

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

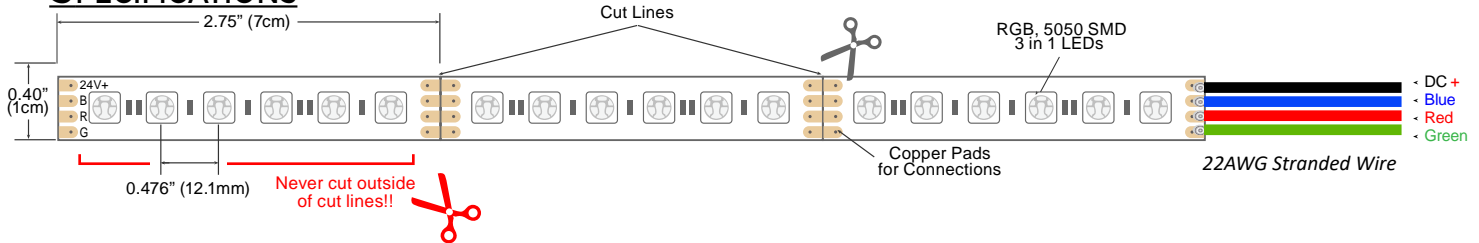
SKU: RL-DX-RLX-RGB-10

**ECOLOCITY**  
LED LIGHTING SOLUTIONS



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

## SPECIFICATIONS



Product SKU : RL-DX-RLX-RGB-10

LED Size : 5050 SMD

LED Quantity : 6 LEDs per 2.75"

Input Power : 24VDC Constant Voltage

Watts : 5.40W per foot

Max Serial Connection : 20ft

Operating Temp : -4° ~ 113°F

Beam Angle : 120°

Rating : Dry

Warranty Period : 2 Years

**Input Power: 24VDC Constant Voltage**

Power supply equation

$$X * 5.40 = Y$$

*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 20ft serial connection!  
**BE CERTAIN** your 24VDC source and wire gauge is suffice for powered load.

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

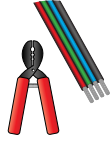
SKU: RL-DX-RLX-RGB-10

## INSTALLATION

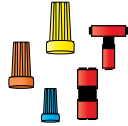
### REQUIRED SUPPLIES



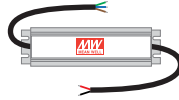
Cleaning Supplies or Degreaser



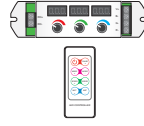
Stranded Wire and Wire Strippers



Wire Nuts or Connectors

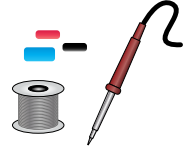


24VDC Power Supply



RGB 3 Channel Color Controller

### OPTIONAL SUPPLIES



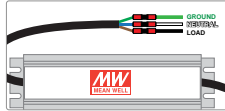
Solder, Solder Iron and Heat Shrink (Required to cut and re-connect)

#### 1.) Clean Mounting Surface



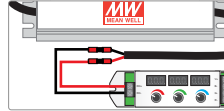
Use your cleaning supplies to clean your mounting surface. Please note that mounting surface must be smooth, clean and dry for the 3M tape to permanently adhere.

#### 2.) Connect Transformer



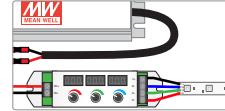
**WARNING – This step should be done by a qualified professional.** Always disable AC power before connecting! Use wire nuts or connectors to secure your AC input to your 24V transformer.

#### 3.) Connect Controller



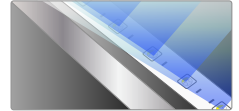
Always be certain power is disabled before connecting! Use a small screw driver to connect your 24VDC positive and negative wires to your 3 channel RGB controller input.

