



IntelliBrite® 5g

Underwater Pool
Color-Changing LED Light



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

visit www.pentairpool.com and www.staritepool.com:

CONTENTS

IMPORTANT SAFETY INSTRUCTIONS	i
IntelliBrite 5g Underwater Pool LED lights Overview	1
Operating IntelliBrite 5g LED lights (120 VAC and 12 VAC models)	1
IntelliBrite 5g Pool LED Light Voltages	1
Using an External Transformer for Multiple IntelliBrite 12 VAC lights	1
Operating IntelliBrite 5g LED lights using a wall switch	2
Selecting a light show mode or fixed color	2
IntelliBrite Controller (optional)	3
Saving a color mode or fixed color	4
Hold and Recall feature	4
Powering on the light / Troubleshooting	5
IntelliBrite 5g Pool LED Light Fixture Installation (new pool construction)	6
Installing the IntelliBrite 5g light Fixture (after electrical requirements are met)	7
Replacing the IntelliBrite 5g Pool LED Light Assembly (in an existing pool) ..	9
Replacing the IntelliBrite 5g Pool LED light (after electrical requirements are met)	10
Replacing the IntelliBrite 5g Pool LED Circuit Board (in an existing pool)	11
Wide and Narrow Angle Lens Adjustment	17
IntelliBrite 5g Pool LED Light Assembly (Replacement Kit Part Numbers)	18

© 2010 Pentair Water Pool and Spa, Inc. All rights reserved.

1620 Hawkins Ave., Sanford, NC 27330 • (919) 566-8000

10951 West Los Angeles Ave., Moorpark, CA 93021 • (805) 553-5000

IntelliBrite®, IntelliTouch®, SAm®, EasyTouch® and Pentair Water Pool and Spa® is a registered trademark of Pentair Water Pool and Spa, Inc. and/or its affiliated companies in the United States and/or other countries. Unless noted, names and brands of others that may be used in this document are not used to indicate an affiliation or endorsement between the proprietors of these names and brands and Pentair Water Pool and Spa, Inc. Those names and brands may be the trademarks or registered trademarks of those parties or others.

P/N 619827 Rev C - 07/14/10

WARNINGS AND IMPORTANT SAFETY PRECAUTIONS



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



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



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 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.



WARNING 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:

INTELLIBRITE® 5g POOL LED LIGHTS REQUIRE HIGH VOLTAGE WHICH CAN SHOCK, BURN, OR CAUSE DEATH.

BEFORE WORKING ON INTELLIBRITE 5g POOL LED LIGHTS! Always disconnect power to the pool and/or spa lights at the 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.

This underwater light must be installed by a licensed or certified electrician or a qualified pool professional in accordance with the 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 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 serviceman, pool users or others due to electrical shock.

READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL.



Important Safety Information for Light Installation

- All Niche and Light installations must conform with all codes. If local codes mandate a cord seal, use Pentair Water Pool and Spa Inc., ("Pentair") plastic niches (P/N 79206600 and P/N 79206700).
- Under **no circumstances** replace lights by splicing wire under water or behind niche.

WARNINGS AND IMPORTANT SAFETY PRECAUTIONS

⚠ WARNING RISK OF ELECTRIC SHOCK AND INJURY. USE ONLY THE INSTALLATION METHOD SPECIFIED BELOW.

Location of Luminaire Use	Pentair Water Pool and Spa Fountain Fixture* (P/N 560001 and P/N 560000)	Required Installation Method
Swimming Pool and Spa	Wet-Niche Swimming Pool (or Spa) Luminaire (Light)	Fixture Housing (Forming Shell) ONLY. DO NOT USE Fountain Fixture Stand.
Fountain	Wet-Niche Submersible Luminaire (Light) swimming Pool (or Spa) Luminair (Light)	Fixture Housing (Forming Shell) or Fountain Fixture Stand.

(*) Note: Wet-niche luminaires complying with requirements for both uses may bare both the Listed Wet-Niche Submersible Luminaires UL Mark. A luminaire not bearing the corresponding UL Listing Mark is not considered by UL to have been produced under UL's Listing and Follow-Up Service for the associated usage location.

CAUTION - The Pentair Water Pool and Spa® IntelliBrite 5g LED light fixture must only be used with Pentair Water Pool and Spa fixture housings (niches). If the IntelliBrite LED light fixture is installed into other niches, the installation will not carry U.L. approval and will void all warranties.

⚠ WARNING Salt is an inherently corrosive material. While the levels of salt required for proper operation of an electronic chlorine generator are relatively low when compared to sea water and other salt solutions, placing any amount of salt in your pool increases the likelihood of corrosion or other deterioration of pool equipment and any surfaces used in and around your pool. Metal parts and certain natural and man-made surfaces are particularly susceptible to corrosion and deterioration when used in and around salt water pools. Pentair Water Pool and Spa does not represent or otherwise guarantee that the proper use of an electronic chlorine generator will prevent corrosion or other deterioration of pool equipment and any surfaces used in and around your pool. Consult your experienced pool professional, who should be able to advise you on the proper material selection, installation techniques for those materials, and the proper use, care and maintenance of those materials for your specific pool type and location in order to minimize the corrosion and deterioration that is inherent in and around salt water pools.

IntelliBrite® 5g Underwater Pool Color-Changing LED Light Overview

The IntelliBrite® 5g underwater pool LED (light-emitting diode) light system gives you brilliant vivid multi-colors with spectacular effects for your pool. The energy efficient colored LED array 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.

