

The art of supervacht lighting



\*The QTS-130 underwater light fixture uses a high impact borosilicate flat lens. The beam angle is 140 degrees and the white LED has a lumen output of 25,000 Lumens.

\*Never feel trapped by this fixture. The LED BALL has universal adjustment. The projector is designed to accept white, Blue and RGBW configurations and can be easily removed for servicing without the hassle of hauling your boat.

\*The QTS-130 is recommended for GRP/Fiberglass and Wooden hull yachts of 20 -100 meters.

\*Distance between lights can vary from 1.5m (transom) to 2-5 meters (port & starboard) for the best illumination.

\*The **OTS-130** has Lloyd's Register Approval and ABS Design Appraisal on all components. Using the latest technology allows our underwater lights to perform well in the harshest environment.

\*The QTS-130 is made from anodized 5083 Aluminium and AB2 front face for extra protection.



Underwater

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THE QT-LED RANGE IS DESIGNED AND MANUFACTURED BY UNDERWATER LIGHTS LTD IN THE U.K.

Type-QTS-130, Issue 'A', Date-1-08-2020



|                                 | ) serviced Fro                           | ım inside      | Part Numbers         |
|---------------------------------|--|----------------|----------------------|
|                                 |  |                | <b>QTS-130-HP4-W</b> |
| Mounting                        |  | -              | A standard           |
| Hull Material                   | GRP / Fiberglass / Wood                  | -              |                      |
| Boat size                       | 20-100 meters+ (65+ft)                   | 6 896          | <b>QTS-130-HP4-B</b> |
| Spacing                         | 1.5meter for Transom. 2-5meter           | s for P & S    |                      |
| Beam Angle                      | 140°                                     | -              |                      |
| Installation Angles             | Flush                                    | -              | OTS-130-RGBW         |
| Technical                       |  |                |                      |
| Lumens for the white and Kelvin | 25,000 lm at 6000K                       |                |                      |
| RGB+W -all colours on           | Approx-20,000 Im                         |                |                      |
| Typical LED Life Expectancy     | 40,000 hrs                               |                | and Data             |
| Min-Max Operating Voltage       | 110 - 240V AC                            | in and o       | out                  |
| Current / Amp draw              | 1.4 - 0.7 amps                           |                |                      |
| Driver Type                     | External                                 |                |                      |
| Driver Output                   | HP4-150W<br>RGBW-4 channels@700ma        |                |                      |
| Control Options                 | HP4-DALI<br>RGBW- DMX                    | IP 65 Alminium | 22                   |
| Bonding                         | Locking Ring                             | Enclosure      |                      |
| Physical                        |  | 220x120x90 cm  |                      |
| Length of fixture               | 150mm (5.90″)                            |                |                      |
| Diameter of fixture             | 130mm (5.11″)                            |                |                      |
| Profile (height) of fixture     | 7mm (0.27")                              |                |                      |
| Removal Space Required          | 152mm (6″)                               | O              | utput to LED         |
| Total weight                    | 6kg (13 lbs)                             |                | $\langle \rangle$    |
| Driver Dimensions (L x W x H)   | 8.7″ x 4.7″ x 3.5″<br>(220 x 120 x 90mm) | <u> </u>       | 120 cm               |
| Cable Length                    | 10 feet - 3 meters max length 20         | meters         |                      |
| Hole Cut-out                    | 4" (101mm)                               |                |                      |
| Material                        | AB2 + 5083 Alu                           | 120            |                      |
| Growth Resistant Lens           | Borosilicate Glass                       | 130 cm         |                      |
| Maximum Hull Thickness          | 95mm (3.75")                             |                |                      |

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The art of superyacht lighting



\*DESCRIPTION - The QT-130 is a "through-hull" submersible marine light using a flat glass lens and is delivered ready for installation. Maintenance of the LED is carried out from inside the hull. The light is suitable for installation into GRP/Fiberglass and wooden hulls. The LED is driven by an external AC driver (110-240vac). The white produces 25,000 Lumens.

\*The Body (1) is common for the HP4 Driver(25,000lm) and the RGB+W leds.

