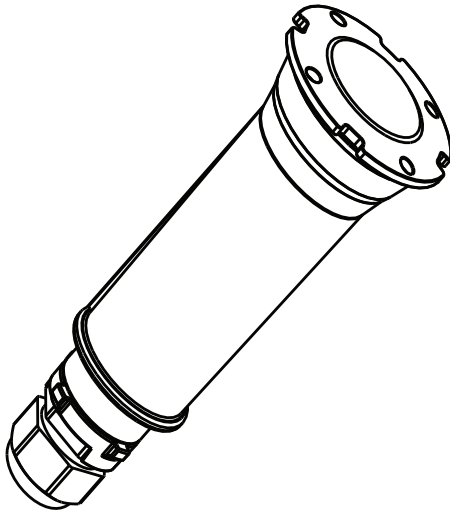




GLOBRITE™ COLOR CHANGING
UNDERWATER LED LIGHT
FOR POOL AND SPA



INSTALLATION
AND
USER'S GUIDE

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

Technical Support

Phone: (800) 831-7133 - Fax: (800) 284-4151

Web sites: www.pentairpool.com and www.staritepool.com:

Contents

IMPORTANT WARNING AND SAFETY INSTRUCTIONS	i-ii
GloBrite Color Changing LED Pool Light Overview	1
Operating GloBrite Color Lights Using a Wall Switch	1
Operating GloBrite Color Lights Using an Automation Control System	1
Using and External Transformer for Multiple 12 VAC GloBrite Color Lights	1
Maximum Wattage Using Multiple Color LED Lights (with a 300 W Transformer)	1
Operating GloBrite Color Lights Using a Wall Switch	2
Powering on the GloBrite Color LED Lights	2
Selecting a GloBrite Light Color and Show Modes or Fixed Color using a Wall Switch	2
Saving a Color Mode or Fixed Color	3
Selecting a GloBrite Color Light Show Mode Using an IntelliBrite Controller	3
GloBrite Color Light Fixture Installation (new pool construction)	4
Installing the GloBrite Color Light Sleeve and Niche (after electrical requirements are met)	4
Installing the GloBrite Color Light Sleeve and Niche in a Concrete/Gunite Pool .	4
Option 1: Light Niche Sleeve with Cone	5
Option 2: Conduit to Light Niche	6
Installing GloBrite Color Light in a Fiberglass Pool	7
Installing GloBrite Color Light in a Vinyl Pool	8
Installing the GloBrite Color Light Assembly (after niche installation)	9
Replacing the GloBrite Color Light Assembly (in an existing pool or spa)	11
Replacing the GloBrite Color Light Assembly (after electrical requirements are met)	12
Connecting GloBrite Color Lights to EasyTouch/IntelliTouch Load Center	13
Setting up GloBrite Color Lights with EasyTouch/IntelliTouch Control System....	15
Wiring GloBrite Color Lights to IntelliBrite Controller and 300 W Transformer	18
Troubleshooting	18
GloBrite Color Lights Parts List and Replacement Kits	19



**READ AND FOLLOW ALL
INSTRUCTIONS IN THIS MANUAL.**

IMPORTANT WARNING AND SAFETY INSTRUCTIONS



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



INSTALLERS, POOL OPERATORS AND POOL OWNERS MUST READ THESE WARNINGS AND ALL INSTRUCTIONS BEFORE USING THE POOL AND/OR SPA LIGHT.



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 NOTICE - Attention Installer: This Installation and User's Guide ("Guide") contains important information about the installation, operation and safe use of this underwater pool and spa light. This Guide should be given to the owner and/or operator of this equipment.



Before installing this product, read and follow all warning notices and instructions in this Guide. Failure to follow warnings and instructions can result in severe injury, death, or property damage. Call (800) 831-7133 for additional free copies of these instructions. Please refer to www.pentairpool.com for more information related to this products.



RISK OF ELECTRICAL SHOCK OR ELECTROCUTION: THE GLOBRITE™ UNDERWATER COLOR CHANGING LED POOL LIGHT REQUIRES HIGH VOLTAGE WHICH CAN SHOCK, BURN, OR CAUSE DEATH.



BEFORE WORKING ON the GloBrite Color Light always disconnect power to the pool and/or spa lights at the source circuit breaker from the light before servicing the light. Failure to do so could result in death or serious injury to service person, pool users or others due to electric shock. When installing and using this electrical equipment, basic safety precautions should always be followed.

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. All applicable local installation codes and ordinances must also be adhered to. 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 power source. 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.



For countries in compliance with International Electrotechnical Commission (IEC) regulatory standards:

The light fixture must be installed by a licensed or certified electrician or a qualified pool service person, in accordance with current IEC 364-7-702 and all applicable local codes and ordinance. Improper installation will create an electrical hazard, which could result in death or serious injury to pool user, installer or other due to electrical shock and may also cause damage to the property.

IMPORTANT WARNING AND SAFETY INSTRUCTIONS

⚠ WARNING Risk of Electrical Shock. Connect only to a branch circuit protected by a ground-fault circuit-interrupter (GFCI). Contact a qualified electrician if you cannot verify that the circuit is protected by a GFCI.

This light must be connected only to a supply circuit that is protected by a ground-fault circuit-interrupter (GFCI). Such a GFCI should be provided by the installer and should be tested on a routine basis. To test the GFCI, push the test button. The GFCI should interrupt power. Push the reset button. Power should be restored. If the GFCI fails to operate in this manner, the GFCI is defective. If the GFCI interrupts power to the light without the test button being pushed, a ground current is following, indicating the possibility of an electric shock. Do not use this light. Disconnect the light and have the problem corrected by a qualified service representative before using.