Unique Wide and Narrow Angle Lens Feature

The unique IntelliBrite 5g LED light lens geometry provides a choice of “wide” or “narrow” angle light beam to suit various size pools. For more information, see page 17.

IntelliBrite 5g pool LED lights are available in two models; 120 VAC and 12 VAC, and are fully compatible with IntelliTouch® and EasyTouch® automation systems. For more information about using IntelliBrite lights with IntelliTouch systems, refer to the IntelliTouch User’s Guide (P/N 520102) and the EasyTouch User’s Guide (P/N 520584).

Operating IntelliBrite 5g Pool lights (120 VAC and 12 VAC models)

IntelliBrite 5g pool LED lights can be manually controlled using a standard wall-mount light switch. Multiple IntelliBrite lights can be connected via a junction box to a single switch so that all lights can be switched on and off together.

IntelliBrite 5g Pool LED Light Voltages

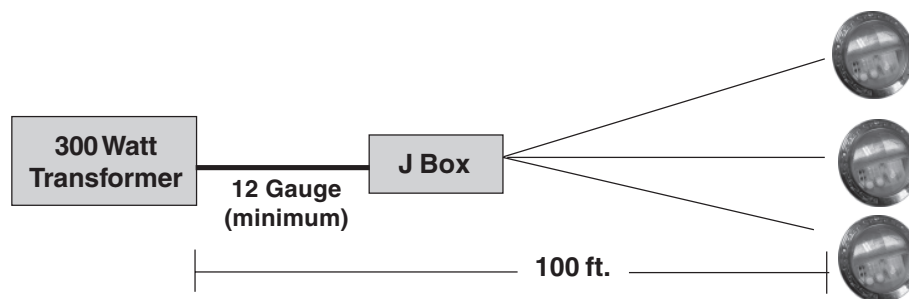
The IntelliBrite 5g pool LED light voltages are as follows:

- IntelliBrite 5g Pool LED Light; 120 VAC, with integrated 12 VAC transformer. P/N 60100x (UL certified), P/N 60200x (CSA certified)
- IntelliBrite 5g Pool LED Light; 12 VAC, (requires 120 VAC to 12 VAC transformer). P/N 60101x (UL certified), P/N 60201x (CSA certified)

Note: Cord length vary from 30 ft. (9.14 m) to 250 ft. (76.2 m). For IntelliBrite 5g light replacement parts list, see page 18.

Using an External Transformer for Multiple IntelliBrite 12 VAC Lights

When using multiple IntelliBrite 12 VAC LED lights on a **300 Watt** transformer, it is recommended that no more than three (3) IntelliBrite pool lights and one (1) IntelliBrite Spa light be used. It is also recommended not to exceed 100 feet of total cable run between the transformer and light (see diagram below).



Operating IntelliBrite Pool LED Lights Using a Wall Switch

IntelliBrite 5g pool LED lights can be controlled using a standard wall-mount light switch. Multiple IntelliBrite LED lights can be connected via a junction box to a single switch so that all lights can be switched on and off together. IntelliBrite 5g lights are controlled by cycling AC power 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, and enables the “Hold” and “Recall” feature.

Selecting a light show mode or fixed color

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 4.

1. **SAM Mode:** Cycles through white, magenta, blue and green colors (emulates the Pentair SAM® 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 successive times.



Turn
switch
Off/On
six times



During the off/on
switching process, no
illumination will occur,
then a white light will
momentarily illuminate.



Followed by the
selected
“California
Sunset Mode”

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.

IntelliBrite® Controller (optional)

Instead of using a wall switch, the IntelliBrite 5g pool LED light can be used with an IntelliBrite Controller (sold separately). The IntelliBrite Controller [P/N 600054] provides complete control of Pentair Water Pool and Spa IntelliBrite underwater LED (light-emitting diode) lights, and IntelliBrite LED landscape 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



The IntelliBrite Controller can control individual or multiple IntelliBrite LED lights. Multiple IntelliBrite LED lights can be connected via a junction box to an IntelliBrite Controller so that all lights can be switched on and off together. When using multiple IntelliBrite LED lights, the total allowable light wattage is 300 Watts maximum. The following example combination of IntelliBrite LED lights can be connected to the IntelliBrite Controller:

- Two (2) IntelliBrite 5g pool LED lights (each light 50 Watt maximum) or two (2) IntelliBrite pool LED lights (each light 70 Watt maximum)
- One (1) IntelliBrite spa LED light (each light 40 Watt maximum)
- Eight (8) IntelliBrite landscape LED lights (each light 15 Watt maximum)

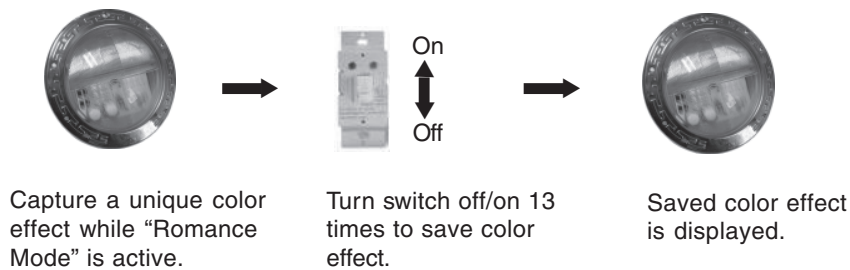
Operating IntelliBrite Pool Lights using a wall switch (Continued)

