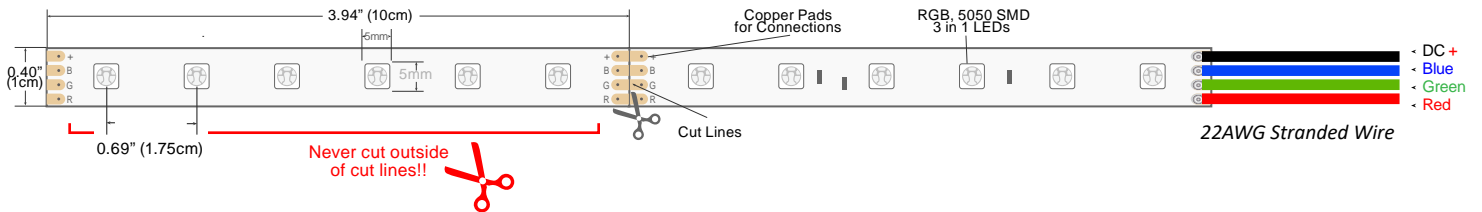
SKU: RL-SC-RS-RGB24-10

ECOLOCITY
LED LIGHTING SOLUTIONS

1092 Greg Street
Sparks, NV 89431
ECOLOCITYLED.COM
775-636-6060



SPECIFICATIONS



Product SKU : RL-SC-RS-RGB24-10

LED Size : 5050 SMD

LED Quantity : 6 LEDs per 3.94"

Input Power : 24VDC Constant Voltage

Watts : 4.30W per foot

Max Serial Connection : 30ft

Operating Temp : -4° ~ 113°F

Beam Angle : 120°

Rating : Dry

Warranty Period : 2 Years

Input Power: 24VDC Constant Voltage

Power supply equation

$$X * 4.30 = Y$$

X = linear strip light footage

Y = minimum transformer wattage

PRECAUTIONS



WARNING - This product should be installed, cut and connected only by a qualified professional.



NEVER cut, connect, or join wires while product is connected to a live power source.



24VDC Use 24VDC Input Only!



DO NOT bend, fold or crease the strip in a manner that will damage the conductivity of the circuit board.



120VAC DO NOT use AC Input!



DO NOT use in direct sunlight.
DO NOT use in environments over 113°F.



This product is not designed to be installed in wet or damp environments.



DO NOT exceed 30ft serial connection!
BE CERTAIN your 24VDC source and wire gauge is suffice for powered load.

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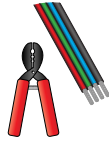
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INSTALLATION

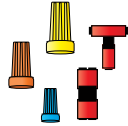
REQUIRED SUPPLIES



Cleaning Supplies
or Degreaser



Stranded Wire and
Wire Strippers



Wire Nuts or
Connectors

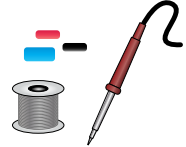


24VDC Power
Supply



RGB 3 Channel
Color Controller

OPTIONAL SUPPLIES



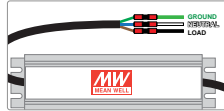
Solder, Solder Iron and Heat Shrink
(Required to cut and re-connect)

1.) Clean Mounting Surface



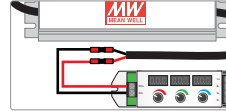
Use your cleaning supplies to clean your mounting surface. Please note that mounting surface must be smooth, clean and dry for the 3M tape to permanently adhere.

2.) Connect Transformer



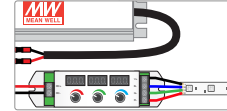
WARNING – This step should be done by a qualified professional. Always disable AC power before connecting! Use wire nuts or connectors to secure your AC input to your 24V transformer.

3.) Connect Controller



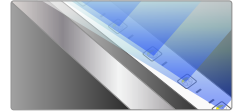
Always be certain power is disabled before connecting! Use a small screw driver to connect your 24VDC positive and negative wires to your 3 channel RGB controller input.