Locate your pool so that the wall is at least 10 feet (3.048 m) from all electrical receptacles and at least 20 feet (6.1 m) from all receptacles not protected by a GFCI. It is also very important to locate the pool so that it is not under any electrical wiring, that is less than 18 feet (5.49 m) vertically above the pool wall and within an area located 10 feet outside the pool walls. The pool must also never be located under any lighting fixture or within five (5) feet (1.5 m) measured horizontally from any fixture mounted less than five (5) feet (1.5 m) vertically above the pool water level.

NOTICE: The external flexible cable or cord of this luminaire cannot be replaced; if the cord is damaged, the luminaire shall be destroyed.

INSTALLERS AND INSPECTORS

THE GLOBRITE™ COLOR 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 Color 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 Aquatic Systems Pool and Spa fixed luminaries:

- FOR LIGHT OPERATION, ONLY USE A SAFETY ISOLATION TRANSFORMER.

Note: Connect all three wires to the corresponding circuit wires in the Junction Box (black wire to power, white wire to common, and green wire to ground). **FIXED POOL AND SPA LUMINARIES SPECIFICATION: 12 VAC 50/60 Hz**

IMPORTANT NOTICE:

THE GLOBRITE COLOR LIGHT IS A NON-SERVICEABLE LIGHT. THE COMPLETE LIGHT ASSEMBLY MUST BE REPLACED.

GloBrite™ Color Changing LED Pool Light Overview

This manual describes how to install and replace the GloBrite™ Color LED light for pool and spa. GloBrite Color LED lights provide brilliant vivid multi-colors with spectacular effects for your pool. The energy efficient colored array utilizes IntelliBrite® Color LED Light technology and can cycle through colors at varying speeds and in different sequences of color. Choose one of the seven pre-programmed color light shows or select one of the five fixed colors to create virtually endless range of dramatic underwater lighting effects for a spectacular effect in your pool and spa.

Operating GloBrite Color LED Lights Using a Wall Switch

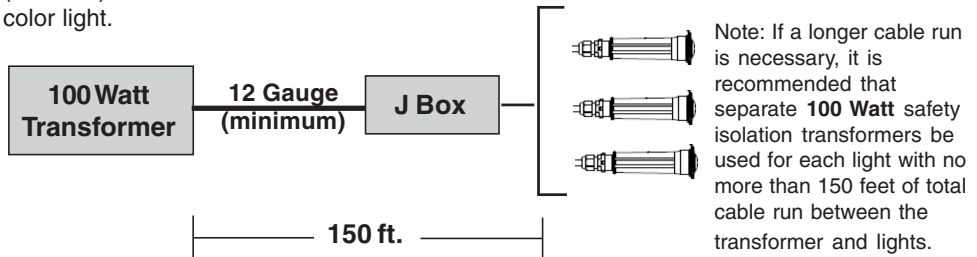
The GloBrite color light can be manually controlled using a standard wall-mount light switch. Multiple GloBrite color lights can be connected via a junction box and a 12 VAC isolation transformer to a single switch so that all lights can be switched on and off together. For wiring diagram, see page 14.

Operating GloBrite Color LED Lights Using Automation Control System

GloBrite color lights can also be automatically controlled using the Pentair IntelliTouch® Control System and the EasyTouch® Control System (see page 14). For more information refer to the IntelliTouch Control System User's Guide (P/N 521075), EasyTouch Control System User's Guide (P/N 521044), and SunTouch® Control System User's Guide (P/N 520785).

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

When using multiple GloBrite 12 VAC color lights on a **100 Watt** safety isolation transformer, it is recommended that no more than three (3) GloBrite color 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 color light.



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

IMPORTANT! When using multiple 12 VAC Pentair® LED white 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 23 Watts maximum
- One AmerBrite White LED (500W) pool light is 51 Watts maximum
- One AmerBrite White LED (400W) pool light is 44 Watts maximum
- One AmerBrite White LED (300W) pool light is 36 Watts maximum
- One AmerBrite Color LED pool light is 36 Watts maximum
- One IntelliBrite Color LED pool light is 30 Watts maximum
- One IntelliBrite Color LED spa light is 18 Watts maximum

Operating GloBrite™ Color Lights Using a Wall Switch

GloBrite™ Color Lights can be controlled using a standard wall-mount light switch or by the IntelliBrite® Controller (see page 3). Multiple GloBrite color lights can be connected via a junction box and a 12 VAC transformer to a single switch so that all lights can be switched on and off together. GloBrite color lights are controlled by cycling AC power to the 12 VAC transformer from a standard wall switch. By turning the switch on and off a specific number of times, the light activates one of the seven light show modes, fixed colors, or enables the “Hold” and “Recall” feature.

Powering on the GloBrite Color LED Lights

When the GloBrite color light is powered on, the previously selected color is displayed, unless the HOLD or RECALL feature was previously enabled.

Note: If power to the light is off for more than five (5) seconds, the last color show mode or fixed color that was saved will be displayed.

Selecting a GloBrite Color Light Show Mode or Fixed Color using a Wall Switch

GloBrite color lights are compatible with IntelliBrite color light colors and shows and can be synchronized with IntelliBrite color lights.

First switch power on to the light. A white light will momentarily illuminate, followed by the previously selected color. To select a color show mode (1-7) or fixed color (8-12), turn the wall switch off/on a specific number of times. Each number (1-12) shown below corresponds to the number of times to power-cycle the switch to activate a color light show or fixed color. For details about saving color effects while in “show” modes, see “Hold” and “Recall” feature on page 3.

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..... | 1 | : SAM Mode: Cycles through white, magenta, blue and green colors (emulates the Pentair SAM® color changing light). |
| ..... | 2 | : Party Mode: Rapid color changing building energy and excitement. |
| ..... | 3 | : Romance Mode: Slow color transitions creating a mesmerizing and calming effect. |
| ..... | 4 | : Caribbean Mode: Transitions between a variety of blues and greens. |
| ..... | 5 | : American Mode: Patriotic red, white and blue transition. |
| ..... | 6 | : California Sunset Mode: Dramatic transitions of orange, red and magenta tones. |
| ..... | 7 | : Royal Mode: Richer, deeper color tones. |
| ..... | 8 | : Blue: Fixed color. |
| ..... | 9 | : Green: Fixed color. |
| ..... | 10 | : Red: Fixed color. |
| ..... | 11 | : White: Fixed color. |
| ..... | 12 | : Magenta: Fixed color. |
| ..... | 13 | : Hold: Save the current color effect during a color light show. |
| ..... | 14 | : Recall: Activate the last saved color effect. |

Example: To select **California Sunset Mode**; turn the switch off and on six (6) successive times. During the off/on switching process, no illumination will occur, then a white light will momentarily illuminate.