Saving a color mode or fixed color

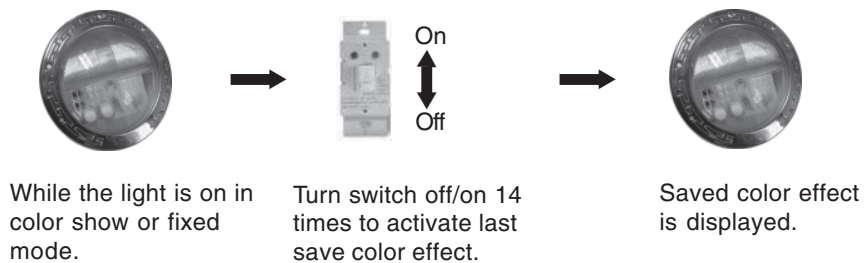
When power is switched off to the IntelliBrite lights, the last color show mode or fixed color will be saved. The next time the light is powered on, the previously saved color show mode or fixed color will be displayed. For example, while in “Party Mode” switch the light off. Wait more than 10 seconds,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

Hold and Recall feature

Hold: Use the **Hold** feature (power-cycle 13 times) to capture and save a color effect while displaying one of the light show modes. It’s easier to capture custom color effects from one of the slower light show modes, such as “Romance Mode” (#3).



Recall: Use the **Recall** feature to activate the last saved color effect (using the **Hold** feature) while in color show mode or fixed colors. To recall the color effect, power-cycle 14 times, and after five seconds the last saved color effect will be displayed.



Powering on the light

When the IntelliBrite LED light is powered on, a momentarily white light will illuminate, followed by the previously selected color.

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

Troubleshooting

Use the following tips to help to resolve problems that might occur while operating the LED light.

Problem	Cause/Action
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 AC power switch. Be sure that there is proper AC power applied to the light.

INTELLIBRITE 5g POOL LED LIGHT FIXTURE INSTALLATION (NEW POOL CONSTRUCTION)

The following describes how to install the IntelliBrite 5g pool LED light fixture. Read through pages 6 through 8 before starting the installation procedure.

BEFORE STARTING: The following information describes the tasks that must be completed by the electrician before the IntelliBrite light fixture is installed in a new pool construction.

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 line voltage models, and has an appropriately rated circuit breaker.
- The Junction Box (or, for 12 volt models, the low voltage transformer) is located at least 8 inches above the maximum water level of the pool and at least 48 inches from the edge of the pool; see Figure 1.
- The light fixture and all metal items within 5 feet of the pool are properly electrically bonded.
- The wet niche is properly installed so that the top edge of the underwater light's lens is at least 18 inches below the surface of the water in the pool; see Figure 1. (Not more than 20" depth in Canada.)
- 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, page 7.

Note: The pool or spa electrical system can be verified with a Pool and Spa Electrical Qualification Test Kit. The test kit is available from Pentair Water Pool and Spa®. The electrical system inspection using this kit must be performed by trained and certified personnel.

- To be certain that the pool or spa electrical system meets all applicable requirements, the electrician should also consult the local building department.
- Use only Pentair Water Pool and Spa wet niches to insure proper bonding and grounding connections.

INSTALLING THE INTELLIBRITE 5G POOL LED LIGHT FIXTURE (AFTER ELECTRICAL REQUIREMENTS ARE MET)

