

# Color Splash® LED Underwater Fountain Luminaires Installation and Operating Guide

Color Splash installation manual and operation guide for following part numbers series only: LFF-F1C-XXXX and LFF-S1C-XXXX

(For Fountain, Ponds and Reflection Pools only)

**Available in 120VAC and 12VAC models.**

This owner's manual contains important information on installing and using your LED Underwater Fountain Luminaires. Read and follow all instructions contained in this manual. Please keep it in a safe place for future reference.



## **DANGER! RISK OF ELECTRICAL SHOCK OR ELECTROCUTION**

This product must be installed by a licensed or certified electrician in accordance with the National Electrical Code and all applicable local codes and ordinances. Improper installation will create an electrical hazard which could result in death or serious injury to installer, or others due to electrical shock, and may also cause damage to property.



## **WARNING!**

Before installing this product, read and follow all warning notices and instructions accompanying this product. Failure to follow safety warnings and instructions can result in severe injury, death, or property damage. Visit [www.jandjelectronics.com](http://www.jandjelectronics.com) or call (800) 735-4553 for additional free copies of these instructions.



## **INSTALLER!**

This manual contains important information about the installation with the freestanding base, operation and safe use of this product. This information should be given to the owner/operator of this equipment. This manual does not cover wet-niche installation. Contact factory for wet-niche installations.

## **Installing LED Underwater Fountain Luminaires**

Before the light fixture is installed the following steps must be completed by the electrician:

1. Verify that the fountain meets the requirements of the current National Electrical Code and all local codes and ordinances. A licensed or certified electrician must install the electrical system to meet or exceed those requirements before the underwater light is installed.
2. Verify that the lighting circuit has a Ground Fault Circuit Interrupter (GFCI) for line voltage models and has an appropriately rated circuit breaker.
3. Ensure that the fountain has enough water depth for the entire fixture to be completely submerged at least 2 inches below the minimum operating water level.

Once electrical requirements have been meet:

1. Position the Fountain Fixture as desired in the fountain.
2. Bolt fountain base securely to flooring using 1/4" bolts. NOTE: Fountain base can be installed as a freestanding base not required to be bolted down.
3. Check Local Codes for Junction Box installation requirements. Ensure that the length of exposed cord in the fountain is no more than 10 feet (3 m.), see Figure 1 on page 2.
4. Cut the cord at the Junction Box, leaving at least 6 inches of cord to make connections.
5. Strip 6 inches of the outer cord jacket to expose the three insulated wires – be careful not to damage the insulation on the three inner wires.
6. Connect the fixture wires to the incoming power feed wires. BLK – Line WHT – Neutral GRN - Ground
7. If required by Local Ordinances, use the supplied bonding lug kit with the Fountain Fixture to ensure proper bonding of light.
8. Fill the fountain until the light is completely submerged in water before operating it. Entire fixture must be at least 2 inches below minimum operating water level.
9. Turn on the fountain light circuit switch and/or circuit breaker to check for proper operation. Refer to Operating Instructions.



## **WARNING!**

Never operate this underwater light for more than 2 minutes unless it is totally submerged in water. Without total submersion, the light assembly will get extremely hot, which may result in serious burns or in breakage of the lens. This may result in serious injury to installers, bystanders, or in damage to property.

**TECHNICAL SUPPORT: PHONE: 800.735.4553 EXT 242**

For more information about this or other J&J Electronics lighting products, please visit [www.jandjelectronics.com](http://www.jandjelectronics.com)

