

# PureWhite™ LED Pool and Spa Light Fixture Installation and Operation Guide



Technical Support

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

## PUREWHITE LED POOL AND SPA LIGHT FIXTURE

Available in 120VAC and 12VAC models

PureWhite LED Pool and Spa light fixtures offer superior, bright white illumination for your pool and spa. This owner's manual contains important information on installing and using your new PureWhite LED Pool and Spa light fixture. Read and follow all instructions contained in this manual. Please keep it in a safe place for future reference.

## PUREWHITE LED POOL AND SPA LIGHT FIXTURE NICHE COMPATIBILITY

For LPL-F1W, LPL-F3W and LPL-F5W Series ONLY For LPL-S1W ONLY

**Pentair®:** 78210400, 78210500, 78210600,  
78210700, 79206700

**Hayward®:** SP0604C, SP0600U

**Jandy®:** PLNICLRG, SSNICLRG1R, SSNICLRG1S

**Jacuzzi®:** 94131234

**Pentair®:** 78244200, 78244300,  
78243200, 78243300, 79206600

**Hayward®:** SP0606C, SP0610C

**Jandy®:** PLNICSM, SSNICSM1R,  
SSNICSM1S



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



**WARNING! Comply with all related codes for the installation and use of this product.**

Most states and local codes regulate the construction, installation, and operation of public pools and spas, and the construction of residential pools and spas. It is important to comply with these codes, many of which directly regulate the installation and use of this product. Consult your local building and health codes for more information.

**INSTALLER NOTICE:** This Installation and Operation Guide contains important information about this LED light. Be sure to give this guide to the owner and/or operator of the LED light for reference regarding the proper installation, operation and use of this product.

**RATED FIXTURE LIFE:** The illumination generated by the PureWhite LED light fixtures are based on Light Emitting Diode (LED) technology. The average expected lamp life is rated up to 50,000 elapsed time hours under normal operating conditions. [Temperature: 33°F to 95°F (1°C to 35°C), Humidity: 0-95% non-condensing].



**WARNING! Before installing or using this light, read all warnings and instructions contained in this manual.**

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



**WARNING! Risk of electrical shock or electrocution**

Always disconnect power to the pool and/or spa light at the circuit breaker panel before attempting to service the light. Failure to do so could result in serious injury or death due to electrical shock. Installation must be performed in accordance with all applicable federal, state & local installation codes and ordinances by a licensed or certified electrician or a qualified pool professional. Improper installation may result in death or serious injury to pool users, installers or others due to electrical shock. In addition, improper installation may cause property damage. **This device is not intended for use in anything other than in-ground pools.**



**WARNING! Important Safety Information for Light Installation**

Do not, under any circumstances, splice wire underwater or behind the light niche during the installation of this light.

**INSTALLER NOTICE:** This light's external cord cannot be replaced and should be handled with care. Any damage to this external cord necessitates replacing the light.

## **OPERATION FOR 120VAC AND 12VAC PUREWHITE POOL AND SPA LED LIGHT FIXTURES**

PureWhite pool LED lights are operated through the light's switch. No special controller or interface is required. Use a junction box to connect and operate multiple lights with a single switch.

## **PUREWHITE POOL AND SPA LED LIGHT FIXTURE INSTALLATION (NEW POOL AND/OR SPA CONSTRUCTION)**

The following steps detail installation of the PureWhite LED light fixture into a new pool or spa construction. Read this section in its entirety prior to beginning any installation.

**INSTALLER NOTICE:** A licensed electrician must complete the following steps prior to installation of this light in a new pool or spa construction.



**WARNING!** Confirm that the pool or spa meets all current National Electrical Code (N.E.C.) Article 680-22 requirements and any applicable local codes or ordinances. The

electrical system must be installed by a licensed or certified electrician to meet or exceed those requirements prior to installation of the light. This includes, but is not limited to, the following National Electrical Code requirements:

- Installation of a ground fault circuit interrupter (GFCI) for line voltage models on the lighting circuit with an appropriately rated circuit breaker.
- A junction box or low voltage transformer is located at least 8 inches above the maximum pool water level and at least 48 inches from the pool edge; reference Figure 1.
- Proper electrical bonding of the light fixture and all metal items within 5 feet of the pool
- Proper wet niche installation with the top edge of the underwater light's lens at least 18 inches below the surface of the water in the pool and not more than 20" in Canada; reference Figure 1.
- Proper electrical wet niche bonding and grounding using the #8 AWG ground connector at the rear of the niche; reference Figure 1.