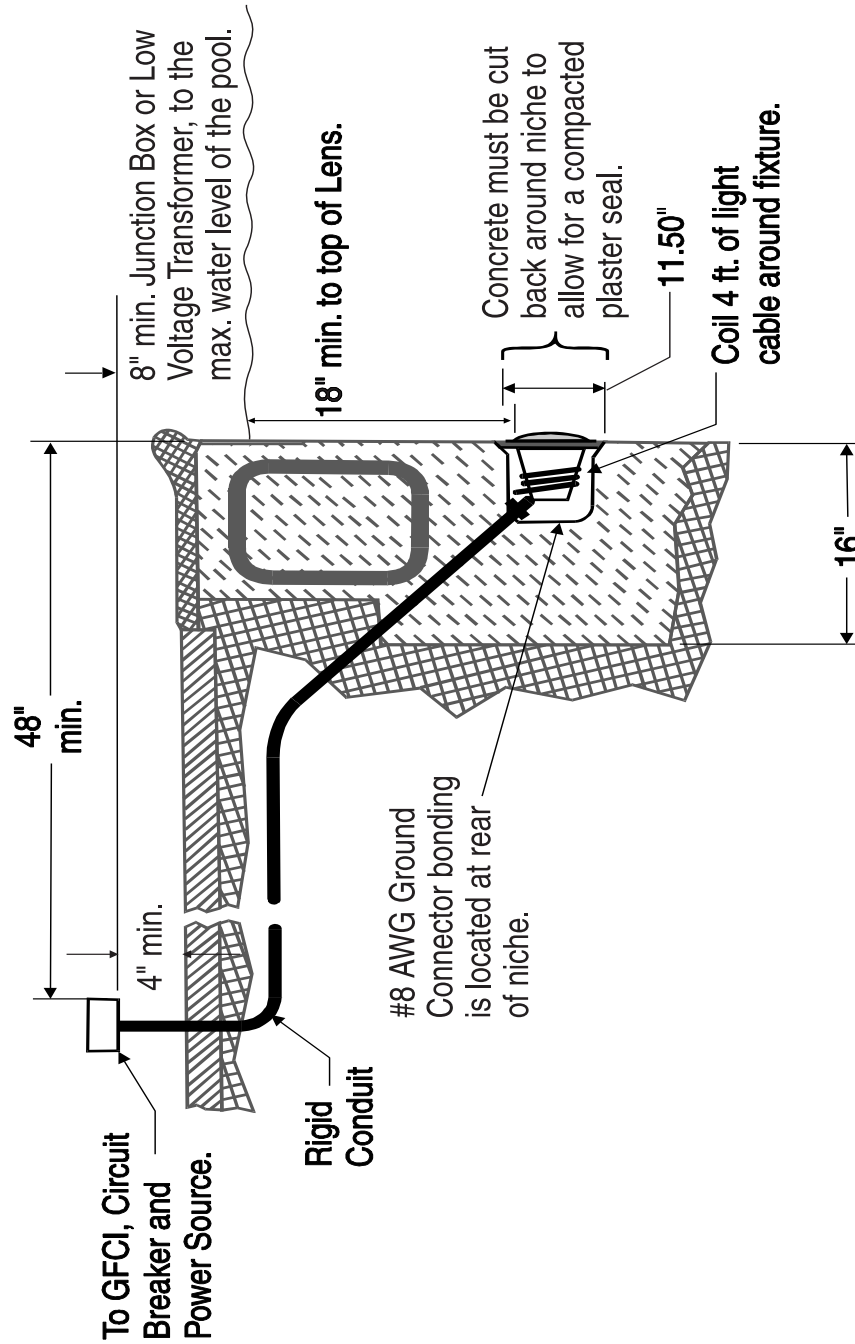


Figure 1.

INSTALLING THE INTELLIBRITE 5G POOL LED LIGHT FIXTURE (AFTER ELECTRICAL REQUIREMENTS ARE MET) (CONTINUED)

1. Feed cord through conduit to Junction Box, leaving at least four (4) feet of cord at the light fixture to coil around the light; see Figure 1, on page 7. The four (4) feet of cord around the light allows the light to be serviced after the pool is filled with water.
2. Cut the cord at the Junction Box, leaving at least six (6) inches of cord to make connections.
3. Strip back six (6) inches of the outer cord jacket to expose the three insulated wires (be careful not to damage the insulation on the three (3) inner wires).
4. Connect all three (3) wires to the corresponding circuit wires in the Junction Box and secure the Junction Box cover in place.

⚠ WARNING If the light is not submerged in water and powered on for more than 10 minutes, the light will switch off for a cooling down period of 10 minutes then power back on. This circuitry protects the light from being potential damage.

5. Install the IntelliBrite light assembly into the niche and tighten the special bronze pilot screw (see Figure 1, on page 7).

Pilot screw
(brass)



⚠ WARNING Use only the **special pilot screw provided** with this underwater light. This screw mounts and electrically grounds the housing securely to the mounting ring and wet niche. Failure to use the screw provided could create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock.

6. Fill the pool until the underwater light is completely submerged in water before operating the light for more than ten (10) seconds.
7. **Final check for proper light operation:** To check for proper operation, switch on the main switch or circuit breaker, and the switch that operates the IntelliBrite underwater light itself. The light should illuminate when power is applied. If not recheck the installation steps starting with Step 1.

REPLACING THE INTELLIBRITE 5G POOL LED LIGHT ASSEMBLY (IN AN EXISTING POOL)

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 National Electrical Code and all applicable local codes and ordinances. Improper installation will create an electrical hazard which could result in death or serious injury to 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 serviceman, pool users or others due to electrical shock.

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 line voltage models, and has an appropriately rated circuit breaker.
- The Junction Box (or, for **12 volt models**, the low voltage transformer) is located at least eight (8) inches above ground level and at least 48 inches from the edge of the pool; see Figure 1 on page 7.
- The light fixture and all metal items within five (5) feet of the pool are properly electrically bonded.
- The wet niche is properly installed so that the top edge of the underwater light's lens is at least 18 inches below the surface of the water in the pool; see Figure 1 on page 7.
- 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.

Note: The pool and spa electrical system can be verified with a Pool and Spa Electrical Qualification Test Kit. The test kit is available from Pentair Water Pool and Spa. The electrical system inspection using this kit must be performed by trained and certified personnel.

- To be certain that the pool's electrical system meets all applicable requirements, the electrician should also consult the local building department.
- Use only Pentair Pool Products® wet niches to insure proper bonding and grounding connections.

REPLACING THE INTELLIBRITE 5G POOL LED LIGHT FIXTURE (AFTER ELECTRICAL REQUIREMENTS ARE MET)

The following installation instructions describe how to replace the IntelliBrite 5g Pool LED light fixture from an existing pool.

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. **WARNING! Switch off main electrical switch or circuit breaker, and the switch which operates the IntelliBrite underwater light.**
2. **To remove the IntelliBrite light fixture assembly from the pool niche:** Remove the special bronze pilot screw at top of face ring. Remove the light assembly from the niche and place it on the deck.

WARNING

Be sure to keep the special pilot screw from this underwater light. This screw mounts and electrically grounds the housing securely to the mounting ring and wet niche. Failure to use the screw provided could create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock.

