

Technical Support

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READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL

 DANGER

SERIOUS BODILY INJURY OR DEATH CAN RESULT IF THIS LIGHT IS NOT INSTALLED AND USED CORRECTLY.

 WARNING

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.

IMPORTANT WARNING AND SAFETY INSTRUCTIONS

INSTALLERS AND INSPECTORS

THE GLOBRITE® LED LIGHT AND PLASTIC NICHE FORM A COMPLETE NON-METALLIC LOW VOLTAGE LIGHTING SYSTEM. THIS CONFIGURATION DOES NOT REQUIRE BONDING OR GROUNDING WHEN POWERED BY A LISTED 100 WATT OR 300 WATT TRANSFORMER (LISTED ON PAGE 19) AND INSTALLED IN COMPLIANCE WITH THE CURRENT NATIONAL ELECTRIC CODE (NEC).

UNBONDED LIGHTING NEC PROVISIONS: When the UL listed non-metallic GloBrite LED Light low voltage lights are used with the GloBrite light approved niches (as listed on page 19), the current NEC provides an exception to luminaire bonding and grounding in Article 680.6 and 680.23

POOL WATER BONDING NEC PROVISIONS : For Pool Water Bonding required by NEC Article 680.26C, concrete pools are considered conductive (refer to 680.26 (b)(1) due to the porosity of concrete and the bonding of rebar. No additional bonding is required.

POOL AND SPA FIXED LUMINARIES: Follow these guidelines when installing or replacing Pentair Water Pool and Spa Pool and Spa fixed luminaries:

FOR LIGHT OPERATION, ONLY USE A SAFETY ISOLATION TRANSFORMER.

Note: Connect both wires to the corresponding circuit wires in the Junction Box (black wire to power, and white wire to common) **FIXED POOL AND SPA**

LUMINARIES SPECIFICATION: 12 VAC 50/60 Hz

IMPORTANT NOTICE: THE GLOBRITE LED LIGHT IS A NON-SERVICEABLE LIGHT. THE COMPLETE LIGHT ASSEMBLY MUST BE REPLACED.

GloBrite® White LED Pool Light Overview

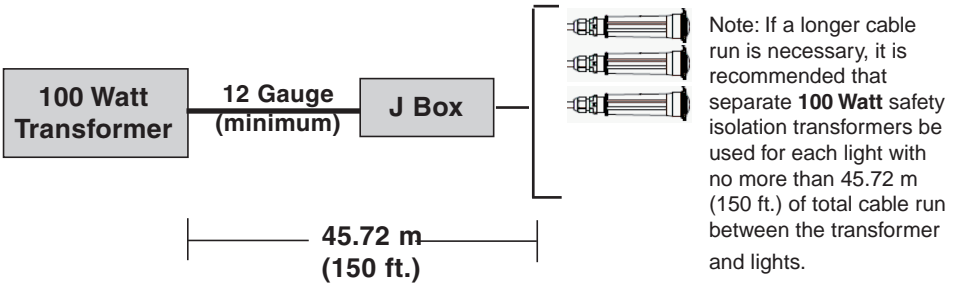
This manual describes how to install and replace the GloBrite White LED Light for pool and spa. The 12 VAC GloBrite White LED Light allows you to choose from one of three brightness levels. For more information see page 2.

Operating GloBrite LED Lights Using a Wall Switch

The GloBrite LED light can be manually controlled using a standard wall-mount light switch. Multiple GloBrite lights can be connected via a junction box and a 12 VAC isolation transformer to a single switch so that all lights can be switched on and off together. For wiring diagram, see page 14.

Using an External Safety Isolation Transformer for Multiple 12 VAC GloBrite Lights

When using multiple GloBrite 12 VAC lights on a **100 Watt** safety isolation transformer, it is recommended that no more than five (5) GloBrite lights be used. For long cable lengths with a single light, It is recommended not to exceed 150 feet (45.72 m) of total cable run between the 12 VAC isolation transformer and the GloBrite light.



Maximum Wattage Using Multiple GloBrite LED lights (with a 300 Watt Isolation Transformer)

IMPORTANT! When using multiple 12 VAC Pentair LED pool and spa lights the total allowable light wattage is 300 Watts maximum. The individual light wattage is as follows:

- One GloBrite Color LED Pool light is 15 Watts maximum
- One GloBrite White LED Pool light is 15 Watts maximum
- One IntelliBrite Color LED pool light is 30 Watts maximum
- One IntelliBrite Color LED spa light is 18 Watts maximum

Selecting a GloBrite White Light Brightness Level using a Wall Switch

GloBrite White lights allow you to choose from one of three brightness levels (100%, 75% and 50%). Whenever the GloBrite white light is turned on, it starts at its highest brightness level (100%). If it has been set to the medium (75%) or low brightness level (50%).