WARNING During the off/on switching process, before the selected color is displayed, no illumination will occur. This operating mode is normal during the switching process. During this period the pool and spa will be dark and precautions should be taken to avoid unforeseen accidents. Failure to observe this warning may result in serious injury or death to pool and spa users.

Saving a Color Mode or Fixed Color

When power is switched off to the GloBrite™ Color Lights, the last color show mode or fixed color will be saved. The next time the light is powered on, the previously saved color show mode or fixed color will be displayed. For example, while in “Party Mode” switch the light off. Wait more than 10 seconds, switch the light back on to resume “Party Mode.”

Selecting a GloBrite Light Color and Show Modes or Fixed Color Using an IntelliBrite® Controller

Instead of using a wall switch, GloBrite color lights can be controlled with the IntelliBrite Controller (p/n 600054, sold separately). The IntelliBrite® Controller provides complete control of your GloBrite color lights. It's easy to select a lighting feature, just dial in any one of the pre-programmed color light shows or fixed colors. Using the Hold and Recall buttons you can also create endless unique lighting effects. The IntelliBrite Controller can be connected to individual or multiple 12 VAC transformers to control GloBrite color lights. The IntelliBrite Controller can also control multiple GloBrite and IntelliBrite lights.



Note: For IntelliBrite controller wiring instructions, see page 18.

Using the IntelliBrite® Color Light Controller: GloBrite color lights are compatible with IntelliBrite colors and shows and can be synchronized with IntelliBrite color lights and landscape lights. To select a color light show mode or fixed color mode, rotate the dial so that it points to the desired selection. The color mode selections start in a clockwise direction from the 9 o'clock position.

Hold and Recall Feature

Hold button/LED: Press this button (LED on) to capture and save a color effect while displaying one of the light show modes. When the button is pressed, the LED will be on, indicating that the color effect is captured.

Recall Button/LED: Use this button (LED on) to activate the last saved color effect. When the button is pressed, the LED will be on, indicating that the color effect is being displayed.

GLOBRITE™ COLOR LIGHT FIXTURE INSTALLATION (NEW POOL CONSTRUCTION)

The following describes how to install the GloBrite™ Color Light fixture.

BEFORE STARTING: The following information describes the tasks that must be completed by the electrician *before* the light fixture is installed. See Figure 1 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:

- The lighting circuit has a Ground Fault Circuit Interrupter (GFCI) for 120 VAC line voltage models, and has an appropriately rated circuit breaker. The conductors on the load side of the GFCI circuit shall not occupy conduit, boxes, or enclosures containing other conductors unless the additional conductors are also protected by a GFCI. Refer to current local codes for complete details.
- The Junction Box and the low voltage transformer is located at least eight (8) inches (20.3 cm) above ground level and at least 48 inches (1.22 m) from the edge of the pool. See Figure 1 on page 7.
- The GloBrite color light niche must be properly installed so that the top edge of the lens of the GloBrite color light is at least 4 inches below (not more than 48 inches below in Canada) the surface of the water in the pool or spa.
- To be certain that the pool or spa electrical system meets all applicable requirements, the electrician should also consult the local building department.

INSTALLING THE GLOBRITE COLOR LIGHT SLEEVE AND NICHE (AFTER ELECTRICAL REQUIREMENTS ARE MET)

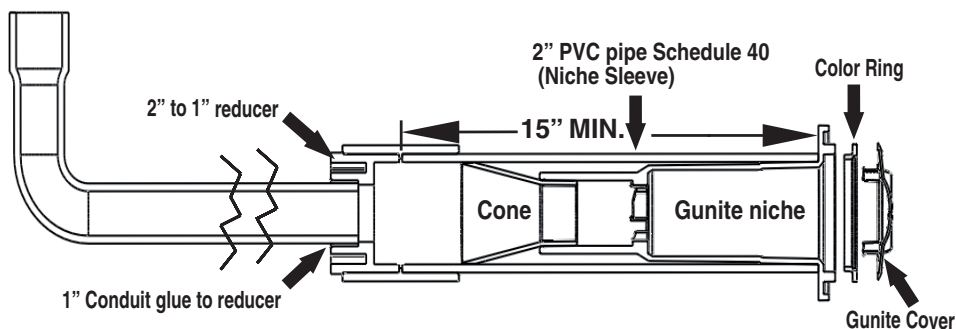
There are three types of GloBrite Color Light niches for pool or spa: Concrete/gunite, fiberglass or vinyl liner.

Note: The GloBrite color 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 4 inches (10.2 cm) below the normal water level of the pool. The GloBrite color light can also be installed in the bottom of the pool.

