

# INSTALLATION MANUAL

# ION-CUBE Series

LED Wall Washer



**UL** US  
LISTED  
CLASS 2  
E359853



**IMPACT**<sup>®</sup>  
LIGHTING

02/2020

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# PRODUCT OVERVIEW

The ION-CUBE series LED Light Source is an 80 watt 24V multi-controllable and configurable wall washer for the architectural and commercial lighting, markets. It can be configured with white light or RGB+W LEDs with a \*stand-alone program, DMX, RS232 Serial or RF. LED options include RGB+W. Cool, White, and Warm White. Discreet colors upon special order, contact the factory for availability.

The ION-CUBE features no serviceable or moving parts.

The fanless SynJet® Cooler provides for quiet and efficient heat sink cooling with a frictionless oscillating diaphragm.

A 120W/24V power supply rated for 100-240VAC and 277VAC for North America only is included.

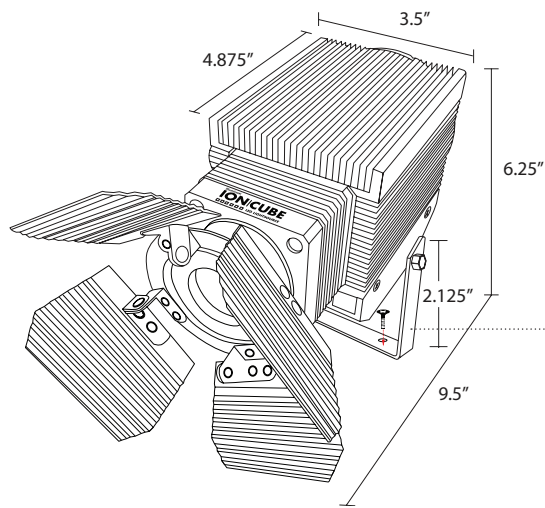
Optional dimming transformer is available.

\*Stand-alone program / SB - Smart Board option:

Advance through the color programs by toggling the ON/OFF switch. Blue/White/Cyan/Green/Magenta/Red/Gold/Smooth Color Cycle Through All Colors.



U Bracket Mount (included)



Includes 100W Power Supply  
100-240VAC /24VDC  
8.5" x 2.75" x 1.5

**MANUAL - Stand Alone:** (smart board) 2 Wire

**DMX:** (smart board) 5 Wire for RGBW

**RS232:** 5 wire for RGBW

**RF:** 5 wire for RGBW

## PRO-TIP ▶

You will find Pro-Tips throughout this manual that are helpful hints and practical advice from lighting professionals.

## SPECIFICATIONS

PARAMETER	MAX RATING
Input Voltage	100-240VAC / 277VAC
Amps	4Amps
Wattage	100W Max
Power Supply	24V DC Class 2
HZ	50/60
Fiber capacity	1000
Operating Temperature	-10°C to 80° C
Weight	7lbs.
Outdoor Rating	IP67
Housing	Powder Coated Aluminum

\* Thermal cut-off protection 70°C

## PHOTOMETRICS

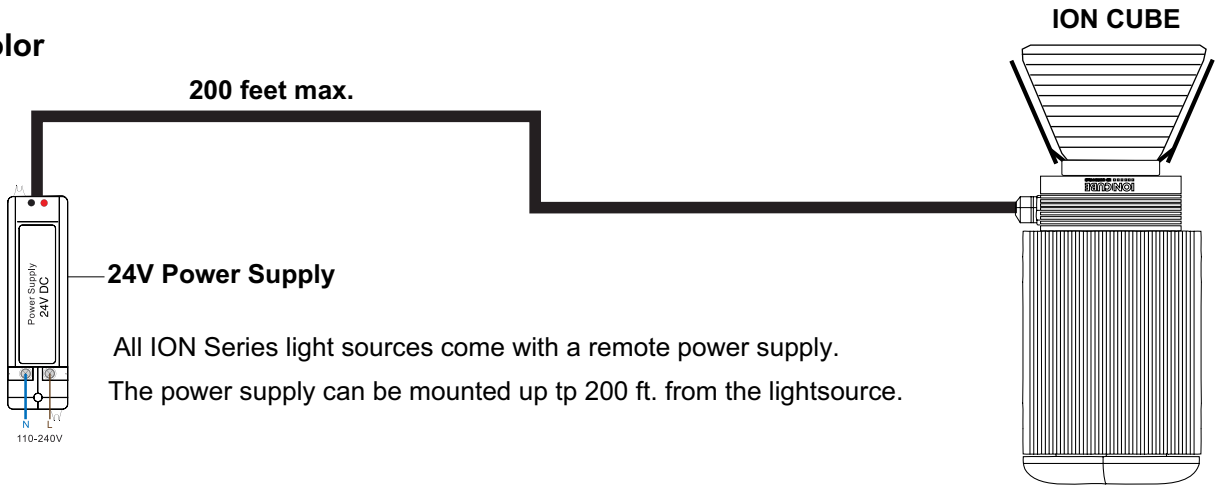
LED	LUMENS @ 700ma
WW	2650 lm
CW	4400 lm
RGBW	3465 lm (R=765 G=920 B=230 W=1550)

