

Ribbon Star Ultra Waterproof LED Strip Light - 24VDC

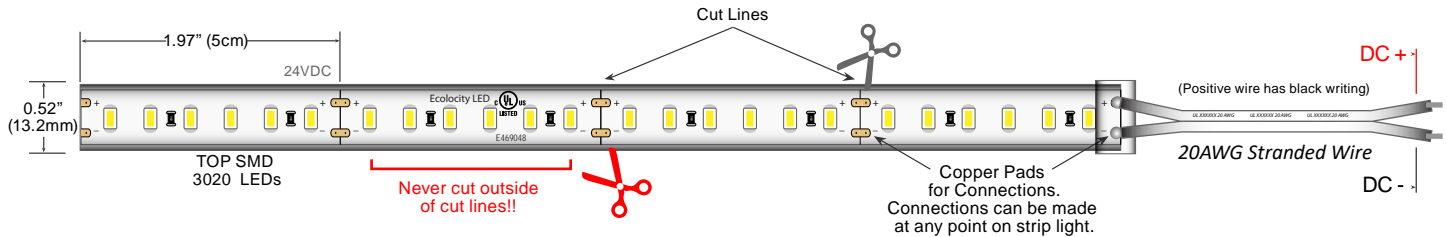
SKU: RL-SC-RSU24-T

ECOLOCITY
LED LIGHTING SOLUTIONS

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



SPECIFICATIONS



Product SKU : RL-SC-RSU24-T

LED Size : 3020 SMD

LED Quantity : 6 LEDs per 1.97"

Input Power : 24VDC Constant Voltage

Watts : 5.4W per foot

Max Serial Connection : 30ft

Operating Temp : -4° ~ 104°F

Beam Angle : 120°

Rating : IP67 Waterproof

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 or crease the strip in a manner that will damage the conductivity of the circuit board.



120VAC DO NOT use AC Input!



To extend the life of this product do not use in direct sun or environments over 104°F. Metal heat sink recommended.



This product must be sealed properly with glue and end caps after cutting to retain IP67 waterproof rating.



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

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INSTALLATION

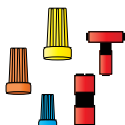
REQUIRED SUPPLIES



Cleaning Supplies
or Degreaser



Stranded Wire and
Wire Strippers



Wire Nuts or
Connectors



24VDC Power
Supply

OPTIONAL SUPPLIES

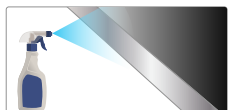


AND



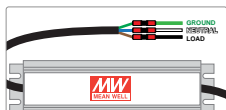
End Caps, adhesive, Solder Iron and Heat Shrink
(Required to cut and re-connect)

1.) Clean Mounting Surface



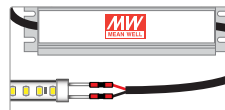
Use your cleaning supplies to clean your mounting surface. Please note that mounting surface must be smooth, clean and dry for the 3M tape to permanently adhere.

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 Strip Lights



Always be certain power is disabled before connecting! Use wire nuts, connectors, or solder and heat shrink to secure your 24V DC+ and DC- output wires to your LED Strip Light.

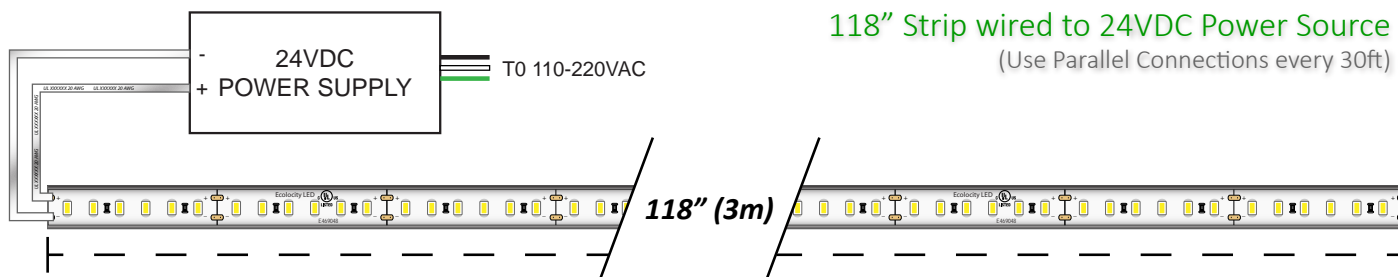
4.) Test and Mount Strip Lights



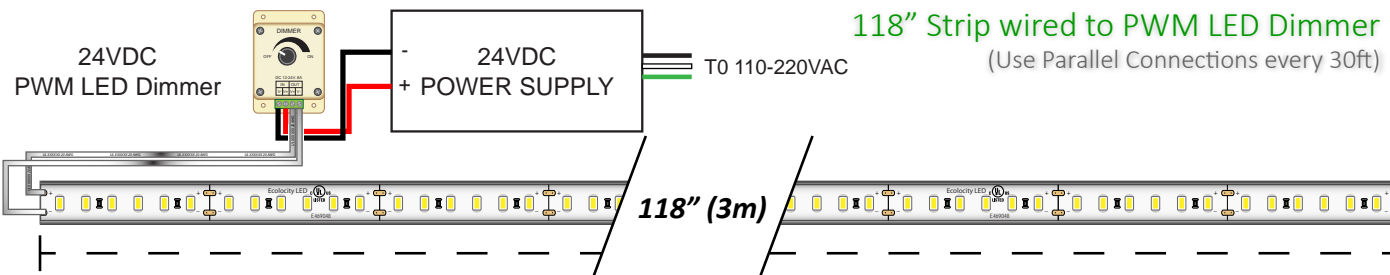
Use your cleaning supplies to clean your mounting surface. Please note that mounting surface must be smooth, clean and dry for the 3M tape to permanently adhere.