3.) Connect Strip Lights



Always be certain power is disabled before connecting! Use a screw driver to connect the 4 wires from your RGB strip light to the proper output ports of your 3 channel RGB controller.

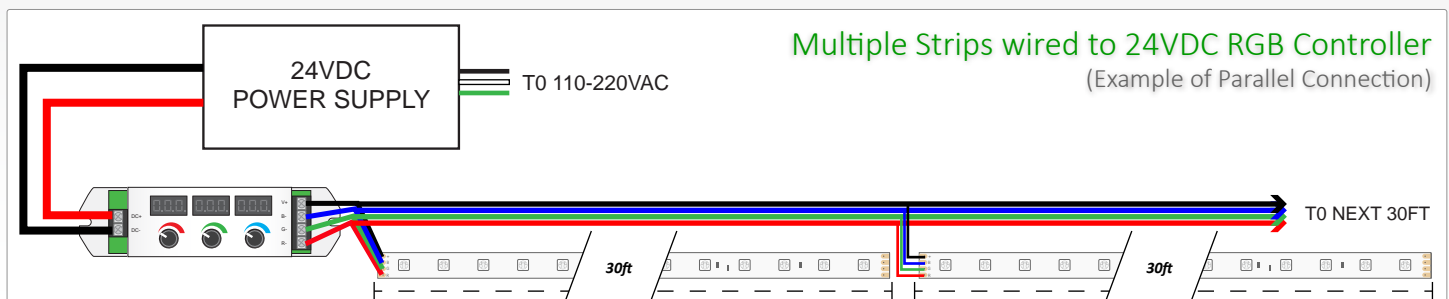
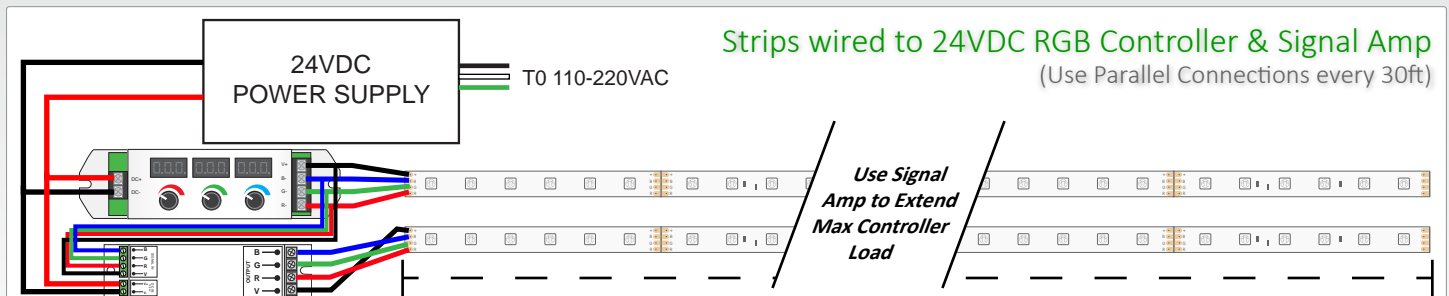
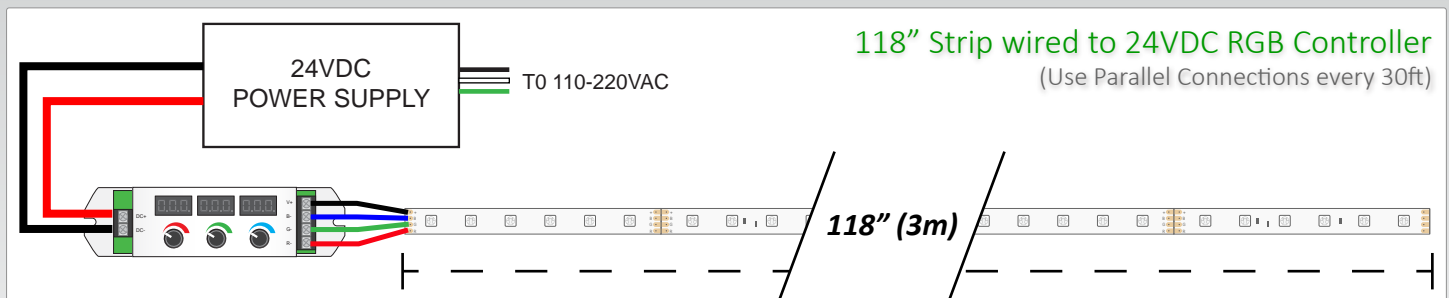
4.) Test and Mount Strips



