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Even-Glow COB LED Strips

RGB COB Strip Specifications

Project _____ Date _____

Notes _____

COB2-IP20-RGB-5m

Voltage 24 VDC | COB LEDs | RGB | IP20 | 5yr WARRANTY

Available Models[1]

- ☐ STN-B-CRGB-O27A-10M5M-12V
- ☐ STN-B-CRGB-O42A-10Z5M-24V

SAMPLE PART NUMBER BREAKDOWN

STN-B-CRGB-O27A-10M5M-12V

Series	Type	LED Type	LEDs/Segment	IP Rating	Width	Density	Length	Voltage
STN-B	**CRGB**	**O**	**27**	**A**	**10**	**M**	**5M**	**12V**
Non-weatherproof	RGB	COB	27: 27 LEDs/seg 42: 42 LEDs/seg	IP20	10mm	M: 810 LEDs/m Z: 840 LEDs/m	5 meters	12V: 12 VDC 24V: 24 VDC

Overview

The Even-Glow® Series 5m RGB COB strip light uses a high density of chip-on-board (COB) LEDs to create a smooth, dotless line of light ideal for applications on or around reflective surfaces such as granite countertops and tile floors. It provides a range of vibrant RGB lighting to any indoor application. Easily customize the strip using the designated cut segments. Flexible construction and 3M™ adhesive backing make it easy to install, including on round surfaces and edges. Pair with a controller (sold separately) to customize color tone and settings.

Features

- COB LEDs create seamless line of light - no visible hotspots
- Flexible, cuttable, and 3M™ adhesive-backed for easy install
- RGB LEDs provides smooth color blending and saturation
- High density design with 246 or 256 LEDs/ft
- 0-100% PWM dimmable

Product Details

- Maximum run: 11.5ft (12V) or 19.7ft (24V)
- Cut segment: 1.3in. (12V) or 1.97in. (24V)
- Strip Width: 10mm (0.39in.)
- Pigtail connection
- 12 or 24 VDC input

Certifications and Compliances

- UL Listed - UL 2108 (IFDR)
- CE compliant

UL LISTED CE

Applications

- Accent Lighting
- Cove Lighting
- Displays
- Sign Lighting
- Stage & Theaters
- Toe Kick Lighting
- Trade Shows
- Under-Cabinets

Warranty

- 5-year warranty

T 866.811.5550 | **F** 314.972.6202
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[1]Contact customer service if interested in other options.

Rev. V1.1 Date: 12/20/2025
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Installation Instructions

1. Plan Your Layout

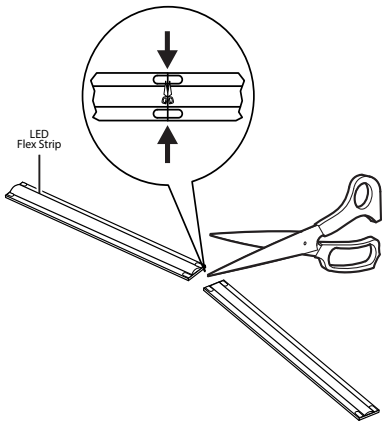
Identify COB strip placement, including how long each run will be and where to place the power supply. Depending on how evenly you want the light to appear, decide on a straight run, center feed, loop-back, or multi-leg. Hidden placements like under cabinets or inside coves produce indirect illumination for ideal lighting results.

2. Match the Power Supply

First, calculate the total strip wattage by multiplying the total strip length by the power used per foot for the total strip wattage. Next, use the following formula to determine the minimum necessary wattage of your power supply

Total Strip Wattage / 0.80 = Minimum Power Supply Wattage

Round up to the nearest wattage, and this number will provide you with the 20% wattage overhead required to maintain power supply longevity.



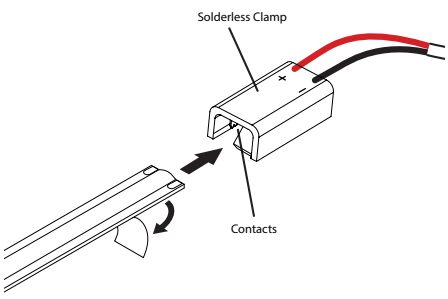
3. Cutting the Strip

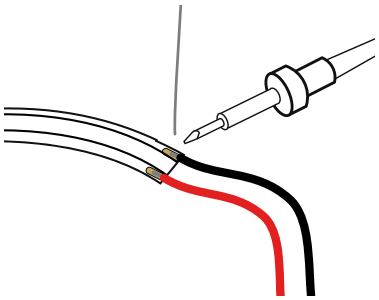
If you need to cut the strip to a custom length, unroll the strip and find the marked cut points, usually between copper pads. Make sure the strip is not powered when cutting. Use sharp scissors to cut only on these lines. Cutting anywhere else can break the circuit.

