



Jandy Pro Series Nicheless LED Underwater Light

WARNING

FOR YOUR SAFETY - This product must be installed and serviced by a contractor who is licensed and qualified in pool equipment by the jurisdiction in which the product will be installed where such state or local requirements exist. The maintainer must be a professional with sufficient experience in pool equipment installation and maintenance so that all of the instructions in this manual can be followed exactly. Before installing this product, read and follow all warning notices and instructions that accompany this product. Failure to follow warning notices and instructions may result in property damage, personal injury, or death. Improper installation and/or operation will void the warranty.



Improper installation and/or operation can create unwanted electrical hazard which can cause serious injury, property damage, or death.

ATTENTION INSTALLER - This manual contains important information about the installation, operation and safe use of this product. This information should be given to the owner/operator of this equipment.

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Section 1. Important Safety Instructions

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

When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

DANGER

RISK OF ELECTRICAL SHOCK OR ELECTROCUTION. This underwater light must be installed by a licensed or certified electrician in accordance with the National Electrical Code® and applicable local codes and ordinances. In Canada, the Canadian Electrical Code and all applicable local codes and ordinances must be adhered to. Improper installation will create an electrical hazard, which could result in death or serious injury to pool or spa users, installers, or others due to electrical shock, and may also cause damage to property. Read and follow the specific instructions below.

WARNING

Before installing this underwater light, read and follow all warning notices and instructions accompanying this light. Failure to follow safety warnings and instructions can result in severe injury, death, or property damage.

Visit www.zodiacpoolsystems.com for additional free copies of these instructions or call Zodiac Technical Support at 800.822.7933 (U.S.) or 888.647.4004 (Canada)

CAUTION

Except when the Jandy Pro Series Nicheless Underwater LED Lights are installed in an area of the swimming pool that is not used for swimming and the lens is adequately guarded to keep any person from contacting it, the light shall be installed in or on a wall of the pool, with the top of the lens opening not less than 4 inches (102 mm) below the normal water level of the pool



ATTENTION INSTALLER

This manual contains important information about the installation, operation and safe use of this product. This information should be given to the owner/operator of this equipment.

SAVE THESE INSTRUCTIONS

NOTICE

The Jandy Pro Series Nicheless Underwater LED Lights are intended for installation in fresh water and salt water swimming pools. It is important to ensure that the wet niches in which the lights are installed are intended for their appropriate application, either fresh water or salt water pools.

Section 2. Installing the Jandy Pro Series Nicheless LED Light

WARNING

Risk of Electrical Shock or Electrocutation. This underwater light must be installed by a licensed or certified electrician or a qualified pool serviceman in accordance with the National Electrical Code® (Canadian Electrical Code, in Canada) and all applicable local codes and ordinances. Improper installation will create an electrical hazard, which could result in death or serious injury to pool or spa users, installers or others due to electrical shock, and may also cause damage to property.

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

2.1 The User Interface (UI)

All system programming and setup is performed through the AquaLink Z4 UI located on the front of the controller.

NOTE: The installer may relocate the UI. It is critical that the UI be mounted outdoors, where a service professional may access it at any time.

WARNING

Risk of Electrical Shock or Electrocutation.

To minimize risk of fire or electrical shock, which could result in serious injury, property damage, or death, use only a transformer that has been listed/certified for swimming pool and spa use.

Verify that the pool meets the requirements of the current National Electrical Code (Canadian Electrical Code, in Canada) 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 electrical systems must meet, are as follows:

1. The junction box or the low-voltage transformer must be located at least eight (8) inches (measured from the inside of the bottom of the junction box or transformer) above the MAXIMUM water level, OR at least four (4) inches above the ground level or pool deck, whichever is greater. The junction box or transformer must also be installed at least forty-eight (48) inches (4 ft.) from the edge of the pool. See Figure 1.
2. A standard 1.5" plastic wall / return fitting (not included) must be installed so that the top edge of the underwater light's lens is at least 4 inches (10.2 cm) below the surface of the water in the pool. See Figure 1.

NOTE To be certain that the pool's electrical system meets all applicable requirements, the electrician should also consult the local building department.