# MOUNTING

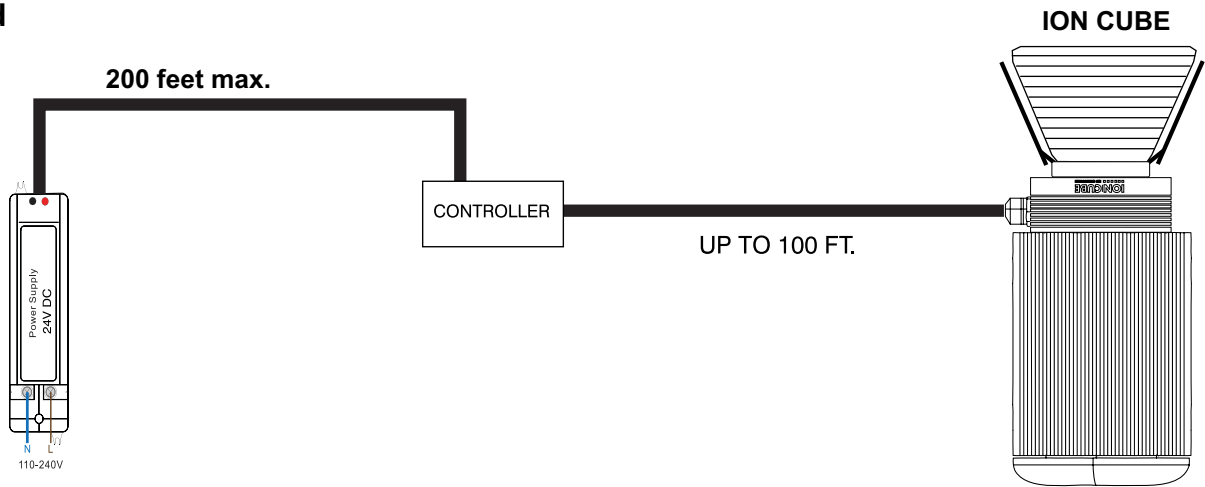
## GENERAL WIRING PARAMETERS

**NOTE:** This light source is not serviceable and has no internal serviceable parts. Please contact the manufacturer with service related issues.

