J&JElectronics ™

ColorSplash XG Controller

For ColorSplash® LXG Lamps, XG Pool & Spa, and Fountain LED Lighting Fixtures

Installation and Operation Guide

IMPORTANT SAFETY INSTRUCTIONS
READ, FOLLOW AND SAVE THESE INSTRUCTIONS

ColorSplash XG Controller installation manual and operation guide for the following part number only: LPL-XG-CTRL-1

ColorSplash® XG Controller

The ColorSplash® XG Controller will work with the following J&J Electronics products ONLY: ColorSplash® LXG Series Pool and Spa Lamps, ColorSplash® XG Series Pool and Spa Fixtures, and ColorSplash® Fountain Lighting Fixtures.

This owner's manual contains important information on installing and using your new ColorSplash® XG Controller. Read and follow all instructions contained in this manual. Please keep it in a safe place for future reference.

DANGER! FAILURE TO PROPERLY INSTALL AND USE THIS PRODUCT CAN RESULT IN SERIOUS BODILY INJURY OR DEATH.

IMPORTANT SAFETY PRECAUTIONS AND WARNINGS

INSTALLER NOTICE: This Installation and Operation Guide contains important information about the installation, operation and use of this product. This information should be given to the operator and/or owner of the XG Controller for reference regarding the proper installation, operation and use of this product. When installing and using the XG Controller, basic electrical safety precautions should always be exercised, including the following:

WARNING!

IMPORTANT SAFETY INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY. READ, FOLLOW AND RETAIN ALL INSTRUCTIONS.

Read and follow all warning notices and instructions contained in this guide before installing or using the XG Controller. Severe injury, death or property damage may result if the warnings and instructions contained in this manual are not followed.

WARNING!

RISK OF ELECTRIC SHOCK OR EXECUTION WHICH CAN LEAD TO SERIOUS INJURY OR DEATH.

Always install at least 60 inches (5 ft) from inside wall of pool, spa or fountain. Before attempting installation or service, ensure that all power to the circuit supplying power to the system is disconnected/turned off at the circuit breaker.

The XG Controller wiring circuit MUST be grounded (bonding with the ground), and should be installed professionally by a qualified electrician.

WARNING!

Read Important Safety Precautions and Instructions. Before beginning any electrical wiring, be sure to read and carefully follow ALL Safety Instructions. Installation of the XG Controller should be performed by a qualified professional electrician.

Before installing the XG Controller read and follow all safety precautions, warning notices and instructions which are included in this Installation and Operation Guide. Failure to follow safety precautions, warnings and instructions can result in severe injury or death, and damage to the XG Controller.

IMPORTANT SAFETY PRECAUTIONS AND WARNINGS

Check to make sure the electrical system for the pool, spa or fountain conforms with all requirements of the National Electrical Code (NEC) Article 680-22 requirements and any applicable local codes or ordinances. A licensed or certified professional electrician must install the electrical system to meet or exceed all NEC requirements and local building codes before the XG Controller is installed.

WARNING!

- The XG Controller should be installed by a qualified electrician, according to the NEC (including article 680) or Canadian Electrical Code (CEC) (including section #68) and any local code requirements. The 120V supply circuit must be protected by a ground fault circuit interrupter (GFCI).

- The electrical circuit of the XG Controller MUST BE PROPERLY GROUNDED to the earth.

- The XG Controller wiring circuit must be grounded to the earth with a solid fail-proof ground as required by NEC, Article 680 and any applicable local codes.

- The electrical lighting circuit must have a "Ground Fault Circuit Interrupter" (GFCI), and a circuit breaker which is appropriately rated.

- For grounding and installation of the XG Controller please refer to section 680 of the NEC or for Canadian installations, section 68 of the CEC.

- *The outlet box must be located a minimum distance of 60 inches (5ft) (three (3) meters for Canadian installations), measured horizontally from the inside wall of the pool or fountain, and not less than 12 inches (1ft) above the maximum water level measured to the top of the outlet box.* MUST USE ONLY COPPER CONDUCTORS.