#### 3.) Connect Strip Lights



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

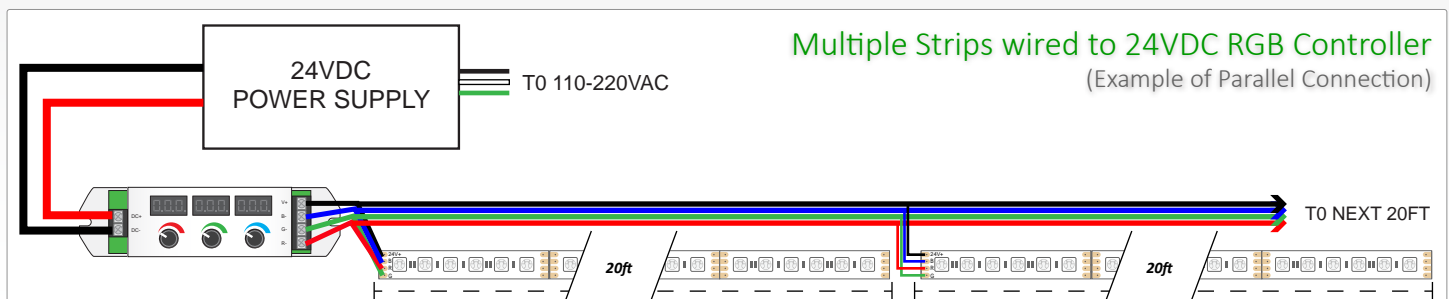
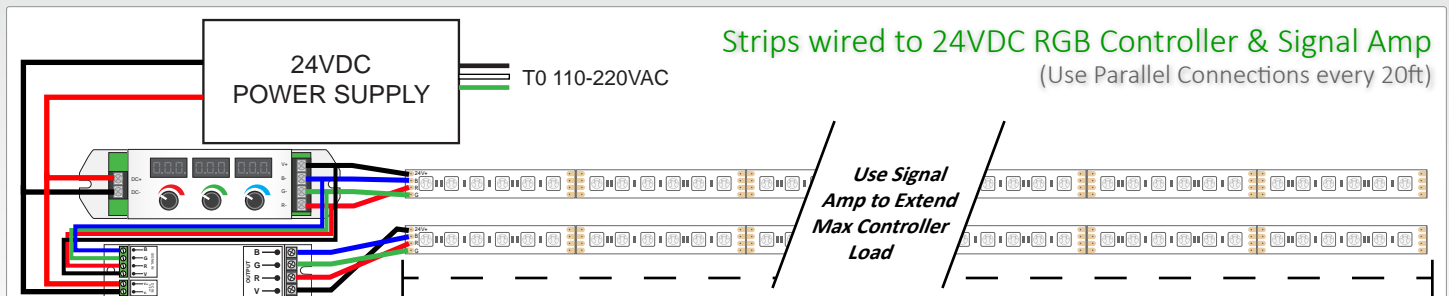
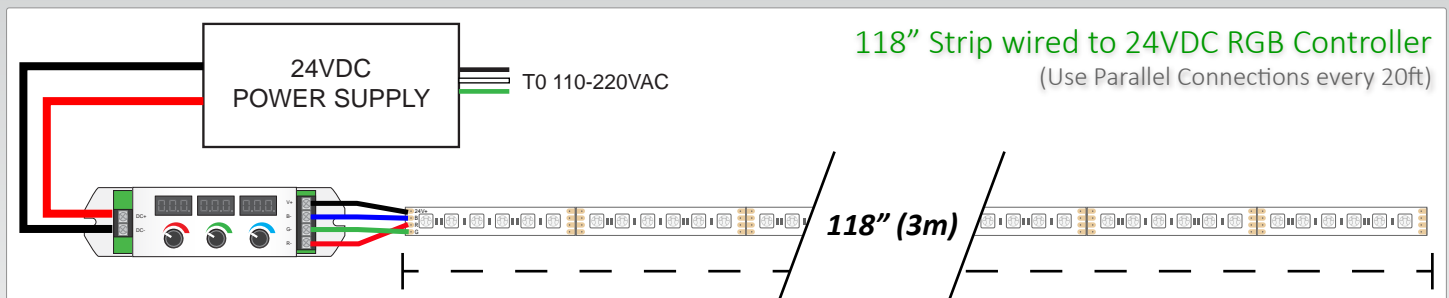
#### 4.) Test and Mount Strips



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: 5.4 Watts per foot

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

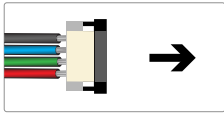


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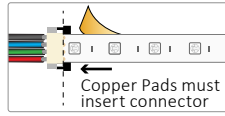
## QUICK CONNECTOR INSTRUCTION

### 1.) Gently Pull Tab



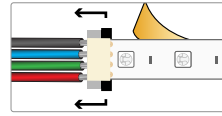
Gently pull out the black plastic tab about 1/16".

### 2.) Insert Strip Light



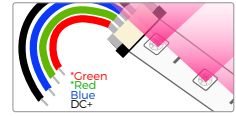
Slightly pull back 3M tape cover, Check the polarity of your strip then insert into the connector.

### 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.

**\*Red and Green Wires will be backwards when using our quick connectors with this strip.**

## SOLDERING INSTRUCTION

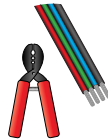
### REQUIRED SUPPLIES



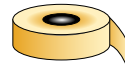
Rosin Core  
Electrical Solder



Electrical Soldering Iron  
(Preferably Temp Adjustable)

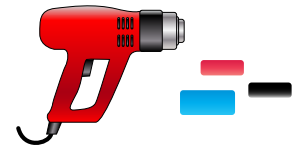


Stranded Wire and  
Wire Strippers



Masking  
Tape

### OPTIONAL SUPPLIES



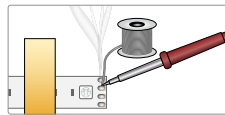
Heat Shrink and Heat Gun  
(Recommended but not required)

### 1.) Strip and Tin Wire



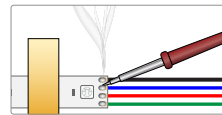
Heat your soldering iron to 500-600°F. Strip your 2 conductor stranded wire roughly 1/8". Tin the exposed wires with rosin core solder.

### 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](https://www.ecolocityled.com/category/led_power_supplies_24v)

**RGB LED Controllers** - [https://www.ecolocityled.com/category/rgb\\_led\\_lighting\\_controllers\\_only](https://www.ecolocityled.com/category/rgb_led_lighting_controllers_only)

**RGB Connection Wire** - [https://www.ecolocityled.com/category/led\\_connection\\_wire\\_products](https://www.ecolocityled.com/category/led_connection_wire_products)

**Aluminum Extrusions** - [https://www.ecolocityled.com/category/led\\_aluminum\\_extrusions](https://www.ecolocityled.com/category/led_aluminum_extrusions)

**Strip Light Soldering Guide** - [https://www.ecolocityled.com/category/led\\_tutorials\\_rgb\\_solder](https://www.ecolocityled.com/category/led_tutorials_rgb_solder)