3. With the light assembly on the pool deck, cut the light cord leaving at least size (6) inches of cord to connect to the cord on the replacement light. Discard the light assembly.
4. Pull the existing cord out of the niche up onto the deck. Strip six (6) inches of the outer cord jacket from the cord to expose the three insulated wires.
5. Using electrical insulating tape, wrap each of the three existing light wires to the cord on the replacement light. Don't wrap too much tape around the cords, this will not allow the cord to be pulled through the conduit to the junction box.
6. Remove Junction Box cover, disconnect the IntelliBrite light fixture wires and pull the cord through the conduit until the new light cord is visible in the junction box conduit. Remove the tape wrapped around the cords and separate the wires.
7. Strip back six (6) inches of the outer new light cord jacket to expose the three insulated wires (be careful not to damage the insulation on the three (3) inner wires).
8. Connect all three (3) wires to the corresponding circuit wires in the Junction Box and secure the Junction Box cover in place.

9. Leave at least four (4) feet of cord to coil around the new IntelliBrite light fixture (see Figure 1 on page 7). This four (4) feet of cord coiled around the light allows the light to be serviced.
10. Install the IntelliBrite 5g light assembly into the niche in the pool.
11. Install the special bronze pilot screw at the top of face ring to secure the light to the niche.
12. **Final check for proper IntelliBrite light operation:** Switch on the main switch or circuit breaker to the system, and the switch that operates the IntelliBrite underwater light itself. The light should illuminate when power is applied. If not recheck the installation steps starting with Step 1 (page 10).

REPLACING THE INTELLIBRITE 5G POOL LED CIRCUIT BOARD (IN AN EXISTING POOL)

When replacing or reassembling the IntelliBrite 5g Pool Light, the Gasket (P/N 79101600) or Gasket and Lens (619864) MUST ALSO BE REPLACED - SEE PAGE 17 FOR PART NUMBERS

⚠ DANGER



D A N G E R !

RISK OF ELECTRICAL SHOCK OR ELECTROCUTION

Always disconnect 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 installer, serviceman, pool users, or others due to electrical shock.

Removal and Installation

1. **Turn off main electrical switch or circuit breaker**, as well as the switch which operates the IntelliBrite 5g pool LED underwater light itself.
2. Before starting make sure that you have a new lens gasket (P/N 79101600) and a IntelliBrite 5g pool LED light assembly (P/N 619818Z) ready to install.

⚠ WARNING

Replace the light assembly with the same type and wattage. Failure to replace the light assembly with the same type will damage the LED light assembly and may cause an electrical hazard resulting in death or serious injury to pool users, installers, or others due to electrical shock, and may also cause damage to property.

⚠ WARNING

Always install a new lens gasket (P/N 79101600) whenever disassembling the IntelliBrite 5g light assembly. Failure to do so may permit water to leak into the assembly which could cause:

- (a) an electrical hazard resulting in death or serious injury to pool users, installers, or others due to electrical shock, or
- (b) breakage of the lens, which likewise could result in serious injury to pool users, installers, or bystanders, or in damage to property.

REPLACING THE INTELLIBRITE 5G POOL LED LIGHT ASSEMBLY (IN AN EXISTING POOL) (Continued)

3. **REMOVING THE 5g INTELLIBRITE LED LIGHT:** Remove the pilot screw at top of face ring, remove the light assembly from the niche. Place the assembly on the deck. **Note:** It is not necessary to drain down the pool.

WARNING

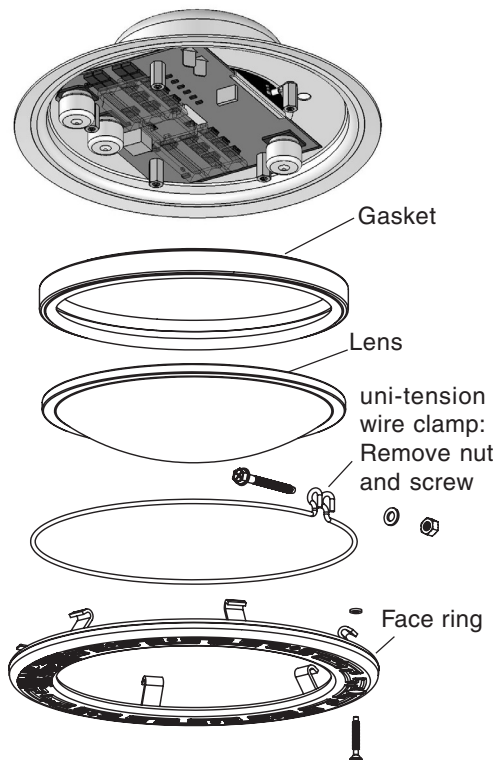
Be sure to keep the pilot screw from the IntelliBrite 5g LED underwater light. This screw mounts and electrically grounds the housing securely to the mounting ring and wet niche. Failure to use the screw provided could create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock.

Pilot screw (brass)