- Do not exceed the maximum ratings of individual components, wiring devices, and current carrying conductor capacity.

- All metal items, and any light fixtures within 60 inches (5ft) of the pool, spa or fountain must be properly bonded electrically.

- Do not attempt to connect more than One (1) XG Controller onto a single lighting circuit.

- The XG Controller MUST NOT BE SUBMERGED in water.

Contents

Note: Outlet box purchased separately

Technical Support

For technical support on the XG Controller please contact
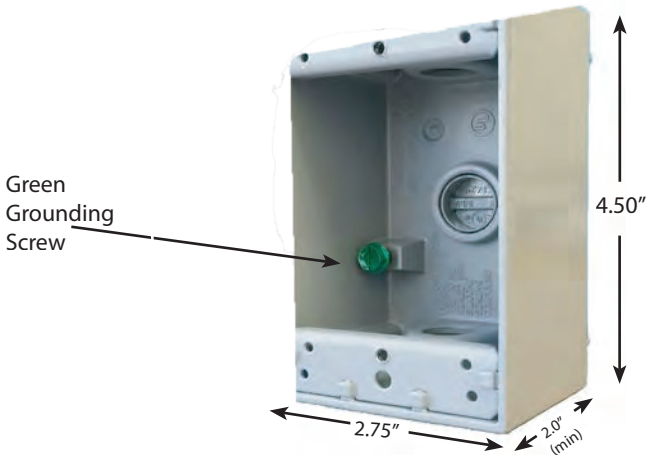J&J Electronics Customer Service at:

800.735.4553 ext. 242

For more information about this or other J&J Electronics lighting
products, please visit **www.jandjelectronics.com**

OUTLET BOX SPECIFICATIONS (purchased separately)

The XG Controller requires a standard outlet box which is purchased separately. The outlet box must meet the following specifications:

- Outlet box size: **4.25 x 2.75" x 2" (minimum).**
- Suitable for wet locations when used outdoors.
- Must have UL/CSA approval listings.

Green Grounding Screw

4.50"

2.75"

2.0" (min)

INSTALLING AN OUTLET BOX FOR THE XG CONTROLLER

The XG Controller mounts onto a standard outlet box See above for outlet box specifications.

WARNING!

RISK OF ELECTRIC SHOCK OR EXECUTION

TURN power OFF at circuit breaker - Always disconnect power to the pool or fountain light at the circuit breaker before servicing the light. Failure to do so could result in death or serious injury to the installer, service person, pool users, or others due to electrical shock.

To install the outlet box:

1. Position the XG Controller and outlet box to meet National Electrical Code requirements, and to prevent hazards to living beings.

2. Run conduit from the electrical outlet to the XG Controller.
   Note: *The outlet box must be located a minimum distance of 60 inches (5ft) measured horizontally from the inside wall of the pool or fountain and not less than 12 inches (1ft) above the maximum water level measured to the top of the outlet box.*

3. Remove the conduit plug from the outlet box.

4. Mount the outlet box onto the conduit.

5. Seal any remaining conduit plugs with silicone sealing compound.

Maximum wattage when using multiple lights with XG Controller

When using multiple LXG, XG and Fountain LED lights, the maximum allowable light wattage is **400 Watts maximum**. The following are **examples** of maximum light combinations that can be connected to the XG Controller:

- Seventeen (17) ColorSplash® LXG LED pool lamps

<div align="center">**or**</div>

- Twelve (12) ColorSplash® XG LED pool lights or Large LED Fountain lights

<div align="center">**or**</div>

- Fifty-Seven (57) ColorSplash® XG LED Spa lights or Small LED Fountain lights

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WARNING!