## NEW CONSTRUCTION INSTALLATION STEPS (ONCE ALL ELECTRICAL REQUIREMENTS ARE MET)

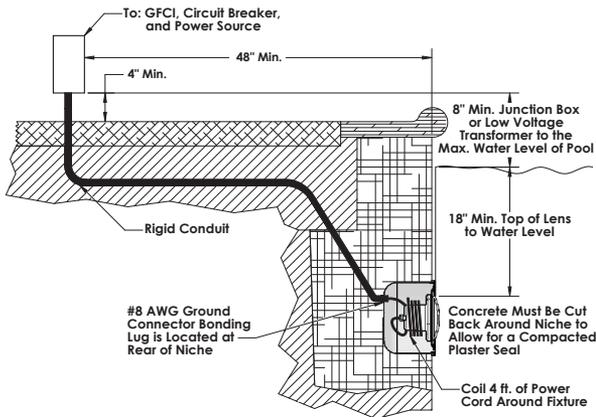


Figure 1.

1. Feed the fixture cord through the conduit to the junction box. Be sure to leave at least four (4) feet of cord at base of the fixture to coil around the light to ensure ease of servicing once the pool and/or spa is filled; reference Figure 1.
2. At the junction box, cut the cord. Be sure to leave at least six (6) inches of cord for making connections.
3. Carefully strip the outer cord jacket to expose six (6) inches of the underlying three insulated wires.
4. Connect these three (3) wires to their corresponding junction box circuit wires and secure the junction box cover in place.



**WARNING!** Do not operate this light for more than two minutes without completely submerging it in water. Failure to do so can result in permanent damage to the light. If the light is operating without being fully submerged in water, the light's circuitry will automatically shut down for a cooling period before powering back on within 10 minutes to prevent damage to the light.

5. Using the stainless steel pilot screw provided, install the PureWhite LED light fixture assembly into the niche, carefully tightening the pilot screw. (Reference Figure 1)



**WARNING! Use only the stainless steel pilot screw provided with this underwater light.**

This special pilot screw secures and electrically grounds the fixture to the mounting ring and wet niche. Failure to install the stainless steel pilot screw provided could create an electrical shock hazard, resulting in death or serious injury to pool users, installers or others.

6. Fill the pool and/or spa to completely submerge the light prior to operating the light. Do not operate light out of water, this may cause damage to the light.

7. Make a final check to confirm proper light operation by switching "on" the main switch or circuit breaker and the light switch. The light should illuminate when power is switched "on". If the light is not operating, go back to Step 1 to recheck each installation step for proper completion.

## **PUREWHITE POOL AND SPA LED LIGHT FIXTURE INSTALLATION (EXISTING POOL AND/OR SPA)**



**Danger - Risk of electrical shock or electrocution!**

Installation of this light must be completed by a licensed or certified electrician or a qualified pool professional in accordance with the National Electrical Code and any applicable local codes and ordinances. Improper installation may result in death or serious injury to pool and spa users, installers or others due to electrical shock. In addition, improper installation may cause property damage.

Always disconnect power to the pool and/or spa light at the circuit breaker panel before attempting to service the light. Failure to do so could result in serious injury or death due to electrical shock. Confirm that the pool or spa meets the current National Electrical Code requirements and any applicable local codes or ordinances. The electrical system must be installed by a licensed or certified electrician to meet or exceed those requirements prior to installation of the light. This includes, but is not limited to, the following National Electrical

Code requirements:

- Installation of a ground fault circuit interrupter (GFCI) for line voltage models on the lighting circuit with an appropriately rated circuit breaker.
- A junction box or low voltage transformer is located at least 8 inches above the maximum pool water level and at least 48 inches from the pool edge; reference Figure 1.
- Proper electrical bonding of the light fixture and all metal items within 5 feet of the pool.
- Proper wet niche installation with the top edge of the underwater light's lens at least 18 inches below the surface of the water in the pool and not more than 20" in Canada; reference Figure 1.
- Proper electrical wet niche bonding and grounding using the #8 AWG ground connector at the rear of the niche; reference Figure 1.
- The wet niche is properly electrically bonded and grounded via the No. 8 AWG ground connector located at the rear of the niche; see Figure 1.