Page 1

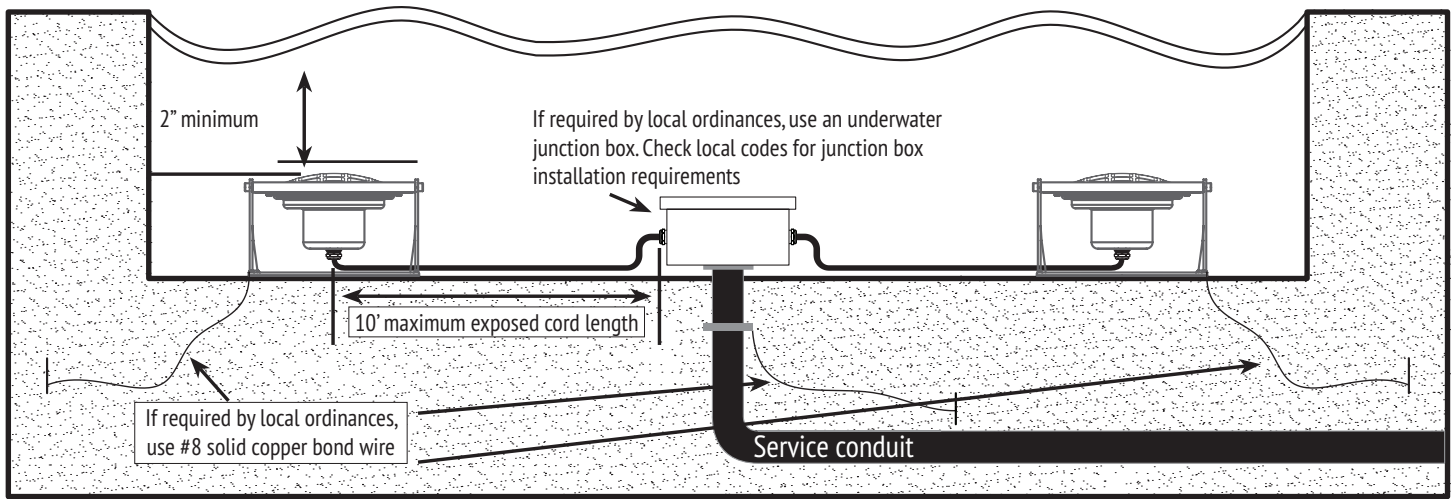


Figure 1

## LIGHT SHOWS, SOLID COLORS AND FUNCTIONS

Color Splash LED light fixtures are pre-programmed and synchronous with each other while offering a wide array of lighting effects and options. They offer seven different light shows (1-7) and five solid colors (8-12) to choose from; as well as a Color Lock (13) and Return (14) feature which allows you to “lock” the light on a color shown during an active light show and can return to the last locked color effect. XG LED Light Fixture features are selectable by turning the fountain light power switch off and on, known as power cycling.

### **LIGHT SHOWS** (See full description of light shows on page 3)

Your Color Splash LED Light fixture has seven light shows from which you can choose.

- |                      |                 |                    |               |
|----------------------|-----------------|--------------------|---------------|
| 1. Peruvian Paradise | 2. Super Nova   | 3. Northern Lights | 4. Tidal Wave |
| 5. Patriot Dream     | 6. Desert Skies | 7. Nova            |               |

### **SOLID COLORS**

Your light fixture has five colors available for you to experience. Available colors are:

- |                  |                      |                   |
|------------------|----------------------|-------------------|
| 8. Parisian Blue | 9. New Zealand Green | 10. Brazilian Red |
| 11. Lilac White* | 12. Miami Pink       |                   |

### **COLOR LOCK AND RETURN**

Your fixture can stop a light show and “color lock” on a color shown during an active light show and can also return to the last locked color effect.

- |                |            |
|----------------|------------|
| 13. Color Lock | 14. Return |
|----------------|------------|

\*Lilac White is a mixture of RGB. Not a true white.

**WARNING!** During off/on power cycling, prior to the selected show/color displaying, no illumination will occur. This is normal during the cycling process. During this period the fountain will be dark and precautions should be taken to avoid any unforeseen accidents. Failure to observe this warning may result in serious injury or death to fountain users.

## LIGHTING OPERATION: HOW TO CHANGE LIGHT SHOW AND SELECT SOLID COLORS

### **CHANGE LIGHT SHOW**

Changing light shows: Power cycle the fountain light power switch off/on as many times needed to match the desired light show's specified number. Example: If you are on (10) Brazilian Red and want to display (3) Northern Lights light show, power cycle three (3) times to select and activate Northern Lights.

### **SELECT SOLID COLORS**

Similar to selecting an light show, power cycle the fountain light power switch off/on as many times needed to match the desired solid color's specified number. Example: If you are on (6) Desert Skies and want to display (11) Lilac White, power cycle eleven (11) times to select and display Lilac White.

**NOTE:** During power cycle process, before the selected light show or color is displayed, temporarily their will be no illumination. This is normal during the switching process.

# LIGHTING OPERATION: HOW TO CHANGE LIGHT SHOW AND SELECT SOLID COLORS

## COLOR LOCK FEATURE

You can select a non-standard solid color at anytime by activating the “color lock” feature. The color lock feature allows you to stop a light show and “lock” on any color shown during an active light show. To “lock” onto a solid color, power cycle the fountain light power switch off/on thirteen (13) times when the desired color is displayed during an active light show.

## RETURN FEATURE

You can return to the last color locked color while in a light show mode or fixed solid colors by activating the “return” feature. To return to the last color locked effect, power cycle fourteen (14) times, and after five seconds the last saved color lock effect will be displayed.

## MEMORY MODE

When your Color Splash light fixtures are turned off for longer than 10 seconds, the light show or solid color on display will be stored. The next time the power is turned on, the fixture will flash white for 3 seconds before displaying that saved memory light show or color. **Note:** Depending on the light show or solid color, the fixture will bypass displaying white and will resume the saved memory show or color instantly.

**NOTE:** Your Color Splash light fixtures are “synchronous”, meaning that multiple Color Splash light Fixtures on the same power switch will sync together so that they all display the same light show or solid color at the same time. However, all of the light fixtures must be on the same electrical circuit for this feature to be operational. Color Splash LED light fixtures will not synchronize with any other manufacturers light fixtures. Please consult a qualified electrician to determine your specific fountain circuit configuration.

## DESCRIPTION OF LIGHT SHOWS, COLORS AND FUCTIONS

### 1. PERUVIAN PARADISE (FACTORY DEFAULT LIGHT SHOW):

*Show:* Rapid cross-fades between white, magenta, blue and green.

*Cycle:* 16 second color sequence cycle through with rapid cross-fade between colors. Fixture will stay on each solid color for 4 seconds before moving to the next.

