












# UL Ti MATE 130 SA- 150W/ 250W

- \*The **UL Ti MATE 130 SA 150w/250w** 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 maximum of 19,000 lumens of light power and it's 100 degree beam angle, the **UL Ti MATE 130 SA** is recommended for GRP/Fiberglass and Wooden hull boats 25m +.
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- \*Distance between lights can vary from 1.5 (transom) to 5 meters (port & starboard) apart for the best illumination.
- \*The internal ( Super Adjustable) unit allows the beam angle to be varied from a narrow to a wide beam, and to universally move the beam direction by 20 degrees from inside the housing.
- \*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.

-  **Maintenance**  
Inside the Hull
-  **Control Options**  
On/Off switch
-  **Ballast**  
Remote
-  **Growth Resistant Lens**  
Borosilicate Glass
-  **Power**  
110-240 VAC
-  **Installation**  
Thru- Hull



- Hull Material**   
Fiberglass / Wood
- Boat Size**   
25 meter +
- Lumens**   
12,000  
19,000
- Kelvin**   
7,000
- Beam Angle**   
100 degrees

IPX8  
Underwater



AVAILABLE YES      AVAILABLE WITH FILTERS



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



# UL Ti MATE I 30 SA I 50/250w

## Mounting

Hull Material	GRP / Fiberglass
Boat size	25m +/-90+ Feet/
Spacing	1.5m up to max 5m (Port & Starboard)
Beam Angle	100° degree
Installation Angles	Flush


## Technical

Lumens	150w: 12,000 250w: 19,000
Kelvin	7,000
Typical Bulb Life Expectancy	3,000 hrs
Min-Max Operating Voltage	150w: 110 - 240V AC 250w: 240V AC
Current / Amp draw	150w: 1.4 - 0.7 amps 250w: 1.2 amps
Ballast Type	External
Ballast Output	N/A
Control Options	On / Off witch

## Physical

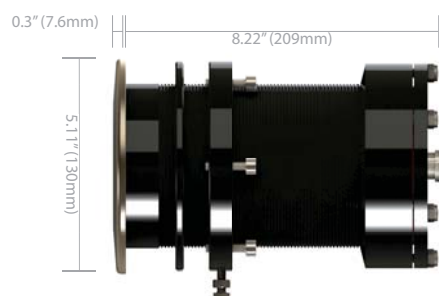
Length of fixture	209mm/8.22"
Diameter of fixture	130mm/5.11"
Profile (height) of fixture	7.6mm/0.3"
Removal Space Required	170mm/6.7"
Total weight	4.5 kgs/9.9 lbs
Cable Length	Custom
Hole Cut-out	101mm/4"
Material	5083 Aluminium / Nickel Coated AB2 Bronze
Lens	Borosilicate Glass
Max Hull thickness	120 mm

## Color

- White 
- White 

## Part Number

- S00475-SA-150W
- S00475-SA-250W



Your Local Dealer



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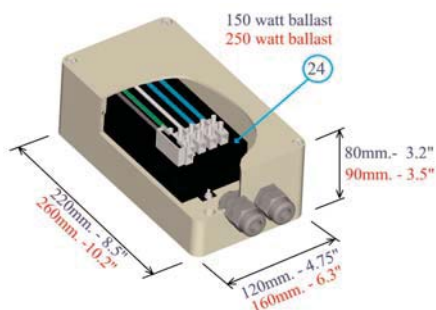
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VAT NO: 556 4425 31

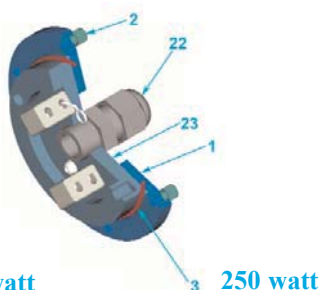
Registered in England No: 2348038

## UL Ti MATE 130 SA-INSTALL

- **UL Ti MATE 130 SA INSTALLATION** (The UL Ti MATE 130 SA 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 0.375inches.- 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.
- **ELECTRICAL INFORMATION**
- **CABLE SPECIFICATION TO PROJECTOR**
- **150 Watt-250 Watt-** High temp silicone three core part number. S00111-0.75-
- **150 WATT** Max distance between ballast and projector with -10 meters.**250 WATT** Max distance 25 meters
- Ballast power 150 watt ballast 120/230 volt, running current 1.4/0.7.A
- Ballast power 250 watt ballast 230 volt, running current 1.2.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