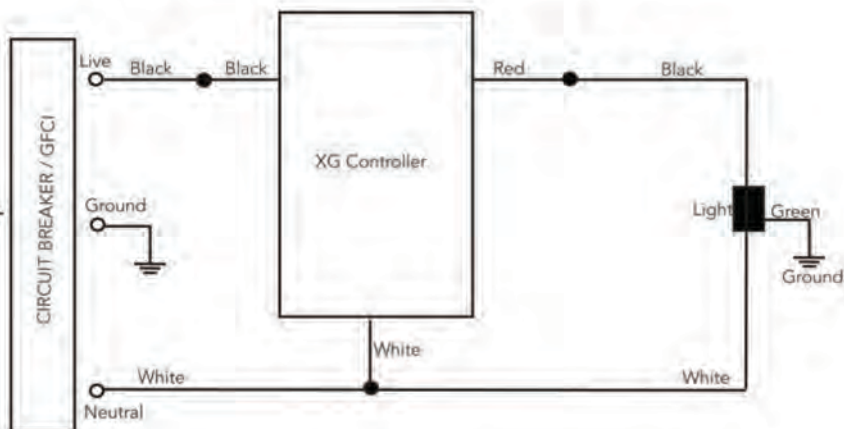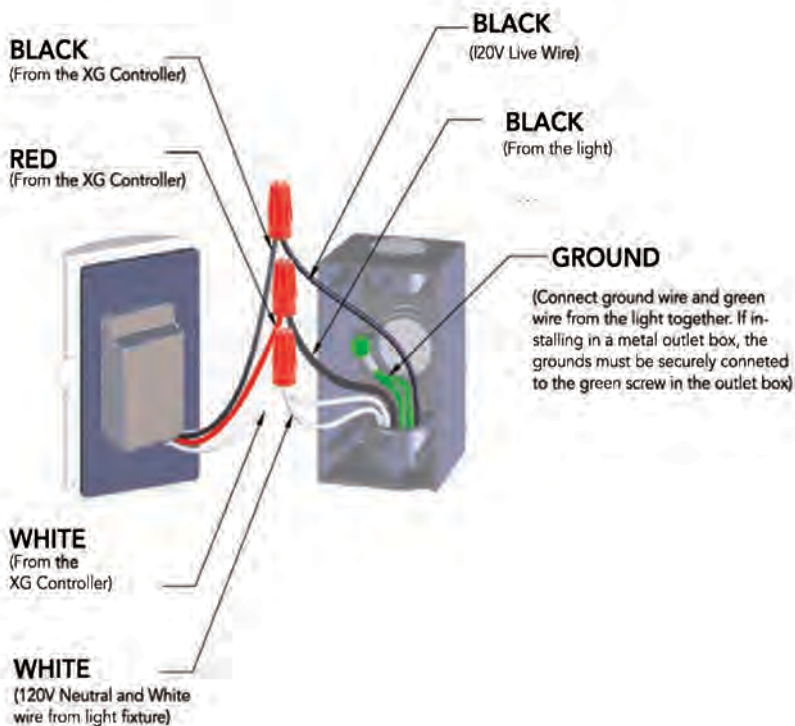### RISK OF ELECTRIC SHOCK OR EXECUTION

TURN power OFF at circuit breaker - Always disconnect power to the pool or fountain light at the circuit breaker prior to servicing or installing any lighting fixtures, lamps or Controllers. Failure to do so could result in death or serious injury due to electrical shock.

To wire **120 Volt** LXG, XG or Fountain LED lights to an XG Controller:

1. **Check to make sure that all electrical power is off** at the circuit breaker
2. Route the lighting fixture cable and the three wires (**white, green and black**) from the GFCI, up through the conduit opening and into the outlet box.
3. Strip the ends of each of the three (3) light conductors, and the three (3) GFCI wires. *Note: ONLY use underwater lights with a water resistant cord.*
4. For installation into a metallic outlet box, use the **green** grounding screw in the outlet box for grounding connections. Fasten the **green** ground wire from the light, and the **green** wire from the GFCI to the grounding screw of the XG Controller outlet box. For installations into a non-metallic outlet box, connect the **green** wire from the light together with the **green** wire from the GFCI using the supplied twist-on wire connector.
5. Connect the **red** wire from the XG Controller to the **black** wire from the light cord.
6. Connect the **white** wire from the XG Controller to the **white** wire from the light cord, and the **white** wire from the GFCI (120V neutral wire).
7. Connect the **black** wire from the XG Controller to the **black** wire from the GFCI (120V HOT wire).
8. After the wiring is complete and proper installation has been verified, proceed to "installing the Controller into the Outlet Box" on page 8.

