

# Installation and Operating Instructions

## LimoLyte-SS™ Solid-State LED Fiber Optic Illuminator



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# ***Installation and Operating Instructions for Lumenyte LED Fiber Illuminator***



**DANGER! PELIGRO!**

## **POWERFUL LIGHT SOURCE!**

**DO NOT LOOK DIRECTLY INTO THE PORTS OR AT LED WITHOUT SHIELDED OR PROTECTED EYES! DIRECTLY VIEWING THE LED'S IS DANGEROUS AND CAN DAMAGE YOUR RETINA, VISION, OR EYESIGHT!**

**EYES EXPOSED TO LIGHT SOURCES OR REFLECTORS CAN SUFFER FROM TEMPORARY BLINDNESS OR DARKENED SPOTS OF VISION – WAIT FOR DARK SPOTS TO CLEAR AND VISION TO RECOVER BEFORE MOVING OR CONTINUING YOUR WORK!**

## **FUENTE de LUZ PODEROSA**

**NO MIRE DIRECTAMENTE DENTRO DE LOS PUERTOS O A LA LUZ SIN TENER PROTECCION EN LOS OJOS. VIENDO DIRECTAMENTE A LA LUZ ES PELIGROSO Y PUEDE CAUSAR DANO A LOS OJOS O A SU VISTA.**

**EXPONER SUS OJOS A LA LUZ, PUEDE CAUSAR CEGUERA TEMPORAL – ESPERA UN TIEMPO PARA QUE SE ACLARE LA VISTA ANTES DE REGRESAR A TRABAJAR!**



**WARNING! ADVERTENCIA!**

**OBSERVE POWER POLARITY! REVERSING RED ('+' Power) AND BLACK ('-' GROUND) WIRES MAY CAUSE DAMAGE TO THE UNIT!  
- WARRANTY WILL BE VOID -**

**OBSERVA LA POLARIDAD. CONECTANDO EL ALAMBRE ROJO ('+ positivo) Y NEGRO ('- tierra) INVERTIDOS PUEDE CAUSARLE DANO A LA CAJA.  
- LA GARANTÍA SERÁ VACÍA -**

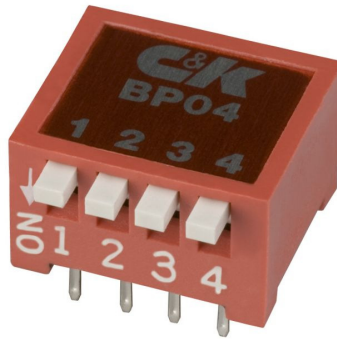
## Power Supply Specifications

- *Voltage Supply:* 10-16 Volts (12.0-14.7 Volts DC Typical); 5 Second Surge to 20 Volts.
- *2-Port Model Current Draw:* 2.2 Amps Max at 14.7 Volts. 1.0 Amp-Hour Average With Both Ports Generating A Typical Color-Wash.
- *3-Port Model Current Draw:* 3.2 Amps Max at 14.7 Volts. 1.5 Amp-Hour Average With All Three Ports Generating A Typical Color-Wash.
- *Suggested Fuse:* 2-Port Unit: 3 Amps; 3-Port Unit: 4 Amps (Fast Acting ATO-Mini Okay)

## Connections

- **Power:**  
Pin 9 – Battery Positive Voltage (RED Wire)  
Pin 7 – Ground or Chassis (BLACK Wire)  
Pin 2 – Color Wheel Motor Control Wire (BLUE, GREEN or WHITE Wire)

## Dip Switch Settings



*The DIP Switch as shown shows all switches in the 'Up' position. On most switches, 'Down' is also marked as 'On'.*

Switch 1: All Ports The Same Color, Color Change Speed Control

Up = Medium-Speed Motor Emulation (Medium-Speed Color Changing)  
Down = Slow-Speed Motor Emulation (Slow-Speed Color Changing)

Switch 2: All Ports Alternating Colors, Color Change Speed Control

Up = Medium-Speed Motor Emulation (Medium-Speed Color Changing)  
Down = Slow-Speed Motor Emulation (Slow-Speed Color Changing)

Switch 3: Color Wheel Motor Control Wire Function

Up = Motor Wire Controls Show Selection (Switch Changes Color Patterns)  
Down = Motor Wire Controls 'Color Stop' (Switch Stops Changing Colors)

Switch 4: No Function

## Installation Instructions

- 1) Mount the box in a convenient location, making sure there is at least 2” of unobstructed clearance for the fan entry and exit. The box may be mounted in any position or orientation.
- 2) The BLACK wire is the GROUND or NEGATIVE Power Supply Wire. Connect the BLACK wire to ground (either by wire or directly to the car chassis).
- 3) The RED wire is the BATTERY or POSITIVE Power Supply Wire. Connect the RED wire to the main power source (either via a dimmer circuit or by another On-Off Controlled Power Source) using a fuse if needed. If you wish, the RED wire can be connected to an ignition controlled source, again using a fuse as needed.

This completes the MOST BASIC hook-up of the Fiber Illuminator. When powered-up, the illuminator will imitate the behavior of a motorized mechanical Fiber Illuminator. If this is the set-up you desire, then attach the remaining control wire to the positive supply (attach the remaining BLUE, GREEN or WHITE wire to the RED wire), and go on to instruction (5) below.

### **However, if you wish to enable additional functions, then**

- 4) Attach the remaining BLUE, GREEN or WHITE wire to a switchable Color Wheel Motor power source, or other switched 12 Volt DC supply wire. By setting the proper DIP Switch on the illuminator, the Motor wire will enable you to:
  - a) Mimic the original function of Color Wheel Motor control (AKA “Color Stop” switch) by stopping the color change at any point in time; or
  - b) Allow an existing Motor Control button (AKA “Color Stop” button), or any switch that controls 12 Volts, to act as a pattern selection switch, selecting a new color pattern with every change of the switch (that is, a new pattern will be selected every time the voltage on the Motor Control wire goes from 0 Volts to +12 Volts, and from +12 Volts to 0 Volts).
- 5) Set the DIP Switch as needed:

DIP Switch Number 1 selects the speed of the default color wheel pattern. This is the pattern that emulates a standard motorized color wheel illuminator, in that all output ports are the same color at the same time, and the colors morph from one to another in unison. If the DIP switch is **Up**, the ‘**Medium Motor Speed**’ is selected. If the DIP switch is **Down**, the ‘**Slow Motor Speed**’ is selected.

DIP Switch Number 2 selects the speed of the alternating ports color wheel pattern (a pattern that is part of the rotating show patterns). This is the pattern that is similar to a standard motorized color wheel illuminator, except that all the ports are not the same color at the same time – they are alternating colors. If the DIP switch is **Up**, the ‘**Medium Motor Speed**’ is selected. If the DIP switch is **Down**, the ‘**Slow Motor Speed**’ is selected.

DIP Switch Number 3 selects whether the Motor Control voltage (if attached) affects the illuminator. If the DIP switch is **Up**, the Motor Control voltage causes the microprocessor to step through the built-in color patterns (or “color shows”). Every time the voltage on the wire changes, the next pattern in rotation is selected, in this way the functioning as a remote pattern selector. If the DIP switch is **Down** then the motor control voltage acts as a traditional motorized color wheel (i.e. as a “Color Stop” control), allowing the color change to stop at random under control of the wire voltage.

DIP Switch Number 4 has no function in this release.