

INSTALLATION INSTRUCTION
PAL LIGHTING TREO MAX PLUS



64-EGTMX-V2

CONTENTS	
Guides and Warnings	p1
Treo Max+ Installation	p2
Connecting to Light	p4
Troubleshooting	p5
Terms and Conditions	p5

GUIDES AND WARNINGS

TOOLS REQUIRED

- 2 ½" Hole Saw
Silicon + caulking gun

Fiberglass Pools Only
- Thread tape

 IMPORTANT INFORMATION

DO NOT CONNECT THIS 24V DC LIGHT DIRECT TO A 120V CIRCUIT.

WARNING

- The Junction Box and the low voltage transformer is located at least 4 (four) inches above ground level or eight (8) inches above maximum water level, whichever is higher. The Junction Box must be at least 48 inches 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.

CAUTION

- 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.
- This 24V 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.

Canadian Installaton 1.5" Wall Fitting
Be sure the electrical system of your pool conforms with the following requirements of the Canadian Electrical Code (CEC), 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.



PACKAGE CONTENTS

1 x Treo Max+
 1 x Cable **Select Models*
 3 x Dress Rings

*A PAL Lighting remote driver (controller & transformer) is required to power this fixture. (sold separately)
 Refer to remote driver owner's manual for detailed installation instructions. www.pallighting.com
 Installations requiring junction boxes - we recommend using PAL Lighting junction boxes (64-JB-5 or 64-JB-8).*

TREO MAX+ INSTALLATION

GUNITE/CONCRETE INSTALLATION GUIDELINES

CONDUIT AND DRIVER PLACEMENT.

1. DRIVER Placement. Mount the 24VAC driver at least 48" away from the pool or spa. Ensure the driver or junction box is installed 18" minimum above the maximum water level of the pool.

2. Electrical Conduit. Use rigid 1" electrical rated conduit from the driver/junction box to the pool wall fitting. Maintain a minimum of 8" separation between conduit and pool structure where shown.

WALL FITTING INSTALLATION.

1. Install the 1.5" PVC wall fitting into the gunite wall structure. This wall fitting is for gunite pools only.

2. Connect the conduit to the wall fitting securely to maintain a watertight path for the cable.

LIGHT PLACEMENT.

1. Position the Treo Max+ light fixture in the wall fitting.

2. Ensure the top of the lens is at least 4" below the waterline.

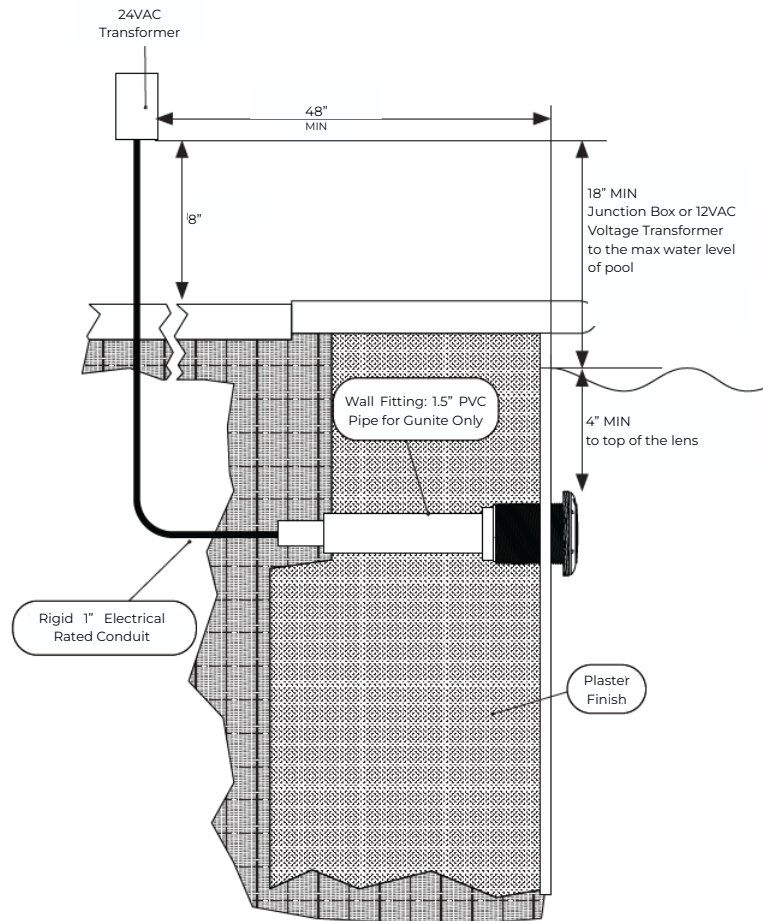
3. Apply plaster finish around the wall fitting and flush to create a clean final surface.