Note: The XG Controller must be wired to a 120V circuit only. For low voltage 12V lights, the XG Controller must be wired to the 120V supply of the low voltage transformer which is powering the lights. **DO NOT WIRE THE XG CONTROLLER TO THE LOW VOLTAGE 12V SIDE OF THE TRANSFORMER.**
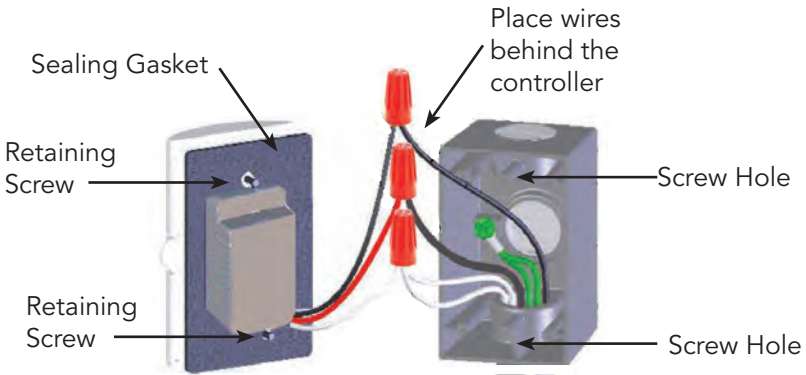
BLACK
(From the XG Controller)

BLACK
(120V Live Wire)

RED
(From the XG Controller)

BLACK
(From the light)

GROUND
(Connect ground wire and green wire from the light together. If installing in a metal outlet box, the grounds must be securely conneted to the green screw in the outlet box)

WHITE
(From the XG Controller)

WHITE
(120V Neutral and White wire from light fixture)

Live Black   Black   Red   Black

CIRCUIT BREAKER / GFCI

XG Controller

120 V~
60Hz

Ground   Light   Green

                                                        Ground

                        White

            White   White

Neutral

The ColorSplash® XG Controller mounts onto a standard outlet box (22.5 cubic inches minimum). See page 5 for outlet box specifications.

After wiring the XG Controller, check that all wiring connections are tight and secure before mounting the controller into the outlet box.

To install the XG Controller:

1. Neatly arrange the wires in the back of the outlet box.

2. If mounting outdoors or in a damp location, the sealing gasket supplied with the XG Controller MUST be used.

3. Align the Controller with the screw holes on the outlet box. Firmly secure the Controller to the outlet box with the (2) retaining screws.

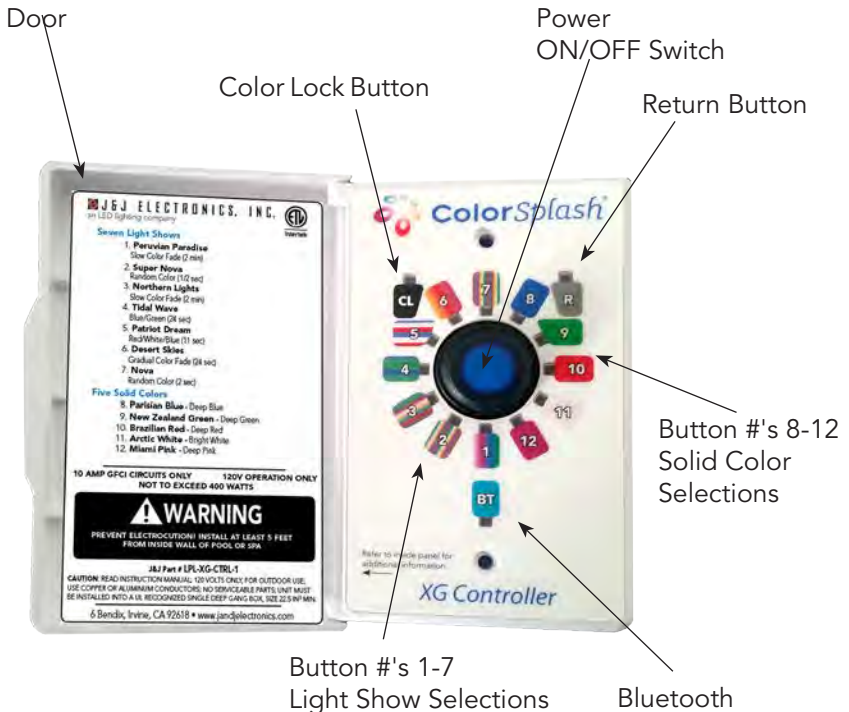4. Close the cover of the Controller.

