

# SONAR CANADIAN RETRO LIGHT INSTALLATION INSTRUCTIONS



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# **GUIDES AND WARNINGS**

#### IMPORTANT INFORMATION:

- 1) Ensure that the electrical system for your pool conforms with all the requirements of the National Electrical Code (NEC) and all relevant local codes and ordinances.
- 2) This Underwater Light must be installed in accordance with the National Electrical Code by a Certified Electrician or a Qualified Pool Technician. NOTE: No Bonding Terminal is required on the forming shell since the fixture is an all plastic construction and complies with NEC article 680 Requirements.
- 3) This Underwater light is designed for use with a 12V AC or 12/24V DC UL Listed Class 2 LED Driver.

#### DO NOT CONNECT THIS 12V LIGHT DIRECT TO A 120V CIRCUIT.

The Junction Box and the 12V AC or 12/24V DC transformer is located at least 4 (four) inches (10.16 cm) above ground level or eight (8) inches(20.3 cm) above maximum water level, whichever is higher. The Junction Box must be at least 48 inches (1.22 m) from the edge of the pool.

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

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

# SONAR CANADIAN RETRO LIGHT INSTALLATION INSTRUCTIONS

#### 1) !IMPORTANT Turn off power to pool lights

IMPORTANT! Ensure system is safely isolated during entire light replacement process. If in doubt, contact an electrician to assist. Failure to comply may result in severe injury or death.

#### 2) Check Transformer Type

Ensure transformer used matches power rating of your chosen light 12V/24V DC or 12V AC. If not matched, consider purchasing the appropriate lighting controller from your PAL Lighting retailer.

Each light requires approximately 10W of power.

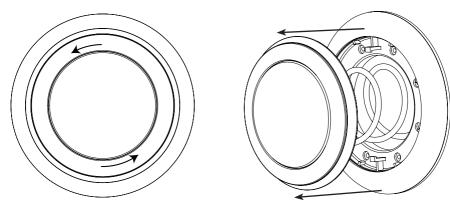
Ensure controller is undamaged by weathering or else damaged and in good wroking order.

Ensure controller is suitable for use with swimming pool lights.

Ensure controller is **NOT** a switch mode transformer.

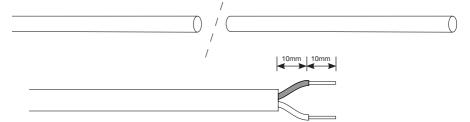
#### 3) Remove Existing Light

Remove existing pool light from pool by twisting counter clockwise then pulling out from wall. Take light out of water and lay light face down on a soft surface.



4) Disconnect cable from old light
Assess cable length ensuring sufficient cable for service access of light. Remove/cut existing cable away from old light.

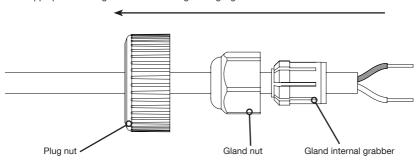
Strip cable outer and inner sheaths to leave 10mm of insulated end and 10mm of wire.



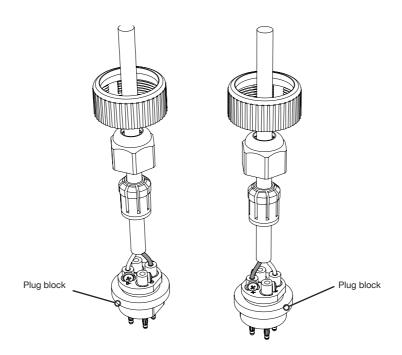
#### 5) Attach cable to retro field assembly plug

A) In correct order, feed plug nut, gland nut and then gland internal grabber (with rubber seal inside) over cable.

\* Use appropriate cable gland size for existing cable gauge.

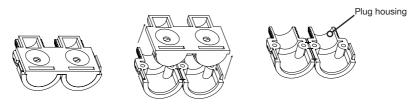


B) Insert the white wire into the socket marked B- on the plug block. Using a philips head screw driver secure the wire in place with the screw for that socket. Insert the black wire into the socket marked + on the plug block. Using a philips head screw driver secure the wire in place with the screw for that socket.

