# AQUALUMIN Nicheless Pool Light Replacement

Installation and Operations Manual



64-PAL-RAL
64-PAL-RAL-80
64-PAL-RAL-150
64-PAL-RAL-150
64-PAL-RALT
64-PAL-RAL-80-T
64-PAL-RAL-80-T
64-PAL-RAL-150
AquaLumin Sonar Retro Pool Light with Remote and PCR-2T-65 Transformer
64-PAL-RAL-150
AquaLumin Sonar Retro Pool Light with Remote, PCR-2T-65 and 80ft Cable
64-PAL-RAL-150
AquaLumin Sonar Retro Pool Light with Remote, PCR-2T-65 and 150ft Cable

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For your safety, it is imperative that this product be installed and maintained by a licensed and qualified contractor specializing in pool equipment, adhering to local regulations. The individual responsible for maintenance should possess extensive experience in pool equipment installation and upkeep to ensure precise adherence to the instructions outlined in this manual. Prior to installation, thorough comprehension, and compliance with all provided warning notices and instructions are crucial. Failure to do so may lead to property damage, personal injury, or loss of life. Any improper installation and/or operation may void the product's warranty and pose significant electrical hazards, potentially resulting in severe harm, property damage, or fatality. It is strictly advised not to modify this equipment. Installer, please be aware that this manual contains vital information concerning the installation, operation, and safe utilization of this product, which should be communicated to the equipment's owner/operator.

## Section 1. SAFETY INSTRUCTION



Improper installation carries the potential for electrical hazards, presenting a risk of severe or even fatal injuries to pool users, installers, or bystanders due to the threat of electrical shock, and may also result in property damage.

## Section 2. Preparation

This manual provides installation and operational instructions for the PAL Lighting AquaLumin Nicheless Replacement Pool Light.

## Read the installation & operational manual before proceeding with the installation. Keep this manual for future reference.

Before starting the installation, check that you have the correct parts below. If any parts are missing, please call technical support at +1(713)-946-4343.

#### 2.1 Package Contents

AquaLumin Nicheless Replacement Pool Light

1 x Remote
1 x Remote Battery Pack
1 x Mounting Plate
1 x Sealing Plate
1 x Clear Dress Ring
1 x Waterproof Gel Pack
1 x Head Screw
3 x Small Mounting Screws
3 x Machine Screws

1 x Cable *\*Select Models* 1 x 24V Transformer *\*Select Models* 

#### 2.2 Preparation Work

1. The PAL AquaLumin Nicheless Replacement Pool Light is a 24V DC replacement light for the Pentair AquaLumin light. A 24V transformer will need to be installed to be able to operate our light.

2. Ensure that the pool's electrical system complies with the standards outlined in the current National Electrical Code (NEC).

#### IMPORTANT NOTICE

This PAL AquaLumin Nicheless Replacement Pool Light is intended to replace the existing AquaLumin Nicheless light. This product includes a new bracket, and a new light, completely replacing the original parts.

### Section 3. Replacing the Light

#### A. Replacing the light and *optional cord*.

1. Remove the old AquaLumin from the niche. Undo the bolt at the top of the light. Take the gray plastic protector and all 4 bolts from the niche. See Figure 1.



2. If the cable can be removed, remove the old cable, and leave a pull line through the conduit.

3. After removing all parts of the old AquaLumin, place the gray gasket plate closest to the liner. The light mount with the words TOP should face outward.

4. Align the screws with the niche. See Figure 2 and 3.

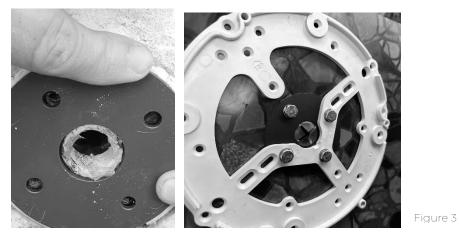


Figure 2

NOTE: The three machined screws will attach to the light mount and go through the gray plate into the niche to secure the light mount. The fourth pan head screw will secure only the gray gasket plate.

NOTE: The niche may cause the light mount to not align straight up and down. To fix this, turn the light mount to align with the screw hole and attach.

5. Once the gray face plate and light mount have been attached, pull the attached cable through the light mount and conduit back to a 24v transformer.

NOTE: When wiring into the transformer, there will be a brown and blue terminal for the wires to screw into on the left side.

6. Attach the light to the mounting plate with the thin screws at the 1, 3, and 7 o' clock positions. See Figure 4.



Figure 4

#### IMPORTANT NOTICE

We recommend pulling a new cable and using the PAL wires to operate the PAL AquaLumin Nicheless Replacement Pool Light. However, you can use the PAL gel kit and the existing wires to wire into the AquaLumin Nicheless Replacement Pool Light.

- B. Installing Cable on AquaLumin with Gel Pack.
  - 1. The PAL AquaLumin Nicheless Replacement Pool Light requires only two inputs for cable. A ground wire is not necessary.
  - 2. Place the positive cable into the furthest screw from the cable entry. See Figure 5 for reference.
  - 3. Place the negative cable into the closest screw from the cable entry. See Figure 5 for reference.
  - 4. Watertight seals are designed to use cable and sheathing as a sealing point. Wires should be stripped back enough to make connection in the terminal block, but not so much that they are exposed when exiting the gel pack.
  - 5. Use the shorter pan head screws to screw in the gel pack.
  - 6. Ensure the screws are tightened evenly so that the gel pack is seated correctly.



Figure 5

### Section 4. REMOTE PROGRAMMING



#### Pairing Lights to Zones:

Within 3 seconds of turning light on, press desired zone number 'I button' 3 times. Once linked, light(s) will flash 3 times.

#### Cloning Modes:

Within 3 seconds of turning light on, press and hold 'I button' on required channel:

- Channell PAL
- Channel 2 Jandy

Channel 3 - Hayward

Channel 4 - 🏘 Pentair

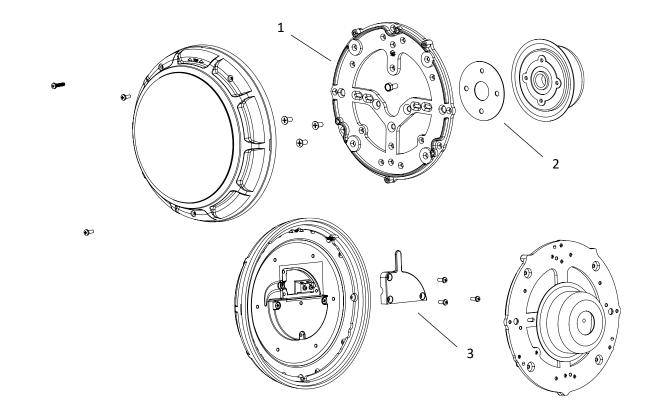
Channel 5 - ASTRALPOOL

## Unpairing Lights from Zones:

Within 3 seconds of turning light on, press the channel zone number's 'I button' that the light is currently linked to 5 times. Light will flash 9 times quickly to confirm it has been unlinked.

### Section 5. REPLACEMENT PARTS

Light Replacement Parts



Replacement Parts				
Item	Part Number	Description		
7	64-PAL-RAL-BRK	Wall Mounting Bracket		
2	64-PAL-RAL-GASKET	Wall Spacer		
3	64-PAL-RAL-GEL	Gel Pack		
	64-PAL-RAL-SCREW	Screw Bag		

	NOTES
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