

Neptune X6™ 12/24V SAE 316L Stainless Steel Low Profile Through-Hull Mounted Underwater LED Light Manual

Thank you for purchasing Dr. LED's Neptune X6 underwater LED light.

This 1500+ lumen Neptune X6 underwater light outperforms all underwater LED lights in the same category in lumens per LED per dollar. Six US made high-power CREE LEDs provide the highest lumen-per-watt underwater light ever made.

Features:

- * Low profile 5mm (~0.2") protrusion and small footprint: 100mm (~3.9") diameter on outer hull.
- * Replaces (same dimensions) our popular three LED aluminum Neptune Light.
- * High-intensity white LED light travels farther underwater for maximum visibility and truer colors.
- * Instant on, no warm-up of bulb needed.
- * SAE 316L stainless steel unibody design. No anodes required, as housing is corrosion proof.
- * Long service life, shock proof, ultra-rugged with no filament to burn out or break
- * Multi-voltage 12VDC or 24VDC.
- * Serviceable from inside the boat, if needed.
- * Non-Polarized Connection, Reverse Polarity Protected.
- * Under-Voltage and Voltage Spike Protected.
- * Electrically Protected Against RFI/EMC Interference.
- * Integrated Thermal Management.
- * Designed in the USA.
- * Compliance:
 - NMMA, USCG, ISO 8846 & SAE J1171 Ignition Protection
 - ABYC H-27 Side Load Test
 - MIL-STD-810G Vibration & Shock Proof
 - ASTM B117 Salt Spray (Fog)
 - CE, FCC Part 15, RoHS, IP68

<u>Part #</u>	<u>Description</u>	<u>Volts</u>
9000487	Underwater thru-hull LED light, Cool White 1500+ Lumens	12/24 VDC
9000494	Underwater thru-hull LED light, Blue Light 300+ Lumens	12/24 VDC

Specifications:

Operating Temperature: -40 to +145 Degree F (withstands temperature extremes).

White LED Color Temperature: Cool White 6,000 Degree Kelvin

Input Voltage: 12/24 VDC

Body, Body End Cap, Cable Gland Nut, & Body Lock Nut: Stainless Steel

Lens: Toughened/Heat Treated Glass (10mm thick)

Gasket: High Temperature (200 deg. C) Silicone Rubber

Light Cable: High Temperature (200 deg. C) Silicone Rubber Insulated Cable

Weight: ~ 2 kg (~4.4 lb)

Mechanical Installation:

Installation must be carried out by a qualified technician.

Please review drawings on the right and following pages.

Please note that the maximum hull thickness shall not exceed 100mm (~3.9").

Select a mounting location with desired visibility and a stable, sturdy mounting hull surface. The light may be placed up to 3 meters below the waterline. Make sure there is adequate access to the mounting area inside the hull before drilling.

Drill a 68mm (~2 11/16") diameter hole in the hull (1" = 25.4mm).

Make sure the outside surface and the thru-hull surface are clean and dry.

Gently unscrew the Body Lock Nut, then remove the Stainless Steel Metal Back-Plate, and Silicone Gasket from the Light Body.

Feed the Cable thru and then gently insert the Light Body thru the drilled hull. With a pencil, trace the Lens Bezel outline onto the hull and then gently remove the Light Body. Tape outside the outline to prevent excess sealant from coming into contact with the hull.

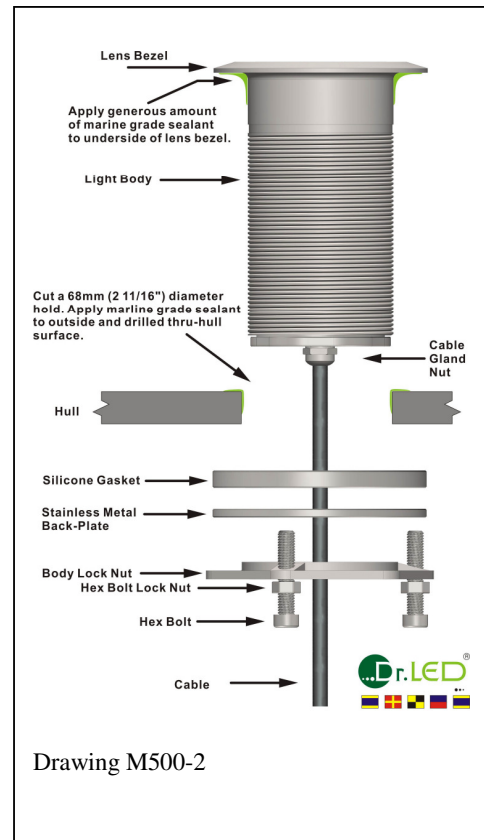
Apply a generous amount of marine grade sealant to the outside surface and the drilled thru-hull surface.

