

# INSTALLATION INSTRUCTIONS

## eLum Cove RGB



**MODEL NUMBER**  
ALS-ELUM-RGB

**ADVANCED**  
LIGHTING SYSTEMS  
A NEXUS LIGHTING COMPANY

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# 1.0 Important Safety Information

## **IMPORTANT SAFETY INSTRUCTIONS** **READ & FOLLOW ALL INSTRUCTIONS**

- SAVE THESE INSTRUCTIONS.
- WARNING: RISK OF INJURY.
- WARNING: RISK OF ELECTRIC SHOCK.
- CAUTION: CONNECT ONLY WITH DESIGNATED CABLING AND TO THE DESIGNATED ALS PROPRIETARY CONTROLLER. FOR HELP IN DETERMINING A PROPER COMPLETE SYSTEM OR IF YOU HAVE ANY CONCERNS OR QUESTIONS DURING YOUR INSTALLATION YOU SHOULD CONTACT SV LIGHTING OR YOUR AGENT.
- KEEP THE UNIT AWAY FROM DIRECT CONTACT WITH WATER OR SNOW.

## 2.0 Placement & Mounting Requirements

The eLum™ Cove RGB is a LED - RGB color-changing, light strip with unique triad LED placement for even an consistent color mixing. The eLum™ Cove RGB creates 16.5 million deep and very bright colors. The proper voltage required at the site is 24 VDC. The eLum Cove RGB can be mounted outdoors or indoors (damp or dry), but it is vital in outdoor applications that the unit is not exposed to water, snow, or rain, and that the water resistant endcap is properly sealed. This unit may be installed using mounting clips in any orientation against a flat surface such as a wall or ceiling. When installing the unit outdoors it must be mounted under a structure to assure that the unit will be free of direct contact with water, rain or snow. It is vital in outdoor applications that the controller is either indoors or within a water tight box. Recommended operating temperatures are between -22° F (30°C) and 104° F (40° C), this will prevent premature failure of the LED modules.

Installation of the eLum RGB linear product is achieved in one of two recommended ways. Since these two products can be used with or without the polycarbonate protective tubes there are also two preferred mounting methods.

(1) Mounting fixtures without the Polycarbonate tubes. This is done by placing a strip of VHB double sided tape along the length of the bottom of the LED board, being careful not to get any conductive material on the tape since this will short out the traces. The bottom side of the tape is peeled and stuck to the mounting surface. Make sure all surfaces are clean and dry for this application. VHB tape is extremely bonding, so make sure the boards are placed in their proper place on the first try.

(2) Mounting fixtures in their Polycarbonate tubes. Mounting clips will be provided with the tube fixtures. These are a gator style clip and use a #8 x 1/2" mounting screw for mounting to the surface.

A line should be snapped for alignment of the fixtures and the preferred clip spacing is every two feet along the length of the fixture. For fixtures shorter than 2' in length, two clips should be used—one towards each end of the fixture.

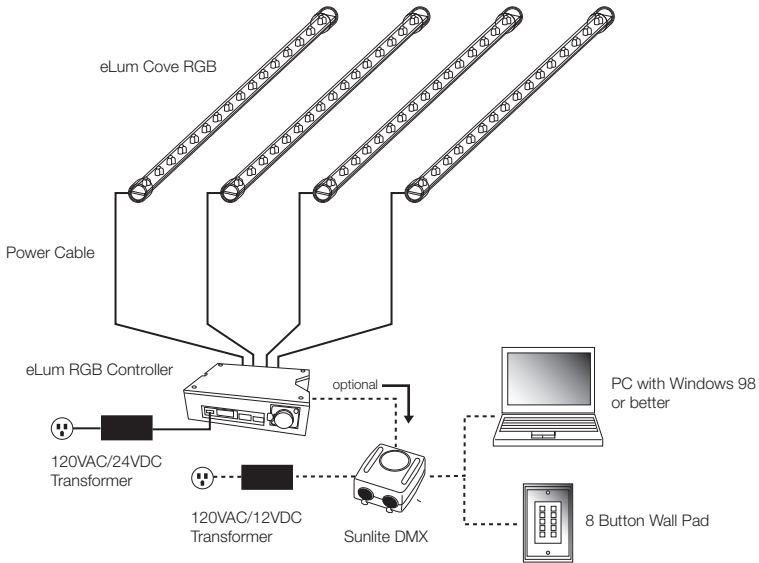
\*Note that the clips give a freedom of rotation for aiming of the tube fixtures, while the VHB tape method for non-tube fixtures does not.

