

# $LITE \ STAR^{\texttt{B}}$ installation and user's guide

IMPORTANT SAFETY INSTRUCTIONS READ AND FOLLOW ALL INSTRUCTIONS SAVE THESE INSTRUCTIONS

#### IMPORTANT WARNINGS AND SAFETY INSTRUCTIONS

**A DANGER** FAILURE TO FOLLOW ALL INSTRUCTIONS AND WARNINGS CAN RESULT IN SERIOUS BODILY INJURY OR DEATH. TURN OFF POWER TO TRANSFORMER SUPPLYING LIGHT BEFORE SERVICING.

#### ATTENTION INSTALLER:

Read this manual completely before attempting installation. Consult AquaStar Pool Products with any question regarding this product. This guide must be left with the pool owner/operator.

#### ATTENTION USER:

This guide contains important information about the installation, operation and safe use of this product. Please retain this guide for future reference.

IMPORTANT NOTICE - FOR SUPPLY CONNECTION, USE ONLY AN ISOLATING LOW VOLTAGE POWER SUPPLY WITH UNGROUNDED OUTPUT, EVALUATED FOR SWIMMING POOL USE.

Do not open the LED light assembly. Light has no user serviceable parts inside.

**A WARNING** The LiteStar model number LS1033-x with 316 stainless steel bezel must be bonded in accordance with the National Electric Code using grounding terminal provided.

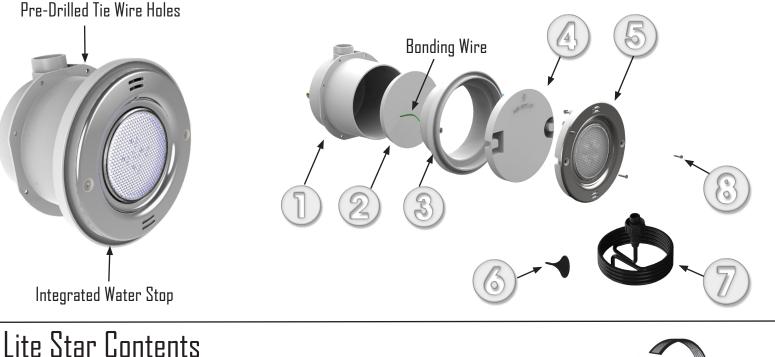
No separate ground wire is required for all other Lite Star models that have no exposed metal.

**A WARNING** The Lite Star LED, adjustable angle light must be installed by a licensed or certified electrician or a qualified pool professional in with the National Electric Code and all applicable local codes and ordinances.

**NOTICE** - Do not operate Lite Star out of water as overheating will cause intermittent dimming to protect from overheating. While the light has been tested for continuous out of water operation, this is NOT recommended and may reduce the life of the product.

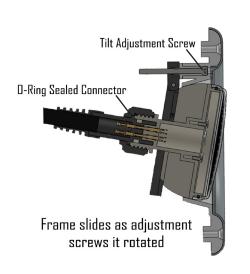
## **Component Overview**

# Lite Star®



- 1. Housing
- 2. Gunite Sheild
- 3. Water Stop Niche
- 4. Plaster Sheild

## Lite Star Features



**LITE STAR CUT-AWAY** 10 Degree Downward Angle 5. Low-Voltage LED Light

- 6. Tilt Adjustment Tool
- 7. Quick-Connect Cord
- 8. 316 Stainless Steel Screws



Lite Star was engineered for brilliance, energy efficiency, and ease of installation.

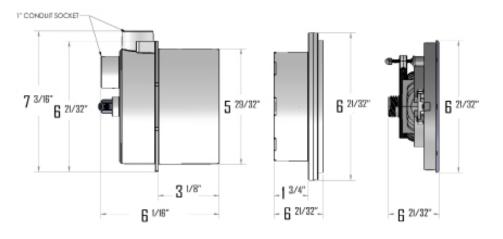
Lite Star features Adjust-A-Beam technology which allows a full 20 degrees of control of the light's angle, making it easy to reduce surface glare and highlight the unique finish and shape of a pool, spa, or fountain at any depth.

