# RGB LED
Sign Modules

Product Data Sheet

The RGB LED Sign Modules are a flexible string of fixtures that contain a chain of LEDs. Their low profile qualifies them for a variety of lighting applications, from backlighting signs, lightboxes, channel letters, and more. Our LED modules are suitable for indoor or outdoor use and can be cut every module so you can help your vision come alive without form factor limitations.
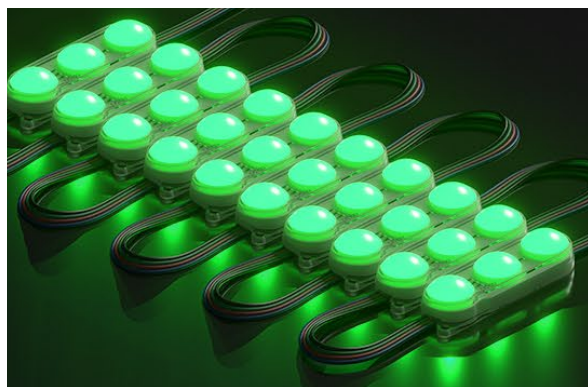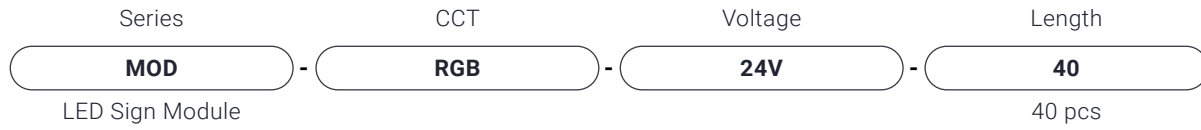

Features

Voltage	12V DC Input
Efficacy	Up to 35 lm/W
Brightness	Up to 25 lm/module
Beam Angle	160° Beam Angle
Ambient Temperature	-4°F to 113°F (-20°C to 45°C)
Max Run Length in Series	Up to 40 modules
IP Rating	IP65 outdoor/damp location
Fixture Color	Clear
Dimmable	Yes
Dimensions	2 5/8" x 7/8" x 7/16" (66 x 22 x 11 mm)
Installation	Surface mount

Color Controllable

CE   c **UL** US   **3-Year Warranty**

Ordering Code

Series	CCT	Voltage	Length
MOD	**RGB**	**24V**	**40**
LED Sign Module			40 pcs

Example: LST-30K-24V

Dimensions

8 3/8" |188 mm

7/8" |22 mm

2 5/8" |66 mm

7/16" |11 mm
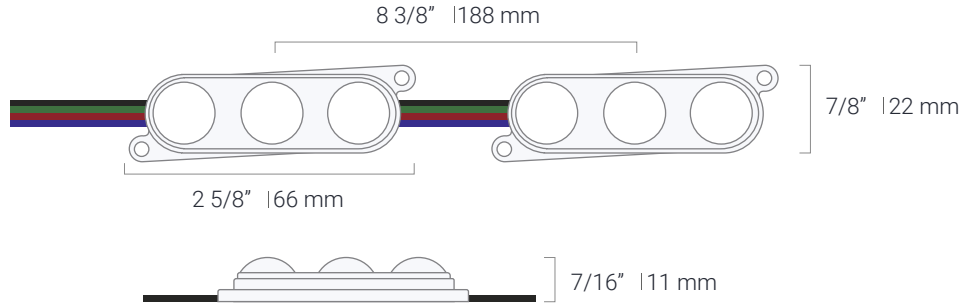
Specifications

Product SKU	Color* (CCT)	Watts / Module	Lumen / Module	Luminous Efficacy (Lumens / Watt)	Color Wavelengths
MOD-RGB-12V-40	RGB	0.72W	25 lm	35 lm/W	R: 620-625 nm G: 520-525 nm B: 465-470 nm

Compatible Drivers (12V)

