Ribbon Star Extreme, RGB LED Strip Light - 24VDC
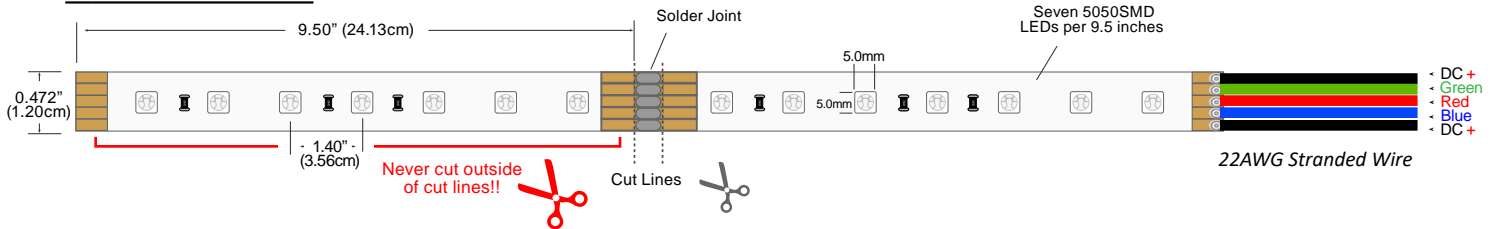## SKU: RL-SC-RSX2-RGB-10

ECOLOCITY
LED LIGHTING SOLUTIONS

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

SPECIFICATIONS

9.50" (24.13cm)

Solder Joint

Seven 5050SMD
LEDs per 9.5 inches

5.0mm

0.472"
(1.20cm)

5.0mm

- 1.40" -
(3.56cm)

Never cut outside
of cut lines!!

Cut Lines

DC +
Green
Red
Blue
DC +

22AWG Stranded Wire

Product SKU :	RL-SC-RSX2-RGB-10
LED Size :	5050 SMD
LED Quantity :	7 LEDs per 9.50"
Input Power :	24VDC Constant Voltage
Watts :	1.70W per foot
Max Serial Connection :	100ft
Operating Temp :	-4° ~ 113°F
Beam Angle :	120°
Rating :	Dry
Warranty Period :	2 Years

Input Power: 24VDC Constant Voltage

Power supply equation

$$X * 1.70 = Y$$

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 100ft serial connection! BE CERTAIN your 24VDC source and wire gauge is suffice for powered load.

1092 Greg Street
Sparks, NV 89431, USA

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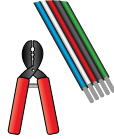# Ribbon Star Extreme, RGB LED Strip Light - 24VDC

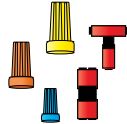## SKU: RL-SC-RSX2-RGB-10

INSTALLATION

REQUIRED SUPPLIES

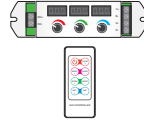Cleaning Supplies or Degreaser

Stranded Wire and Wire Strippers
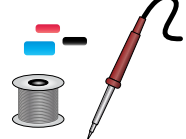
Wire Nuts or Connectors

24VDC Power Supply

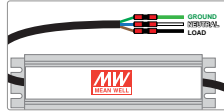RGB 3 Channel Color Controller

OPTIONAL SUPPLIES

Solder, Solder Iron and Heat Shrink (Required to cut and re-connect)
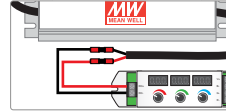
1.) Clean Mounting Surface

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.
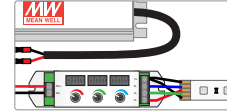
2.) Connect Transformer

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.
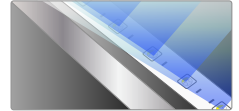
3.) Connect Controller