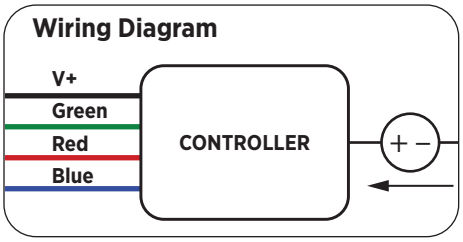
4. Connecting the Strip (Solderless or Soldering)

To connect cut sections of LED strips to a power supply or controller, wires can be soldered directly to the copper pads or solderless connectors may be used as an alternative. To use a solderless connector, open the connector, then slide in the cut end of the strip so the copper pads line up with the contacts inside. Ensure the connector is oriented correctly so the contacts pierce through the top of the strip. Close the connector to lock it in place. Use jumper connectors instead of bending the strip for corners or gaps.

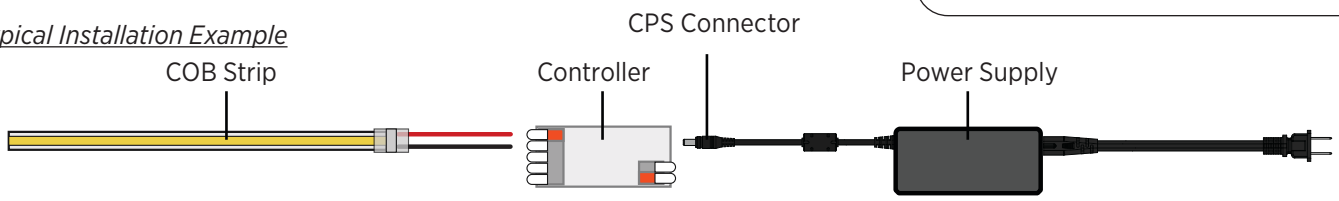
Note: *Illustrations show wiring for single-color strip.*
Follow specific wiring diagram for strip and controller type.







Typical Installation Example



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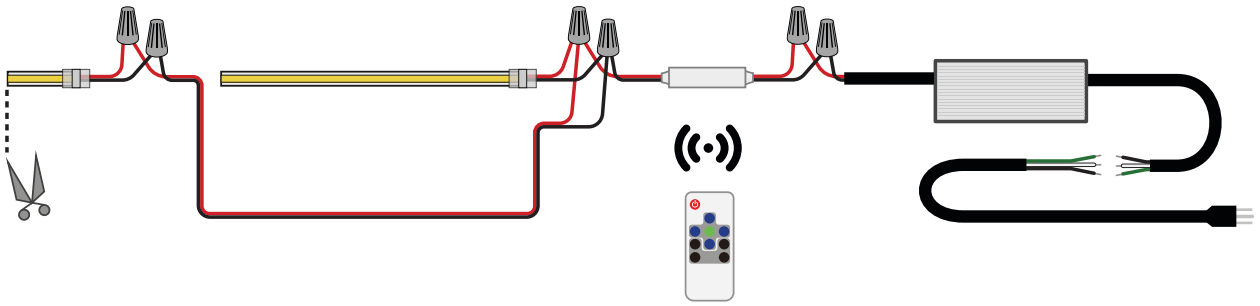
Installation Instructions (cont.)

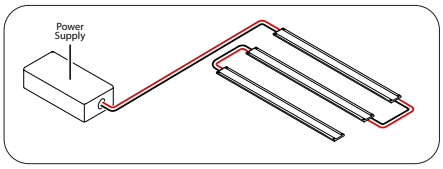
5. Extend the Wiring

Use the lowest gauge wire that's practical for your setup, based on the total current draw and length of the run. As a general guideline, 22 AWG is suitable for short, low-power runs, while 18 AWG or lower is recommended for longer runs or higher-powered strips. Keep the wiring short where possible and double-check polarity. Longer runs can lead to voltage drop and dimming at the far end of the strip.