Non-dimmable					
Power Supply	**Diagram**	**# of Light Sheets**	**Watts**	**Product SKU**	**Class 2**
Plug-In **Power Supply** Plug-and-Play Power Supply		1 - 13	12 W	12V-WMPS2-1	X
		14 - 26	24 W	12V-DPS2-2	X
		27 - 53	48 W	12V-DPS2-4	X
		54 - 80	72	12V-DPS2-6	
		81 - 106	96 W	12V-DPS2-8	
Mean Well™ HLG Hardwired Power Supply		1 - 75	60 W	HLG-80H-12A	X
		76 - 150	120 W	HLG-120H-12A	X
		151 - 400	265 W	HLG-320H-12A	

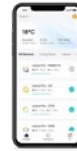**See Power Supplies Selector**

Controller Options

Handheld Remotes

Wall Dimmers

Smart Home Controllers

See Controllers and Dimmers

In-Line Dimming

or

120V
AC Power

**Mean Well
Power Supply**

AC   DC

**Leona™ Smart
Home Controller**

DMX

**DMX Controller
Installed in Wall Box**

DMX Data
Output

**G
+
-**

**V+
V -**

AC Power
50/60Hz

L
N

L
N
G*

Input   **Output**   V+
V-

**Class 2 12-24VDC Driver
Installed in Junction Box**

V+
V-

