

## LuxemBright® Inferno RGB Installation Guide

### Introduction

The LuxemBright® Inferno RGB is a premium full color LED Channel Letter illumination system. Based on the technology of CAO's well established LuxemBright® Fire series, it offers easy installation, durability, and a long life span for all of your full color illumination needs. The 3 LEDs per color and 9 LEDs per module cluster design allows for highly saturated colors, extremely bright light and smooth color transitions. By using LuxemBright® Inferno RGB, you know your sign will keep shining!

### Materials and Tools

- 1. LuxemBright Inferno RGB



- 2. RGB LED controller w/ remote



- 3. 12VDC power supply / adapter



- 4. Wiring nuts (optional)



- 5. 4-wire cord (optional)



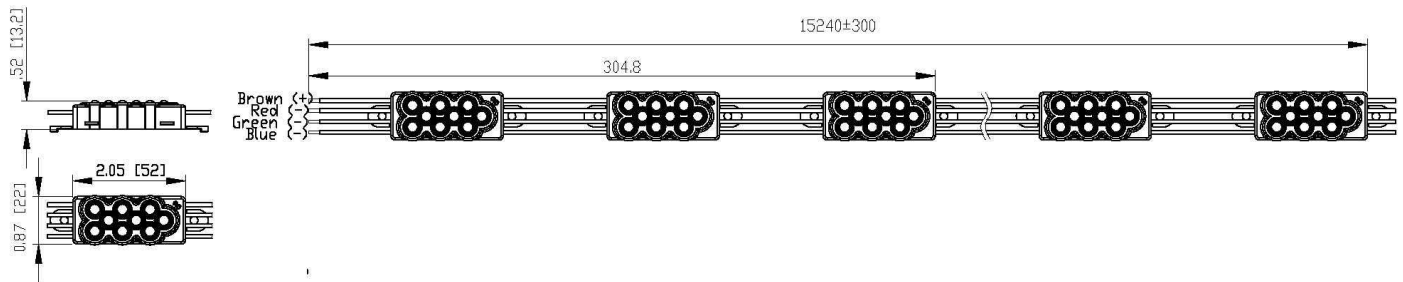
- 6. Power cord (optional)



- 7. Flat screw driver



## LuxemBright Inferno RGB LED Dimensions



### Notes:

1. Connect red/green/blue/brown wires to the R/G/B/V+ terminals in the "LIGHT" section of the controller respectively.
2. Connect positive and negative leads of a 12VDC power supply to the "+" and "-" terminals in the "POWER" section of the controller respectively.
3. Dimensions are in inch/mm or mm only.
4. Dimensions without tolerances are for reference only.
5. Connection wires are 20 AWG.

## LuxemBright Inferno RGB LED Specifications

Part Number	Color	Input Voltage (VDC)	Wavelength	Lumen / Foot	LEDs / Module	Module / Foot	Max Watt / Module	Max Watt / FT	View Angle	Warranty	Max Footage Per Power Supply			
											40W	60W	120W	240W
770-RGB23	Red	12	625 nm	18	3	3	0.25	0.75	120°	5 Years	17	26	53	106
	Green	12	520 nm	40	3	3	0.25	0.75	120°					
	Blue	12	470 nm	9	3	3	0.25	0.75	120°					
	White (RGB)	12	9000K	67	9	3	0.75	2.25	120°					