### 3.0 eLum RGB Controller Operating Instructions

With the LED strip properly installed, plug the 24VDC power supply into your controller:

#### eLum RGB Controller:

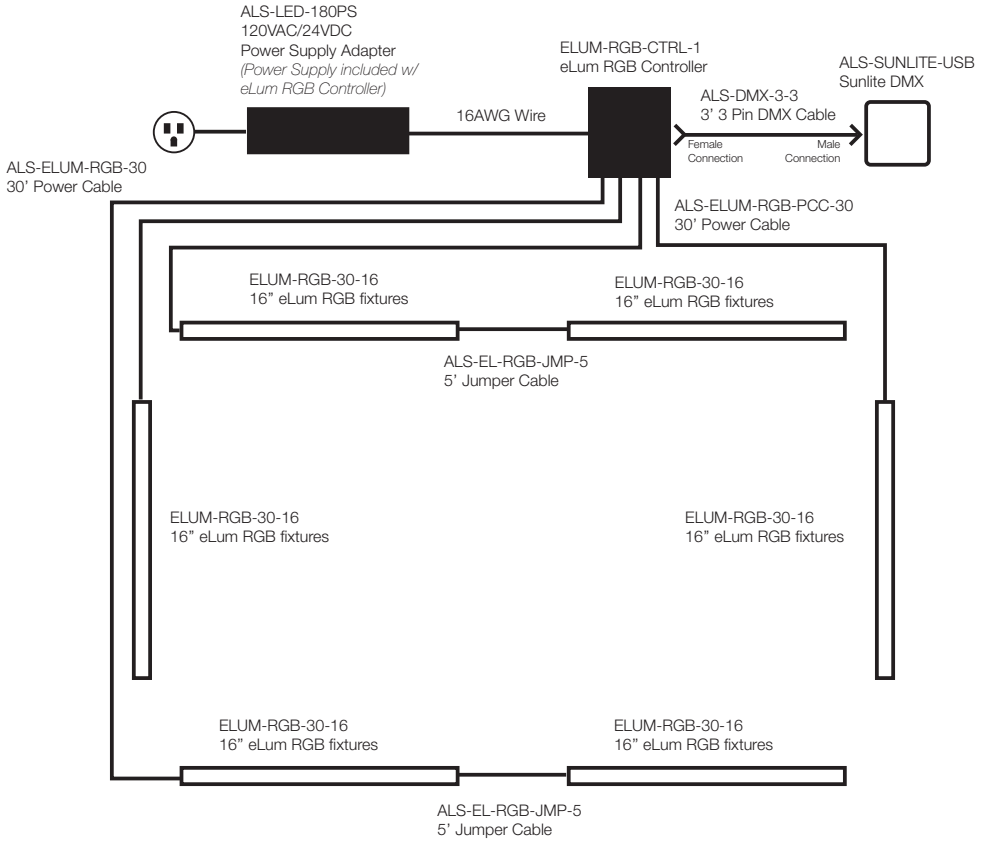
The eLum RGB controller is designed to receive DMX512 protocol and will drive a number of ALS eLum Cove RGB strips. They use 24 VDC power and three 0.5 - 5V analog control signals to vary the intensity of the red, green, and blue LED's. The eLum RGB Controller has four outputs to eLum LED strips. Each output is capable of powering a combined total of 50 feet of eLum LED strips, power cable, and jumper cables. The maximum amount of eLum Cove RGB that can be powered by each output junction is 10.5 feet. Below a typical eLum RGB system controlled by a eLum RGB Controller.



# 3.0 eLum Cove RGB Controller Stand Alone Settings

Effect #	Switch Position							Description
	1	2	3	4	5	6	7	
1	1	0	0	0	0	0	0	Static red
2	0	1	0	0	0	0	0	Static blue
3	1	1	0	0	0	0	0	Static green
4	0	0	1	0	0	0	0	Static magenta
5	1	0	1	0	0	0	0	Static yellow
6	0	1	1	0	0	0	0	Static cyan
7	1	1	1	0	0	0	0	Static warm white
8	0	0	0	1	0	0	0	Static cool white
9	1	0	0	1	0	0	0	Static blue magenta
10	0	1	0	1	0	0	0	Static red magenta
11	1	1	0	1	0	0	0	Static turquoise
12	0	0	1	1	0	0	0	Static orange
13	1	0	1	1	0	0	0	Static light blue
14	0	1	1	1	0	0	0	Static light yellow
15	1	1	1	1	0	0	0	Static warm pink
16	0	0	0	0	1	0	0	Static light green
17	1	0	0	0	1	0	0	Static light salmon
18	0	1	0	0	1	0	0	Static light amber
19	1	1	0	0	1	0	0	Static light lavender
20	0	0	1	0	1	0	0	Fade red, blue, green 30 sec
21	1	0	1	0	1	0	0	Fade red, blue, green 20 sec
22	0	1	1	0	1	0	0	Fade red, blue, green 15 sec
23	1	1	1	0	1	0	0	Fade red, blue, green 10 sec
24	0	0	0	1	1	0	0	Fade red, blue, green 5 sec
25	1	0	0	1	1	0	0	Fade red, blue, green 1 sec
30	0	1	1	1	1	0	0	Fade rmy, 30 sec
31	1	1	1	1	1	0	0	Fade rmy, 20 sec
32	0	0	0	0	0	1	0	Fade rmy, 15 sec
33	1	0	0	0	0	1	0	Fade rmy, 10 sec
34	0	1	0	0	0	1	0	Fade rmy, 5 sec
35	1	1	0	0	0	1	0	Fade rmy, 1 sec
40	0	0	0	1	0	1	0	Snap color sequence 10 sec
41	1	0	0	1	0	1	0	Snap color sequence 5 sec
42	0	1	0	1	0	1	0	Snap color sequence 2 sec
43	1	1	0	1	0	1	0	Snap color sequence 1 sec
44	0	0	1	1	0	1	0	Snap color sequence 0.5 sec
45	1	0	1	1	0	1	0	Snap color sequence 0.25 sec
50	0	1	0	0	1	1	0	Strobe red 0.5 sec
51	1	1	0	0	1	1	0	Strobe red 0.25 sec
52	0	0	1	0	1	1	0	Strobe red 0.1 sec
60	0	0	1	1	1	1	0	Strobe blue 0.5 sec
61	1	0	1	1	1	1	0	Strobe blue 0.25 sec
62	0	1	1	1	1	1	0	Strobe green 0.1 sec
70	0	1	1	0	0	0	1	Strobe green 0.5 sec
71	1	1	1	0	0	0	1	Strobe green 0.25 sec
72	0	0	0	1	0	0	1	Strobe green 0.1 sec
80	0	0	0	0	1	0	1	Strobe white 0.5 sec
81	1	0	0	0	1	0	1	Strobe white 0.25 sec
82	0	1	0	0	1	0	1	Strobe white 0.1 sec