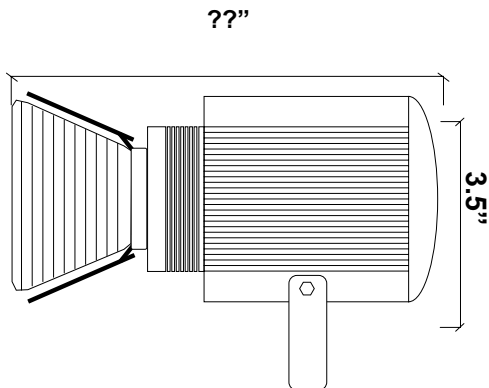
### Single Color



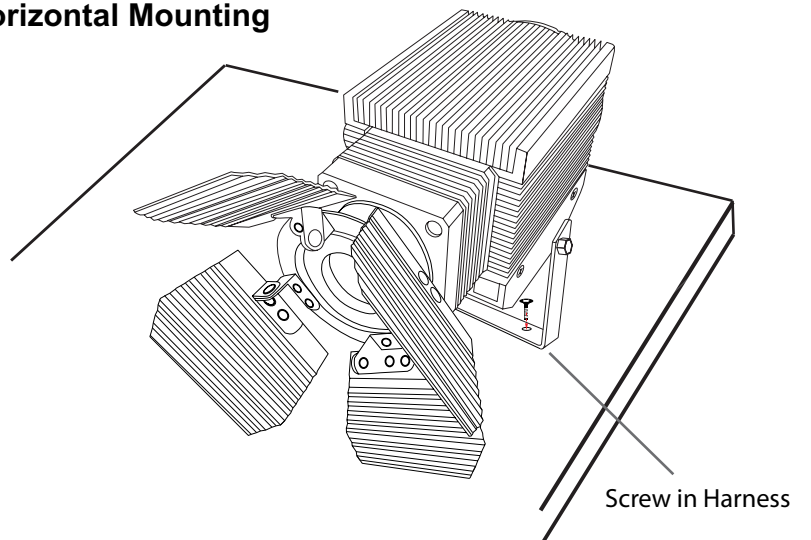
### Controlled



### Mounting Hole Template

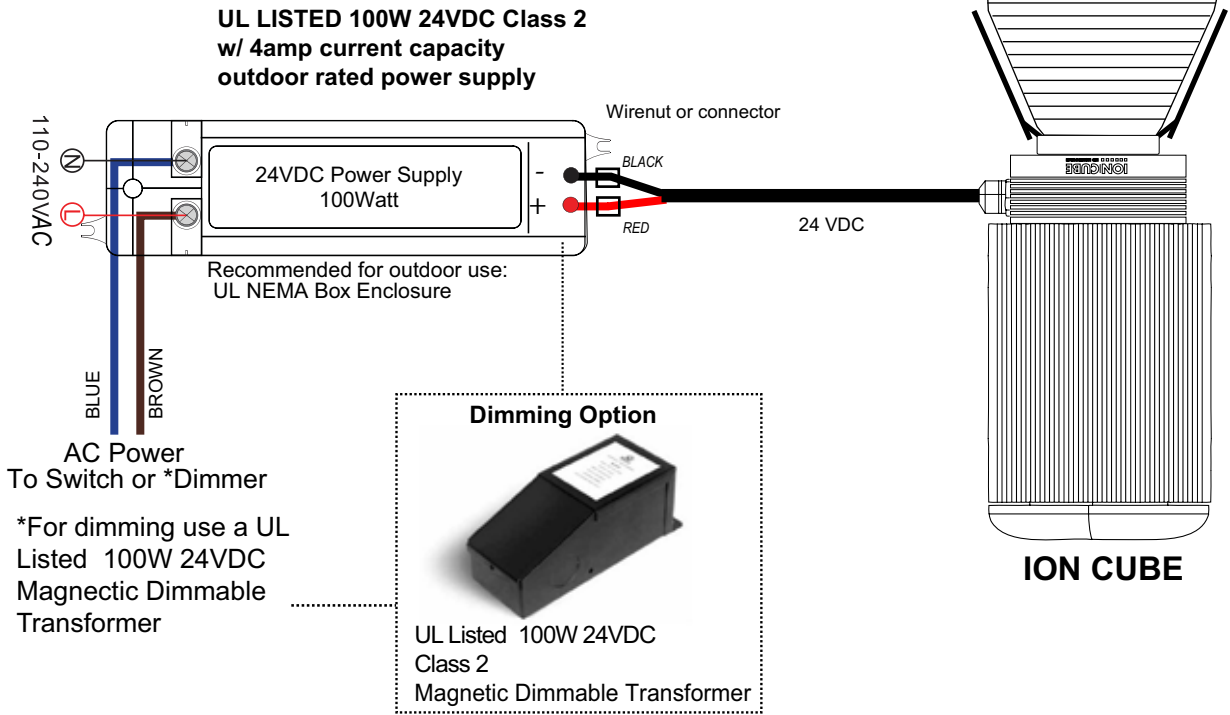


### Horizontal Mounting

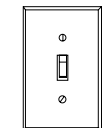
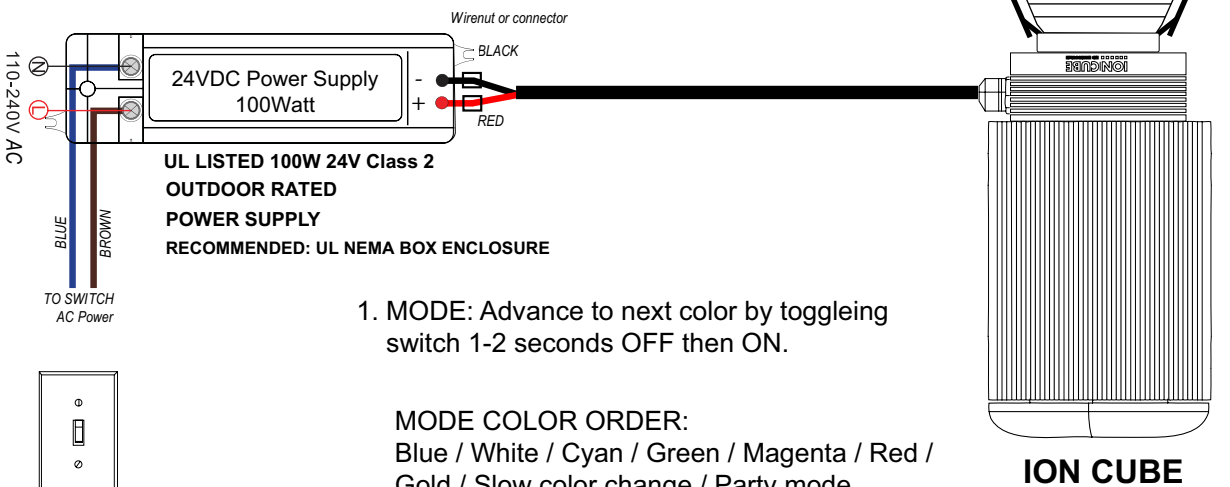


## SINGLE COLOR STAND ALONE SYSTEM (smart board) MANUAL OPERATION

**NOTE:** Only a licensed electrician should install this product.



## RGB / RGBW STAND ALONE SYSTEM MANUAL OPERATION



**TOGGLE SWITCH**

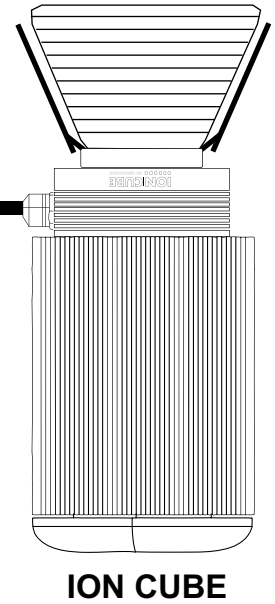
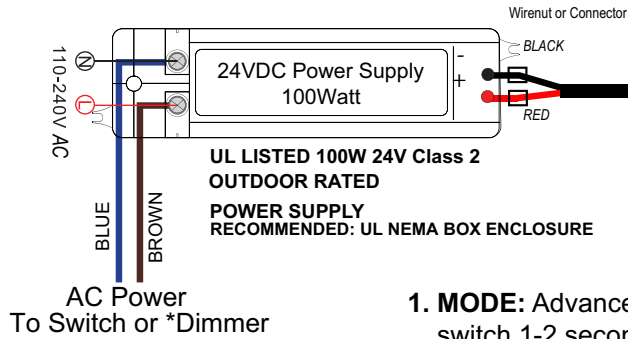
A toggle switch is to be wired to the AC input. This switch is used to scroll through all the modes on the