Make sure the Light End Plate and the Cable Gland Nut are tightened as depicted in Drawing M500-1 on page 4. Make sure the underside of the Lens Bezel is clean then apply a generous amount of marine grade sealant to it as depicted in Drawing M500-2 on page 5.

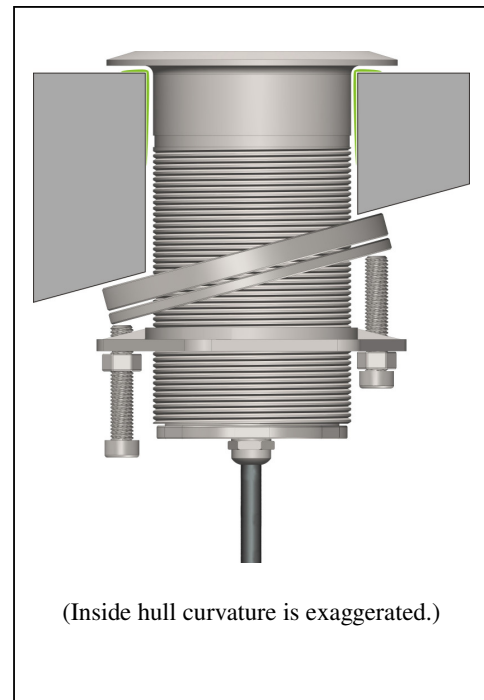
Gently insert the Light Body through the cut hull, pressing firmly. Check for a tight seal and wipe off excess sealant inside and outside. From the inside place the Silicon Rubber Gasket onto the Light Body. Then, slide the Stainless Steel Metal Back-Plate against the Rubber Gasket.

Loosen the three Hex Bolt Lock Nuts and the three stainless Hex Bolts (expose at least 5 threads) on the large Body Lock Nut. Apply a small amount of grease onto the Light Body threads. Gently screw* the large Body Lock Nut onto the threaded Light Body until one of the Hex Bolts is touching the Metal Back-Plate. Adjust the three Hex Bolts to the contour of the hull then using a Allen wrench tighten them making sure that there is adequate compression of the Gasket for a watertight fit. Finally, using a nut wrench tighten the three Hex Bolt Lock Nuts.

***BE VERY CAREFUL NOT TO DAMAGE THE BODY THREADS.**



Drawing M500-2



Electrical Wiring and Connections:

All wiring must be carried out by a qualified technician. With low voltage DC wiring, the risk of fire may be present if wiring is not correctly installed (if in doubt, ask). It is critical that the wire gauge used be of sufficient size for the current draw. Make sure the correct size fuse is used (3A Slow Blow per light). The electrical connections are not polarized.

Maintenance:

Ensure the lens is kept clean at all times. Do not use abrasive or sharp objects to clean the glass lens. A plastic or rubber scraper may be used if necessary. Keep the lens clear of paint. Failing to do so will result in poor light performance. Carry out regular checks of the housing to ensure it is kept clear and clean. Carry out regular checks of wiring and connectors to ensure they are secured.

Limited Warranty:

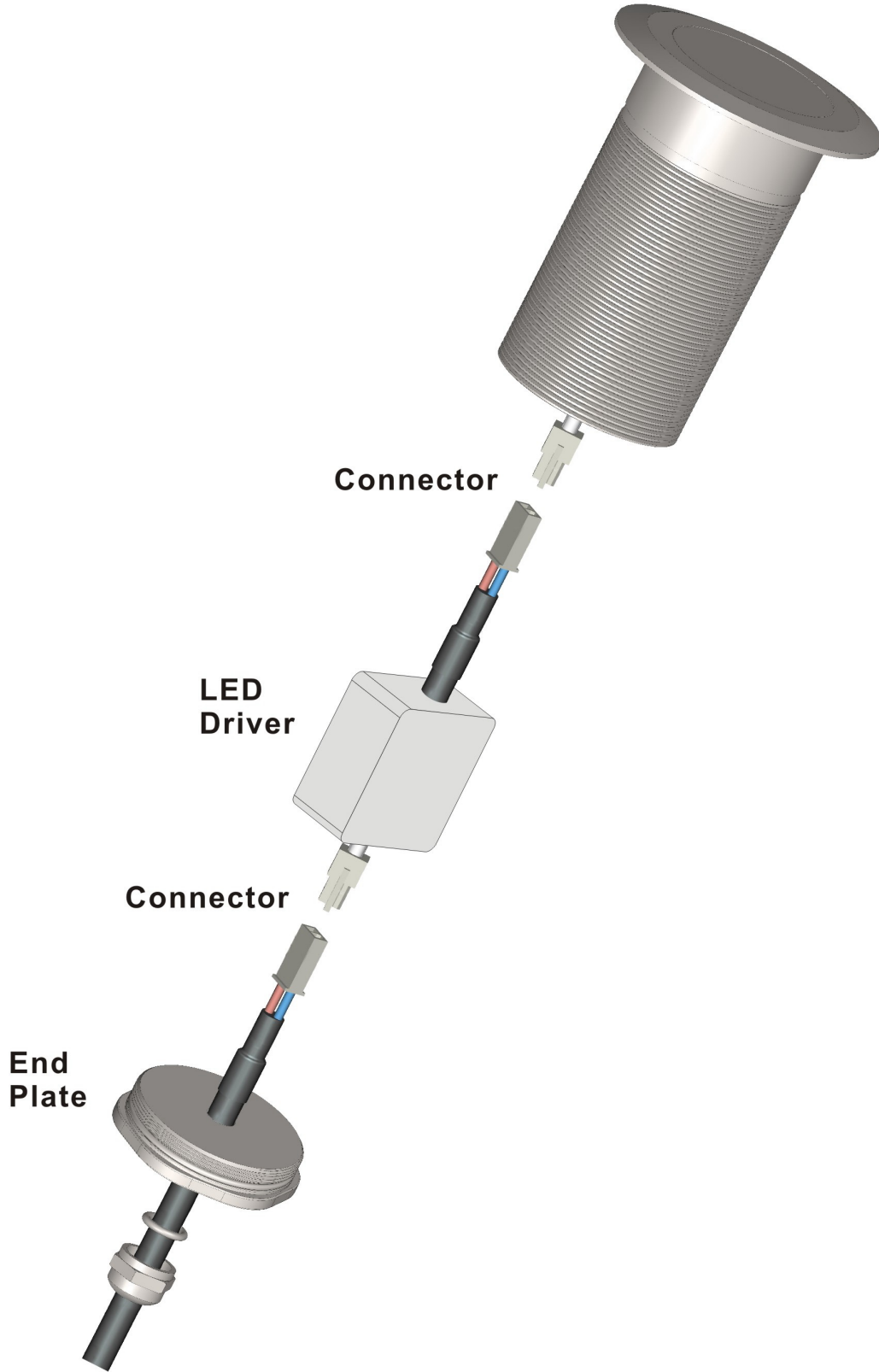
Dr. LED products are warranted for one year against defects in material and workmanship. Any product developing such defect within this period will be repaired or replaced at our option providing it is sent to us, shipping charges prepaid, along with \$20.00 to cover the cost of handling. This is not a repair charge. No additional charge will be made unless the warranty period has expired or servicing is made necessary for reasons beyond our control, in which case a charge will be applied. A Proof-of-purchase date to Dr. LED must accompany the return.

This limited warranty does not cover damages to this product through accident or misuse, nor does it cover any incidental expense to the user resulting from a non-function or mal-function of this product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights. You may also have other rights, which vary from state to state.