Output   **Input**

L
N
G*

L
N

AC Power
50/60Hz

**Class 2 12-24VDC Driver
Installed in Junction Box**

1   2   3

● **Ground**
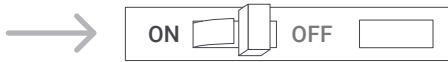● **Data -**
⊘ **Data +**

V-   V+

V-   V+
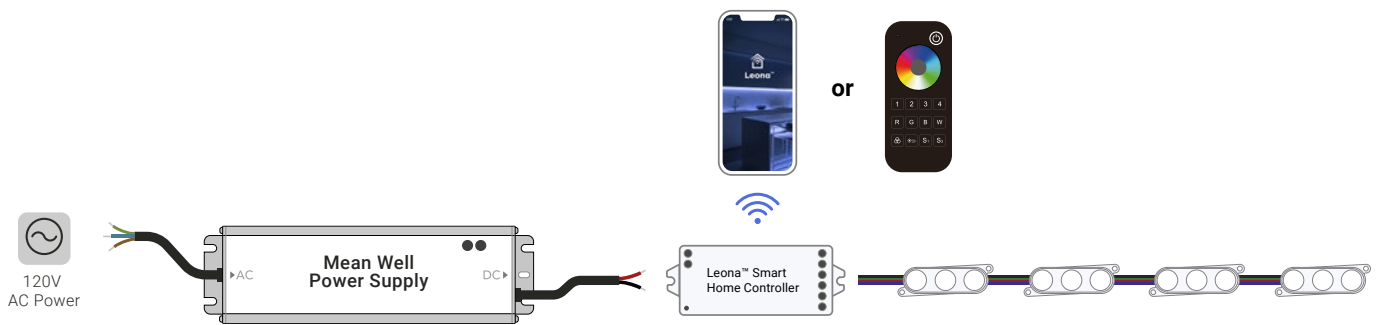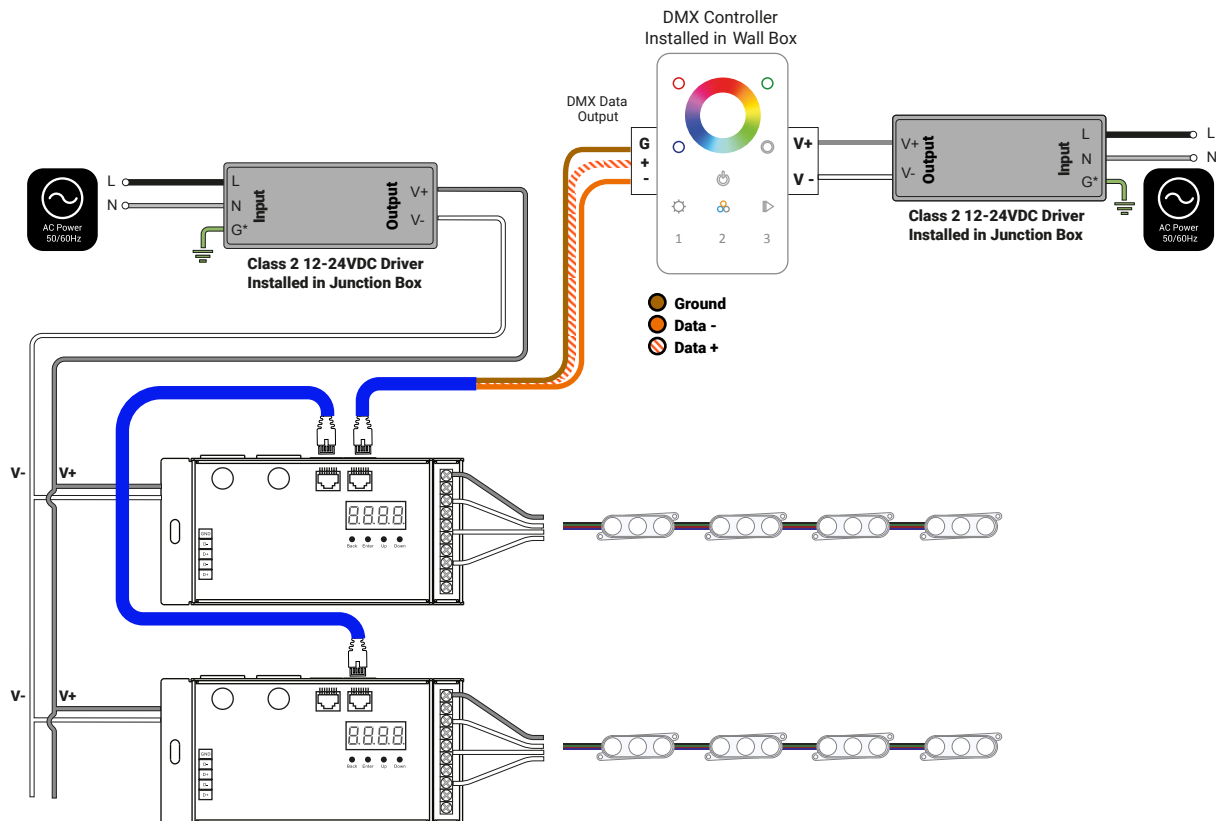
Installation Instructions

Before installation, complete a mock installation to test your modules and turn them on to make sure all components are working correctly.
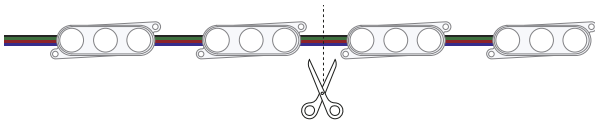
1. Turn power off at circuit breaker.
To avoid any possible injury.

ON ☐ OFF ☐

2. Cut the sign modules to required length
Measure the sign modules to the required length. Using sharp scissors, cut along the wires between modules.

3. Prepare surface for installation
Thoroughly clean any surface where you will be attaching your sign modules. The adhesive backing will not stick to dirty, dusty, or porous surfaces.