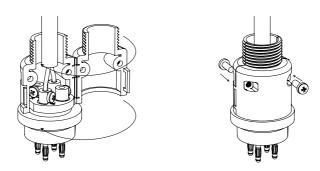


DO NOT OVER TIGHTEN

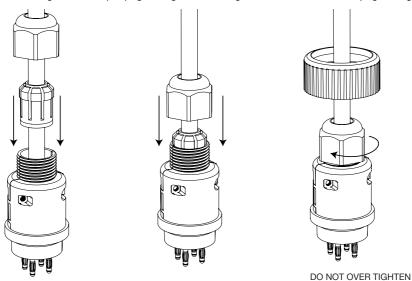
C) Remove protective cover from plug housing and discard.



D) Wrap plug housing around plug block with clip and secure with 2 x screws using philips head screw driver.

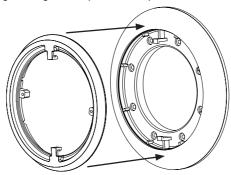


E) Push gland internal grabber into top of plug housing and screw on gland nut to secure cable onto plug housing.



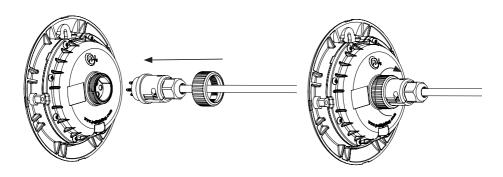
## 5) Install Adapter Plate to Niche

Align adatpter plate with existing mounting tabs and push to fit into position.

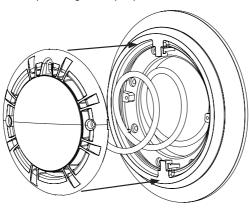


## 6) Install Retro Light

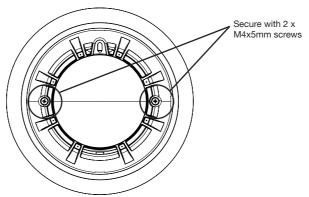
A) Remove dust cap from back of Retro Light and insert plug. Hand tighten nut clockwise on light.



B) Coil cable into niche and position light in adapter plate



C) Secure light into adapter plate with 2 x M4x5mm screws.

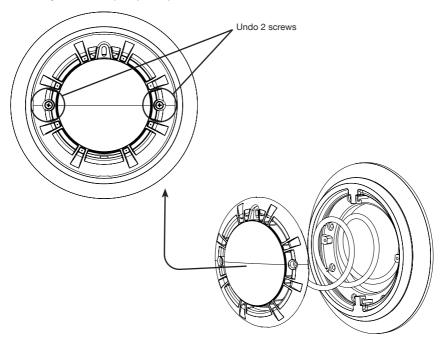


### 7) Turn on power

Turn on power at mains/lighting controller/transformer to ensure system is operational.

#### Winterisation

Undo 2 screws and remove likght from adapter plate. Lift light above water, dry and disconnect cable from light. Store cable and light with dust caps to protect pins.



#### **ELECTRICAL GROUNDING**

Underwriters Laboratories (UL) StatementPer the NEC, NFPA 70, Article 680.23 (B)(5), states that bonding shall not be required for luminaires that are listed for the application and have no non-current carrying metal parts. In addition, per Article 680.26 (B)(4), exception states that Listed low-voltage lighting systems with non-metallic forming shells shall not require bonding. Therefore, luminaires with polymeric/non-current carrying metal parts are not required to be grounded / bonded.

#### Manufacturers Statement

PAL Lighting with their plastic housing designs and plastic niches do not require grounding / bonding. PAL Lighting lights have also been determined to comply with the applicable requirements for wet-niche, LED type Swimming Pool and Spa Luminaires.

Do not make any changes or modifications to the equipment unless otherwise specified in the manual.

# TERMS AND CONDITIONS

#### PAL PRODUCT WARRANTY DETAILS

The PAL product is guaranteed against defects in materials and/or workmanship, under normal domestic use for (36) thirty six months.

Except as otherwise provided for by law, this guarantee becomes invalid if in the opinion of the Company the product has been misused, abused, damaged in transit, incorrectly installed, or connected to an electrical supply not corresponding with the products specification or a non-approved PAL power supply.

The Company is not responsible for forwarding freight charges or losses in transit.

If any part of the product proves to be defective within the warranty period, the defective part will be repaired or replaced, free of charge and at the discretion of PAL Lighting.

PAL Lighting shall not be liable for any loss of profits or any consequential, indirect or special loss, damage or injury of any kind whatsoever arising directly or indirectly from PAL Lighting products.

PLEASE REGISTER YOUR PRODUCT WARRANTY DETAILS ONLINE AT:

https://pallighting.com/product-registration/

OR You MUST retain some proof of purchase to provide evidence of the DATE of the original purchase.