### 2. SUPER NOVA:

*Show:* Rapid and random flashes through all five solid colors.

*Cycle:* 1/2 second color sequence cycle with fast change between colors

### 3. NORTHERN LIGHTS:

*Show:* Slow cross-fade through all five solid colors.

*Cycle:* Two minute color sequence cycle with slow cross-fade between colors. Fixture will hold on each solid color for 8 seconds before moving to the next.

### 4. TIDAL WAVE:

*Show:* Slow cross-fade between green and blue.

*Cycle:* 24 second color sequence cycle with slow cross-fade between solid colors.

### 5. PATRIOT DREAM:

*Show:* Cross-fade through red, white and blue only.

*Cycle:* 11 second color sequence cycle with quick cross-fade between colors. Fixture will stay on each solid color for 3 seconds before moving to the next.

### 6. DESERT SKIES:

*Show:* Cross-fade through orange, red and magenta.

*Cycle:* 24 second color sequence cycle with cross-fade between colors.

### 7. NOVA:

*Show:* Cross-fade transition through all five solid colors.

*Cycle:* 2 second color sequence cycle with fast change between colors.

**8. PARISIAN BLUE:** *Fixed color*

**9. NEW ZEALAND GREEN:** *Fixed color*

**10. BRAZILIAN RED:** *Fixed color*

**11. LILAC WHITE:** *Fixed color*

**12. MIAMI PINK:** *Fixed color*

**13. COLOR LOCK:** *Lock and save the current color effect during a color show.*

**14. RETURN:** *Return to the last saved color effect.*

## TROUBLESHOOTING

PROBLEM	REASON/CAUSE
The light fixture will not illuminate	Check the GFCI ground fault wiring and reset the GFCI if necessary
Light fixture does not function properly	Check the fixture wiring connection to the junction box and the AC power switch. Be sure that there is proper AC power applied to the fixture.

### J&J ELECTRONICS, INC. 3-YEAR LIMITED WARRANTY COLOR SPLASH® LED UNDERWATER LUMINAIRES

J&J Electronics, Inc. ("J&J") warrants its LED Underwater Fountain Luminaires to be free from defects in material and workmanship, under normal use, conditions and service, from the date of purchase and warrants its products as follows:

PRODUCT LINE	STRUCTURAL HOUSING	LED MODULE
Large Fixture	Three (3) Year	Three (3) Year*
Small Fixture	Three (3) Year	Two (2) Year*

\*If during the first twenty-four (24) months (Large Fixture) and first twelve (12) months (Small Fixture) of the warranty period, the LED Module fails to operate due to a defect in material or workmanship, J&J will, at its option, repair or replace fixture at no charge. If during months twenty-five (25) through thirty-six (36) (Large Fixture) and months thirteen (13) through twenty-four (24) (Small Fixture), the LED Module fails to operate due to a defect in material or workmanship, J&J will grant the purchaser a pro-rated credit for purchase of a J&J LED fountain fixture, as the purchaser's sole remedy.

#### TERMS AND CONDITIONS

This warranty is available to the original purchaser of the product(s) only. This warranty applies only when products are properly installed in a fountain; any other use voids the warranty. Products must be used in applications and in environmental conditions within the normal specified operating range. This warranty does not apply to any abnormal use of product(s), 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). This warranty will not apply in the event of conditions demonstrating abnormal use or stress, freezing, operating when not fully submerged, under/over voltage/current conditions, excessive switching cycles or operating hours or outside the recommended operating conditions. This warranty does not apply to normal color shifts or dimming that may occur over the life span of the LED's. If the product operates for 15 or more hours per day or continuously for 24 hours per day, the product warranty period stated shall be reduced to half the stated period. This warranty does not cover damage occurring during shipment, damage or failure resulting from alteration, accident, acts of God, theft, abuse, negligent installation, improper service, unauthorized repairs, freezing or where adequate care has not been taken to prevent damage to the product(s). Tampering with any internal component of this product(s) will void the warranty.

This warranty gives you specific rights. You may have other rights that vary according to the laws of your state.

#### LIMITATION OF LIABILITY

THE FOREGOING SHALL CONSTITUTE THE EXCLUSIVE REMEDY OF THE PURCHASER AND IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ALL WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OR TRADE. THE LIABILITY OF J&J UNDER THIS WARRANTY SHALL BE LIMITED TO THE REPLACEMENT, REPAIR OR PRO-RATED CREDIT OF THE PRODUCT(S) AS STATED HEREIN. J&J IS NOT RESPONSIBLE FOR SHIPPING OR TRANSPORTATION COSTS RELATED TO OBTAINING WARRANTY SERVICE. IN NO EVENT SHALL J&J BE LIABLE FOR ANY OTHER COSTS OR DAMAGES, INCLUDING LOST PROFITS OR REVENUES, LABOR CHARGES OR FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES.

J&J reserves the right to change the warranty, warranty period without prior notice and without incurring obligation.

To obtain warranty service, retain the failed Product; retain the installation invoice showing product purchase price and contact J&J Electronics, Inc. at 800.735.4553 ext. 242 or warranty@jandjelectronics.com. As of 01/21/2014