To select one of the GloBrite's three brightness levels (100%, 75% and 50%) first power on the lights, then by rapidly cycling the light switch OFF and ON a specified number of times, you can select the desired light brightness level.

Selecting the light's brightness levels is as follows:

- **100% Brightness:** Switching the lights **OFF**

There are three types of GloBrite White Light niches for pool or spa: Concrete/gunite (see page 5), fiberglass (see page 6) or vinyl liner (see pag 10).

BEFORE STARTING: The following information describes the tasks that must be completed by the electrician *before* the light fixture is installed. See Figure 2 on page 7.

 **WARNING**

Be sure that the pool or spa meets the requirements of the current National Electrical Code (N.E.C.) Article 680-22 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. Some of the requirements of the National Electrical Code which the pool's electrical system must meet are as follows:

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Be sure the electrical system of your pool conforms with the following requirements of the Canadian Electrical Code (CE), and all local codes and ordinances. A licensed or certified electrician must install the electrical system to meet or exceed those requirements before the light and (fixture-housing) is installed. Some of the CE requirements are listed below.

Installing GloBrite® Light Sleeve and Niche in a Concrete/Gunite Pool - Option 1 and Option 2 (see page 6)

Option 1: Niche Sleeve with Cone (Cone is used for applications where the niche is installed after the conduit has been connected to the 2" sleeve)

1. **Install Sleeve: Note:** The GloBrite white light niche must be installed in or on the wall of the pool (or water feature) with the top of the lens not less than 10.2 cm (4 in) below the normal water level of the pool. Refer to Figure 2 on page 7 for the exact depth requirements. The GloBrite white light can also be installed in the bottom of the pool.
2. Install a 5 cm (2 in) PVC pipe Schedule 40, 38.1 cm (15 in.) long in the desired location of the light niche sleeve.
3. Allow at least 2.5 cm (1 in) of the niche sleeve 5 cm (2 in) PVC pipe to extend out on both sides of the wall during your gunite operation. Cut any excess off the pipe so that it is flush against the wall before plastering.
4. Glue a 5 cm (2 in) x 2.54 cm (1 in) reducer bushing to the back side of the niche sleeve.
- 5.

Installing GloBrite® Light Niche in a Fiberglass Pool

To install the GloBrite white light niche in a fiberglass pool:

1. Drill or punch a 5 cm (2 in) hole in the desired location for the GloBrite light niche.
2. Place the sealing gasket on the niche as shown below.
3. Insert the niche through the 5 cm (2 in) hole in the pool wall.
4. Install the PVC washer to the back of the niche.
5. Install the plastic nut onto the back of the niche. Hand tighten the nut to secure the niche in place.
6. Glue the 2.5 cm (1 in) conduit into back of niche.



GloBrite White Light Niche (Fiberglass pool) Installation Diagram

Installing GloBrite® Light Niche in a Vinyl Pool

To install the GloBrite white light niche in a vinyl liner pool:

1. Drill a 7.62 cm (3 in) hole in the desired location for the light vinyl niche.
2. From the inside of the pool, insert the vinyl niche through the 7.62 cm (3 in) hole.
3. Install the plastic nut onto the back of the niche. Hand tighten the nut to secure the niche in place.
4. Place the sealing gasket onto the front of the niche as shown below.
5. Install the vinyl liner.
6. Install the conduit. See Figure 2 on page 7.
7. Using the alignment tabs on the niche, carefully align the faceplate to the niche. Once the faceplate is properly aligned, pierce liner through faceplate and install the screws one at a time.
8. Using a No. 2 Phillips head screwdriver, hand tighten each retaining screw to secure the cover. **DO NOT OVER TIGHTEN THE SCREWS. DO NOT USE A POWER TOOL TO SECURE THE SCREWS.** Over tightening or using a motorized screwdriver on the sealing ring screws can over torque the screw threads and damage the niche housing and/or vinyl liner seal.

1.

6. Place the light installation tool (P/N 620057) over the front of the light. Turn the tool and light clockwise (less than an .3175 cm (1/8th. turn), while pushing inward, until you feel the stop point. This indicates the light is properly seated, locked and the niche is completely sealed.

Note: *If the light does not turn smoothly, pull the light slightly out and make sure that it's seated properly and the niche is free of debris, then install the light as described in step 6.*

7. Before operating the GloBrite white light, fill the pool with water until the light is completely submerged.

Note: *The GloBrite white light should not be powered for more than 30 seconds if is not submersed in water.*

8. **Final check for proper GloBrite light operation:** Switch on the main switch

REPLACING THE GLOBRITE® LIGHT ASSEMBLY (IN AN EXISTING POOL OR SPA)

⚠ DANGER



Risk of Electrical Shock or Electrocution!