ELECTRICAL CONNECTION.

1. Pull the fixture's cord through the conduit and into the junction box/driver housing.

2. Make all connections according to local and NEC electrical codes.

3. Verify that the driver output is 24VAC before powering the light.



DRILLING HOLE IN VINYL/FIBERGLASS POOL

POSITIONING THE LIGHT.

1. For best coverage (size, shape, and color of the pool considered), the center of the light should be 12" below the water level, or 18" below the top of the pool deck. This ensures maximum illumination of the water.

2. The light can be installed at a minimum of 4" of water coverage if needed.

SELECT THE MOUNTING AREA.

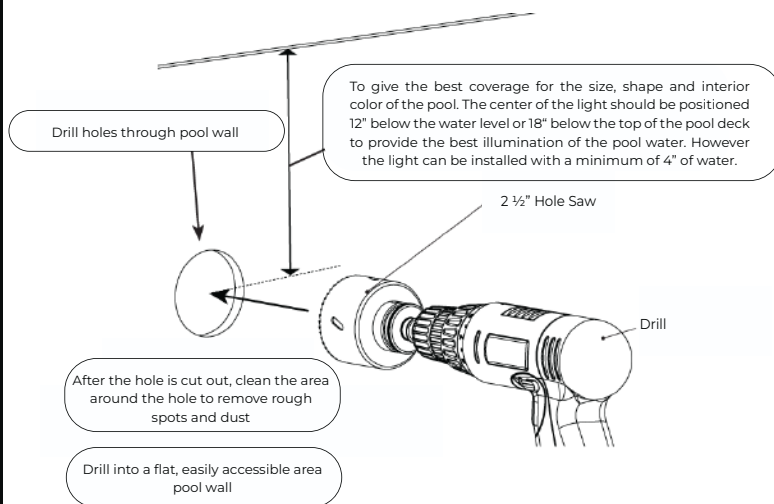
1. Choose a flat, easily accessible area of the pool wall. Avoid rough or uneven surfaces that may affect sealing and alignment.

DRILLING THE HOLE.

1. Use a 2 ½" holesaw attached to a drill. Carefully drill a hole through the pool wall at the marked position. Ensure the drill remains level and steady to avoid angled cuts.

CLEANING THE HOLE.

1. After drilling, remove all rough edges, dust, and debris from the cut area. A clean surface ensures a tight and secure fit for the wall fitting and light.



SEALING NICHELESS LIGHT INTO 1½" FITTING

APPLY SEALANT.

Option A – Threaded Sealant Tape

Wrap threaded sealant tape around the threads of the light. Apply evenly in the direction of the threads to prevent unraveling during installation.

Option B – Silicone Sealant (Alternative Method)

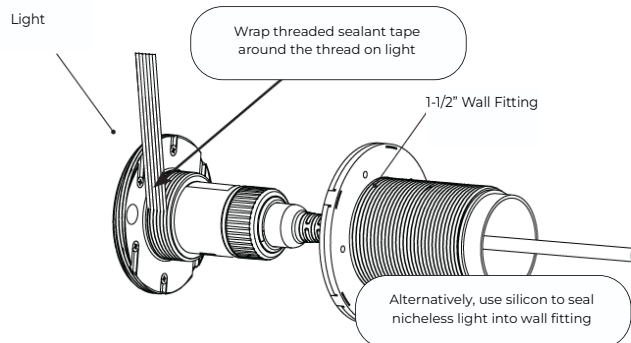
Instead of tape, you may apply a thin, even bead of silicone sealant around the threaded section of the light.

INSERT INTO WALL FITTING.

1. Align the light with the 1-1/2" wall fitting.

2. Thread the light carefully into the fitting, ensuring it goes in straight without cross-threading.

3. Tighten securely to achieve a watertight seal, but do not overtighten which could damage the threads or fitting.



REMOVING AND INSTALLING LIGHT

INSTALLING THE LIGHT.

