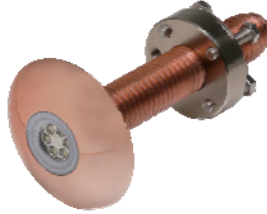


Micro Matrix[®] Thru-Hull SeaLite[®]

Patents Pending

User Manual Rev. 05/16/12



Congratulations on the purchase of your Micro Matrix[®] Thru-Hull SeaLite[®]! DeepSea Power & Light has been supplying underwater lights for industrial and research applications for over 25 years, and our line of SeaLite[®] products have set the standard for durability and performance in every industry where they are used. Your Micro Matrix[®] Thru-Hull SeaLite[®] has been rigorously tested, and the quality and performance of your light comes with the full confidence and backing of DeepSea Power & Light.

READ BEFORE USING

- Micro Matrix[®] Thru-Hull SeaLite[®] is **NOT INTENDED FOR USE ON METAL HULL BOATS**, it is only designed for installation on fiberglass and wooden transoms.
- Micro Matrix[®] Thru-Hull SeaLite[®] should never be installed on a vessel while the vessel is in the water.
- Only qualified technicians should install the Micro Matrix[®] Thru-Hull SeaLite[®].
- Micro Matrix[®] Thru-Hull SeaLite[®] should be electrically joined to the vessel's grounding and cathodic protection system. Failure to properly ground this fixture may result in catastrophic failure due to CORROSION, which in turn may lead to injury, damage or loss of property and loss of life.
- **To ensure no damage has occurred during shipping, energize the light using the intended power supply BEFORE drilling any holes in the boat.**

INSTALLATION & OPERATING INSTRUCTIONS



Caution! For hulls constructed with Divinycell[®] or similar foam cores, please consult the boat manufacturer for specific procedures to use when installing hull-penetrating fixtures. In general, the exposed surfaces of the internal core must be protected using a fiberglass resin or an epoxy compatible with the hull material to form a solid, sealed surface from the outside to the inside of the hull.

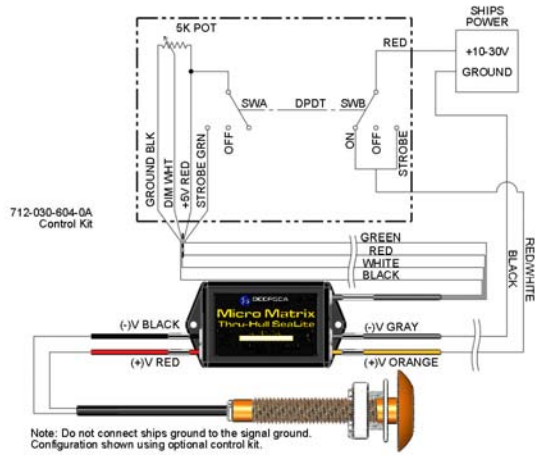
1. The Micro Matrix[®] Thru-Hull SeaLite[®] should be mounted on a flat portion of the hull with the center of the housing approximately 8" (203 mm) below the waterline. The light flange should not extend beyond the flat surface on which it will be mounted. The Micro Matrix[®] Thru-Hull SeaLite[®] can operate while the boat is underway, so turning it off while underway is not necessary.
2. Before drilling the power cable hole, ensure that there is adequate clearance on the inside of the hull, inboard of the hole.
3. Drill a 5/8" (16 mm) hole through the hull for the fitting.
4. Run the cable from outside the boat, through the drilled hole, into the boat.
5. Coat the back of the flange and the portion of the fitting that will extend thru the hull with 3M[®] 5200 sealant, or equivalent, and slide the fixture into the hole.
6. On the inside of the hull, slide the jacking plate over the thru-hull fitting to the inside of the hull. Thread the jacking nut onto the fitting and carefully tighten the jacking screws with a wrench, do not exceed 30 inch pounds of torque or the fixture or hull may be damaged.
7. Allow the sealant to dry (according to its instructions) and remove any excess.
8. Use the screw terminal on the jacking nut to connect the fixture to the ship's bonding system.
9. Route the cable from the light fixture to the driver box. Care should be taken to avoid routing the cable over sharp edges or around tight bends as these could damage the cable over time.
10. Ensure that the power is disconnected and locked out. Using the supplied heat shrink connector, connect the driver box to the light fixture and to the vessel power. Verify that the driver's voltage rating and the voltage available on the vessel are compatible.
11. Refer again to the wiring diagram. The low voltage DC driver version has a low current 5V power supply that can be used for dimming and strobing features. Connect the dimming and strobe controls to the driver box.
12. At this point, the Micro Matrix[®] Thru-Hull SeaLite[®] can be tested by energizing the light.
13. Once the boat is back in the water, marine growth should be periodically removed from the Micro Matrix[®] Thru-Hull SeaLites[®] port with a soft brush and/or low pressure spray (garden hose) at line pressure.



