

## Underwater LED Installation Instructions

Mounting Hole :5mm Stainless Steel Screw

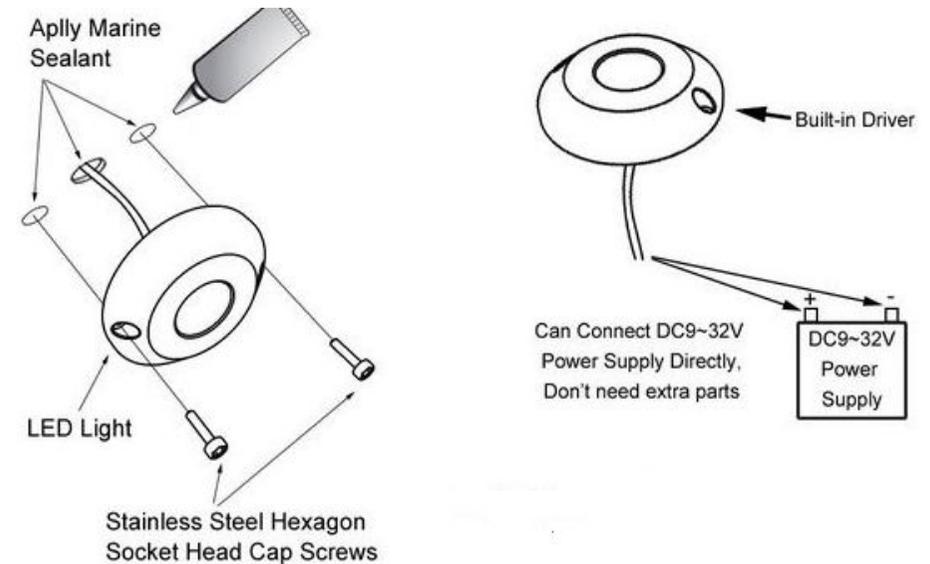
Materials needed:

Stiff Scraper, Boat life Sealant, Screwdriver, Isopropyl, or Denatured Alcohol , Electric Drill and Drill Index , Pencil, Lint Free Cloths , Included Mounting Hardware.

CAUTION:Do not run lights out of water for more than 1 minute(although lights have temperature protection. But it's for testing purposes only, If lights turn off after testing,don't touch the lights body, cation hot.) DANGER: Do not stare directly into the lights as this may cause damage to your eyesight.

NOTE: Installation of lights must be done while vessel is out of the water. We are not responsible for any personal or property damage incurred due to improper installation. Failure to follow installation instructions will result in void of warranty. Installation must occur in conditions above 50F to ensure proper adhesion.

- 1) Determine the desired mounting location on the boat's hull. Remove any ablative paint from the mounting location to ensure proper adhesion. Check that the corresponding location inside the hull is accessible and the through hole will not penetrate any critical systems or structural members.
- 2) Carefully drill a through hole for the wiring , double checking one last time for potentially dangerous penetrations. lights require an approximate 6.5mm hole60watt(120watt and 180watt : 8mm hole)
- 3) Feed the wire into the vessel and hold the light flush against the hull. Using the light, mark locations of pilot holes, then remove the light. lights are designed to use M5 screws, requiring a 5.3mm pilot hole. It is recommended to run the screws into and out of the holes once before actually mounting the light. For installations requiring through-bolts, use stainless steel truss head machine screws and dry fit. A slight countersink at the hole entry removes excess material and allows the screw to self center.
- 4) Clean the mounting area on the exterior of the hull thoroughly, using alcohol and lint-freecloths.
- 5) Apply a uniform layer of Life-Seal to the backside of the light, using a 1/2' thick bead, tracing from the outer edge of the light, around the mounting holes and wiring hole and across the back of the light. Ensure that there is enough adhesive to create a strong bond between the light and the boat's hull. Also apply sealant to the hull by tracing 1/2'



from the through hole and pilot holes.

- 6) Feed the light's wire into the through hole, Press light against the hull using gentle but uniform pressure. Install the mounting screws with included neoprene washers at the mounting holes at each end of the light.
  - 7) Remove and smooth excess sealant that may have squeezed out during mounting.Check for a seamless seal around the entire perimeter of the light and add sealant where necessary.
  - 8) Ensure boat's 12V DC system is de-energized. Wire the light's positive and negative leads to the boat's 12V wiring. The positive wire is RED and the negative wire is BLACK. recommends marine grade heat-shrink butt connectors to connect Our lights to your boat's 12VDC system.(our lights are available for 9~30V, include 12V,24V)
  - 9) Ensure that the light is thoroughly fastened to the hull and that the Boat Life sealant has completely cured prior to launching the boat. The light may be tested for brief periods while the boat is out of the water. See CAUTION statements above.
  - 10) Sit back, relax, and admire your handy work. You will the envy of everyone at the dock.
- Please feel free to contact us at any time if you have any questions regarding installation, wiring, operation, or maintenance. Also,