

Customer Name

Project Name

Part Number

## Flexible DMX RGB LED Strip



## Description

SIRS-E® DMX RGB LED strip lights let you create millions of colors by just mixing red, green, and blue colors. With the ability to control each individual pixel and each individual channel, the color mix and color effects possibilities are endless.

## Product Specifications

Input Voltage	5V DC	Cut/Readdress	Cuttable every pixel / Readdressable at 1.64 ft (0.5m) <sup>1</sup>
Control Method	DMX512 Control - Pixel by Pixel	Reel Length	16.4 ft / 5 m
Power Consumption	2.00 W/ft	Max Run Length	16.4 ft / 5 m, powered from both sides
LED Chip Type	High Quality SMD 3-Diode RGB	Segment Width	0.56 in (14 mm)
LED Density	10 LEDs/ft / 34 LEDs/m	Luminous Flux Maintenance	75,000 hrs <sup>2</sup>
Channels/Pixels	3 Channels per Pixel (510 Channels Total)	Dimming	DMX512 Control - Pixel by Pixel
Board Type/Color	2 oz Density Copper, Black PCB	Environmental	IP 67/68 - Dry and Damp Locations
Operating Temperature	-20°F to 120°F	Warranty	5 Years Limited
Mounting	Non-Porous: 3M Adhesive Tape		

## Product Photometrics - Red, Green and Blue Diodes<sup>3</sup>

Color Diode	Peak Wavelength (nm)	Dominant Wavelength (nm)	CIE (x,y)	Luminous Flux (lm/ft)	Luminous Efficacy (lm/W)
Red	628.6	621.6	(0.6940, 0.3052)	25	16.91
Green	517.3	523.6	(0.1528, 0.7224)	90	54.66
Blue	464.7	469.0	(0.1327, 0.0609)	20	13.05

## Product Photometrics - All Three Colors at Full Intensity<sup>3</sup>

Nominal CCT (K)	Luminous Flux (lm/ft)	Luminous Efficacy (lm/W)	CIE (x,y)	Duv	CRI	TM-30-15	
						Fidelity (Rf)	Gamut (Rg)
22000 K	129	27.7	(0.2196, 0.2549)	+0.0250	64.0	NA	NA

1 - The RGB DMX strips are cuttable in any pixel, but in order to start at DMX address channel 001, you need to cut at 0.5m (1.64 ft), usually represented where there is solder joints. If you want to change the starting address, you will need a DMX Address Module, available on our website.

2 - After 75,000 hrs: 30% Luminous Flux loss, 10% Chromaticity change, as per LM-80-15

3 - Photometric values estimated from our AcuVibrant™ RGB series of LED strips.