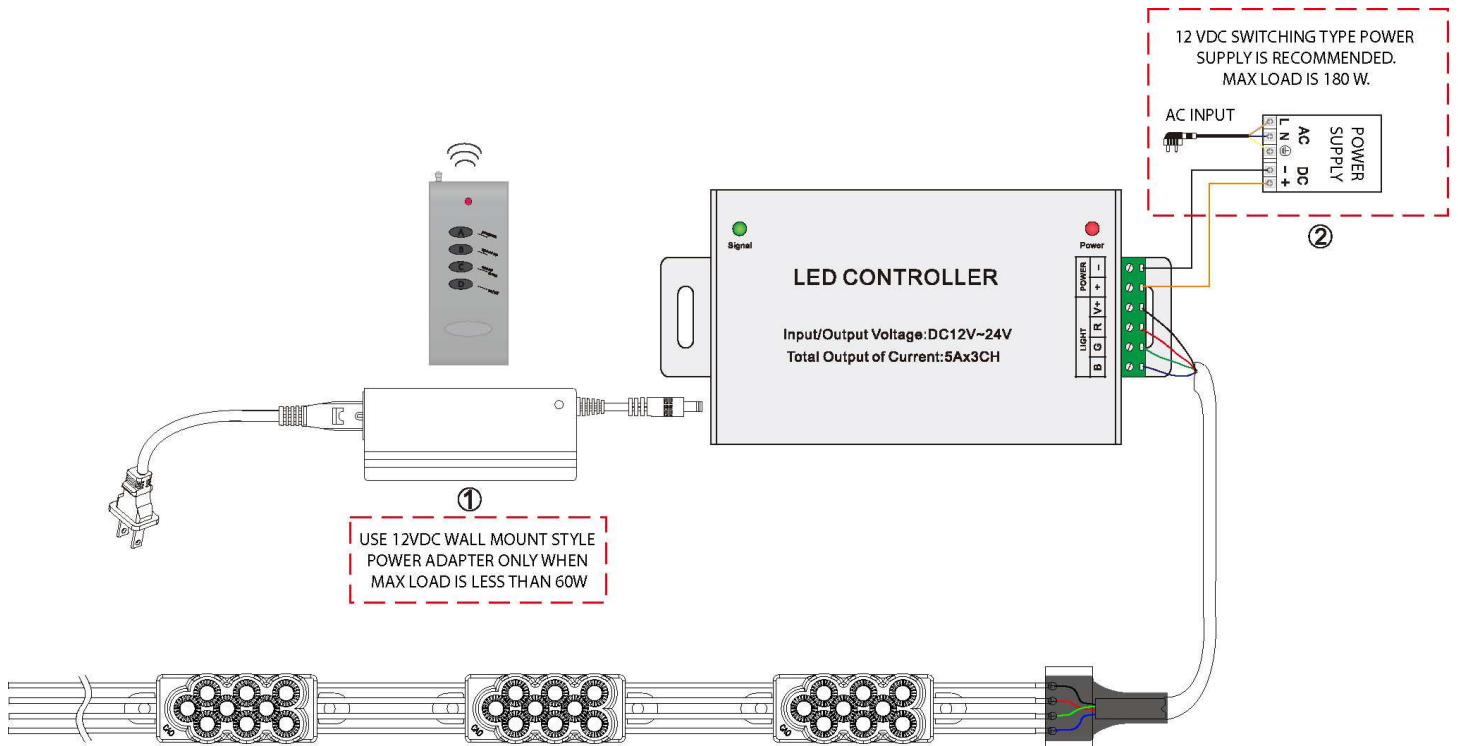
## RGB Controller Specifications

RGB Controller		Remote	
Input Voltage	12 / 24 VDC	Battery	A23 12V Alkaline Battery x1
No. Channels	3 Channels	Remote Frequency	Radio frequency 433.92 MHz
Max Current	5A x 3 Channel, Total 15 A	Radio Range	>150 FT
Max Watt	180W @ 12V	Working Temperature	-20°C - 60°C
RGB Connection	Common Anode	IP Rating	50
Color Mode	15 (7 Static colors, 8 changing modes)	Certification	CE / RoHS
Dimming Method	PWM	No. Button	4
Grey Scales	256	Button A	Program (see table below for color modes)
Protection	Input Polarity Protection	Button B	Speed Up
Working Temperature	-20°C - 60°C	Button C	Speed Down
IP Rating	50	Button D	On/Off
Certification	CE / RoHS		

## RGB Controller Mode Table

Mode No.	Mode Description	Button A (Program)	Button B (Speed Up)	Button C (Speed Down)	Button D (On/Off)
1	Static Red	Mode 1 to Mode 2	Brightness Up	Brightness Down	On / Off
2	Static Green	Mode 2 to Mode 3	Brightness Up	Brightness Down	On / Off
3	Static Blue	Mode 3 to Mode 4	Brightness Up	Brightness Down	On / Off
4	Static White	Mode 4 to Mode 5	Brightness Up	Brightness Down	On / Off
5	Static Cyan	Mode 5 to Mode 6	Brightness Up	Brightness Down	On / Off
6	Static Purple	Mode 6 to Mode 7	Brightness Up	Brightness Down	On / Off
7	Static Yellow	Mode 7 to Mode 8	Brightness Up	Brightness Down	On / Off
8	Fading (Red/Green/Blue)	Mode 8 to Mode 9	Speed Up	Speed Down	On / Off
9	Strobe ( Red/Green/Blue)	Mode 9 to Mode 10	Speed Up	Speed Down	On / Off
10	Fading (R/G/B/W/C/P/Y)	Mode 10 to Mode 11	Speed Up	Speed Down	On / Off
11	Strobe (R/G/B/W/C/P/Y)	Mode 11 to Mode 12	Speed Up	Speed Down	On / Off
12	Flashing Red	Mode 12 to Mode 13	Speed Up	Speed Down	On / Off
13	Flashing Green	Mode 13 to Mode 14	Speed Up	Speed Down	On / Off
14	Flashing Blue	Mode 14 to Mode 15	Speed Up	Speed Down	On / Off
15	Flashing White	Mode 15 to Mode 1	Speed Up	Speed Down	On / Off

## Wiring Diagram



**Warning: Use 12VDC power supply / adapter for LuxemBright Inferno RGB ONLY!**

## Installation Guide

1. Verify the output voltage of the power supply/adaptor is 12VDC.



2. Disconnect the green connector from the RGB controller.



3. Connect red/green/blue/brown wires to the R/G/B/V+ terminals in the "LIGHT" section of the connector respectively. Connect positive and negative leads of the 12VDC power supply to the "+" and "-" terminals in the "POWER" section of the connector respectively.



## LuxemBright® Inferno RGB Channel Letter Illumination Systems

4. Plug in the connector back to the RGB controller.



5. Mounting the power supply, RGB controller and LuxemBright Inferno RGB according to the Installation Guide of LuxemBright Fire series.
6. Plug in the power cord of the power supply and press the buttons of the remote of the RGB controller to adjust color mode and brightness according the RGB controller mode table listed above.

[www.caolighting.com](http://www.caolighting.com)

For product information and a complete list of sales representatives, please go to our website.

For technical assistance call:

US/Canada: +1 (877) 236-4401 or (801) 256-9282

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