This underwater light must be installed by a licensed or certified electrician or a qualified pool professional in accordance with the current National Electrical Code (NEC), NFPA 70 or the Canadian Electrical Code (CEC), CSA C22.1 and all applicable local codes and ordinances. Improper installation will create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock, and may also cause damage to property.

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

**IMPORTANT NOTICE:
THE GLOBRITE LIGHT IS A NON-SERVICEABLE LIGHT. THE
COMPLETE LIGHT ASSEMBLY MUST BE REPLACED.**



Be sure that the pool or spa meets the requirements of the current National Electrical Code (N.E.C.) Article 680-22 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. Some of the requirements of the National Electrical Code which the pool's electrical system must meet are as follows:

The following removal and installation instructions describe how to remove and install the GloBrite light assembly.



Failure to bring the pool or spa's electrical system up to code requirements before installing the underwater light will create an electrical hazard which could result in death or serious injury to pool users, installers, or others due to electrical shock, and may also cause damage to property.

1. **Switch off electrical switch or circuit breaker at the source. Note: DO NOT service the light while in the pool water. Service the light on the deck.**
2. Remove Junction Box or Transformer cover. Disconnect the light wires and attach a fish tape to the existing light power cord. *This will assist in pulling the replacement light power cord through the conduit back to the junction box.*
3. **Remove the GloBrite light assembly from the pool or spa water and place it on the deck:** Using the provided installation tool (P/N 620057), rotate the light assembly counter-clockwise about a 1/8th turn to release the light from the niche as shown on page 10).
4. Slowly pull the light and attached power cord (with attached fish tape) out of the niche. Pull the light's power cord and fish tape out of the niche and place the light on the deck.
5. Attach the new light power cord to the fish tape and carefully feed the fish tape and cable to the junction box.
6. **Install the light into the niche:** Place the light installation tool over the front of the light. Turn the tool and light clockwise while pushing inward, until you feel the stop point. This indicates the light is properly seated, locked and the electrical conduit, is completely sealed (see page 10).
Note: If the light does not turn smoothly, pull the light slightly out and be sure that it's seated properly and the niche is free of debris, then install the light as described in step 5.
7. Connect the two (2) conductors to the corresponding circuit wires in the Junction Box (black wire to power, white wire to common) and secure the Junction Box cover in place.
8. **Final check for proper GloBrite light operation:** Switch on the main switch or circuit breaker to the 12 VAC transformer and the switch that operates the light itself. The light should illuminate when 12 VAC power is applied. If not recheck the installation steps.

SUB-PANEL

ASSEMBLY

GloBrite® White Lights Parts List and Replacement Kits

GloBrite Lights

Part No.	Description
602053	GloBrite 12 VAC 30' cord
602054	GloBrite 12 VAC 50' cord
602055	GloBrite 12 VAC 100' cord
602056	GloBrite 12 VAC 150' cord

GloBrite Bundles

Part No.	Description
619993	Gunite Combo #1- 1 GloBrite 100' w/300W transformer & Gunite niche
619994	Gunite Combo #2 - 2 GloBrite 100' w/300W transformer & 2 Gunite niches
620051	Fiberglass combo #1- 1 GloBrite 100' w/300W txfmr & Fiberglass niche
620052	Fiberglass combo #2 - 2 GloBrite 100' w/300W txfmr & 2 Fiberglass niches
620080	Vinyl combo #1- 1 GloBrite 100' w/300W txfmr and vinyl niche
620081	Vinyl combo #2 - 2 GloBrite 100' w/300W txfmr and two vinyl niches

GloBrite Light Niches

Part No.	Description
620039	Vinyl Niche for GloBrite
620040	Gunite Niche for GloBrite
620041	Fiberglass Niche for GloBrite
620093	Fiberglass Niche for GloBrite (Blue)
620094	Fiberglass Niche for GloBrite (Gray)

GloBrite Light Replacement Kits

Part No.	Description
620054	Vinyl (gasket, front face and screws)
620055	Fiberglass (Washer and Gasket)
620056	Color Ring (Color Ring and Plaster Cover)
620057	O-Ring (O-Ring, Insertion Tool)
620058	Nut (Fiberglass/Vinyl Nut)
620314	Glare Shield
602136	Vinyl Blue, Gaskets (3), Front Face Plate (Blue), Screws (12)
602137	Vinyl Gray, Gaskets (3), Front Face Plate (Gray), Screws (12)
602138	Vinyl White, Gaskets (3), Front Face Plate (White), Screws (12)

Accessory: GloBrite Anti-Glare Screen (P/N 620314 - optional and sold separately)

Note

