

## FRL RGB

### FRL-RGB-B LED MODULE

FRL RGB modules are premium color changing signage modules engineered for constant current so there is no lumen drop across the full length of any string. The FRL RGB module features three chips in each LED – red, green, blue for added brightness. Use DMX controls to tune RGB modules to any color. Insulation Displacement Connection is adopted to reduce the voltage drop of long-distance supply. FRL Series modules are rated IP66 and come with a 2-year warranty.

## APPLICATIONS

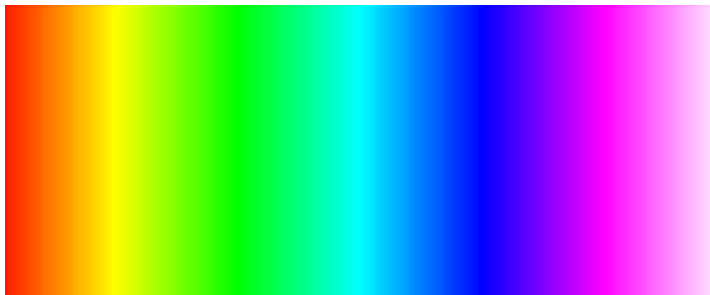
- Channel letter
- Box signs
- Cove and Accent lighting



## PRODUCT RATINGS

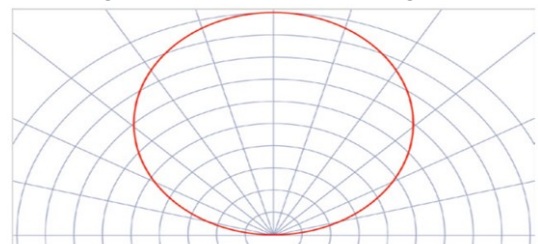
Luminous Efficacy	27.8 lm/W (All)	Input Current	55mA (All)
	14.8 lm/W (Red)		25 mA (Red)
	36.2 lm/W (Green)		25 mA (Green)
	8.23 lm/W (Blue)		25 mA (Blue)
Wattage per Module	1.32 W/module (All)	Power Supply Loading	68 modules per 100W
	0.60 W/module (Red)	Ingress Protection	IP66
	0.60 W/module (Green)	Operating Temperature	-40° — +60° C
	0.60 W/module (Blue)	L70 Lifetime @ 60° C	50,000 Hours
Input Voltage	24 VDC	Warranty	2 Year Limited Warranty
Control	DMX512	Number of Pixel	40 pixels / Strip (1 Pixel per module)
Addressing Options	Auto-Addressing		

## COLOR TEMPERATURE SCALE

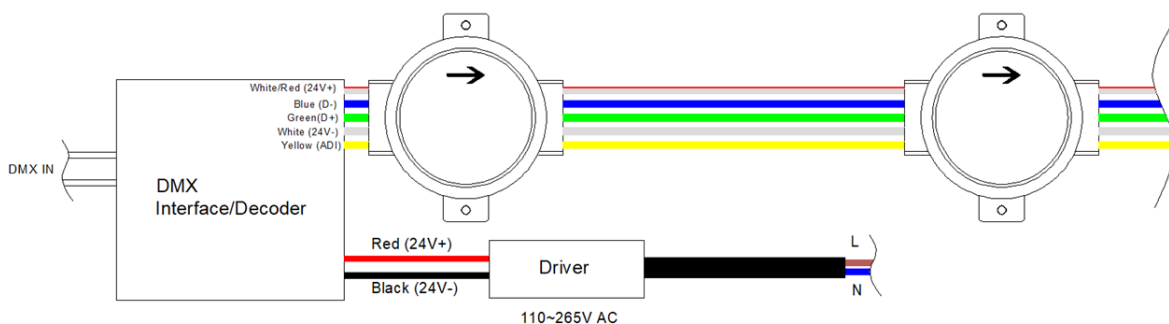


## LUMINOUS INTENSITY DISTRIBUTION

Batwing Beam Pattern (beam angle: 120°)



## WIRING DIAGRAM



**SHIPPING INFORMATION**

Module Type	Packaging Quantity		Carton Dimensions			Gross Weight	Net Weight
	Per Strip	Per Carton					
FRL-RGB-B	40Modules	120Modules	W	D	H	5.45KG	4.98KG
	21.7FT	65.1FT	19.7 inch	9.1 inch	6.7 inch		
	6.6m	19.8m	500mm	230mm	170mm		

**LAYOUT GUIDE\***

Channel Depth (in.)	Single Row		Multiple Rows		Channel Depth (mm)	Single Row		Multiple Rows	
	Max. Stroke	Module Spacing	Row Spacing	Module Spacing		Max. Stroke	Module Spacing	Row Spacing	Module Spacing
4	11	5	10	5	100	275	125	250	125
5	14	6	10	6	125	350	150	250	150
6	14	6	10	6	150	350	150	250	150
7	14	6	10	6	175	350	150	250	150
≥7	14	6	10	6	≥200	350	150	250	150

\*Density guide designed to maintain a minimum of 600 lux for a single row or 800 lux for multiple rows at sign face .

**POWER SUPPLY LOADING**

FRFRL-RGB-B					
Power Supply		18AWG/0.82 mm <sup>2</sup> supply wire Max. # of Modules Per Continuous String	16AWG/1.31 mm <sup>2</sup> supply wire Max. # of Modules Per Continuous String	14AWG/2.08 mm <sup>2</sup> supply wire Max. # of Modules Per Continuous String	12AWG/3.31 mm <sup>2</sup> supply wire Max. # of Modules Per Continuous String
Maximum Supply Wire Limits	18W	10Pcs ( 1.6m )	/	/	/
	35W	20Pcs ( 3.2m )	/	/	/
	60W	35Pcs ( 5.8m )	/	/	/
	75W	40Pcs ( 6.6m )	/	/	/
	100W	40Pcs ( 6.6m )	45Pcs ( 7.6m )	60Pcs ( 9.6m )	/
	150W	40Pcs ( 6.6m )	45Pcs ( 7.6m )	60Pcs ( 9.6m )	72Pcs ( 12.1m )
	200W	40Pcs ( 6.6m )	45Pcs ( 7.6m )	60Pcs ( 9.6m )	72Pcs ( 12.1m )
	240W	40Pcs ( 6.6m )	45Pcs ( 7.6m )	60Pcs ( 9.6m )	72Pcs ( 12.1m )
	300W	40Pcs ( 6.6m )	45Pcs ( 7.6m )	60Pcs ( 9.6m )	72Pcs ( 12.1m )

Note 1. The number of modules in each of the parallel strings should not exceed the specified maximum.

2. \*3 – 300 Watt Channels

**DIMENSIONS**

