

S.R.Smith Treo Micro LED Light

ASSEMBLY & INSTALLATION INSTRUCTIONS



Installation information applies to both RGB and White Light only models.

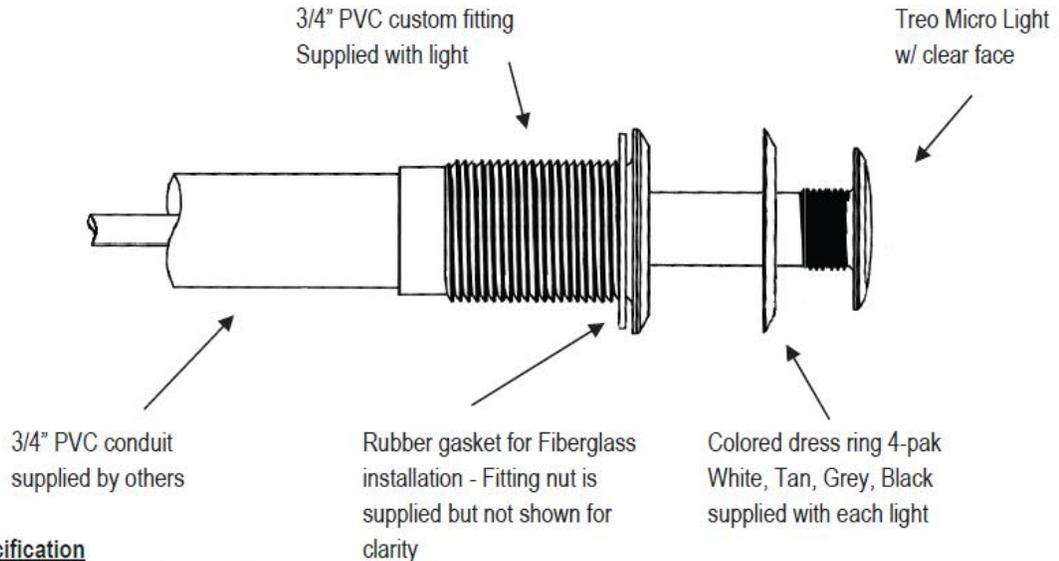
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**CONFORMS TO UL STD 676
CERTIFIED TO CSA STD C22.2 #89**



Thank you for purchasing the S.R.Smith Treo Micro LED Light for underwater lighting applications in small, shallow areas or places where low powered accent lighting is desired in pools, spas, and water features.

The light comes with its own custom concrete or fiberglass wall fitting that will glue onto $\frac{3}{4}$ " PVC pipe or conduit. While not recommended, the light body also comes threaded to fit $\frac{1}{2}$ " NPT female threads for alternative installations.



Electrical Specification

Class 2 (or better) Input voltage: 12-14 VAC

Color Change (RGB): 1.5 Watts max.

White Only: 1.5 Watts max.

S.R.Smith poolLUX™ ACP* compatible

(*ACP = Advanced Control Protocol – see pg. 4 for additional information)

Important Installation Information

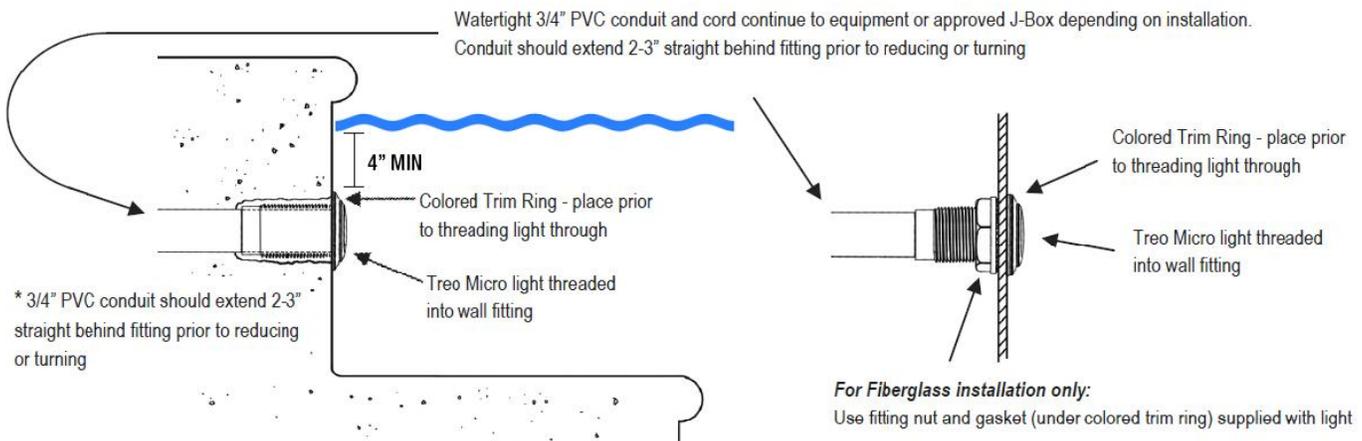
1. Ensure that the electrical system for your pool conforms with all requirements of the National Electrical Code (NEC) and all relevant local codes and ordinances.
2. This 12V Underwater Light must be installed in accordance with the National Electrical Code by a Certified Electrician or a Qualified Pool Technician. **NOTE:** No Bonding Terminal is required on the forming shell since the fixture is an all plastic construction and complies with NEC article 680 Requirements.
3. Waterproof conduit must be used from the S.R.Smith Treo Micro Light to the 'above ground' power supply equipment.
4. **For supply connection, use only an isolating low voltage power supply with ungrounded output, evaluated for swimming pool use.**
5. **DO NOT CONNECT THIS 12V LIGHT DIRECTLY TO A 120VAC CIRCUIT - LIGHT WILL BE DAMAGED.**
6. Fit your S.R.Smith Treo Micro LED Light/s as outlined in the following detailed installation instructions.