### Ordering Guide

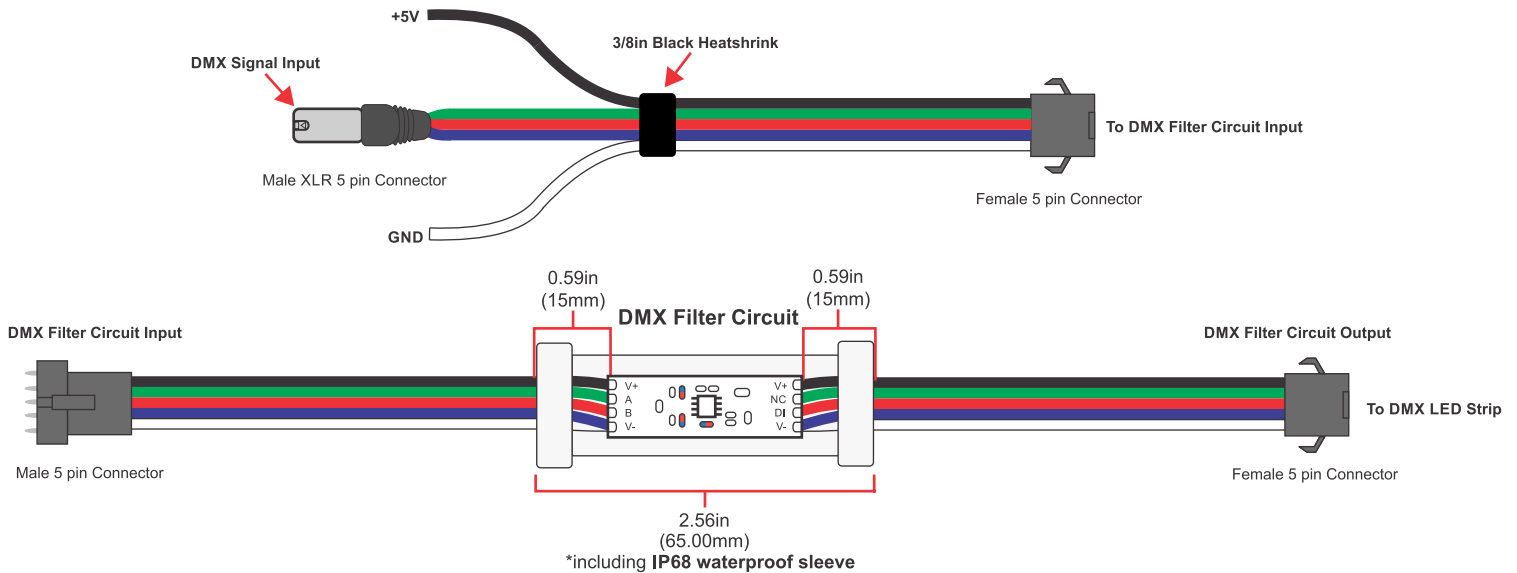
LED Size	Voltage	Color	Density	IP
5050	5	RGBXX	XX XX	
	5	RGB	34 67	
			68*	

\*IP 68 Version consists of the same Physical Dimensions as IP67

### Product Country of Origin

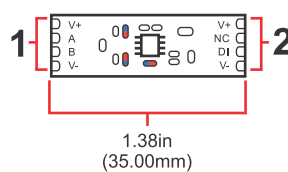
Product Engineering & Design	USA
Assembled	China Preassembled / USA Final Assembly
QC Quality Control	USA
Product Customization	USA
Technical Support	USA

### Wiring Diagram

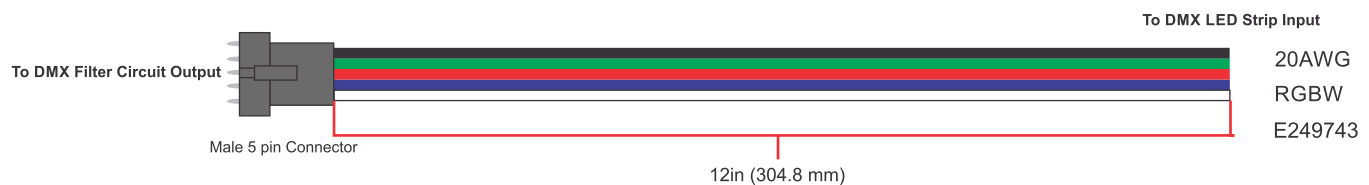


#### DMX Filter Circuit

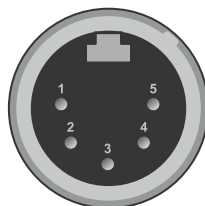
- 1 - DMX Filter Input (from XLR)
- 2 - DMX Filter Output (to LED strip)



The 34 LEDs/m DMX strips requires a filter whether is 5m long or just 0.5m. The 24 LEDs/m DMX strips already have a DMX filter included so there's no need of an additional external filter like in the 34 LEDs/m strips.