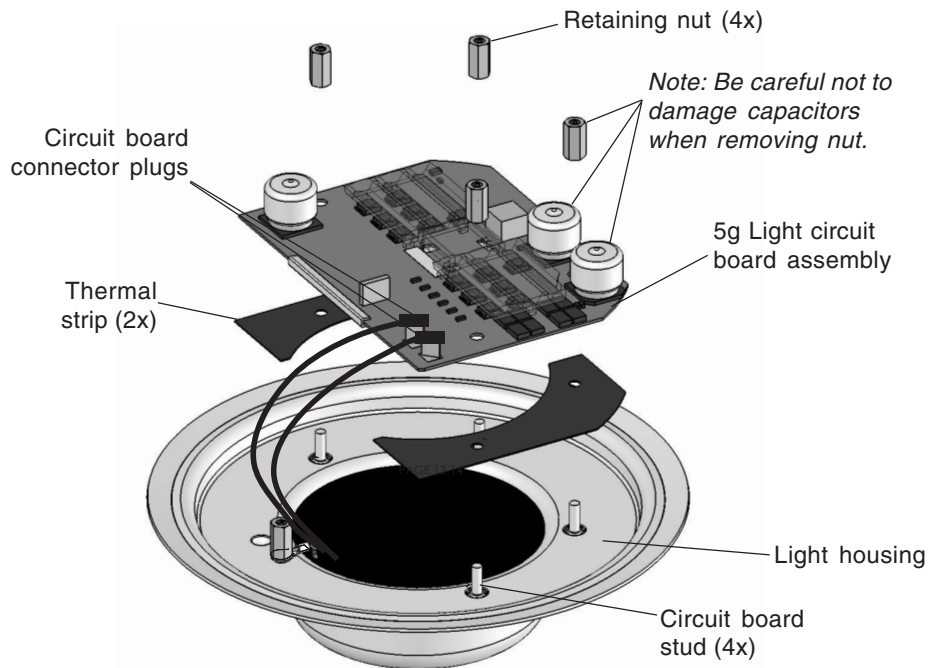
4. Place a cloth on the ground to protect the lens. Turn the light over so the lens is resting on the cloth. Using a 1/4" nut driver and a #3 Phillips screwdriver, remove the nut uni-tension wire clamp. Place the nut aside for reinstallation.
5. Remove the face ring and wire clamp from the light housing.
6. With the light resting on its base, carefully pry off the gasket to remove the lens. Set the lens aside for installation later. Discard the gasket.

Note: A NEW LENS GASKET (P/N 79101600) MUST BE USED EACH TIME THE LIGHT IS REASSEMBLED. See page 18 for Replacement Kit part numbers.



Note: Note the current position of the lens at the pilot screw (12 o'clock) position, before removing it from the fixture. "W" on the lens indicates wide angle, "N" indicates narrow angle. For more information, see page 17.

7. Using a ¼" nut driver, carefully remove the four retainer nuts from the LED light assembly. **NOTE: Be sure not to damage the capacitors with the nut driver while removing the studs.** Place the nuts aside for reinstallation.
8. Unplug the two connector plugs from the circuit board. Lift up the circuit board and remove it from the light housing base.
9. Carefully lift off the thermal strips from the base of the light housing base.
Proceed with installation step 10 on page 14.



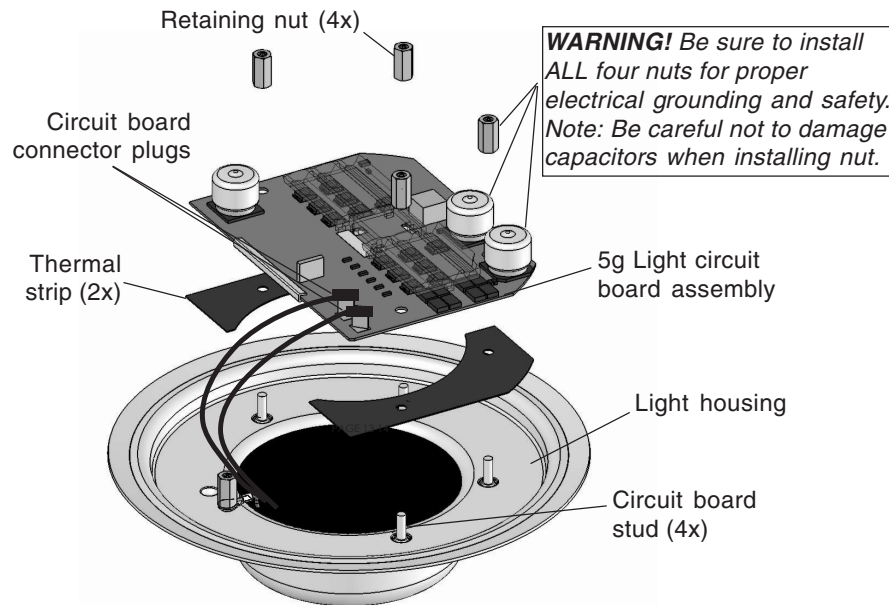
INSTALLING THE INTELLIBRITE 5g POOL LED LIGHT ASSEMBLY WITH NEW GASKET (see illustration on next page)

10. Place the two thermal strips (provided) over the circuit board studs in the base of the light housing (see illustration on next page)..
11. Place the light circuit board over the base studs and seat the circuit board on top of the thermal strips. Be sure the two connecting wires are not caught between the housing and the edge of the circuit board.
12. Using a ¼" nut driver, secure the circuit board with the four (4) retaining nuts.

⚠ WARNING Be sure to install ALL of the four (4) retaining nuts. These nuts ensure proper electrical ground. Failure to install all of the retaining nuts could create an electrical hazard which could result in death or serious injury to pool users, installers or others due to electrical shock.

