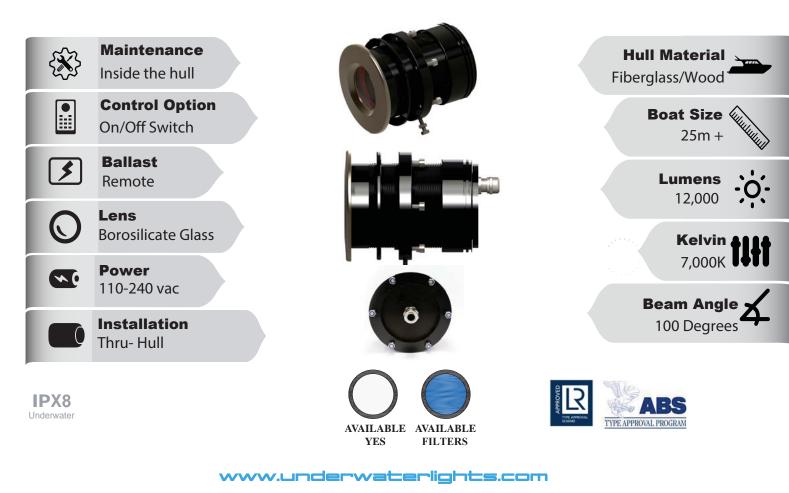
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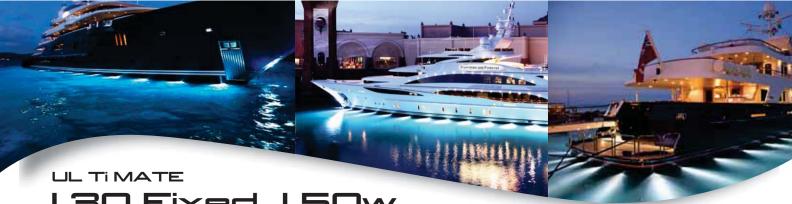
# UL TI MATE 130- 150W- Fixed

- \*The UL Ti MATE 130 Fixed is a "Screwed Thru-Hull" underwater light which features a flush lens and a larger aperture than our original screwed fitting.
- \*Never feel trapped by this fixture, the internal part with lamp can be easily removed for servicing and upgrades without the hassle of hauling your boat.
- \*With 12,000 lumens of light power and it's 100 degree beam angle, the UL Ti MATE 130 150W is recommended for GRP/Fiberglass and wooden hull boats 25 meters +.
- \*The light must be installed below the waterline and the boat must be hauled out for installation.
- \*Distance between lights can vary from 1m (transom) to 3 meters (port & starboard) apart for the best illumination.
- \*The fixture can also be fitted with a wide beam lens and colour filters.
- \*With complete Lloyd's Register Approval and ABS Design Appraisal on all components, the UL Ti MATE 130 has been installed on some ten thousand of large sports fish boats and motor yachts world wide.



THE UL TI MATE RANGE IS DESIGNED AND MANUFACTURED BY UNDERWATER LIGHTS LTD IN THE U.K.

Type-130 MSD, Nickel Date-12-02-2018



#### 1 30 Fixed 150w

#### Mounting

Hull Material	GRP / Fiberglass
Boat size	25m + / 90+ Feet
Spacing	1m up to 3m (Port & Starboard)
Beam Angle	100 <sup>o</sup> degree
Installation Angles	Flush
Technical	
Lumens	12,000
Kelvin	7,000
Typical Bulb Life Expectancy	3,000 hrs
Min-Max Operating Voltage	110 - 240V AC
Current / Amp draw	1.4 - 0.7 amps
Ballast Type	External
Ballast Output	N/A
Control Options	On / Off Switch
Physical	
Length of fixture	177mm/6.9″
Diameter of fixture	130mm/5.11″
Profile (height) of fixture	7.6mm/0.3″
Removal Space Required	170mm/6.7″
Total weight	4 kgs/8.8 lbs
Cable Length	Custom
Hole Cut-out	101mm/4″
Material	5083 Aluminium / Nickel Coated AB2 Bronze
Lens	Borosilicate Glass
Max Hull thickness	75mm)