The ColorSplash® XG Controller provides complete control of ColorSplash® LXG Series Pool and Spa lamps, XG Series Pool and Spa Fixtures, and Fountain Light Fixtures. It is easy to select a lighting feature, just press any one of the pre-programmed color light shows or fixed color buttons. The button indicator light will illuminate the active selection.

WARNING!

The XG Controller is a 120 VAC device, **DO NOT** connect 12 VAC lights fixtures directly to the XG Controller, use an appropriate step down transformer between the controller and lights. For more information see page #'s 5 - 8.

Door

Color Lock Button

Power ON/OFF Switch

Return Button

Button #'s 8-12 Solid Color Selections

Button #'s 1-7 Light Show Selections

Bluetooth

XG SERIES: LIGHT SHOWS, SOLID COLORS AND FUNCTIONS

ColorSplash® LXG, XG and Fountain lights are pre-programmed and synchronous with each other while offering a wide array of lighting effects and options. There are 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" on any color blend during an active light show and allows you to return to the last color locked color at any time. Light shows and solid colors are selectable by pressing the desired button on the XG Controller.

LIGHT SHOWS:

1. Peruvian Paradise   2. Super Nova   3. Northern Lights   4. Tidal Wave

5. Patriot Dream   6. Desert Skies   7. Nova

SOLID COLORS:

8. Parisian Blue   9. New Zealand Green   10. Brazilian Red

11. Arctic White   12. Miami Pink

COLOR LOCK AND RETURN:

13. Color Lock   14. Return

COLOR LOCK, RETURN AND MEMORY MODE FUNCTIONS

COLOR LOCK FEATURE

Press the Color Lock (CL) button at any time during a color changing light show to stop the light show. This will lock the light on the active color that the light produced at the time the color Lock (CL) button was pressed. (this allows you to set a sixth solid color of your choice that you can return to at any time)

NOTE: pressing the color lock "CL" button again while in a color changing light show will override the previous color lock.

RETURN FEATURE

To return to your color locked color, press the Return (R) button on the XG Controller

MEMORY MODE

When power to your light has been turned off for a minimum of 10 seconds, the previously selected light show or color will become active when the power is re-applied. (Such as when a timer turns the lights off and on each day).

NOTE: Your ColorSplash® LXG, XG and Fountain LED lights are "synchronous", meaning that multiple ColorSplash® LXG, XG and Fountain lights on the same power circuit will sync together so that they all display the same light show or solid color at the same time. All of the ColorSplash® LXG, XG and Fountain LED lights must be on the same electrical circuit for this feature to be operational. ColorSplash® LXG, XG and Fountain LED lights may not synchronize with other pool, spa or fountain light fixtures. Please consult a qualified electrician to determine your specific pool and spa circuit configuration.

DESCRIPTION OF LIGHT SHOWS AND COLORS

1. PERUVIAN PARADISE (FACTORY DEFAULT LIGHT SHOW):
Show: Slow color-fades between white, magenta, blue and green.
Cycle: Continuous color slow-fades between colors. Light will stay on each solid color for 4 seconds before fading to the next.