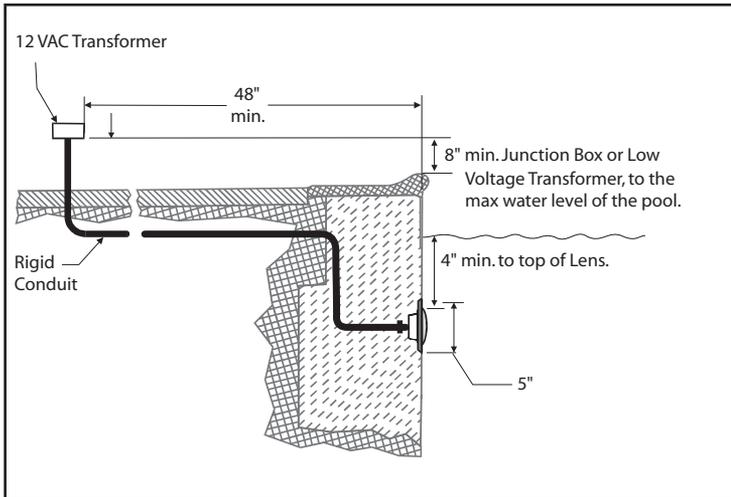


Figure 1. Jandy Pro Series LED Light Installation with standard 1.5" plastic fitting

2.2 Installing the Light Fixture

NOTE Perform these steps *only* after the electrical system requirements are met.

1. Feed cord through electrical conduit to junction box, leaving at least fourteen (14) inches of slack cord in the conduit near the pool wall to allow for winterization. See Figure 1.
2. Remove the docking ring from the light and attach the docking ring to the 1.5" pool fitting. See Figure 2.

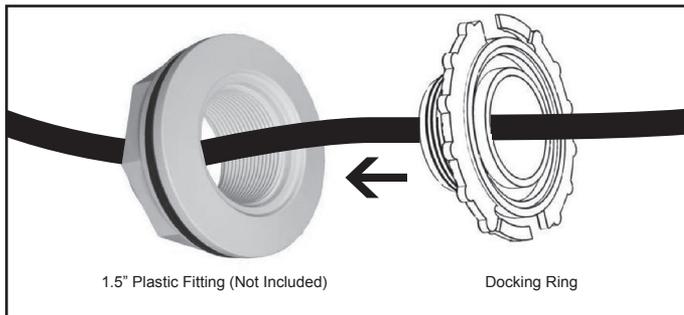


Figure 2. Install the docking ring securely to the 1.5" pool wall fitting

3. Cut the cord at the junction box, leaving at least six (6) inches of cord to make connections.
4. Strip six (6) inches of the outer cord jacket to expose the two insulated wires being careful not to damage any remaining insulation.
5. The light mounts to the docking ring by turning it clockwise onto the docking ring and securing it with the provided screw. See Figure 3.
6. Fill the pool until the underwater light is completely submerged in water before operating the light. Turn on main switch or circuit breaker, and the switch, which operates the underwater light, to check for proper operation. Refer to *Section 4, Operating Instructions*.
7. Properly prepare the end of the light cable to securely connect it to the 12VAC output of a Class 2 transformer that is listed or certified by a Nationally Recognized Testing Laboratory (NRTL) for the intended use.

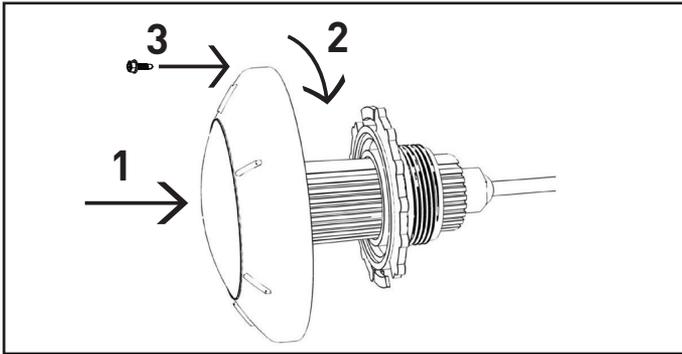


Figure 3. Attach the assembled light and cable to the docking ring

Section 3. Wiring Options for Controlling Jandy Pro Series Nicheless LED Lights

NOTE The **Jandy Pro Series Nicheless LED Lights** are not compatible with light dimmers. *Do not wire the Jandy Pro Series Nicheless Lights to any dimming circuitry.*

To the extent allowed by local installation codes in effect in the installation jurisdiction and capacity of the electrical equipment, multiple Jandy Pro Series lights may be controlled with a single switch and transformer so their colors may be synchronized.

Separate switches may be used to control the on/off and color functions of each set of Jandy Pro Series Nicheless Lights (a 'set' being all the lights wired to a common 12 VAC transformer). It is recommended that these switches be located next to each other to facilitate simple color synchronization when desired. If color synchronization is critical, switches must be operated simultaneously.