Always test your strip lights before adhering the 3M double sided tape. **Never test the strip light when rolled inside the plastic reel.**

CONNECTION EXAMPLES: 4.3 Watts per foot

POWER SUPPLY AND CONTROLLER AMP OUTPUT RATING MUST BE GREATER THAN THE LOAD OF THE STRIP LIGHT OUTPUT.

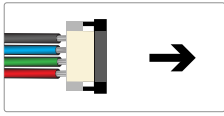


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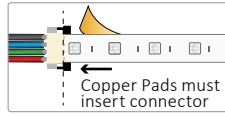
QUICK CONNECTOR INSTRUCTION

1.) Gently Pull Tab



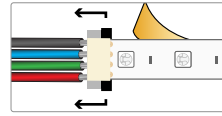
Gently pull out the black plastic tab about 1/16".

2.) Insert Strip Light



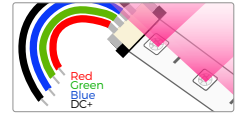
Slightly pull back 3M tape cover, Check the polarity of your strip then insert into the connector.

3.) Push Back Tabs



Push back the plastic tabs to pinch the strip light into place.

4.) Test your Connection



Test your connection before installation.

SOLDERING INSTRUCTION

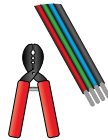
REQUIRED SUPPLIES



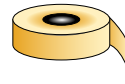
Rosin Core
Electrical Solder



Electrical Soldering Iron
(Preferably Temp Adjustable)

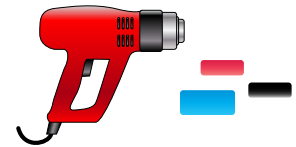


Stranded Wire and
Wire Strippers



Masking
Tape

OPTIONAL SUPPLIES



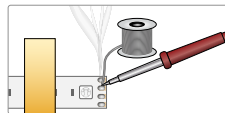
Heat Shrink and Heat Gun
(Recommended but not required)

1.) Strip and Tin Wire



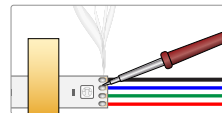
Heat your soldering iron to 500-600°F. Strip your 2 conductor stranded wire roughly 1/8". Tin the exposed wires with rosin core solder.

2.) Tin Strip Light Pads



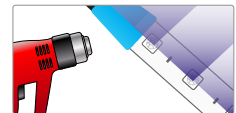
Cut your strip light to length on cut line between copper pads. Tin each copper pad with rosin core solder. **Do not bridge solder between copper pads.**

3.) Solder Wire to Strip



Mate your tinned wire to the copper pad with respective polarity. Black wire to DC+. Be sure that no wires or solder are touching on another.

4.) Test and Heat Shrink



Test your soldered connection for continuity or any electrical arcing. Once tested you can cover exposed copper pads with heat shrink if desired.

STRIP LIGHT ACCESSORIES:



RGB Strip Light
Quick Connectors



24VDC Power Supplies



RGB LED Controllers



Aluminum Extrusions
and Covers

HELPFUL LINKS:

24VDC Power Supplies - https://www.ecolocityled.com/category/led_power_supplies_24v

RGB LED Controllers - https://www.ecolocityled.com/category/rgb_led_lighting_controllers_only

RGB Connection Wire - https://www.ecolocityled.com/category/led_connection_wire_products

Aluminum Extrusions - https://www.ecolocityled.com/category/led_aluminum_extrusions

Strip Light Soldering Guide - https://www.ecolocityled.com/category/led_tutorials_rgb_solder