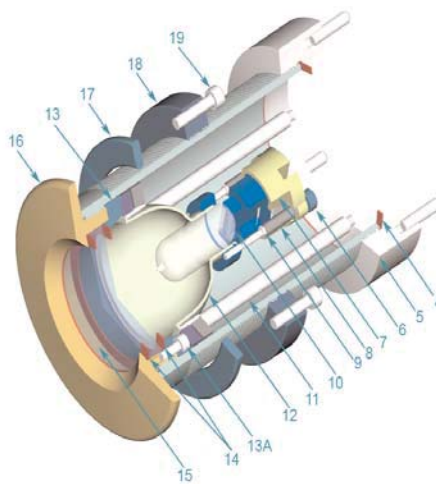


ELECTRONIC BALLAST COMPLETE WITH IP65 ENCLOSURE



150 watt

250 watt



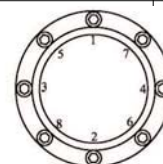
EARTH TAB AND SCREW

Part Description 130-SA	Part No
1: Projector lid securing plate	00283-B
2: M6 Nut	93381
3: 'O' Ring	00108
4: Gasket NAF	00285-A
5: Connecting ring	00274-C
6: Lamp holder screw	00290
7: Lamp holder (250W)	91195
7: Lamp holder (150W)	91191
8: Reflector collar bush	00288-A
9: M4 Lock nut	93374
10: Lamp (250W)	91209
10: Lamp (150W)	91210
11: Reflector adjustment rod	00284-2-D
12: Reflector complete	S91791
13: Glass retaining ring	00476-B
13A: Cap head screws	93325
14: Glass gaskets NAF	00286-A
16: Body	S00475-A
17: Compensating ring	00277
18: Securing ring	00275
19: Cap head screws	93610
20: Ignitor (250W)	S95325
21: Projector cover (250W)	00102-H
22: Gland	00107
23: Projector cover (150W)	00102-E
24: Ballast 250 watt	S00800-V1W2
24: Ballast 150 watt 230v	S00800-V2W2
24: Ballast 150 watt 120v	S00800V3W2

Recommended Spares	Part No
Lamp ( 250w = W1 )	91209
Lamp ( 150w = W2 )	91210
Glass with gaskets	S00281-A
Ballast	S00801

### 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 an 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

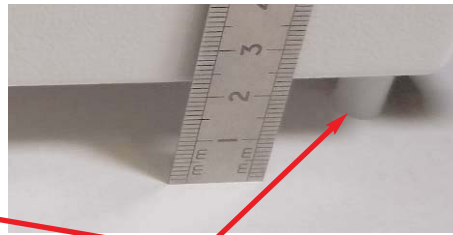




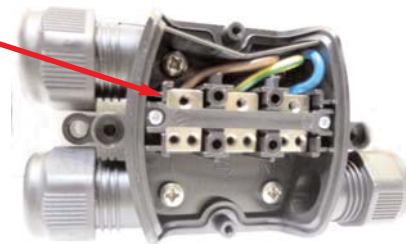
## 250 WATT BALLAST INSTALLATION FOR UL Ti MATE 75SA & 130 SA



POWER CONNECTION AT  
TOP OF BALLAST



2 CM SPACERS AT BACK  
OF BALLAST



THE BALLAST MUST HAVE A MINIMUM DISTANCE OF 50 CM FROM THE PROJECTOR THE BALLAST MUST HAVE AIR FLOW ON ALL SURFACES. USE THE 2 CM SPACERS FOR THE BACK SURFACE WHEN SECURING.  
THE BALLAST MUST BE INSTALLED VERTICALLY (AS SHOWN IN RIGHT HAND PICTURE)  
THE MAXIMUM AMBIENT TEMPERATURE OF **45C MUST NOT BE EXCEEDED**

- DO NOT DO THE FOLLOWING -**
- INSULATE THE PROJECTOR.**
  - RESTRICT AIR FLOW AROUND THE BALLAST**
  - OR PLACE IT CLOSE TO PROJECTOR**
  - LOCATE BALLAST IN AREAS THAT CAN EXCEED THE MAXIMUM AMBIENT TEMPERATURE**
  - ANY OF THE ABOVE WILL RESULT IN FAILURE OF BALLAST AND LIGHT**