Powered by 12 low voltage LEDS, Lite Star produces a bright brilliant light while using a fraction of the power of a traditional incandescent or halogen pool light. The long lasting LED bulbs are easy to replace with a quick-connect plug.

The Lite Star includes a strong PVC niche that is designed to make installation simple. Pre-drilled wire tie holes make it easy to secure the niche, multiple conduit ports provide plumbing flexibility, and the adjustable collar with Water Stop provides extra protection against leaks.

## Installation Instructions

#### **LiteStar Dimensions**



#### **Installation Instructions**

**1.** Start by placing the Lite Star niche such that it is held on all four sides by rebar. Rebar should be set at 10" for a 12" beam and 8" for a 10 " beam. It may be necessary to add sections or move existing sections of rebar in order to ensure that the niche is held in securely.

NEC REQUIRES THAT THE TOP OF THE LIGHT LENS BE AT LEAST 18 INCHES BELOW THE WATER LEVEL. IT IS IMPORTANT TO POSITION THE LITE STAR NICHE SO THAT YOU COMPLY WITH THIS REQUIREMENT.

**2.** Once the niche has been securely positioned and is held in the rebar it must be securely tied to the rebar using tie wire. Pre-drilled holes have been added along the niche's flange for convenience. Tie wire should also be wrapped tightly around the outer circumference of the niche and secured to rebar for additional support.

**3.** The Lite Star niche has two conduit ports. Punch out only the interior tab of the port that is to be used, leave the other tab intact. The niche will accept 1" PVC electrical conduit. Do not use flexible conduit. Attach conduit and securely connect the bonding wire to the niche's outside bonding connector.

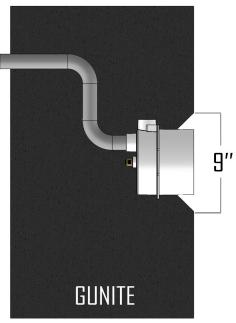


Figure 1

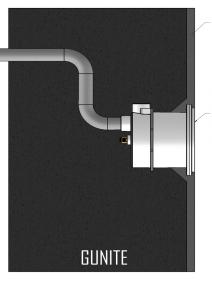
## Installation Instructions

**4.** Place on the provided gunite shield. The gunite shield must be installed in order to prevent gunite or concrete from entering the inside of the niche.

**5.** The outside bonding connection must be inspected before the concrete or gunite is applied. Follow applicable codes. It's important to maintain a 9" diameter undercut around the outside circumference of the niche and to avoid having concrete or gunite harden on it's outer edge (*See Figure 1*).

**6.** Before applying finish remove the gunite shield. Using PVC glue or construction adhesive secure the adjustable plaster ring with integrated Water Stop inside the Lite Star niche, ensure proper depth and alignment. Pool finish should be flush with the front face of the adjustable plaster ring (*See Figure 2*). Place plaster cap onto the adjustable plaster ring to avoid debris from entering while applying the finish.

**7.** To install pool light remove the plaster cap. Clean any debris that may have entered the niche and the adjustable plaster ring during pool construction. Ensure that there are two O-rings located inside the quick-connect plug and that they are lubricated and in good condition. Excess cable should be long enough to rest on the deck of the pool and should be wound up inside the niche (*See Figure 3*). Connect the quick-connect cord to the back of the LED light, screw the locking nut clockwise till fully secured. Connect bonding wire from the light bonding lug to the and internal niche's bonding lug. Ensure that both bonding connections are secure, follow all applicable codes. Securely fasten the light with provided screws onto the adjustable plaster ring.



PLASTER /PEBBLE

ite Star

ADJUSTABLE PLASTER RING INSTALLED AND SEALED

Figure 2

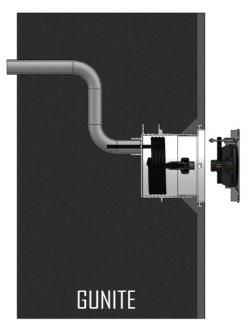


Figure 3

**8.** To adjust pool light use the Lite Star's adjustment wrench and turn the adjustment screw located at the top of the pool light clockwise to tilt the light up and counterclockwise to tilt down. The LiteStar can be tilted 10 degrees in both directions, for a total of 20 degrees of total adjustment.