4. Attach the sign modules onto surface
Peel and stick to any non-porous surface or use screws (not included) to mount the sign modules to the porous surface where you want to install them.
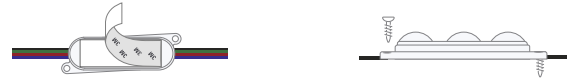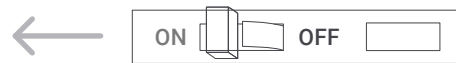
5. Complete all connections
Complete the connections and wiring between your power supply, dimmers, and controllers. Please refer to the manufacturer's installation instructions for each component.
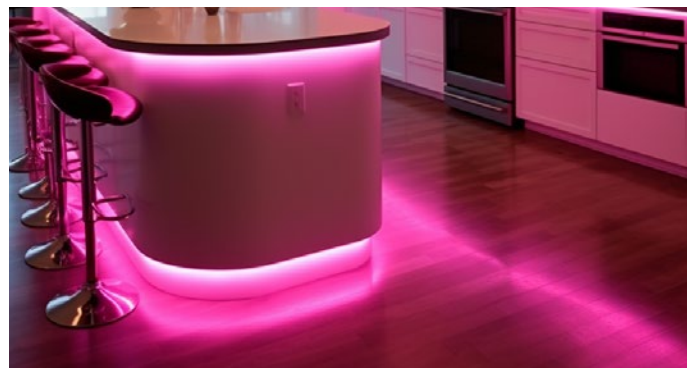
120V
AC Power

Mean Well
Power Supply

Leona™ Smart
Home Controller

6. Turn power on at circuit breaker
The LED sign modules should light up and work properly.

ON ☐ OFF ☐

Applications Examples

Safety And Disclosures

01. Installation must be in accordance with local and national electrical code regulations.

02. To ensure safety and correct installation, our strips are intended to be installed by a qualified, licensed electrician.

03. Only install with a Class 2 DC Constant Voltage LED driver to meet UL requirements.

04. Do not install in environment where excessive heat may exist.

05. LED modules must be handled with care. Excessive handling, bending, and pressure may damage the product, voiding the warranty.

06. Only use copper wiring. Use wires rated for at least 176°F (80°C) and certified for use with external connection of electrical equipment.

07. Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run recommended.

08. Make sure the appropriate gauge wire is installed between LED driver, LED modules, and any dimmers. When choosing wire, calculate voltage drop, maximum amperage rating, and the location ratings on the wire. Improper wire selection and installation could overheat wires, and cause fire.

09. Do not modify product beyond instructions or warranty will be void.

10. We reserve the right to modify and improve the design of our fixtures without prior notice. Although we try our best to order the same colors every time, due to changes in technology and phosphors over time, we cannot guarantee to match existing installed fixtures for subsequent orders or replacements in regards to product appearance, CCT, or lumen output.

Warranty Information

Limited Warranty

This product has a 3-year limited warranty from the date of shipment. This warranty only includes the main product outlined in this specification sheet and does not include the additional accessories that are used as a reference. Complete warranty details for fixtures and additional accessories are available at https://www.flexfireleds.com/warranties/ within the Policies section. For warranty related questions, please, contact the product support team at (support@flexfireleds.com).

Consumer's Acknowledgment

Flexfire LEDs, Inc. stands behind its products when they are used properly and according to our specifications. When you purchase our products, you are agreeing to the terms and conditions outlined in our warranty section. We try our best to make recommendations, but the burden of proper installation, design, and maintenance relies on the purchaser. This limited warranty does not include product failures that are the result of: Connecting LED products to the wrong output voltage; Improper connection of power, LED products, or controls; Connecting LED products or controls directly to any AC power source if they are stated for DC only input; Connecting power backwards to an AC power source; Products used in an inappropriate location or in environmental conditions (temperature, humidity, moisture, etc.) outside the normal specified range; Water damage to products not specifically sold as waterproof products; Electrical power surges and spikes; Damage from hail, flooding, tornado, fire, wind, earthquake, lightning, electrical storm, or any other natural disasters or "force majeure" incidences; Damage caused by a vehicle or other accident; Damage caused when transporting the item; Damage to any products that were modified by the user, used for purposes other than as intended or directed, or connected to LED systems or components not purchased from Flexfire LEDs; Products that have been subjected to misuse, mishandling, misapplication or accident. Products used in connection with any components, devices or systems other than those explicitly approved as compatible with Company's products and listed on Company's website. Excessive wear and tear and/or physical or accidental abuse, loss, or theft. Improper repairs or warranty services performed by someone other than Flexfire LEDs will void this warranty.

Contact Information

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FLEXFIRELEDs

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