



THRU-HULL™ Installation Manual

Patents Granted



Utilizing
Tritonium™
Optical Technology

IP68 connectors by



DEUTSCH

Congratulations on purchasing your
new OceanLED® underwater light.



THRU-HULL®
LED underwater light



Locking ring assembly, washer & 5mm allen key



12v/24v LED driver



2m / 6.5' Extension cable

This kit should also include a warranty certificate (not pictured).

Prior to Fitting

Installation should only be carried out by qualified / approved personnel using suitable tools and materials.

The OceanLED® Thru-Hull LED underwater light is intended for composite and wooden hulled vessels.

Under normal circumstances lights are recommended to be at least 150-200mm below the waterline for the best illumination results, but will operate perfectly provided the light is submerged during normal operation.

Note; Positioning will be dependant on obstacles such as frame width, water lines, fuel tanks, electrical wiring etc.

Never try to install or remove this light while the vessel is in the water.

Always disconnect and isolate power before working on the light.

Key Maintenance Tips

OceanLED® recommends general inspection of the electronic driver every 12 months.

The inert ***Tritonium®*** lens used in this product is designed to inhibit sea growth, and only occasional wiping of the lens using a soft brush or cloth should be necessary.

Note:

DO NOT use any abrasive or chemical cleaner on the lens other than ***Tritonium®*** Optical Cleaner available from OceanLED®. Failure to comply may cause permanent damage to the lens.

Whenever the vessel is hauled for maintenance, clean the fixture thoroughly and re-apply anti foul / bottom paint.

Troubleshooting

Complete product manuals are available online.

Please open this booklet for installation instructions.


www.oceanled.com

Electrical Specifications

1. One IP68 electronic driver module per underwater light.
2. Maximum cable run between light and driver 20m / 65'
Cable is pre-assembled [Extension leads available on request].
3. Connection to light & driver by Deutsch IP68 Plug & Play system.
4. Power supply to driver as follows:

RED - Positive 9 - 28VDC supply range

BLACK - Negative, ground return connection

Driver Specifications		1010	1520	2010	3010	4010
Size	Length	92mm / 3 5/8"	92mm / 3 5/8"	105mm / 4 1/4"	150mm / 5 29/32"	200mm / 7 7/8"
	Width	52mm / 2 3/4"	52mm / 2 3/4"	72mm / 2 27/32"	100mm / 3 15/16"	150mm / 5 29/32"
	Height	28mm / 1 1/8"	28mm / 1 1/8"	32mm / 1 1/4"	60mm / 2 3/8"	80mm / 3 1/2"
Connector Type						
Extra space allowance for Connectors		20mm / 1 3/16" on Length		80mm / 3 1/2" on Width		
Weight		0.158kg/0.338lb	0.158kg/0.338lb	0.31kg/0.66lb	0.42kg/1.13lb	1.2kg/2.64lb
Current @	12VDC	1.7amps	1.7amps	4amps	8amps	15amps
	24VDC	800mA	800mA	1.8amps	3.8amps	7.2amps
	110 VAC 50/60 Hz	170mA	170mA	400mA	800mA	1.4amps
	240 VAC 50/60 Hz	85mA	85mA	190mA	375mA	700mA

OceanLED reserves the right to alter specifications without prior notice.

THRU-HULL™

Installation Guide

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Step 1: Hull Preparation

After carefully selecting a flat surface cut a 26mm (1") hole in the hull. For 4010 Series a 36mm / 1 1/2" hole is required.

The minimum hull thickness is 10mm (0.4") and maximum is 90mm (3.5").

The Plug & Play system requires an additional 80mm (3.15") behind the fixture.

The exposed inner hole surface must be properly sealed before light installation is carried out to prevent water intrusion.



Step 2: Sealing

Using **3M 4200 Marine Adhesive** or equivalent squeeze a continuous bead of adhesive into entire circumference of the two grooves in the rear face of the light.

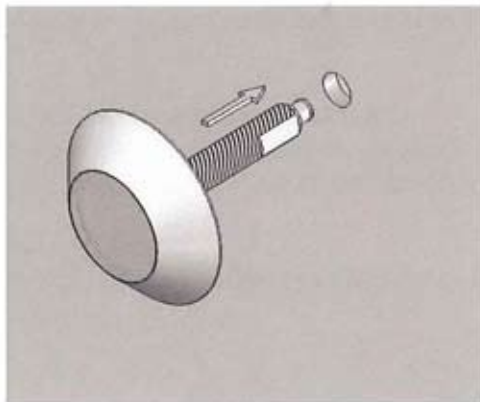
Note: There must be a continuous bead in each groove to ensure water integrity.



For troubleshooting go to www.oceanled.com

Step 3: Inserting the Light

Insert the light stem through the hole from outside of the hull and secure in place inside the hull using the washer and spinning the locking ring down the threaded stem.



Step 4: Securing into Hull

Tighten the 3 (6) bolts against the washer to lock the light in situ. Tighten the bolts first to hand tight and then only 1/2 to 3/4 of a turn more in a criss cross pattern using the 5mm allen key supplied.

DO NOT OVERTIGHTEN BOLTS
Or this could result in stem failure.

Wipe any excess sealant from the light fixture.



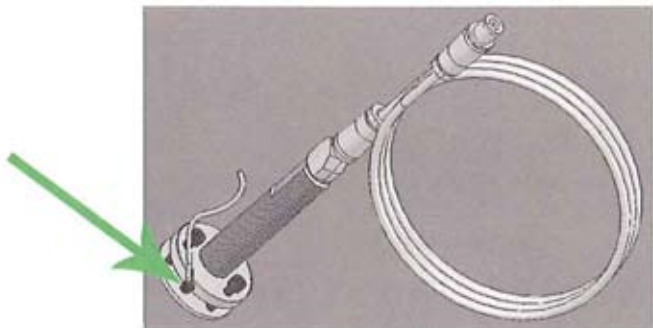
Step 5: Bonding

Attach to the vessels bonding / cathodic protection system to the bolt on the locking ring. See green arrow in picture below.

Step 6: Plug & Play

Push connect the female end of the extension cable on to the male plug on the back of the light until it 'clicks' together and route the other end to the driver location.

Note: If plugs do not connect easily, check for debris and try again. Take care not to force plugs together as this may damage contact pins.



Step 7: Power Connection

Choose a suitable dry location off the floor for the driver box to be mounted. Securely fasten driver in place.

Connect the end of the extension cable to the plug on the driver.

See separate Technical sheet for switching info for power input.

Briefly test the lights prior to launching the vessel.

Note: Do not test lights out of water for more than 4 -5 minutes.

Step 8: Curing time

Allow the sealant manufacturers recommended drying time for the sealant to cure before launching vessel.

Warranty²



Please Recycle



Made in England



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