#### Color Code Male XLR 5 pin



XLR Male Cable

#### Color Code XLR

- Pin 1 - V- / Ground
- Pin 2 - B / DMX-
- Pin 3 - A / DMX+
- Pin 4 - NC
- Pin 5 - NC

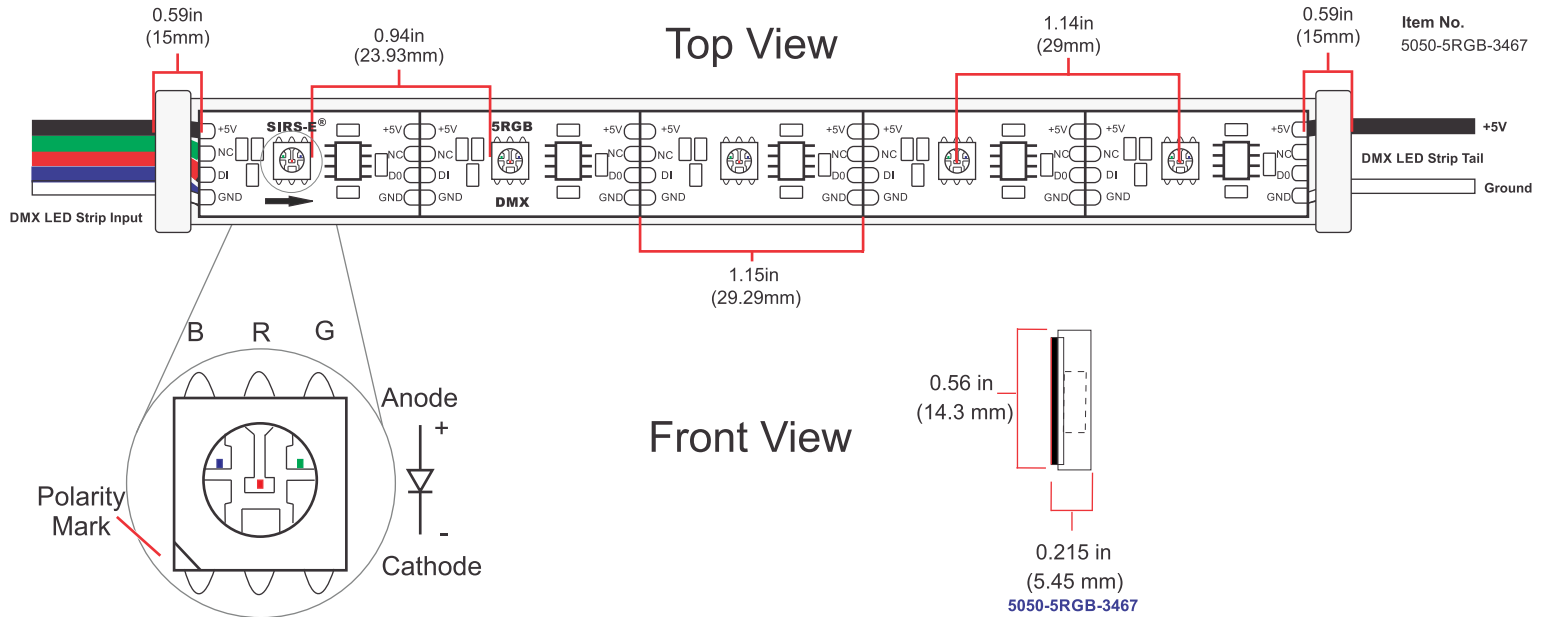
#### Color Code LED Strip

- +5V
- NC
- DI/D0
- Ground
- Ground

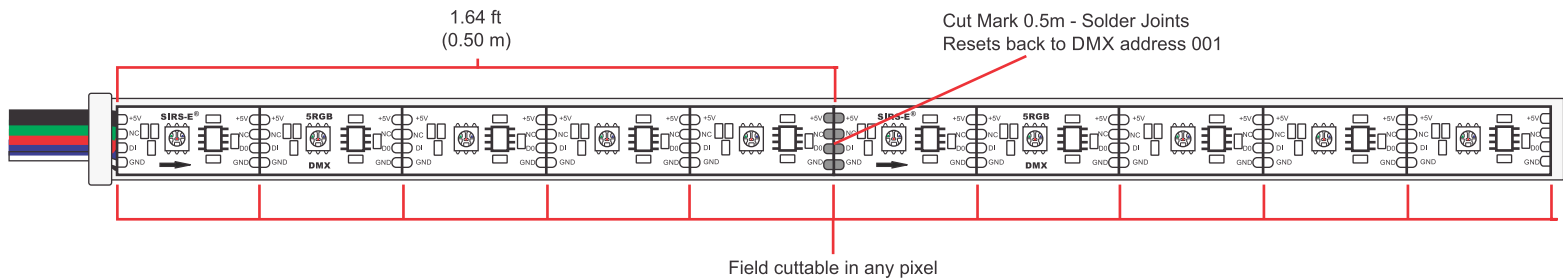
#### Color Code Filter Circuit

- +V
- A
- B
- V-
- V-

### Mechanical Dimensions



### Cutting & Re-Addressing Instructions



#### Important:

- The RGB DMX strips are cuttable in any pixel, but in order to start at DMX address channel 001, you need to cut at 0.5m (1.64 ft), usually represented where there is solder joints.
- If you want to change the starting address, you will need a **DMX Address Module** (PN# dmx-address-module), available on our website.
- If you cut a segment, make sure the cable leads connect to a DMX filter.

### Weight

Product Weight: 10.8 oz, 16.4 ft Reel (IP67), Without Packaging.

### Compatible Accessories

This list shows some of our most sellable accessories compatible for this product. For a complete list, please visit our website.



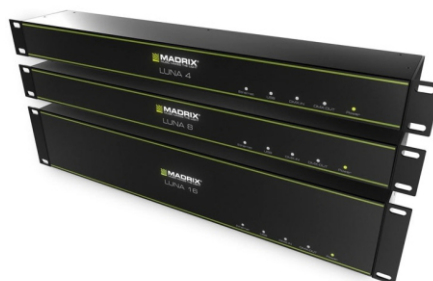
ArtNet to DMX Interface  
Pro 6 Universes  
(AD-PRO-6)



MADRIX Neo  
DMX512 Interface  
& Software Licenses



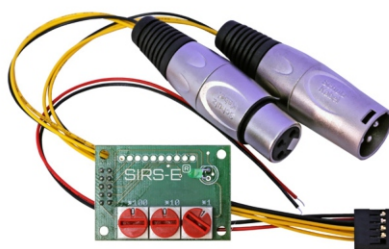
Meanwell 5V PSU  