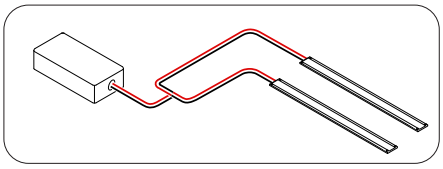
Extended Power Wire Installation Example



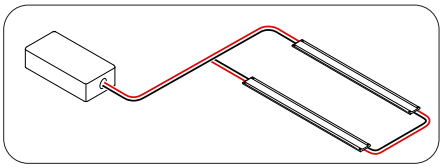
Straight Run Layout



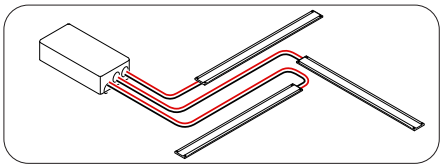
Center Feed Layout



Loop-back Layout



Multi-leg Layout



Voltage Drop

As current travels through the strip, resistance in the circuit causes a drop in voltage over the length of the strip, leading to dimmer light at the far end. Wire length and total power draw of the circuit influence the amount of voltage drop. To reduce it, keep wire lengths short, use thicker gauge wire, or split the power feed (center-feed or loop-back).

6. Prepare the Surface

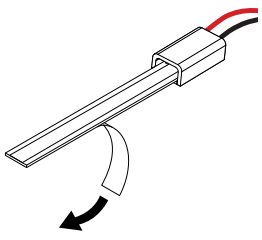
Wipe the mounting area with alcohol or another cleaner that removes dust, oils, and residue. The strong 3M™ adhesive backing is intended for a single application.

7. Connect to Power and Test

Connect the wires from the strip or connector to the output side of the power supply or controller. Match the positive and negative sides. If you're unsure, use a multimeter. If using a dimmer or switch, install it according to the product's installation instructions. Before mounting, test the strip to make sure all sections light up properly and there are no connection issues.

8. Mount the Strip

Peel the paper from the adhesive backing and press the strip firmly into place. Work slowly from one end to the other to avoid bubbles or wrinkles. To prevent damage to the circuit, avoid bending the strip sharply or folding it over itself. Use flexible connectors for any sharp turns or difficult areas.



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SPECIFICATIONS		
Model	**STN-B-CRGB-O27A-10M5M-12V**	**STN-B-CRGB-O42A-10Z5M-24V**
PHOTOMETRIC		
LED Color	RGB	
Beam Angle	160°	
ELECTRICAL		
Operating Voltage	12 VDC	24 VDC
Current Draw per Foot	384 mA/ft	189 mA/ft
Current Draw	6.3A	3.1A
Wattage per Foot	4.6 W/ft	
Wattage	75 Watts	
Dimmer Type	PWM	
MECHANICAL		
Max Run (Class 2)	11.5ft (3.5m)	19.7ft (6m)
Minimum Cut Length	33mm (1.3in.)	50mm (1.97in.)
LEDs per Segment	27	42
LED Density	246 LEDs/ft	256 LEDs/ft
Strip Width	10mm (0.47in.)	
Length	16.4ft (5m)	
LED Type	COB (chip-on-board)	
Input Connection Type	Pigtail	
LED Lifetime	50000 hours	
ENVIRONMENTAL		
IP Rating	IP20	
Environmental Rating	Non-weatherproof, Suitable for Dry Locations	
Ambient Operating Temperature	-20 to 60°C (-4 to 140°F)	