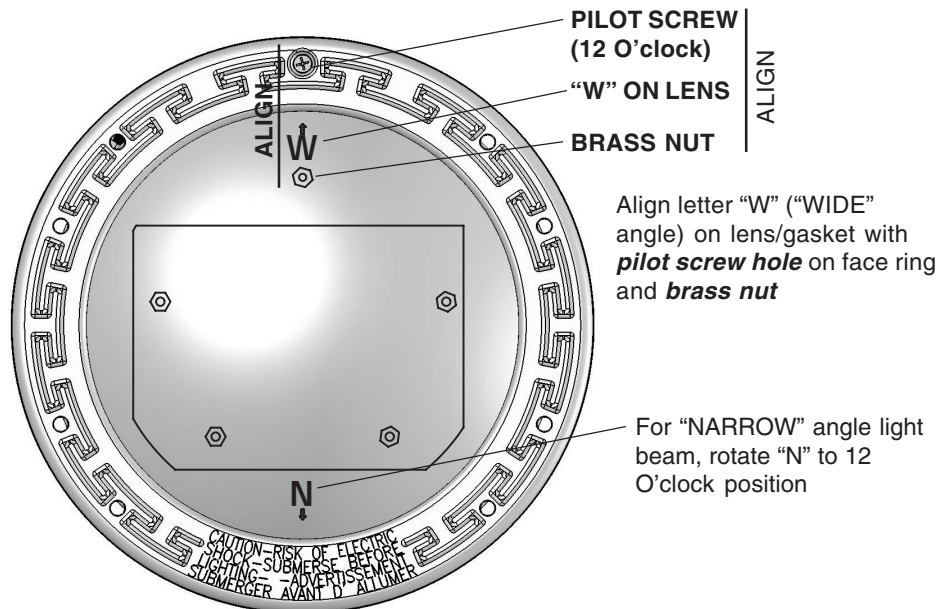
13. Connect the two connector plugs to the circuit board terminals.

Continue on next page.

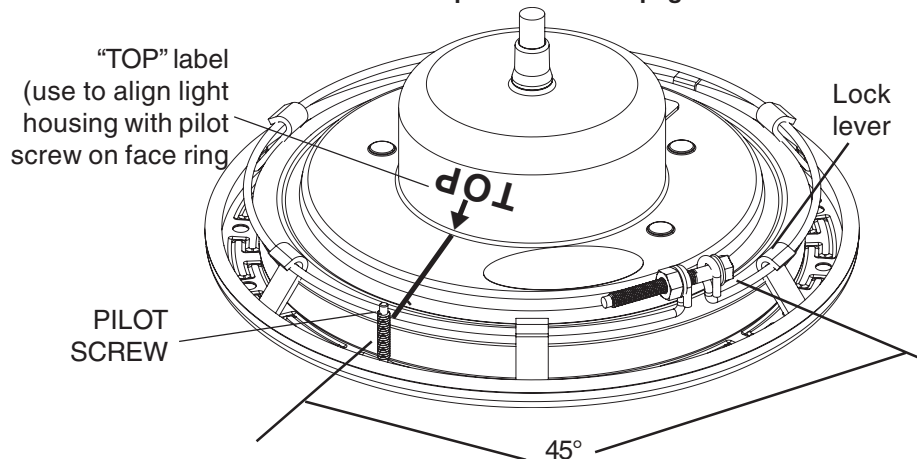


14. **Install NEW GASKET ONTO LENS (see illustration on next page):** Stretch the gasket around the circumference of the lens. Be sure the gasket is installed evenly around the lens.
15. **ALIGN LENS/GASKET ONTO LIGHT HOUSING:**
 - a) With the light housing resting on its base, place the lens/gasket on top of the light housing.
 - b) Rotate the lens/gasket to align the letter “W” (“WIDE” angle) on the lens with the brass nut in the housing (see diagram on page 15 for brass nut location).

Note: The IntelliBrite 5g light lens ships from the factory in the ‘WIDE’ (W) angle position. To use the “NARROW” angle light beam, rotate the lens/gasket to align the letter “N” on lens. Note: For more information about using the “WIDE” and NARROW angle lens, see page 17.
16. **INSTALL FACE RING:** Place the face ring on top of the lens/gasket/housing. Rotate the face ring so the **pilot screw hole** is aligned in the 12 O’clock position, with the lens letter “W” (or “N”) and the brass nut in the housing. Also, verify the “TOP” position arrow indicator label (see page 15) on the rear of the housing is aligned with the pilot screw on the face ring.



17. **INSTALL UNI-TENSION CLAMP:** With the hook ends of the circular uni-tension clamp pointing down, spread the clamp and place it in the "U" recesses of the locking levers. Be sure the hook ends of the clamp are located between the pair of locking levers as shown below and that the wire clamp is properly engaged with all of the lock levers.
18. Place a cloth on the ground to protect the lens. Turn the light over so the lens is resting on the cloth. Be sure the orientation of the wire clamp and the bolt connection is positioned at 45°.
19. Tighten the bolt and nut until the distance between the ends of the clamp equals ¼-inch or less. **Continue with Step 20 on the next page.**



Position the wire clamp (nut and bolt) about 45° between the PILOT SCREW and LOCK LEVER.

20. Install the special bronze pilot screw at the top of face ring to secure the light to the niche.

Pilot screw (brass)