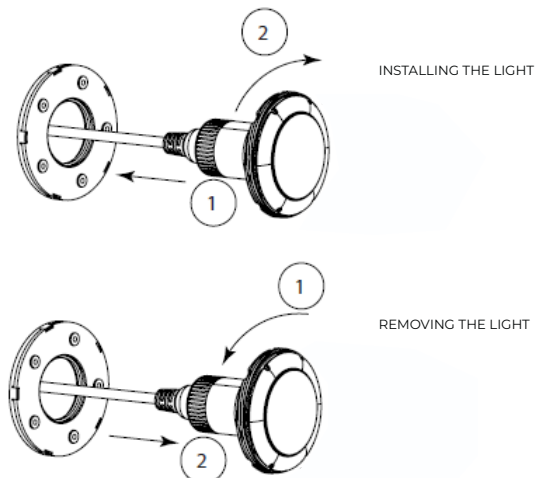
1. Align the light with the nicheless wall fitting
Insert the light into the wall fitting.
Twist the light clockwise into the nicheless fitting until it is snug and secure.

REMOVING THE LIGHT.

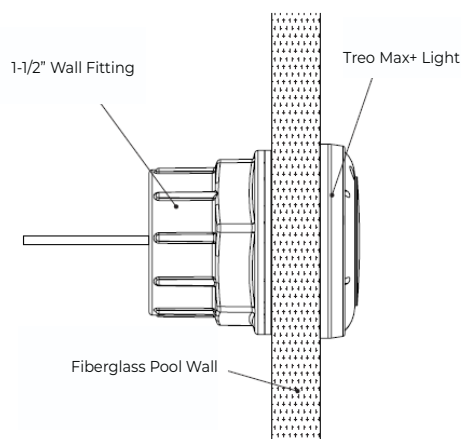
1. Using hand, twist counter-clockwise to loosen the light from the fitting.
Continue twisting until the light is free from the nicheless fitting.

FINAL INSTALLATION

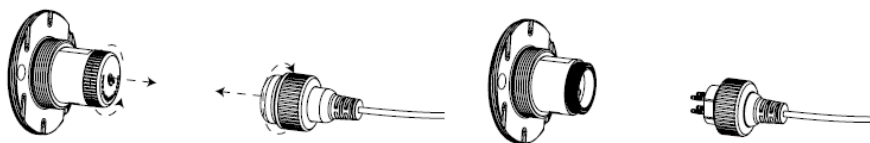
This diagram shows the final installation of the PAL Treo Max+ Light in a vinyl/fiberglass pool wall. The light is securely fitted into a 1.5" wall fitting, with the body of the fixture seated flush against the pool wall to ensure proper alignment and watertight sealing. Once installed, the Treo Max + Light provides a clean, finished appearance from inside the pool while maintaining secure cable routing and support through the back of the niche.



Final Installation



CONNECTING TO LIGHT



Remove protective caps from plug and light socket by unscrewing



Insert plug into light and secure with screw-on cap

ENSURE O-RING IS FLAT DURING INSTALLATION.

TROUBLESHOOTING

Model: Treo Max+

ISSUE	REASON	ACTION
Light not turning on (1)	Faulty light head.	Replace light head.
Light not turning on (2)	Faulty Driver.	Check Driver output under load using a multimeter. 12volts DC.
Light not turning on (3)	Cut Cable.	Check the voltage at light using a multimeter.
Light not turning on (4)	No power to driver.	Check Driver is connected to power, check power indicator LED is lit on your Driver. If still no indicator light, send back to PAL for repair.
Light not turning on (5)	Faulty LED Driver inside control box.	Push the test button inside control box, if lights still doesn't turn on then send product back to PAL.
Lights out of sync (1)	Light incorrectly wired to control box.	Check color wire sequences connecting to control box.
Lights out of sync (2)	Lights incorrectly wired to LED light head.	Check color sequences to LED lamp terminal block inside the light.

WINTERIZATION

Ensure the water level is at least 4 inches above or below the light, based on the specific winterization requirements of the pool. Always consult a local swimming pool professional to determine the correct procedure for your region. Never drain water from the pool without first checking local groundwater levels as this may cause structural damage.

To remove the light, use your hand to rotate out counter clockwise.

NOTE: If water is trapped in conduit, damage may occur from freezing expansion. If partially draining the pool, DO NOT maintain the water level at the height of the light.