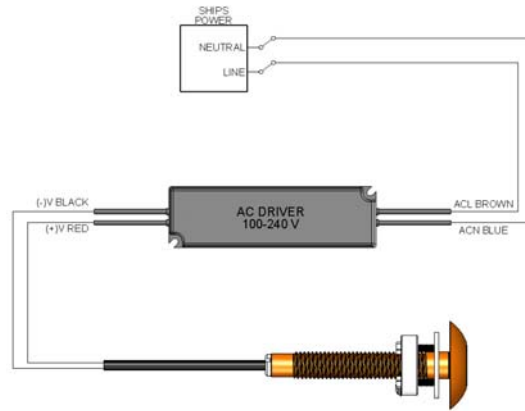
4033 Ruffin Rd.
San Diego, CA 92123 USA
Phone: (858) 576-1261
Fax: (858) 576-0219
Email: THSL_sales@deepsea.com
Web: www.deepsee.com

WIRING DIAGRAM

DC Version



AC Version



Light Specifications

MECHANICAL	STANDARD FITTING	OPTIONAL LONGER FITTING
Housing Material:	Copper Alloy	Copper Alloy
Pressure Tested To:	100 PSI	100 PSI
Size:		
Length:	4.51 in. (11.45 cm)	8.51 in. (21.62 cm)
Diameter:		
Thru-Hull Fitting:	5/8 in. (16 mm)	5/8 in. (16 mm)
Outer Flange (0.38 in. thick):	1.99 in. (50.55 mm)	1.99 in. (50.55 mm)
Weight:	0.76 lbs (318 g)	0.85 lbs (386 g)
Lens:	Sapphire	Sapphire
Cable Length:	6' (1.83 m)	6' (1.83 m)
Recommended Hull Thickness:		
Minimum:	0.25 in. (6.35 mm)	0.25 in. (6.35 mm)
Maximum:	3.00 in. (76.20 mm)	7.00 in. (177.80 mm)

LAMP

Type:	LED (Sapphire Blue, Emerald Green, Ruby Red or Diamond White)
Rated Average Life:	>30,000 hours
Color Temperature:	6,000° K Typical
Beam Angle:	60° (Flood)

OPERATING

Warm Up / Re-strike Time:	Instantaneous
Minimum Operating Temperature:	-22° F (-30° C)

Driver Specifications

MECHANICAL	DC Version	AC Version
Housing Material:	Plastic (potted)	Plastic (potted)
Size:		
Length:	3.88 in. (9.86 cm)	4.63 in. (11.76 cm)
Width:	2.08 in. (5.28 cm)	1.38 in. (3.51 cm)
Depth:	0.90 in. (2.29 cm)	1.00 in. (2.54 cm)
Weight:	0.40 lbs (181.44 g)	0.50 lbs (226.80 kg)
Cable Length:	2' (0.60 m) power input and 2' (0.60 m) driver output	2' (0.60 m) power input and 2' (0.60 m) driver output
ELECTRICAL	DC Version	AC Version
Input Voltage:	10-32VDC	100VAC-240VAC 50/60Hz
Input Current:	1.60 A at 12V Typical	0.23 A at 120V Typical
Input Power:	18 Watts Typical	18 Watts Typical

WARRANTY AND REPAIR INFORMATION

Full warranty information can be found at www.deepsee.com. For warranty and non-warranty repairs, please contact DeepSea Power & Light for an RMA number prior to returning your item. When shipping your item, be sure the freight is pre-paid (CODs will not be accepted) and that the RMA number is clearly printed on the outside of the box.



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