3.1 Wiring to an AquaLink® Controller

The Jandy Pro Series Nicheless LED Lights can be controlled by an AquaLink controller. Connect the transformer powering the lights to one of the auxiliary relays in the AquaLink.

Refer to Figure 4 to connect the Jandy Pro Series Nicheless LED Lights to the Power Center.

⚠ WARNING

RISK OF ELECTRICAL SHOCK OR ELECTROCUTION, which could result in serious injury or death. A Ground Fault Circuit Interrupter (GFCI) must be provided for 120 Volt transformers. 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.

⚠ WARNING

RISK OF ELECTRICAL SHOCK OR ELECTROCUTION, which could result in serious injury or death. The Jandy Pro Series Nicheless LED Lights are only available for 12-volt AC power. Use **ONLY** a 120VAC to 12 VAC step-down, class 2 transformer which is NRTL-listed/certified for the application. For more information about 12-volt installations, refer to *Section 5* of this manual.

3.2 Wiring to a Time Clock

The Jandy Pro Series Nicheless LED Lights can be wired to a time clock to operate the lights automatically.

3.3 Wiring to a Switch

The Jandy Pro Series Nicheless LED Lights can be wired into a switch to manually operate the lights. Refer to Figure 4 to connect the lights into the switch.

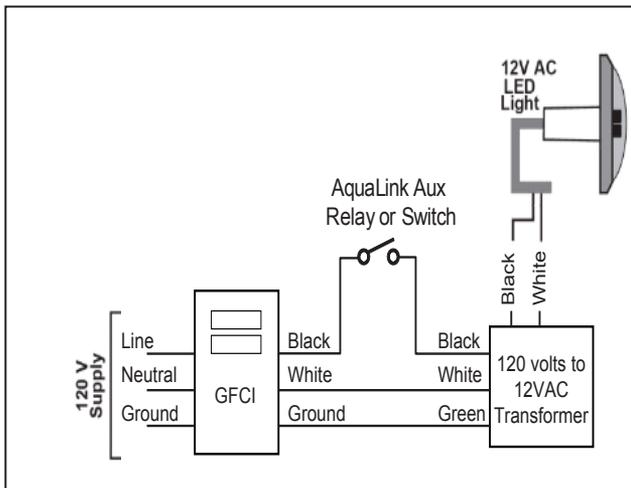


Figure 4. Wiring Jandy Pro Series Nicheless Underwater Lights

Section 4. Jandy Pro Series Nicheless LED Light Operating Instructions

4.1 Operating the Light and Changing Colors

NOTE This section only applies to the color (RGB) lights.

Turn the light **ON**. If the light has been off for 7 seconds or longer, the light will turn on at the last color selected. To change the color, turn the light **OFF** and then **ON** within three (3) seconds. Continue turning **OFF** and **ON** until the desired light color mode is reached. See Table 1 for the color mode sequence.

Table 1. Jandy Pro Series Nicheless Underwater LED Lights Sequence

Sequence Order	Color Modes
1	Alpine White
2	Sky Blue
3	Cobalt Blue
4	Caribbean Blue
5	Spring Green
6	Emerald Green
7	Emerald Rose
8	Magenta
9	Violet
10	Slow Color Splash
11	Fast Color Splash
12	America the Beautiful
13	Fat Tuesday
14	Disco Tech

NOTE When the light is turned **OFF** for more than seven (7) seconds, it will remain in the color set that is currently active. When the light is turned back **ON**, the light will be on the same color set.

4.2 To Reset to the Beginning of the Color Sequence

Begin this procedure with the light turned ON.

Turn the light OFF, wait five (5) seconds, then turn ON, the light will return to the beginning of the color cycle (Alpine White).

NOTE To synchronize colors on multiple Jandy Pro Series Nicheless Underwater LED Light systems wired to separate switches, perform the above actions on all of their switches simultaneously. All Jandy Pro Series Nicheless Underwater LED Lights will synchronize automatically if activated by the same switch. No other accessories are required.

Section 5. Twelve (12) Volt Installation

A 12-14 Volt AC Transformer must be used to power all 12-Volt lights.

NOTE For optimum performance Jandy Pro Series recommends not exceeding the load factor specified by the instructions included with the transformer.

To ensure maximum safety, use only a Class 2 transformer that can supply 12-14 Volts AC to power all 12-Volt lights. The transformer must be listed or certified by a Nationally Recognized Testing Laboratory (NRTL) for the intended use.

CAUTION

To prevent risk of fire which could result in property damage, and to ensure optimum performance, do not exceed the load factor specified in the instructions provided by the transformer manufacturer.

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