THIS DEVICE IS NOT INTENDED FOR USE WITH EMERGENCY EXITS
NE CONVIENT PAS AUX SORTIES DE SECOURS

Installation instructions for S.R.Smith Treo Micro LED Series with custom, 3/4" wall fitting for concrete or fiberglass pools or spas

1. Locate the appropriate positions for mounting the wall fittings to install the S.R.Smith Treo Micro lights to give the best coverage in the desired area. Per NEC Article 680.23 (5) lights are to be installed in no less than 18" (450mm) below the normal water level unless the luminaire is listed and identified for use at lesser depths. **S.R.Smith lights are listed and identified for use at depths no less than 4" (100mm) below the normal water level.** All depth measurements are from the normal water level to the top of the Luminaire lens.
2. Run 3/4", Watertight, PVC conduit to the light location from the 'Above Ground' location of the 12VAC, Class 2 power source. Conduit may need to terminate directly to the power source enclosure or an approved Junction Box depending on local Rules and Regulations for the application.
For Concrete - Omit the fitting nut and gasket so that the fitting can be directly glued on the 3/4" PVC conduit with the back of the fitting flange at wall finish grade. Use tape to mask off the front of fitting to protect it from plaster or other finish material as the color ring needs to fit cleanly over the front of the fitting.
For Fiberglass - Drill a 1 5/16" to 1 3/8" hole. Place the gasket behind the fitting flange and slide fitting through hole from the front and secure nut from the back - **DO NOT** Over-tighten. Silicone sealant suitable for pool use may be used to enhance sealing around fitting if used in a problematic area such as curves or uneven surfaces. Be sure to protect the front of the fitting from glue, sealant or other debris as the color ring needs to fit cleanly over the front of the fitting.
3. Fit the desired color ring on the fitting face and carefully pull the waterproof supply cable through. Fit the S.R.Smith Treo Micro into the 1/2" threads and use the included tool to gently tighten the light body. **DO NOT** Over-tighten the light as damage may occur. Connect the red / black wire conductors of the S.R.Smith Treo Micro to an approved, low voltage, Class 2, Magnetic Type Power Source operating between 12 - 14VAC or an S.R.Smith poolLUX™ brand power source as required by NEC or relevant local codes and ordinances.

Luminaire is listed and identified for use at 4" or more below the normal water level of the pool.



S.R.Smith Treo Micro LED Light Winterization Recommendations

Swimming Pools may or may not be drained completely. If not drained completely, the water level should be lowered below the S.R.Smith Treo Micro LED light and make sure that all water is drained from the wall fitting and conduit. The S.R.Smith Treo Micro will need to be unthreaded (completely disengage the threads) from the wall fitting and left to rest in the fitting. Alternatively, the S.R.Smith Treo Micro light may be removed completely, the conduit purged of all water, and water level left below the fitting.

NOTE - If water is trapped in conduit, damage may occur from freeze expansion.

Basic Operation for LED Color Changing models (RGB) - White Only lamps are simply on or off

When connected to an approved, 12VAC, Class 2 power supply - The S.R.Smith Treo Micro LED color changing light uses simple 'off / on' power switching to control the basic, pre-defined color modes with memory function.

Memory

The memory function remembers the last color setting. For example, if the light was last used in the blue mode, the next time the light is turned on it will be blue mode.

Color Mode Selection

The LED will turn on to the color in memory. To move to the next color mode, quickly (within one second or faster) toggle the power to the lights 'OFF / ON'.

Advance through the modes until the desired mode is selected. The modes will cycle 1,2,3,4,5,6,7,8, then cycle back to 1. See table below for details.

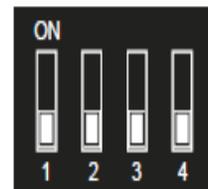
Color Mode Selection Guide	
Mode 1	Soft Color Change
Mode 2	White
Mode 3	Blue
Mode 4	Green
Mode 5	Red
Mode 6	Amber
Mode 7	Magenta
Mode 8	Flash Color Change

Color Sync Reset

To synchronize all lights on the system including older *Fiberstars LED Series Pool lights, you must use the following sequence:

1. Turn lights 'ON' to confirm the color modes are out of sync.
2. Turn lights 'OFF' for 5 seconds or more.
3. Toggles lights 'ON' / OFF' three times within three seconds - must end in 'OFF' condition
4. Leave lights in 'OFF' condition for 5 seconds.
5. Turn lights 'ON' and confirm that all lights are in mode #1, Soft Color Change

* Older Fiberstars LED lights can synchronize with the newest generation lights ONLY if they have their DIP switches in their default, 'All Down' position. In a mixed environment, the Color Sync Reset will need to be performed each time the lights are used and color synchronization is desired.



Advanced Operation via ACP

Advance Control Protocol (ACP) provides dimming and custom color control through a dedicated color remote control. All S.R. Smith LED lights (Treo®, Fiberglass®, Treo Micro®) and 2015 or later water features are ACP compatible.

This sealed light is equipped with a thermal protection circuit built into the LED emitter control circuit. If the circuit detects that the light is getting too hot for a given environment, it will automatically reduce the brightness in increments until the light remains below the thermal threshold. If this condition occurs, it may or may not be noticeable by the human eye and is a normal function, not a sign of malfunction or failure.