Color Part Number 000 White S00475-FIXED-120V White S00475-FIXED-230V





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Registered in England No: 2348038

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## LL TI MATE 130 Fixed-INSTALL

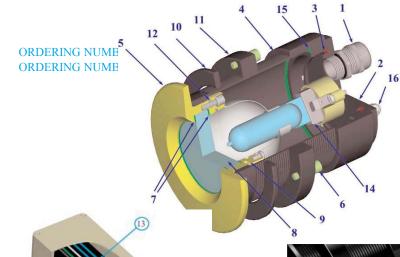
#### • UL Ti MATE 130 INSTALLATION (The UL Ti MATE 130 should be no less than 250mm/10" below the water line)

Qualified/Approved personnel must be used to carry out installation

- Cut and prepare a 4 inch / 100 mm clearance hole for the body (16). Coat the flange of the body and the area around the hole with 3M 4200FC sealant then slide the body into the hole. From the inside fit the compensating ring (17) and screw the securing ring (18) up "hand tight". Adjust the screws (19) so the compensating ring is flush to the hull and check the sealant has flowed completely around the flange. Do "NOT" over tighten the screws as this will squeeze the sealant from the surface. Allow the sealant to solidify and remove surplus. Finally tighten the adjustment bolts to 4Nm / 3ft.lbs
- Note for cored hulls After cutting, the exposed surfaces of the hole must be finished to form a solid surface through it, thus protecting the internal core of the hull.
- Maximum hull thickness should not exceed 4.75 inches 120mm Minimum wall thickness 0.375 inches.- 10mm
- After completing the installation procedure it is highly recommended to coat the exposed body with antifouling.
- EARTHING LIGHT FOR CATHODIC PROTECTION-tighten the earth screw on the securing ring so that it bites into the screwed barrel. Check there is continuity to the front face. This prevents galvanic corrosion.

#### • OPERATIONAL CONDITIONS AND CONSIDERATIONS

- The UL Ti MATE 130 is serviced from inside the hull. Allow a minimum of 170mm behind the cable gland for lamp replacements on 150w and 150mm behind the ignitor on 250w
- ELECTRICAL INFORMATION
- CABLE SPECIFICATION TO PROJECTOR
- **150 Watt** High temp silicone three core part number. S00111
- 150 WATT Max distance between ballast and projector with -10 meters
- Ballast power 150 watt ballast 120/230 volt, running current 1.4/0.7.A
- Ballast will not ignite a hot lamp. The ballast has three attempts to ignite the lamp then will wait for four minutes before repeating the cycle.
- Do not attempt to remove the glass lens while afloat



Part Description	Part No
1: Cable	S00111
2: Projector lid complete	S00102-C
3: "O" Ring	00108
4: Connecting Ring	00274-B
5: Body	S00475-A
6: Screws (M6X 25 ALU.)	93610
7: Gasket - NAF	00286-A
8: Glass	00281
9: Glass retaining ring	00476-C
10: Comp. ring	00277-В
11: Securing ring	00275-В
13: Electronic ballast-230 volt	95322-V2HW2
13: Electronic ballast-120 volt	95322-V3HW2
12: Reflector Tube with Reflector	S00273
14: Lamp (MSD-150W/70)	91210
15: Gasket - NAF	000C07-A
16: Cable gland	92010
17: Screws (M6X 16 S.S.)	93333
Recommended Spares	Part No
Lamp (MSD-150W/70)	91210
Glass with gaskets	S00279-A
Electronic ballast	95322



## ELECTRONIC BALLAST COMPLETE WITH IP65 ENCLOSURE



EARTH TAB AND SCREW



#### LENS FITTING INSTRUCTIONS

Check the glass landing surface is clean and apply a suitable silicone grease to the gaskets. Fit the glass, gaskets and retaining ring as shown above. Hand tighten the screws with a 5mm Allen key making sure the glass retaining ring is square. Torque the screws to 6 Nm (4.5ft/lbs) in the sequence shown, check the ring again and re-torque the screws again to the same setting