# 5.0 Schematic Example



For additional assistance or questions contact an authorized distributor or dealer for Advanced Lighting Systems, Inc. or contact the factory at:

Advanced Lighting Systems, Inc.  
 519 Lincoln Road  
 Sauk Centre, MN 56378  
 Tel: 320.352.0088  
 Fax: 320.352.0089

## **LIMITED WARRANTY**

Nexxus Lighting, Inc. warrants its products, excluding lamps, to be free from defects in material and/ or workmanship, under normal condition, use and service, for a period of two (2) years from the original invoice date (Five (5) Years for Red, Amber and Orange FlexLED and Border Light LED products and one (1) Year for Non-UL Listed Power Supplies). If proof of purchase is provided, Nexxus Lighting will warranty the product for two (2) years from date of the purchase (Five (5) Years for Red, Amber and Orange FlexLED and Border Light products and one (1) Year for Non-UL Listed Power Supplies).

### **TERMS AND CONDITIONS:**

This warranty only applies when Nexxus Lighting products are properly wired and installed together as a system; and operated within the electrical values shown on the Nexxus Lighting specification sheets; used in lighting equipment designed and approved for the application and environmental conditions (temperature, humidity) within the normal specified operating range of the system. This warranty does not apply to any abnormal use in violation of any applicable standard, code or instructions for use in installations including those contained in the latest National Electrical Code (NEC), the Standards for Safety of Underwriters Laboratory, Inc. (UL), Standards for the American National Standards Institute (ANSI), in Canada, the Canadian Standards Association (CSA), Europe (CE), Australia (C-Tick). This warranty will not apply in the event of conditions demonstrating abnormal use or stress, including under/ over voltage conditions, excessive switching cycles, excessive operating hours, alterations, accident, theft, misuse, abuse and damaged caused by negligent installation, improper maintenance or where adequate care has not been taken to prevent damage to the lighting system. Replacement of Nexxus Lighting components with any other manufacturer will void the entire warranty.

### **WARRANTY SERVICE CLAIMS:**

Nexxus Lighting must issue a Return Material Authorization (RMA) number for all requests for warranty review. To expedite service, please contact Nexxus Lighting Customer Representative: 407-857-9900. If you are unsure whether a situation exists that is covered by this warranty, please contact Nexxus Lighting Customer Service for assistance. In the event of a defect in material or workmanship during the warranty period, Nexxus Lighting will repair or replace (at its own discretion) its products under the conditions of the warranty.

### **RETURN OF DEFECTIVE PRODUCT:**

After contacting Nexxus Lighting, Inc. and receiving the RMA#, the purchaser / user shall promptly return the product after receiving instructions regarding if, when and where to ship product. Product must be returned within 30 days of receiving RMA#, Shipping box must be clearly marked with RMA#. Failure to follow this procedure shall void this warranty. Nexxus Lighting will cover expenses for material but will not cover shipping costs. Products returned without an RMA# will be refused and returned to sender at the senders expense.

### **REPLACEMENT OF PRODUCT, LIMITS OF LIABILITY:**

The foregoing shall constitute the exclusive remedy of the purchaser and the sole liability of Nexxus Lighting, Inc. regarding its products and component warranty. **NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE OR IS TO BE IMPLIED.** In no event shall Nexxus Lighting, Inc. be liable for any other costs or damages including labor charges, lost profits or revenues, incidental, special or consequential damages. Total liability shall not exceed the total extended purchase price for the product. Nexxus Lighting, Inc. reserves the right to examine all failed Nexxus Lighting, Inc. products and components to determine the cause of failure and patterns of usage and reserves the right to be the sole judge as to whether any product or component is defective and covered under this warranty.