2. SUPER NOVA:
Show: Very rapid flashing through random colors.
Cycle: Continuous color flashing.

3. NORTHERN LIGHTS:
Show: Slow cross-fade through all colors.
Cycle: Continuous color sequence cycle with slow cross-fade between colors. Light will hold on each color for 8 seconds before cross-fading to the next.

4. TIDAL WAVE:
Show: Slow cross-fade between green and blue.
Cycle: Continuous color sequence cycle with slow cross-fade between green and blue colors. Light will hold on solid green and blue for 8 seconds before slowly transitioning.

5. PATRIOT DREAM:
Show: Cross-fade through red, white and blue.
Cycle: Light will hold on each color for 3 seconds before changing to the next.

6. DESERT SKIES:
Show: Slow color-fade through orange, red and magenta.
Cycle: Continuous color sequence cycle with cross-fade between colors.

7. NOVA:
Show: Fast color-change through random colors.
Cycle: Light will hold on each color for 2 seconds before changing to the next color.

8. PARISIAN BLUE: *Solid Deep Blue*

9. NEW ZEALAND GREEN: *Solid Deep Green*

10. BRAZILIAN RED: *Solid Deep Red*

11. ARCTIC WHITE: *Solid White Hue*

12. MIAMI PINK: *Solid Deep Pink*

BLUETOOTH

1. Download the free XG Controller App onto your Apple® or Android™ device. **Note**: Apple: requires iOS® 7 or later. Compatible with iPhone®, iPad® & iPod Touch®. Android™: requires version 4.3 or later
2. Search the Apple® App Store or Android™ Play Store/Google Play™ for "XG Controller" and download the App to your device (*refer to your device's manual*).
3. To pair your device to the XG Controller:
   • Open the XG Controller app on your device
   • Press the XG Controller power switch off & then on. *(Center light should be illuminated).*
   • Tap CONNECT on your device within 30 seconds to pair. *(The BT button on the XG Controller will flash green during this time).*
   • *Select CS CONTR*
4. Once paired, your device is ready to operate the XG Controller.

OPERATING YOUR XG CONTROLLER WITH YOUR BLUETOOTH PAIRED DEVICE

Once paired, your mobile device will mirror your XG Controller. All buttons and features will function the same as on the XG Controller.

See page 10 for operation of:
Light Shows, Solid Colors, Functions and Selecting a Color, Color Lock Feature, Return Feature, and Memory Mode

Note: 1.) Your device will stay paired to the XG Controller while the App is open on your device.
2.) When a light show or color is selected, the lights being controlled will turn off for a few seconds before turning back on to the selected light show or color.

TROUBLESHOOTING

Use the following tips to help you resolve problems that might occur while operating the XG Controller.

Problem	Possible Cause / Action
The XG Controller does not turn on	**1.** XG Controller is mis-wired / See wiring instructions on page #'s 6 & 7.
	2. 120V circuit breaker or GFCI switch is in the off or tripped position / reset circuit breaker and GFCI switch.
Light fixture does not function properly	**1.** XG Controller power on-off button is not in the "on" position / Push on-off button to the "on" position. Button should be illuminated when on.
	2. Loose wire connections or mis-wiring at junction box / check wires for proper connection.
	3. (12V light only) The low voltage transformer is not operating. / Check for proper transformer wiring. See transformer manufacturer operation manual.

J&J ELECTRONICS, LLC 1-YEAR LIMITED WARRANTY
COLORSPLASH® XG CONTROLLER

J&J Electronics, LLC ("J&J") warrants its Controller 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:

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; any other use voids the warranty. 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, under/over voltage/current conditions, excessive switching cycles or outside the recommended operating conditions. 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 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 and/or 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, LLC at 800.735.4553 or warranty@jandjelectronics.com. As of 04/28/2020

J&JElectronics
A HALCO LIGHTING TECHNOLOGIES COMPANY

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