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UL Ti MATE 130 Fixed Nickel AB2-12-02-18

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## **Ballast and Projector Lid Cable Connection and Operational Information**

### BALLAST INSTALLATION AND OPERATIONAL INFORMATION

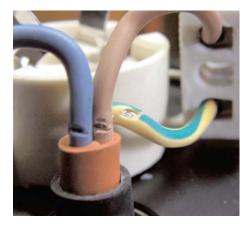
Ballast voltage 120/230 volts, wattage 150 watts.

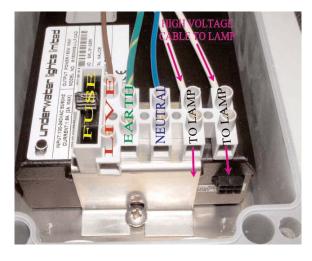
Cable length between ballast and projector should be kept to a minimum. The ballast has the capability to operate the lamp with a cable length of 10 meters .

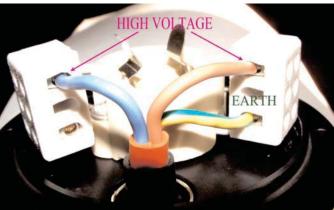
Cable specification -3 core braided silicone rubber 210 degrees C Spark Test 10kV

Lamp cable preparation - It is extremely important that the cable insulation is not damaged or broken as shown in the picture (right). The ballast could fail should the ignition voltage of 5000 volts short across from the lamp cable to the earth.. Shorting across the high voltage cable will stop the lamp from working

The picture (below) shows the ballast inside the plastic enclosure. The terminal block should be wired as indicated.







To assit the electrician in the cable connection process we have provided an additional ceramic terminal block. (right hand picture)

The ballast cannot strike/ignite a hot lamp. There has to be a cool down period of say ten minutes. The ballast has three attempts to strike the lamp which takes about one minute and then it will wait for four minutes before trying again.

Switching the ballasts on and off is not recommended. Wait for say ten minutes before switching the lamps.

Should the lamp not strike then check ballast and lamp.

# 🛆 Note

# The most common cause of ballast failure is due to defective wiring. Please take care.

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#### 150W BALLAST -01-08-17

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BONDING TEST FOR QT-LED AND UL TI MATE 80 & 130 LIGHTS

DURING OUR PRODUCTION A RIVET IS USED TO MAKE THE ELECTRICAL CONNECTION BETWEEN THE BARREL AND FRONT FACE TO ENSURE THAT THE FRONT FACE IS BONDED BY THE BONDING SCREW TO THE VESSEL CATHODIC PROTECTION SYSTEM

WHEN THE LIGHT IS INSTALLED A TEST CAN BE MADE TO ENSURE ALL IS CORRECT. REMOVE A SMALL AREA OF THE ANODISING AS SHOWN TO EXPOSE THE ALUMINIUM

WHEN THE BONDING SCREW HAS BEEN TIGHTENED SUFFICIENTLY TO BREAK THROUGH THE ANODISING ON THE BARREL A METER IS USED TO MEASURE THE RESISTANCE. THE RESISTANCE SHOUD BE ZERO OHMS. IF IT DOES NOT THEN TIGHTEN THE BONDING SCREW FURTHER UNTIL THERE IS ZERO RESISTANCE MEASURED

INSTALLATION PICTURE SHOWING BONDING TERMINAL AND ANODE CONNECTION





REMOVE A SMALL PART OF THE ANODISING FROM THE BARREL TO EXPOSE THE ALUMINIUM FOR TESTING THE BONDING CONNECTION



WHEN THE BONDING SCREW SHOWN ON THE RIGHT IS TIGHT AND HAS BROKEN THE ANODISING ON THE BARREL THE RESISTANCE SHOULD BE ZERO OHMS, THE FRONT FACE IS THEN PROVEN TO BE BONDED



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