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 5 wires from your RGB strip light to the proper output ports of your 3 channel RGB controller.
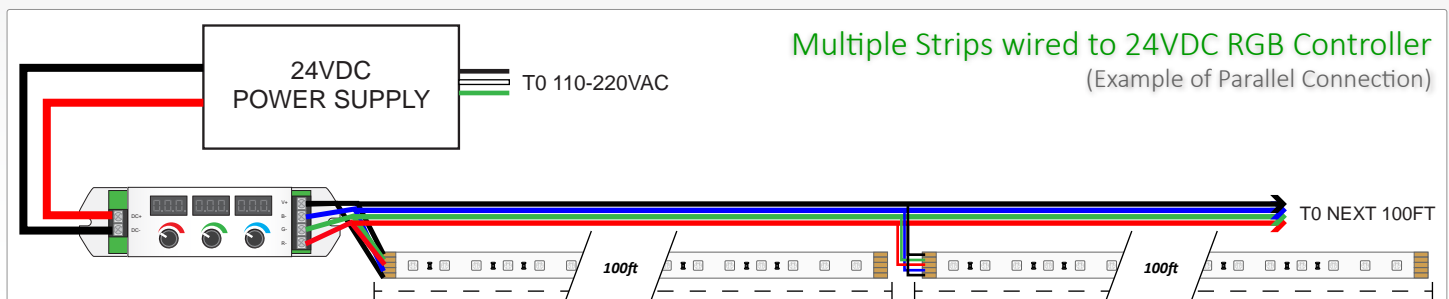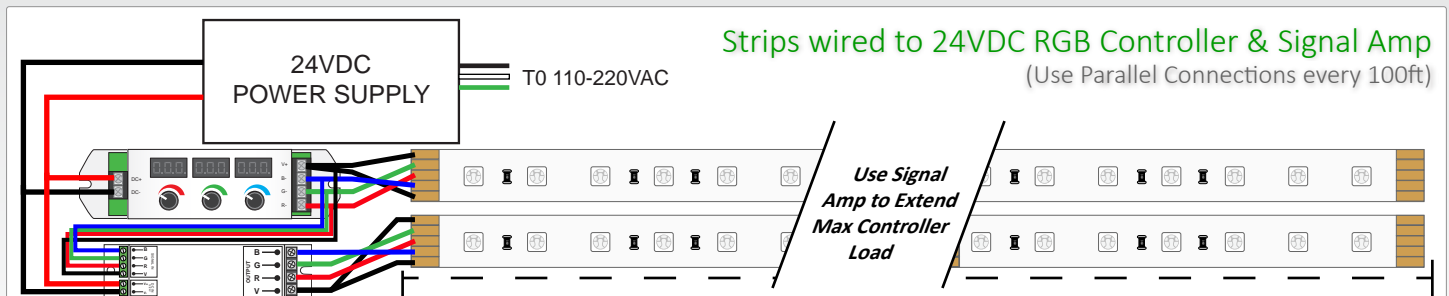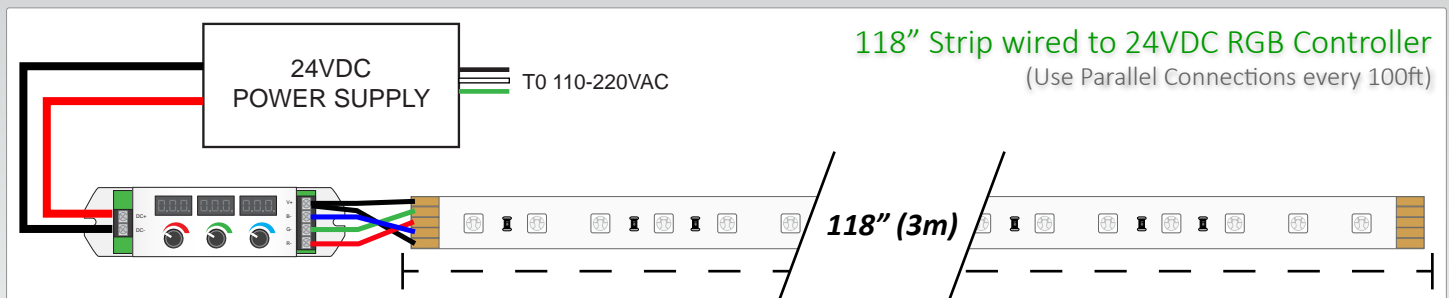
4.) Test and Mount Strips

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: 1.7 Watts per foot

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

118" Strip wired to 24VDC RGB Controller
(Use Parallel Connections every 100ft)

24VDC POWER SUPPLY — T0 110-220VAC

118" (3m)

Strips wired to 24VDC RGB Controller & Signal Amp
(Use Parallel Connections every 100ft)

24VDC POWER SUPPLY — T0 110-220VAC

Use Signal Amp to Extend Max Controller Load

Multiple Strips wired to 24VDC RGB Controller
(Example of Parallel Connection)

24VDC POWER SUPPLY — T0 110-220VAC

100ft   100ft   T0 NEXT 100FT

Ribbon Star Extreme, RGB LED Strip Light - 24VDC

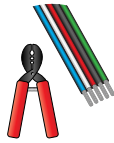## SKU: RL-SC-RSX2-RGB-10

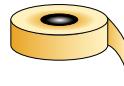### SOLDERING INSTRUCTION

REQUIRED SUPPLIES

Rosin Core
Electrical Solder

Electrical Soldering Iron
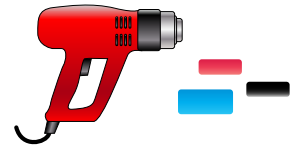(Preferably Temp Adjustable)

Stranded Wire and
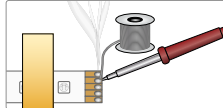Wire Strippers

Masking
Tape

OPTIONAL SUPPLIES

Heat Shrink and Heat Gun
(Recommended but not required)
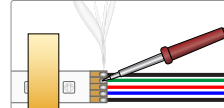
1.) Strip and Tin Wire

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:

5 Wire Connection Wire

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*