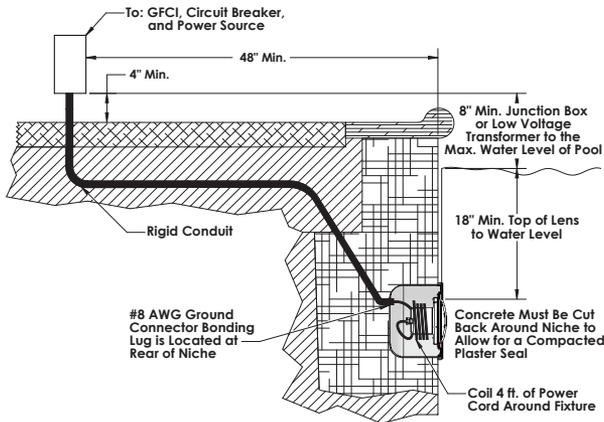


Figure 1.

## EXISTING CONSTRUCTION INSTALLATION STEPS (ONCE ALL ELECTRICAL REQUIREMENTS ARE MET)

The following steps detail installation of the PureWhite LED light fixture into an existing pool or spa. Read this section in its entirety prior to beginning any installation.



**WARNING! Pool or spa electrical system must meet current code requirements.**

Failure to bring the pool or spa electrical system up to current code requirements prior to light installation may create an electrical shock hazard resulting in death or serious injury to users, installers, or others due to electrical shock, and may also cause property damage.



**WARNING! Use only the stainless steel screw provided with this underwater light.**

This special pilot screw secures and electrically grounds the fixture to the mounting ring and wet niche. Failure to install the stainless steel pilot screw provided could create an electrical shock hazard, resulting in death or serious injury to pool and spa users, installers or others.

1. Disconnect the main electrical switch or circuit breaker and the switch which operates the installed light.
2. Remove the existing light per the original manufacturer's instructions. Place the light fixture on the deck.
3. Leaving the light fixture on the deck, cut the light cord. Be sure to leave at least six (6) inches of cord in order to connect it to the replacement light cord. Discard the light fixture.

**INSTALLER NOTICE:** This light's external cord cannot be replaced and should be handled with care. Any damage to this external cord necessitates replacing the light.

4. Remove the existing cord by pulling it up out of the niche and onto the deck. Carefully strip the outer cord jacket to expose six (6) inches of the underlying three insulated wires.
5. Tape the three existing light wires to the replacement light cord with electrical insulating tape. Avoid wrapping too much tape around the cords. Otherwise, the thickness will be too great for the cord to be able to be pulled through the conduit to the junction box.
6. After removing the junction box cover, disconnect the light fixture wires. Then, pull the cord through the conduit until it is visible in the junction box conduit. Remove the tape from the cords and separate the wires.
7. Carefully strip the outer cord jacket from the new light cord to expose six (6) inches of the underlying three insulated wires.
8. Connect these three (3) wires to their corresponding junction box circuit wires and secure the junction box cover in place.
9. Be sure to leave at least four (4) feet of cord at base of the fixture to coil around the light to ensure ease of servicing; reference Figure 1.
10. Install the PureWhite LED light fixture into the niche.
11. Using the stainless steel pilot screw provided, install the PureWhite LED light fixture assembly into the niche, carefully tightening the pilot screw. (Reference Figure 1)
12. Make a final check to confirm proper light operation by switching "on" the main switch or circuit breaker and the light switch. The light should illuminate when power is switched "on". If the light is not operating, go back to Step 1 to recheck each installation step for proper completion.

# J&J ELECTRONICS, INC. 3-YEAR LIMITED WARRANTY POOL UNDERWATER LUMINAIRE LED LIGHT FIXTURES COLOR SPLASH® and PUREWHITE™

J&J Electronics, Inc. ("J&J") warrants its LED In-Ground Light Fixtures 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
Pool/Large Fixture	Three (3) Year	Three (3) Year*
Spa/Small Fixture	Three (3) Year	Two (2) Year*

\*If during the first twenty-four (24) months (Pool/Large Fixture) and first twelve (12) months (Spa/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) (Pool/Large Fixture) and months thirteen (13) through twenty-four (24) (Spa/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 Light 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 an in-ground pool/spa; any other use voids the warranty. Products must be used in lighting equipment designed and approved for the application 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 LEDs. 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