CONNECTION EXAMPLES: 5.40 Watts per foot

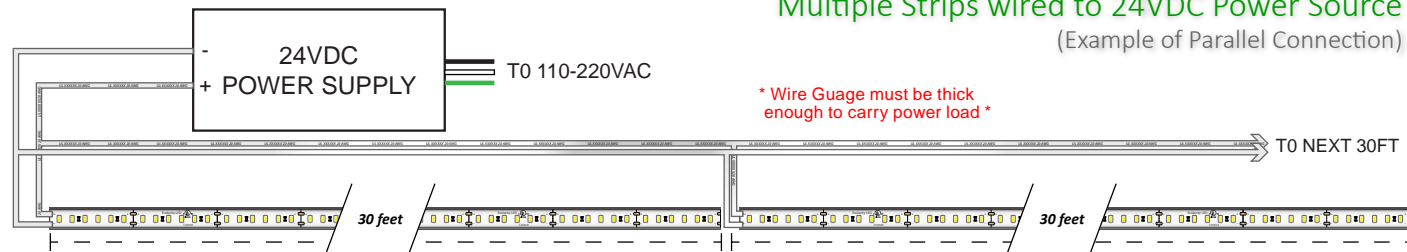
118" Strip wired to 24VDC Power Source (Use Parallel Connections every 30ft)



118" Strip wired to PWM LED Dimmer (Use Parallel Connections every 30ft)



Multiple Strips wired to 24VDC Power Source (Example of Parallel Connection)



SKU: RL-SC-RSU24-T

SOLDERING INSTRUCTION

REQUIRED SUPPLIES



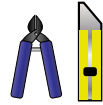
Rosin Core
Electrical Solder



Electrical Soldering Iron
(Preferably Temp Adjustable)



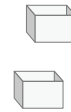
Stranded Wire and
Wire Strippers



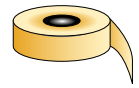
Razor Blade or
Cutting Tool



Silicone
Adhesive

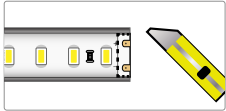


Strip Light
End Caps



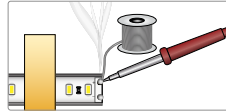
Masking
Tape

1.) Cut Waterproof Coating



Cut your strip light to length on the cut line only. Then use a sharp blade or cutting tool to expose the copper pads enough for soldering.

2.) Tin Strip Light Pads



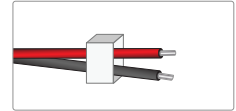
Heat your soldering iron to 500-600°F. Use a piece of masking tape to secure your strip then tin each copper pad with rosin core electrical solder.

3.) Strip and Tin Wire



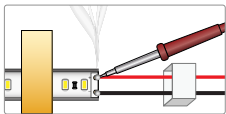
Strip your 2 conductor wire roughly 1/8". Tin the exposed wires with rosin core solder.

4.) Push Wires through Cap



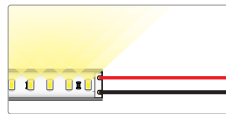
Push your connection wires through the plastic end cap with wire holes. Be sure to face the end cap in the right direction.

5.) Solder Wire to Strip



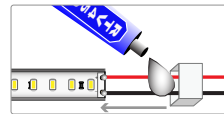
Mate your tinned wire to the copper pad with respective polarity. Red wire to DC+ (positive), Black wire to DC- (negative).

6.) Test Connection



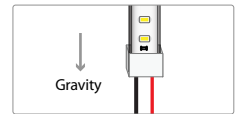
Before permanently adhering your end cap to the strip light, it is a good idea to test your connection first.

7.) Glue End Cap



You can now glue on your end cap. We recommend using RTV 4500 Silicone type adhesive, fill the entire end cap and gum all commisures.

8.) Let Glue Set



Our waterproof strip lights have a hollow inside. Be certain to hang the strip vertical so that the glue sets inside the mounting cap.

STRIP LIGHT ACCESSORIES:



Waterproof Strip
Light Connectors



24VDC Power Supplies



PWM LED Dimmers



Aluminium Extrusions
and Covers

HELPFUL LINKS:

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

PWM LED Dimmers - https://www.ecolocityled.com/category/pwm_led_light_dimmer

18AWG Connection Wire - https://www.ecolocityled.com/product/50ft_dc_connection_wire_bonded

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

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