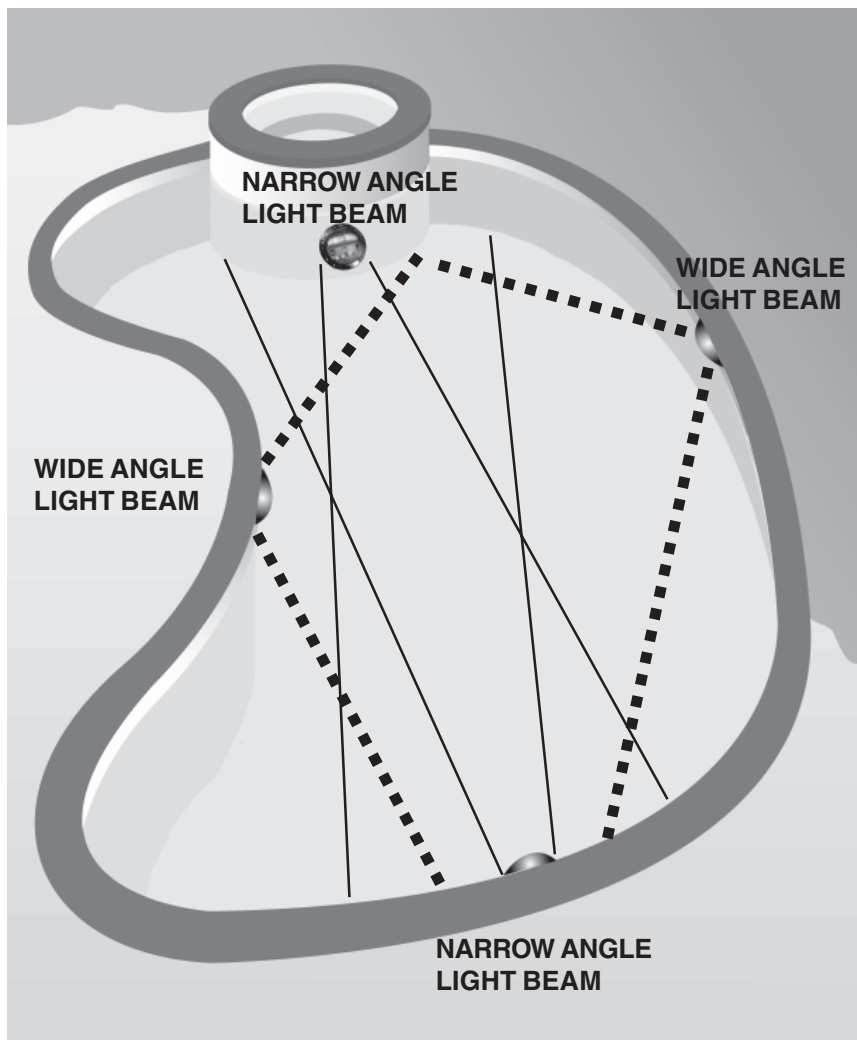
21. **Final check for proper IntelliBrite light operation:** Switch on the main switch or circuit breaker to the system, and the switch that operates the IntelliBrite underwater light itself. The light should illuminate when power is applied. If not recheck the installation steps starting with Step 1 (page 11).

Wide and Narrow Angle Lens Adjustment

Unique Wide and Narrow Angle Lens Feature

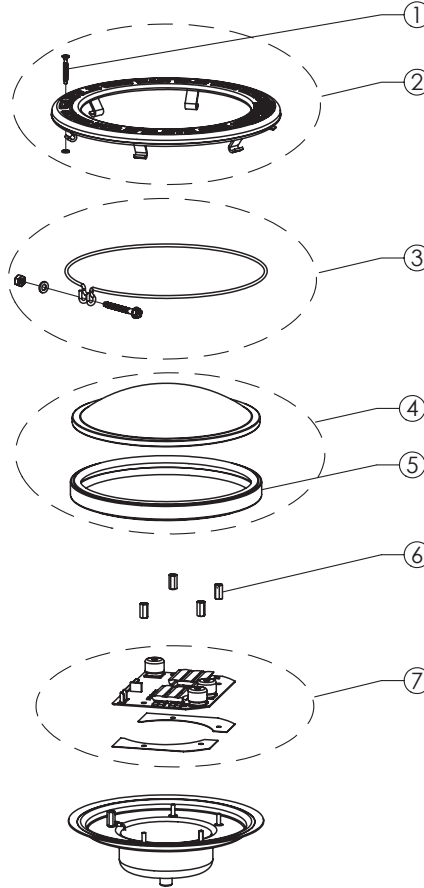
The unique IntelliBrite 5g LED pool light lens geometry provides a choice of “wide” or “narrow” angle light beam to suit various size pools. For lights located on either side of the pool, simply rotate the lens to the ‘wide’ (W) angle position, which will provide a wider angle light beam for greater underwater coverage and light reflection. For lights located either end of the pool, rotate the lens to the ‘narrow’ (N) angle light beam position for increased underwater light intensity and distance.

Note: The IntelliBrite 5g light lens ships from the factory in the ‘WIDE’ (W) angle position.



Recommended IntelliBrite 5g 'Wide' and 'Narrow' angle Lens Position

IntelliBrite 5g Pool LED Light Assembly Replacement Kit Part Numbers



Note: A 120 VAC to 12 VAC external transformer is required for the 12 VAC model IntelliBrite 5g Pool light. See page 1 for more information.

Item No.	Kit Part No.	Description
2, 3, 5	600095	Face Ring assembly, stainless steel. - Uni-tension wire clamp assembly. - Gasket, 8-3/8 in. diameter, off white.
4, 5	619864Z	Replacement Lens Kit. - Gasket, 8-3/8 in. diameter, off white. - Lens, IntelliBrite 5g, Pool, 8-3/8 in. diameter, tempered.
3, 5, 7	619818Z (UL), 619905Z (CSA)	- Replacement Kit. (Circuit Board and Thermal Strips (2x), 5g Pool light assy.) - Uni-tension wire clamp assembly. - Gasket, 8-3/8 in. diameter, off white.
1	79104800	Pilot screw, with captive gum washer.
5	79101600	Gasket, 8-3/8 in. diameter, off white.

Note: The 120 VAC IntelliBrite 5g pool LED light has an integrated 12 VAC transformer.

Notes



P/N 619827 Rev C