1. **MODE:** Advance to next color by toggling switch 1-2 seconds OFF then ON.

**MODE COLOR ORDER:**  
Blue / White / Cyan / Green / Magenta / Red / Gold / Slow color change / Party mode

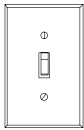
2. **RESET MODE:** Toggle OFF 5-7 seconds then ON. This will reset all light sources back to blue. Memory will be save after 8 seconds.

## WW-CW STAND ALONE SYSTEM MANUAL OPERATION



**1. MODE:** Advance to next color by toggling switch 1-2 seconds OFF then ON.

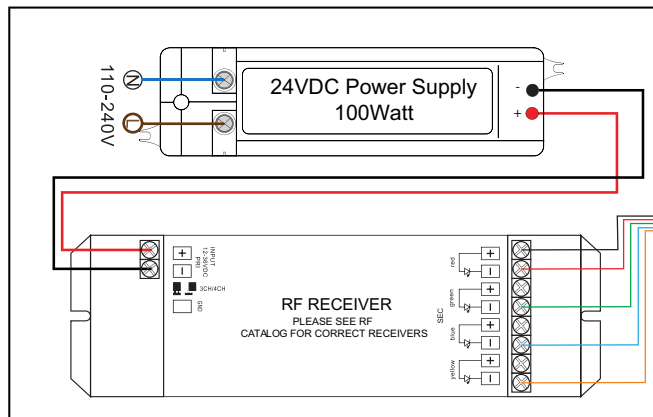
**MODE COLOR ORDER:**  
Cool White 5000K / Neutral White 4000K / Warm White 3000K