Installing GloBrite™ Color 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:** Locate position on vertical pool or spa wall where light is to be installed. The top of the light lens must be a minimum of four (4) inches below normal water level. Refer to Figure 1 on page 7 for the exact depth requirements.
2. Install a 2 inch (5 cm) PVC pipe Schedule 40 15" (38.1 cm) long in the desired location of the light niche sleeve.
3. Allow at least 1 inch (2.5 cm) of the niche sleeve (2 inch (5 cm) 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 2" x 1" reducer bushing to the back side of the niche sleeve.
5. Glue the 1" conduit into the reducer as shown below in "Option 1 Installation Diagram". Make sure the 2" PVC pipe Schedule 40 accommodates for the total length of niche/cone and reducer assembly.
6. Glue the cone into gunite niche (the cone is used to guide the fish tape from the junction box into the niche).
7. Apply PVC cement to the inside of the sleeve. Slide the gunite niche into the sleeve until it is flush with the gunite wall.
8. Install the desired color ring to the front of the niche.
Note: If required by local codes, install the light into niche as described on page 9.
9. Using the niche cover to seal the front of the niche, snap on the gunite cover over the front of the niche. This will protect the light cooling cavity of the niche during plastering. Note: If a gunite cover is not available, use masking tape to protect lens and cooling cavity from plaster operation.
10. Apply gunite plaster to pool wall up to the outer edge of the gunite cover. The gunite cover should be the only exposed part of the niche after plastering.
11. After the plastering has been completed, remove and dispose of the gunite cover.



Option 1: Niche Sleeve with Cone - Installation Diagram

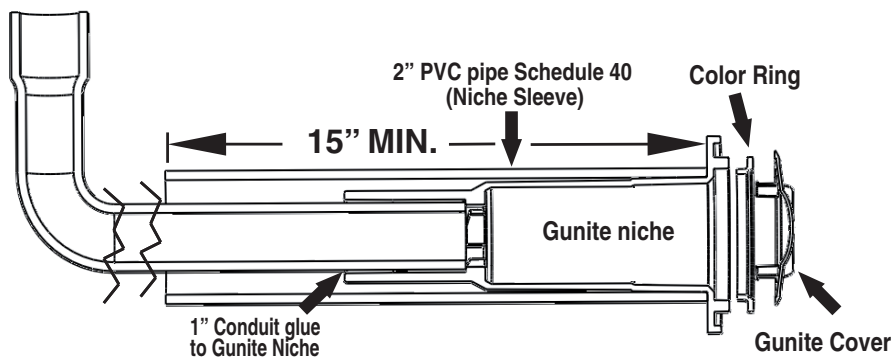
Option 2: Install Conduit to Light Niche

To install the conduit onto the GloBrite™ Color Light niche:

1. **Install Sleeve:** Locate position on vertical pool or spa wall where light is to be installed. The top of the light lens must be a minimum of four (4) inches below normal water level. Refer to Figure 1 on page 7 for the exact depth requirements.
2. Install a 2 inch (5 cm) PVC pipe Schedule 40 15" (38.1 cm) long in the desired location of the light niche sleeve.
3. Allow at least 1 inch (2.5 cm) of the niche sleeve (2 inch (5 cm) 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. Pull the fish tape and the light power cord through the 1" conduit and the 2" PVC sleeve schedule 40.
5. Glue the 1" conduit into the back of the conduit shown below in "Option 2 Installation Diagram".
6. Glue the cone into gunite niche (the cone is used to guide the fish tape from the junction box into the niche).
7. Apply PVC cement to the inside of the sleeve. Slide the gunite niche into the sleeve until it is flush with the gunite wall.
8. Install the desired color ring to the front of the niche.

Note: If required by local codes, install the light into niche as described on page 9.

9. Using the niche cover to seal the front of the niche, snap on the gunite cover over the front of the niche. This will protect the light cooling cavity of the niche during plastering. Note: If a gunite cover is not available, use masking tape to protect lens and cooling cavity from plaster operation.
10. Apply gunite plaster to pool wall up to the outer edge of the gunite cover. The gunite cover should be the only exposed part of the niche after plastering.
11. After the plastering has been completed, remove and dispose of the gunite cover.



Option 2: Conduit to Light - Installation Diagram

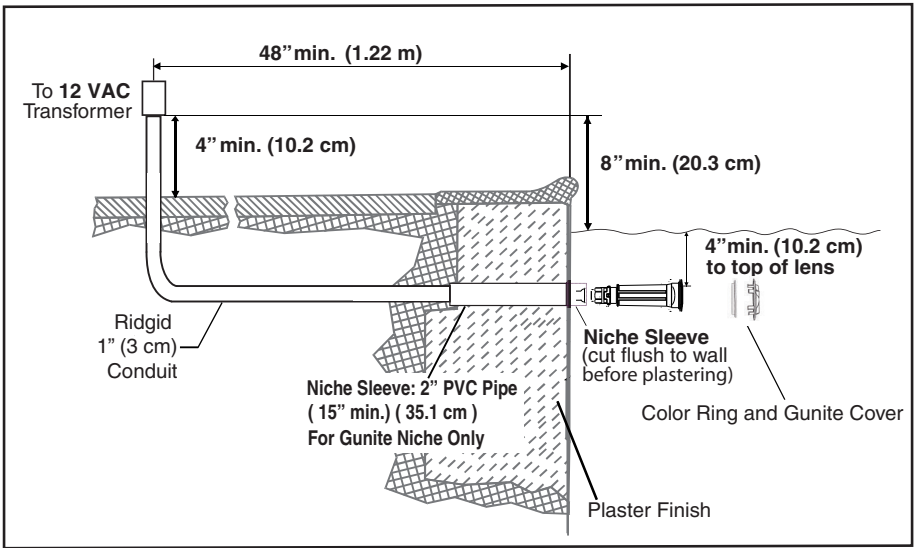
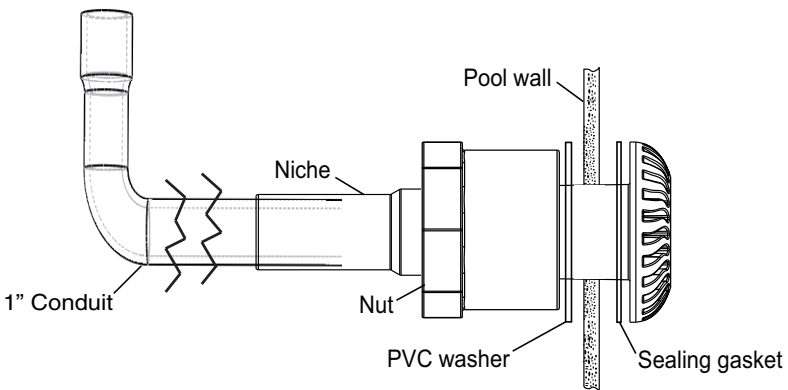


Figure 1: Gunite Light Installation Diagram

Installing GloBrite™ Color Light Niche in a Fiberglass Pool

To install the GloBrite™ color light niche in a fiberglass pool:

1. Drill or punch a 2-1/8 inch 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 2-1/8 inch 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 1" conduit into back of niche.