## Ballast and Projector Lid Cable Connection and Operational Information

### BALLAST INSTALLATION AND OPERATIONAL INFORMATION

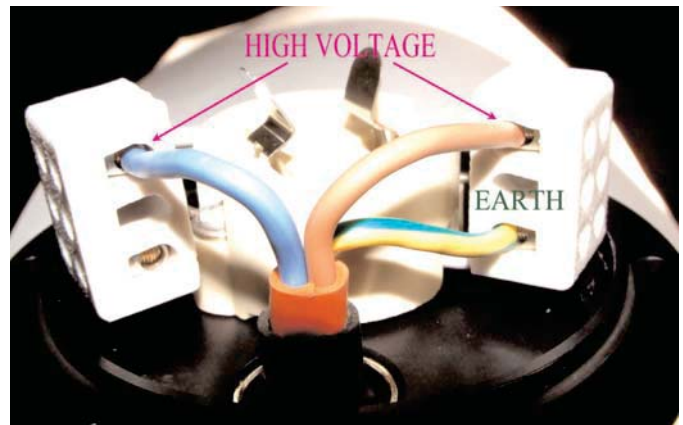
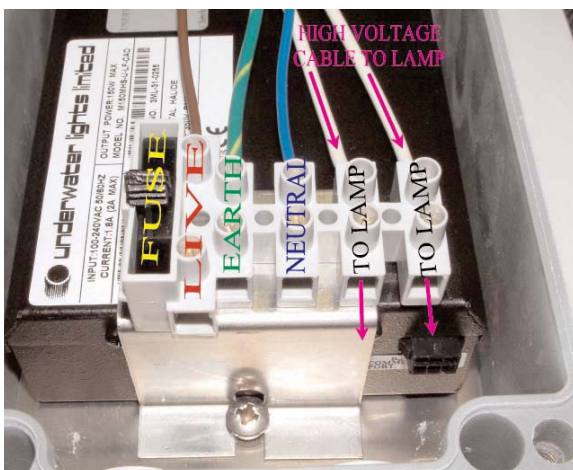
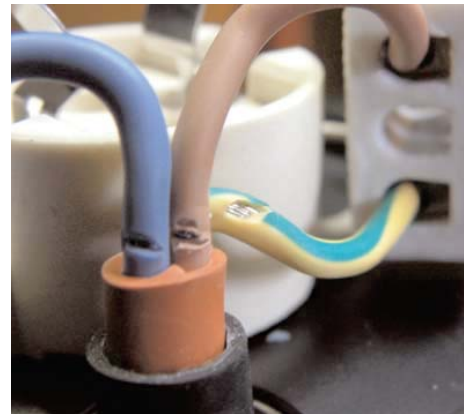
Ballast voltage 120/230 volts, wattage 150 watts.

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 assist 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.**

# UL Ti MATE

## SA Beam Angle & Lux Infos

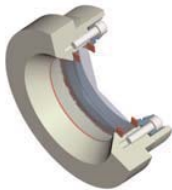
### DESCRIPTION

The cone angle in the body restricts the width of the light beam angle. The 50 degree is 65 degrees, the flush and UL Ti MATE 130 have an angle of 100 degrees. The center of the light beam should be kept to 15 degrees down from the horizontal. Taking into account the reflector adjustment a flush body can be installed at an angle of 35 degrees to the vertical. The spherical is then adjusted to 20 degrees and then locked. This gives the required 15 degree beam angle. The flush can installed from 0-35 degrees.

UL Ti MATE 130 SA  
S00475 - For composite hulls



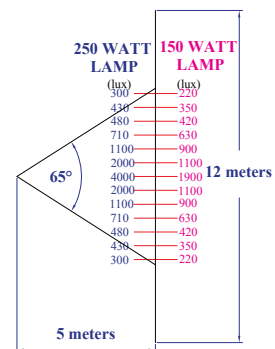
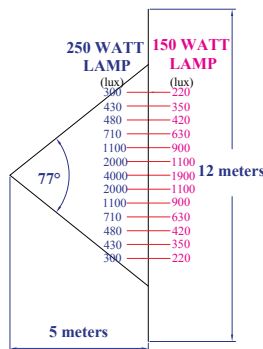
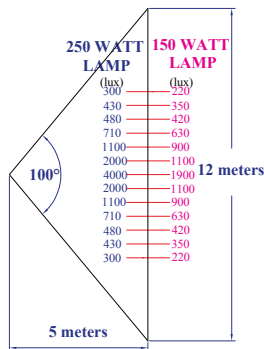
UL Ti MATE 75 SA



UL Ti MATE 75 SA  
30 DEGREE



UL Ti MATE 75 SA  
50 DEGREE



## BEAM AND ANGLE ADJUSTMENT INFORMATION

MAXIMUM DIRECTIONAL  
ADJUSTMENT 20 DEGREES



TIGHT BEAM ANGLE  
LAMP IS ADJUSTED BACK



WIDE BEAM ANGLE  
LAMP IS ADJUSTED FORWARD



### DESCRIPTION

The above pictures on the left show the directional adjustment. The center pictures show how the lamp is moved back to create a tight beam and the right hand pictures shows the lamp moved forward to create a wide beam.

Note - When the lamp is adjusted for a wide beam. The lux level at the center will decrease but will increase on the outer part of the beam giving a more uniform light pattern.