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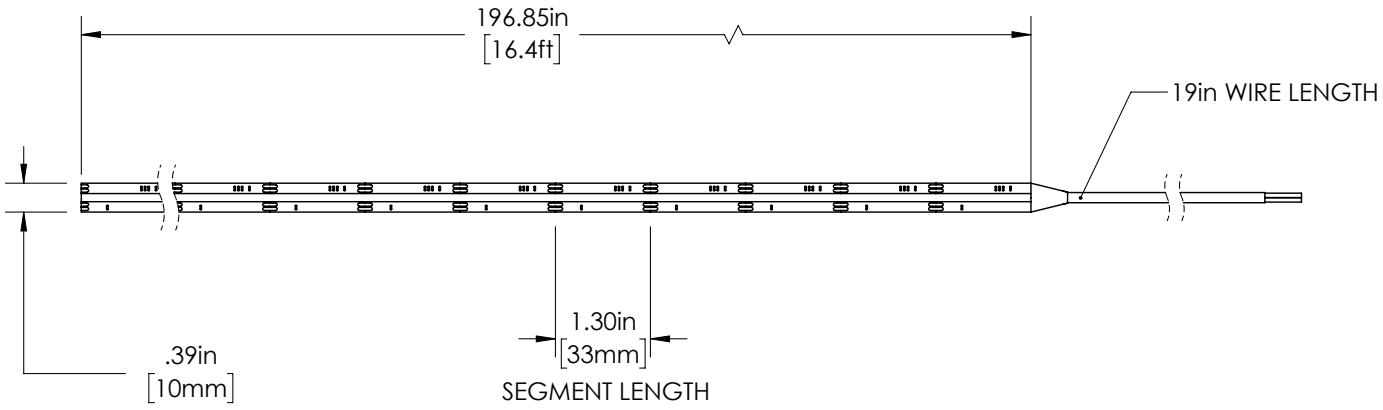
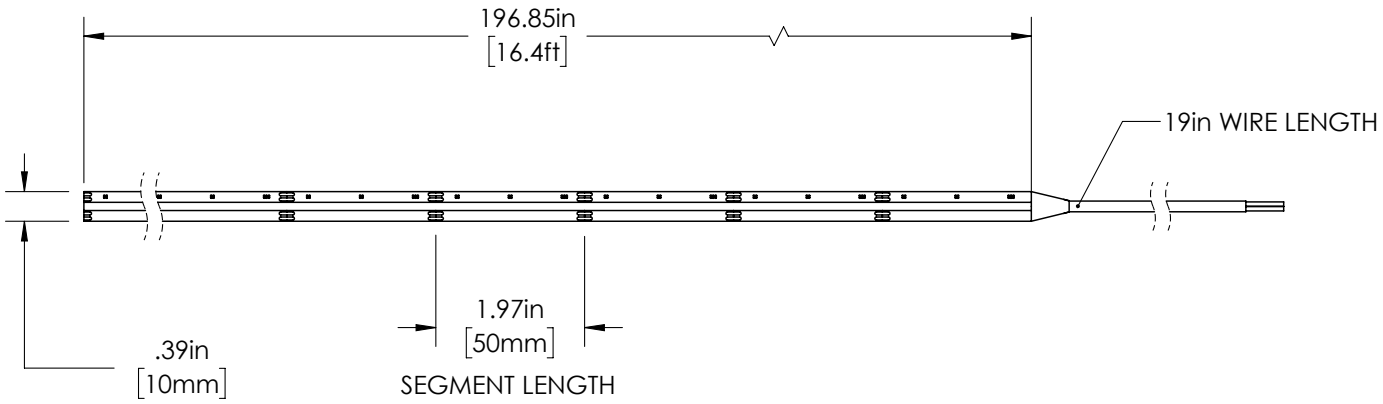
Dimensional Drawings

STN-B-CRGB-O27A-10M5M-12V

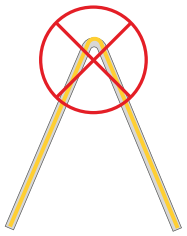


STN-B-CRGB-O42A-10Z5M-24V

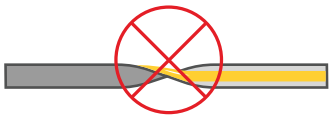


Note: Strip thickness ~0.08in. (1.9mm)

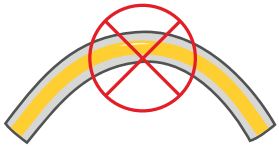
Strip Flexibility



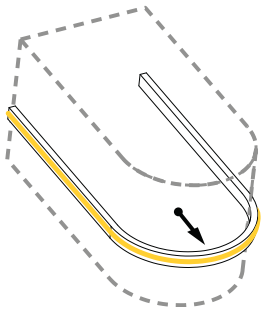
Bending strips at sharp angles will damage circuit traces and void warranty.



Twisting strips will damage circuit traces and void warranty.



Bending strips on horizontal plane will damage circuit traces and void warranty.



Minimum bending radius ≥ 1.97in. [50mm]

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