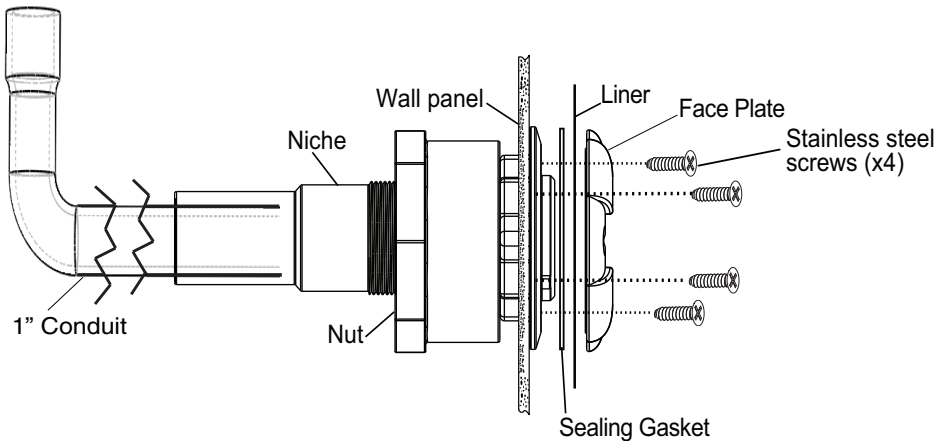


GloBrite Color Light Niche (Fiberglass pool) Installation Diagram

Installing GloBrite™ Color Light Niche in a Vinyl Pool

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

1. Drill a 3 inch hole in the desired location for the light vinyl niche.
2. From the inside of the pool, insert the vinyl niche through the 3" 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 1 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, 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.

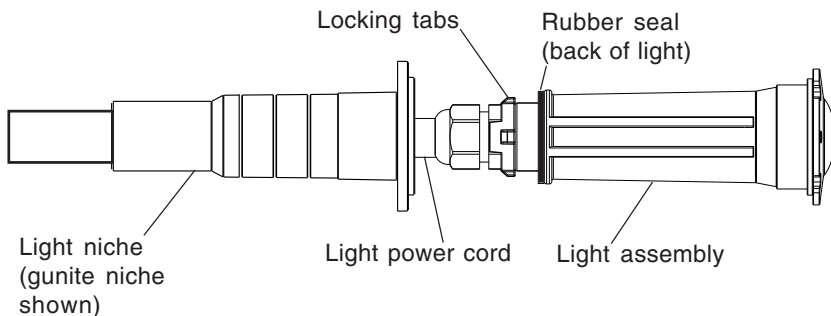


INSTALLING THE GLOBRITE™ COLOR LIGHT ASSEMBLY (AFTER NICHE INSTALLATION)

To install the GloBrite™ color light into the gunite, fiberglass or vinyl niche:

1. Route the GloBrite light power cord through the front of the niche, to the location of the 12 VAC pool transformer or junction box.
2. At the 12 VAC transformer or junction box, cut off any extra cord. Leave at least six (6) inches (15.2 cm) of cord in the Junction Box or transformer to facilitate the light installation, niche inspection. Cut off any extra cord. See Figure 1 on page 7.
3. Strip back the outer cord jacket of the wires to expose the two (2) insulated conductors. Strip back the two conductors. Be careful not to damage the copper conductor.
4. Connect the two (2) conductors to the corresponding circuit wires in the Junction Box (black wire to power, white wire to common). Secure the Junction Box cover.
5. **Install the new GloBrite light assembly:** Push the light into the niche while pulling the power cord from the junction box or transformer, making sure the locking tabs in the back end of the light are properly aligned with the niche openings (inside the niche).

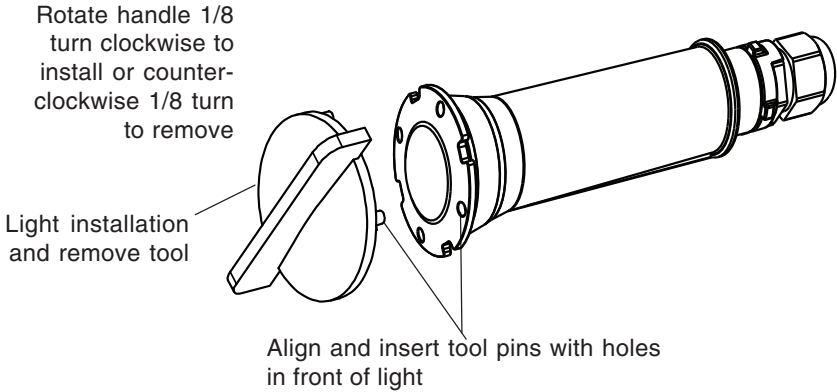
Note: When using longer runs of cables or multiple lights per transformer, it is recommended to use the 13 VAC or 14 VAC tap on the transformer.



GloBrite Niche and Light

6. Place the light installation tool (P/N 620057) over the front of the light. Turn the tool and light clockwise (less than an 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.*



GloBrite™ Color Light Installation/Removal Tool

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

Note: *The GloBrite color 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 or circuit breaker to the 12 VAC transformer and the switch that operates the GloBrite light itself. The light should illuminate when the 12 VAC power is applied. If not recheck the installation steps.

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

⚠ DANGER



Risk of Electrical Shock or Electrocutation!