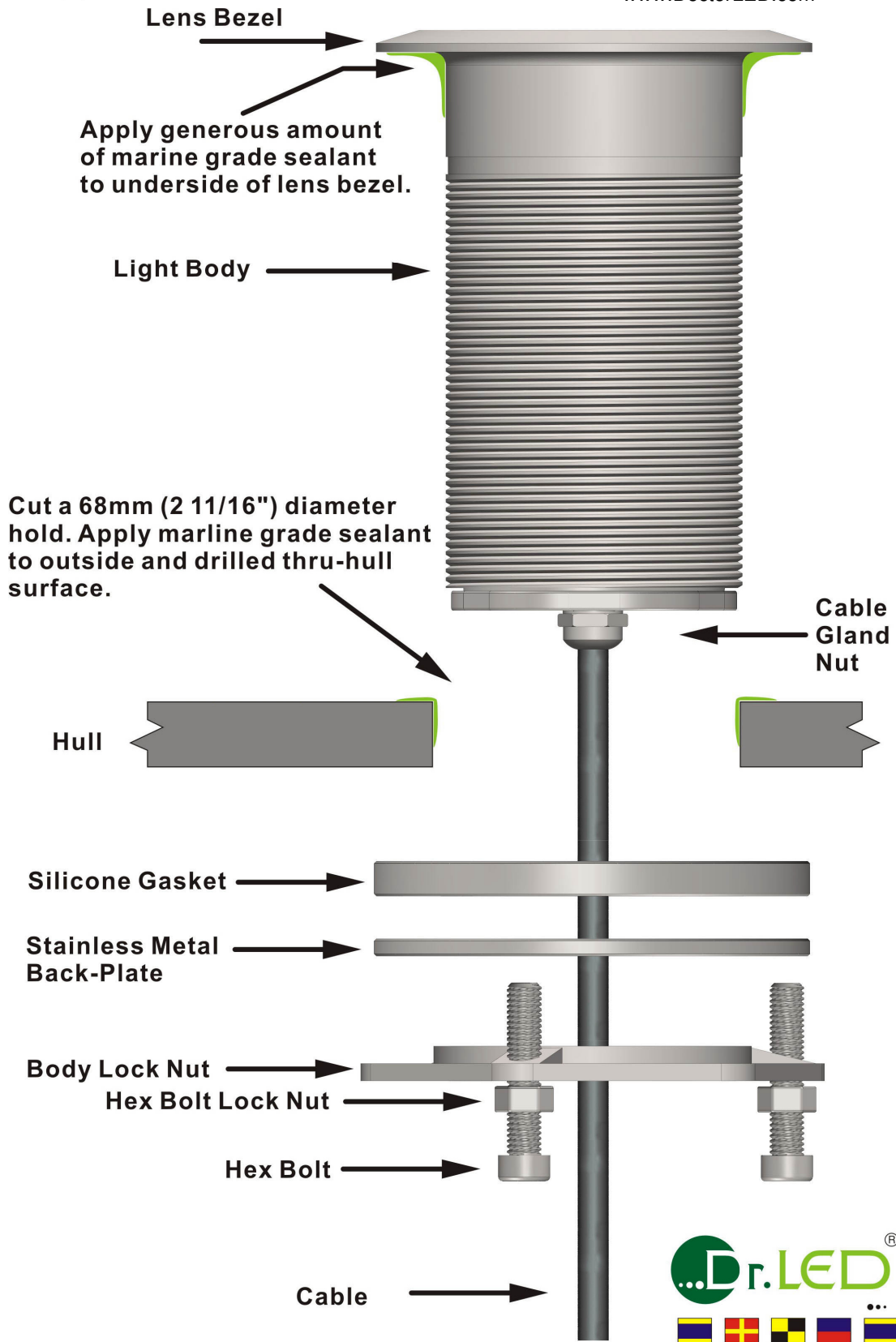
Under no circumstances is Dr. LED responsible for reimbursement of expenses related to vessel haul-outs, technician or yard personnel travel expenses, yacht storage, labor performed during removal and/or replacement of fixture, or expedited shipping costs for replacement parts. These are assumed liabilities of the customer and part of the terms of sale between Dr. LED and its customer. The warranty set forth above is inclusive and no other warranty, whether written or oral, is expressed or implied.

Warning or Disclaimer:

Electric shock, extreme serious personal injury or death may result if not used or installed properly. Light unit may become HOT upon use. For handling by qualified adults ONLY. For use with rated voltage ONLY. Dr. LED is not responsible for any damage which may arise from improper use or tampering of this product.



Drawing M500-1



Drawing M500-2