PAL Winterizing outdoor swimming pools

Swimming Pools may or may not be drained completely. If not drained completely, the water level should be lowered to approximately 2-4” below the pool lights and make sure all the water is drained out of the wall fitting - blowing the line out with air is recommended.

**MODE SELECTION**

To operate the light’s turn ON the light switch. To advance to the next color mode just turn the light switch OFF then ON within 1.5 seconds on each color advance until you select the required color mode. If you require to select a new color after the light mode is set just switch off the light switch for 2 seconds and the lamp will reset ready to select a new color mode.

**START COLOR SELECTION**

The choice of 3 Start Colors can be selected by adjusting the DIP switch as shown in Mode 1. The color change time and aqua as an alternative to red can also be selected as shown in the selection guide.

This PAL light is now equipped with the new programmable LAU lamp. It will color synch with all PAL lights equipped with LAL* and LAU LED lamps as well as any of the new CLS-2 equipped Color Light Streams water features connected to the same 12V AC transformer. Please see the color mode setting chart for further details.

*note - if color synching with any LAL equipped PAL lights, only the factory default settings will work (all DIP switches in down/off position for LAU lamps & CLS-2 drivers). Otherwise, all switch positions will need to match each other for successful synchronization.

**DIMENSIONAL DETAILS**

<table>
<thead>
<tr>
<th>PAL TREO LIGHT</th>
<th>7/8&quot;</th>
<th>5/16&quot;</th>
<th>3 9/16&quot;</th>
<th>2 3/8&quot;</th>
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**FEATURES**

- Compact Modern Design
- All Moulded Construction
- No Bonding Required Article 680 Compliant
- Side Light Feature
- Even Light Distribution
- Color Lock Feature with 6 Fixed Colors and 2 Color Effects with 3 selectable start colors
- Long Life LED Lamp
- Low Power Consumption
  - Less than 5 watts
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 12V 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 all plastic construction and complies with NEC article 680 Requirements.**

3) This Underwater light is designed for use with an Approved Low Voltage Transformer operating between 12 - 15V. **DO NOT CONNECT THIS 12V LIGHT DIRECT TO A 120V CIRCUIT.**

4) The PAL TREO is Aquatic and is suitable for use in or out of water.

5) Fit your PAL TREO Underwater Light/s as outlined in the following detailed installation instructions.

Lamp Replacement Instructions for the Treo Underwater Light

Step 1. Unscrew the Cover Lens Locking Screw (shown in figure 2) until the lens cover can be twisted in an anti-clockwise direction to retract the lamp fitting from the housing (shown in figure 1).

Step 2. Remove the clip-on lens cover with the aid of a screwdriver as shown in figure 3.

Step 3. Unscrew the (6) six lens screws to unclip the lamp from the lamp socket as shown on the Assembly drawing.

Step 4. Replace the LAU-2 Lamp. **Note: To ensure reliable operation of your PAL TREO it is essential to use only the genuine LAU-2 Lamp & Seal Replacement kit part no. FPAL-LAU.**

When the LAU-2 Lamp is replaced it is essential to maintain the water tight seal that the "O" ring seal be also replaced, the "O" ring seal is supplied with the Lamp/Seal replacement kit. (FPAL-LAU)

Step 5. When reassembling the PAL TREO fitting ensure the "O" ring is sitting correctly and replace the (6) lens screws and ensure the screws are not overtightened. Fit the lens cover.

Step 6. Feed the wire back into the wall.

Installation Instructions for PAL TREO using Standard 1 1/2" Pool Wall Fitting in Pools/Spas

Step 1. Locate the appropriate position/s for mounting the PAL TREO light/s to give the best coverage for the size, shape and interior color of the pool. The center of the light should be positioned 12" below the water level or 18" below the top of the pool deck (assuming 6" freeboard) to provide the best illumination of the pool water.

Step 2. Fit a standard 1 1/2" Pool Wall Fitting into the pool wall at the selected location. Watertight PVC conduit must be used from the wall fitting to the above water/ground level conduit termination on the transformer side of the 12V AC line. Please refer to the illustration below.

Step 3. Fit the PAL TREO fitting into the 1 1/2" Wall Fitting as shown. Note: The front cover gasket can be replaced by a bead of silicon suitable for pool use.

**WET NICHE INSTALL**

12V AC TRANSFORMER

Pool Deck

Water Level

1-1/2" watertight, underground PVC conduit back to 12V AC transformer location. All fittings should be glued and watertight.

* Minimum of 3 1/2" of straight, 1-1/2" PVC pipe behind wall fitting required prior to conduit reducer or bend.

**optimal Coverage will occur at 10" - 12" under water surface.

Front Cover Seal or a bead of silicon

Figure 1

Figure 2

Figure 3

Front View

Side View Assembly Details

Clip off cover with Screwdriver

Note: Fitted with White Dress Ring and Spare Tan, Black and Grey supplied