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 COLOR LIGHT IS A NON-SERVICEABLE LIGHT.
THE COMPLETE LIGHT ASSEMBLY MUST BE REPLACED.**

⚠ WARNING

Verify that the pool and spa 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. Some of the requirements of the National Electrical Code which the pool's electrical system must meet are as follows:

- The lighting circuit has a Ground Fault Circuit Interrupter (GFCI) for 120 VAC line voltage models, and has an appropriately rated circuit breaker. The conductors on the load side of the GFCI circuit shall not occupy conduit, boxes, or enclosures containing other conductors unless the additional conductors are also protected by a GFCI. Refer to local codes for complete details.
- The Junction Box and the low voltage isolation transformer is located at least eight (8) inches (20.3 cm) above ground level and at least 48 inches (1.22 m) from the edge of the pool. See Figure 1 on page 7.
- The GloBrite™ color light niche must be properly installed so that the top edge of the GloBrite light's lens is at least 4 inches below (not more than 48 inches below in Canada) the surface of the water in the pool or spa.
- To be certain that the pool or spa electrical system meets all applicable requirements, the electrician should also consult the local building department.

REPLACING THE GLOBRITE™ COLOR LIGHT ASSEMBLY (AFTER ELECTRICAL REQUIREMENTS ARE MET)

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

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

WARNING

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,**
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 color light assembly from the pool or spa water:** 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™ Color 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.

CONNECTING GLOBRITE® COLOR LIGHTS TO EASYTOUCH® OR INTELLITOUCH® CONTROL SYSTEM LOAD CENTER TO AN AUXILIARY RELAY

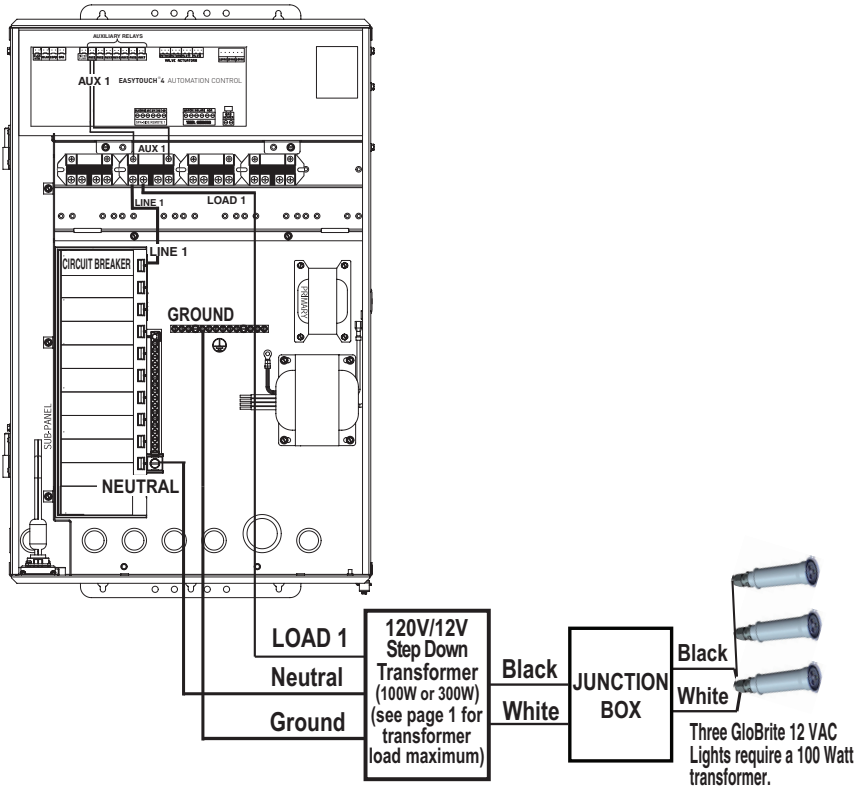
 **DANGER**

D A N G E R !

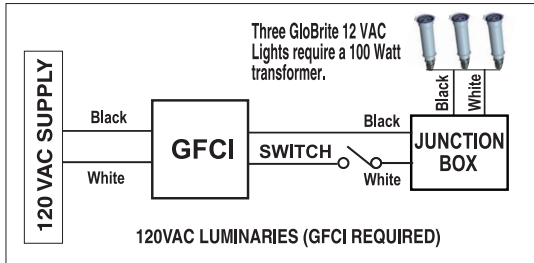
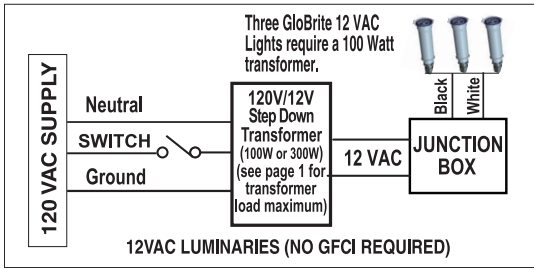
RISK OF ELECTRICAL SHOCK OR ELECTROCUTION

Always disconnect AC power to EasyTouch and IntelliTouch control system load center at the circuit breaker before servicing, or removing the **HIGH VOLTAGE FRONT PANEL**. Failure to do so could result in death or serious injury to installer, service person, pool users, or others due to electrical shock.

1. **EasyTouch or IntelliTouch Control System Load Center:** Unlatch the enclosure door spring latch, and open the door.
2. **Discharge Electrostatic energy before removing the cover by first touching the metal part of the enclosure.**
3. Loosen the two (2) retaining screws from the HIGH VOLTAGE FRONT PANEL. Remove the panel from the enclosure.
4. Run the GloBrite color light power cord to a auxiliary relay in the EasyTouch/IntelliTouch load center.
5. Connect the 120 Volt side of a 12 VAC transformer to the LOAD SIDE of one of the auxiliary (AUX) relays in the load center.
6. Connect the Neutral conductor from the 12 VAC transformer to the Neutral bus bar in the load center.
7. After the connection has been completed, close the control panel and secure it with the two (2) retaining screws.
8. Close the load center front door. Fasten the spring latch.