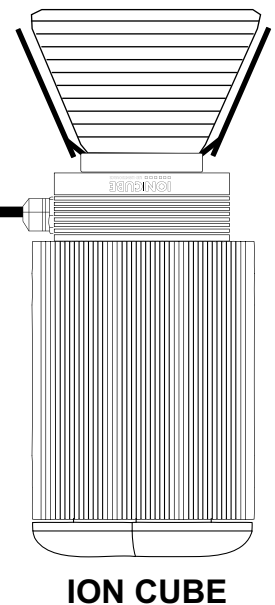
**TOGGLE SWITCH**  
A toggle switch is to be wired to the AC input. This switch is used to scroll through all the modes on the Illuminator.

**2. RESET MODE:** Toggle OFF 5-7 seconds then ON. This will reset all light sources back to blue. Memory will be save after 8 seconds.

## RF SYSTEM WIRING

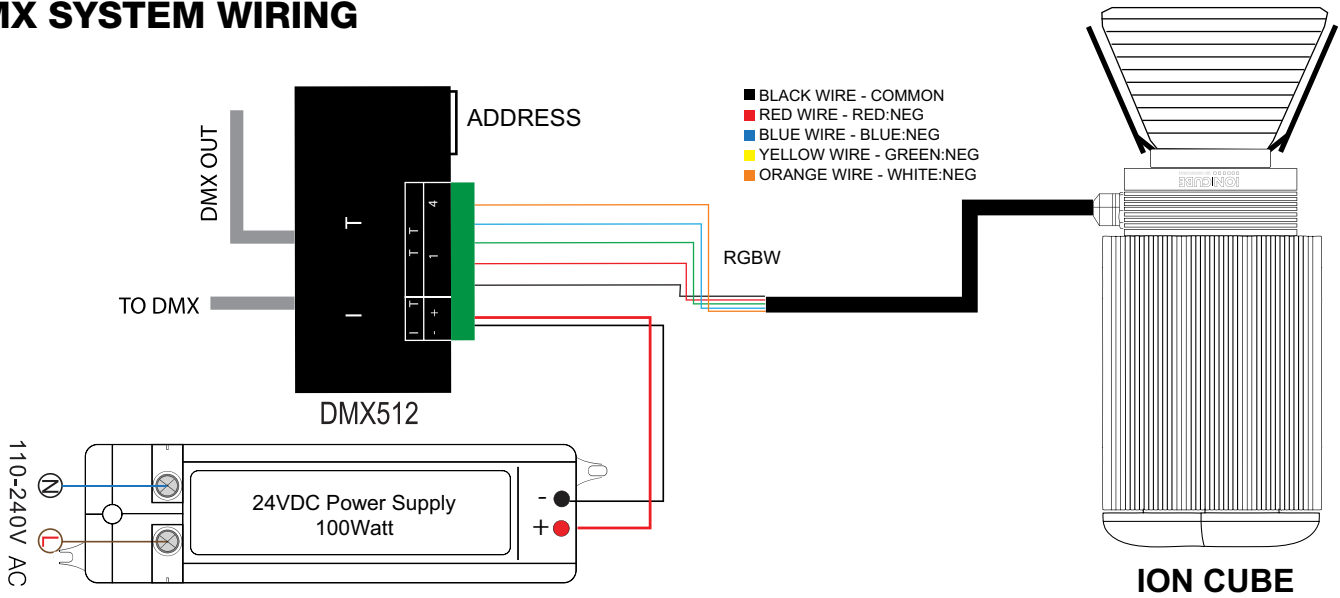


- BLACK WIRE - COMMON
- RED WIRE - RED:NEG
- BLUE WIRE - BLUE:NEG
- YELLOW WIRE - GREEN:NEG
- ORANGE WIRE - WHITE:NEG



RECOMMENDED OUTDOOR RATED ENCLOSURE

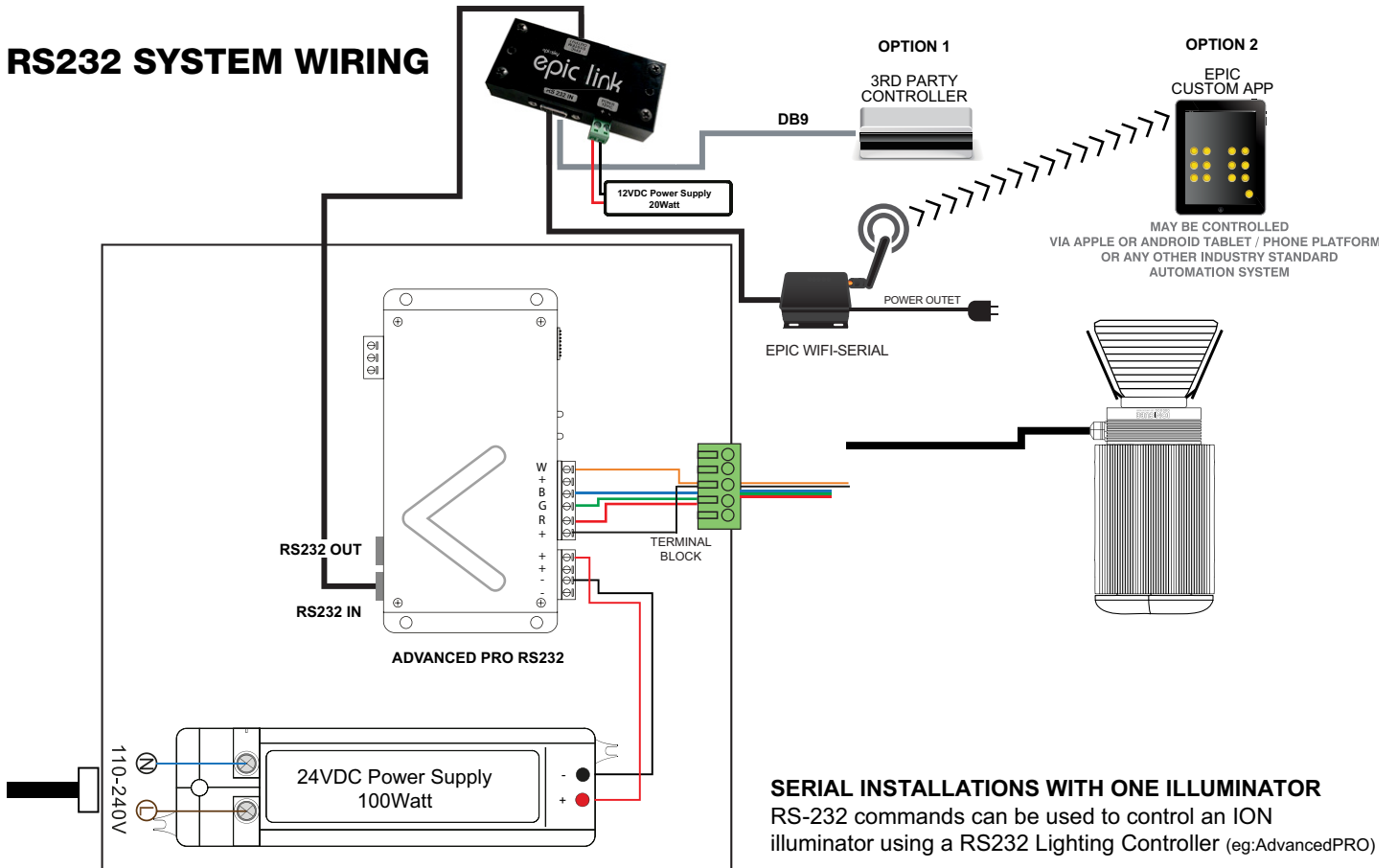
## DMX SYSTEM WIRING



## ADVANCED RS232 DMX

DMX is an industry standard abbreviation for “digital multiplex”. It is an RS-485 based protocol that has become the industry standard for digital lighting control interfaces. DMX allows users to synchronize fixtures to a centralized lighting controller. It supplies a constant flow of data to the fixture so that the unit knows what it should be doing at all times.

## RS232 SYSTEM WIRING



**NOTE:** This light source is not serviceable and has no internal serviceable parts. Please contact the manufacturer with service related issues.

- ▶ **Problem:** Light source is not turning on
- ▶ **Possible Cause:** No power or improper wiring
- ▶ **Solution:** Check that the main power to the unit. If the main power is on and the unit still does not turn on, check to see if there is power at the low voltage side of the power supply. If there is power on the low voltage side of the power supply, check your control system and make sure it is wired properly. *(check wiring diagrams that correspond to your application)*

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