(LED-PS05V-30W-UL)



MADRIX Luna  
ArtNet Interface



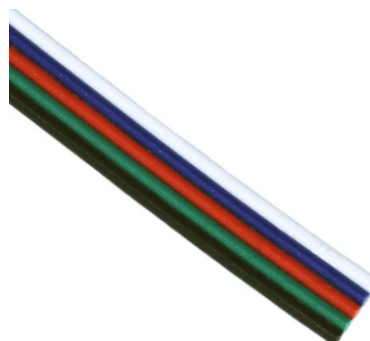
Baxter Controls DMX  
Basic Pocket Console  
(As a Testing Tool)



SIRS-E® DMX  
Address Module  
(dmx-address-module)



SIRS-E RGBW  
Wire Connectors



SIRS-E RGBW  
Wire Leads



## Notes

- A good technique to minimize brightness loss and increase lumen output on CV LED Strips is to power the strip on both sides.
- LED electrical and photometric characteristics change with the manufacturing batch/bin date. Approximately 3-Step MacAdam Ellipses between batches.
- We reserve the right to change any data without prior notice.

## About Us



**SIRS-E** /semiconductor • illumination • research • solutions /

In 2004, SIRS-E began research into the use of high powered LED components to be applied in direct lighting fixtures and LED strips.

In 2005, SIRS-E developed the RGB HPL01 – 12 watt (60 lumens per watt efficiency) RGB lighting fixture controlled via DMX using LumiLEDs, one of the first high powered LEDs eventually acquired by Phillips. Included in early research solutions, was the development and testing of many different LED strips intended to be used for direct RGB lighting and effects applications. This was the beginning of what we now know as SIRS – Electronics.