EasyTouch® and IntelliTouch® Control System Load Center Wiring Diagram



GloBrite™ Color Light with Wall Switch Wiring Diagram

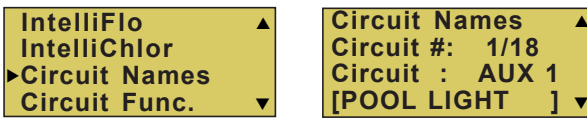
SETTING UP GLOBRITE™ COLOR LIGHTS WITH EASYTOUCH® AND INTELLITOUCH® CONTROL SYSTEM

EasyTouch® Control System

The following describes how to setup the GloBrite™ Color Light from the EasyTouch® control system indoor control panel or the EasyTouch control system wireless control panel. From the EasyTouch control panel you can control the light shows.

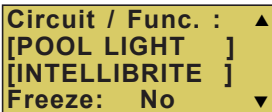
To set up a GloBrite light circuit; assign the “Light Circuit Name” to the relay circuit (example; AUX 3, as “Pool Light”) and “Function”: assign the name “Pool Light” circuit in the Circuit Func. menu as a “light” circuit (IntelliBrite). After assigning the circuit name and function, the light circuit name “Pool Light” can be setup in the CONFIG menu for light position, color etc.

To assign a Circuit Name go to: MENU > SETTINGS > CIRCUIT NAMES



1. Press the **Up/Down button** to select a circuit number 1/18. Press the Up button two times to select **AUX 1** to choose this circuit for a light circuit On/Off button. The circuit number (1/18) corresponds to its assigned circuit name.
2. Press the **Up/Down button** to scroll through the list of preset names. Select a name such as “Pool Light.” AUX 1 has now been assigned the circuit name “Pool Light.”

To assign a Circuit Function go to: MENU > SETTINGS > CIRCUIT FUNC.



3. Press the Menu button to return to the Settings menu. Press the Down button to and select “Circuit Func.” Press the Right button to access the Circuit Func. menu.
4. Press the **Up/Down button** to select the already assigned circuit name “Pool Light.”
5. Press the **Right button** to view “Circuit Functions” to assign to light circuit “Pool Light.”
6. Press the **Up/Down button** to select the type of light circuit function to use. Select “INTELLIBRITE” for the GloBrite light circuit function.
7. Press the Menu button three times to return to the main screen.

Operating the GloBrite lights: The GloBrite™ color light is ready to operate using the EasyTouch control panel button 1 (auxiliary 1 circuit). To access the Lights menu screen (*special Light Features*), press **Menu > Lights**. The Lights menu settings are: MODES, COLORS, ALL ON, ALL OFF, SYNC, MAGICSTREAM, CONFIG: From the Modes screen you can control the color light shows. To access the Modes menu, press Menu > Lights > Modes. See page 2 for GloBrite color light shows.

IntelliTouch® Control System

The following describes how to setup the GloBrite™ Color Light from the IntelliTouch® control system control panel. From the IntelliTouch® control system control panel you can control the light shows. To access the GloBrite light screens, from the IntelliTouch indoor control panel or the MobileTouch® Wireless Remote control panel.

Assigning a Circuit Name

To identify the GloBrite light connected to the auxiliary circuits (AUX 1, AUX 2) in the IntelliTouch load center, you need to assign the GloBrite light circuit name to the corresponding auxiliary circuits in the IntelliTouch indoor control panel. Choose a circuit name from the preset list of names for the GloBrite light connected to the auxiliary relay installed in the IntelliTouch load center.

Assigning a Circuit Name for the GloBrite Light: To assign a Circuit Name for the GloBrite light, go to: **MENU > SETUP > ADVANCED > CIRCUIT NAMES > ASSIGN CIRCUIT NAMES > DISPLAY.**

Selecting DISPLAY Screen 1, 2, 3, or 4: The auxiliary circuits that control the pool and spa equipment can be accessed from the “Display” screen on the Indoor Control Panel or MobileTouch wireless control panel. Selecting the button next to Display 1, 2, 3, or 4 displays the screen with circuits belonging to that particular expansion Load Center or Power Center. “Feature Circuits” can also be assigned from this screen.

To assign circuit names for a specific display screen:

Display #1 - This screen shows circuit names for the filter pump, pool and spa modes, and all high voltage auxiliary circuits connected to the main Load Center or Power Center. **Display #2** - This screen shows circuit names for the additional auxiliary circuits connected to the first expansion center (Load Center or Power Center).

Display #3 - This screen shows circuit names for the additional auxiliary circuits connected to the second expansion center (Load Center or Power Center)

Display #4 - This screen shows circuit names for the additional auxiliary circuits connected to the third expansion center (Load Center or Power Center).

To assign a GloBrite light circuit name for the MAIN SCREEN:

1. Select the button next to Display #1. These are the circuit names that will be displayed on the Main Screen. Note: If there is an expansion Load Center or Power Center installed, select the appropriate Display #2, #3, or #4 associated with that expansion Load Center or Power Center.
2. From the Main Display screen, press the button next to AUX 1. A small arrow pointing to AUX 1 is displayed.
3. Use the Up and Down buttons at the bottom of the screen to scroll through the alphabetical list of preset equipment names. Choose the equipment name that matches the label name for button number 1 on the Load Center Outdoor Control Panel.
4. Continue to name other auxiliary circuits (AUX2, AUX3, etc.): After selecting the equipment name you want to use for AUX 1, press the button next to the AUX 2 and choose a circuit name. The small arrow indicates which circuit is selected for naming.
5. Repeat the process to assign the other equipment to circuits on this screen.
6. When you have finished assigning equipment circuit names, press the Save button. Press the Exit button to return to the Main screen.
7. **CONTINUE TO NEXT PAGE to set up the GloBrite “Function Circuit.”**

Set up a GloBrite™ Color Light Circuit Function

To setup an AUX circuit to control the GloBrite™ color light, assign the circuit light function an auxiliary relay circuit (AUX 1), then assign the circuit name for that light circuit. The light circuit name will appear on the main screen. Each GloBrite light must also be assigned a circuit function.

To assign a Circuit Name for the GloBrite light, go to: MENU > SETUP > ADVANCED > CIRCUIT FUNCTIONS

Setup a GloBrite light function circuit: Assign each light auxiliary relay circuit a circuit name, then assign that light relay circuit in the “CIRCUIT FUNCTIONS” section, as “INTELLIBRITE.”

To setup the GloBrite light circuit function (use the “IntelliBrite” circuit name):

1. Press the button next to the AUX button (the relay auxiliary circuit connected to the GloBrite (IntelliBrite) light).
2. Press the right or left side (PREV/NEXT) button next to “INTELLIBRITE.” Scroll through the circuit functions until “INTELLIBRITE” is displayed.
3. Press the SAVE button on the bottom of the screen. Press the EXIT button to return to the main screen.

Assign the GloBrite light circuit to the Lights screen:

4. Press the Lights button on the bottom of the screen.
5. Press the right side button next to “CONFIGURE.”
6. Press the button next to “NONE” to assign an IntelliBrite light circuit to the selected button. Light names can be setup to display on the left side for “Spa” features and on the right side for the “Pool” features.
7. Press the top left or right side button to scroll through the available light circuits which can be used for the GloBrite (IntelliBrite) lighting features. Select at the circuit name you wish to use. The displayed circuit names are circuit names that were previously assigned when assigning a circuit function.

Operating and Selecting GloBrite (IntelliBrite® Color Light) Color Modes

From the “Modes” screen you can select various preset show color lighting effects, such as “American mode” and “Sunset mode,” and Pentair SAM® Color Changing Light (an emulation of the SAM color scheme). Using the “Hold” and “Recall” feature you can also capture and save a unique color effect to recall at a later time.

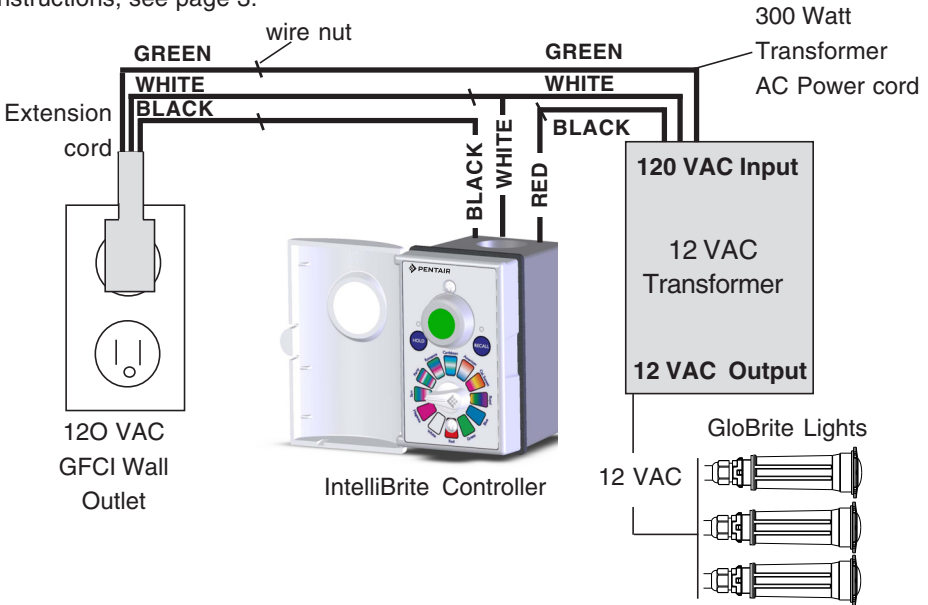
Modes screen

To access the IntelliBrite® Color Light color show “Modes” features from the Lights screen, press the Lights button on the bottom of the screen, then press the left side button next to “MODES.”

Special Light Features: Up to twelve (12) IntelliBrite light circuits can be displayed on the main Lights screen (special light features). From the Lights screen you can activate the IntelliBrite lighting features (i.e., color swim, color set). Assuming each GloBrite (IntelliBrite) light has its own relay and separate circuit.

Wiring GloBrite™ Color Lights to IntelliBrite Controller and 300 Watt Transformer

The following diagram shows how to connect GloBrite™ color light to an IntelliBrite Controller using a 300 Watt transformer. Note: For GloBrite light operating instructions, see page 3.



Troubleshooting (GloBrite™ Color Lights)

Problem	Cause/Action
The light will not illuminate.	Check the GFCI ground fault wiring and reset if necessary.
Light does not function properly.	Check the light wiring connection to the junction box at the pool side and to the AC power switch. Be sure that there is proper AC power applied to the light.

Troubleshooting (IntelliBrite® Controller)

Problem	Cause/Action
Both of the LEDs are flashing.	The IntelliBrite Controller has detected that the load has exceeded the maximum allowable wattage or the output is shorted out. 1. Switch off the IntelliBrite Controller OFF. Remove excessive load or short. 2. Press the IntelliBrite Controller power switch to power on the unit. Ensure that the LEDs are no longer flashing.
The light will not illuminate.	Check the ground fault wiring and reset if necessary.
Light does not function properly.	Check the light wiring connection to the junction box at the pool side and to the main circuit breaker. Be sure that there is proper AC power applied to the light.

GloBrite™ Color 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 (includes White, Blue and Grey face rings)
620040	Gunite Niche for GloBrite
620041	Fiberglass Niche for GloBrite
620093	Fiberglass Niche, GloBrite (Blue)
620094	Fiberglass Niche, GloBrite (Grey)

GloBrite™ Light Replacement Kits

Part No.	Description
620054	Vinyl (gasket, front face and screws (4))
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)



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