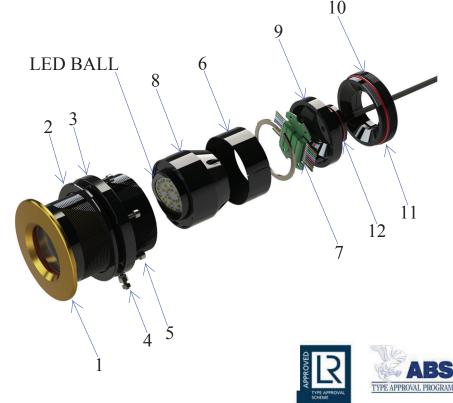
**\*FITTING THE BODY-** Qualified/Approved personnel must be used to carry out installation. Cut and prepare a 4 inch / 101mm clearance hole for the body (1). Coat the flange of the body and the area around the hole with 3M 4200FC or Sikafl ex 291 sealant then slide the body into the hole. From the inside fit the compensating ring (2) and screw the securing ring (3) up "hand tight". Adjust the screws (5) so the compensating ring is flush to the hull and check the sealant has flowed completely around the body flange (1). 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 (5) 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 3. 5 inches - 9 mm. After completing the installation procedure it is highly recommended to coat the exposed body with anti-fouling and bond all lights to the anodes or a cathodic protection system if fitted by using the earth screw (4).

\***REPLACEMENT/ADJUSTMENT OF LED-** The underwater light is supplied fully assembled. For removal/adjustment of the LED Ball follow the instructions-

Unscrew the securing cover(10) and ensure the cable does not rotate. Remove the connection holder (9) and unplug the LED from the green plug (7) and place to one side. Slide the expansion bush (6) and LED heat sink (8) out and place to one side. Thoroughly clean all parts removed and the internal surfaces and lens. Replace the LED heat sink (8) and the expansion bush (6), Connect the LED to the green plug (7) housed in the connection holder (9) and push all parts firmly into the barrel. Adjust the LED BALL to the desired angle. Lightly coat the thread on the cover (10), 'O' rings (11 & 12) with silicone grease and screw tight.

\*DRIVER INSTALLATION INSTRUCTION - The driver must be located at least 60 cm above tank top with good ventilation and the maximum ambient temperature should not exceed 40C. The underwater lights is has three meters of cable and a IP 68 plug that fits into the driver enclosure socket (plug and play).

| DESCRIPTION                | Qnty |
|----------------------------|------|
| 1-BODY                     | 1    |
| 2-COMPENSATING RING        | 1    |
| 3-SECURING RING            | 1    |
| 4-EARTH SCREW              | 1    |
| 5-ADJUSTMET BOLTS          | 6    |
| 6-EXPANSION BUSH           | 1    |
| 7-PLUG                     | 1    |
| 8-LED BALL HEAT SINK       | 1    |
| 9-SECURING BUSH            | 1    |
| 10-SCREWED RETAINING COVER | 1    |
| 11- 'O' RING               | 1    |
| 12- 'O' RING               | 1    |



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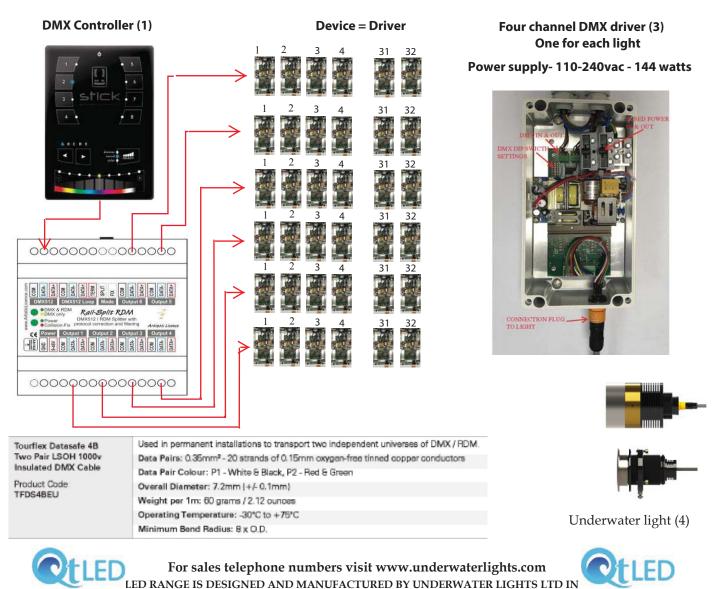
## **ELECTRICAL INFORMATION**

\* Shown below is a simple connection diagram for the DMX Controller (1), the six channel SPLITTER (2), Four channel DRIVER (3) also shown as 'Device' and the RGB+W underwater lights (4).

\* Single light connection- Every light has six meters of cable and a IP 68 plug ready to plug into the drivers aluminium driver enclosure which has a IP 68 socket for plug and play. A longer cable can be used if needed \* DMX connection- All DRIVERS (3) are connected in series to a six channel SPLITTER (2). Each channel can have 32 DRIVERS connected but we recommended to use ALL channels to reduce the number of drivers per channel to avoid the possibility of capacitance and magnetic interference in the cable.

\* The DMX controller (1) is connected to the six channel SPLITTER (2).

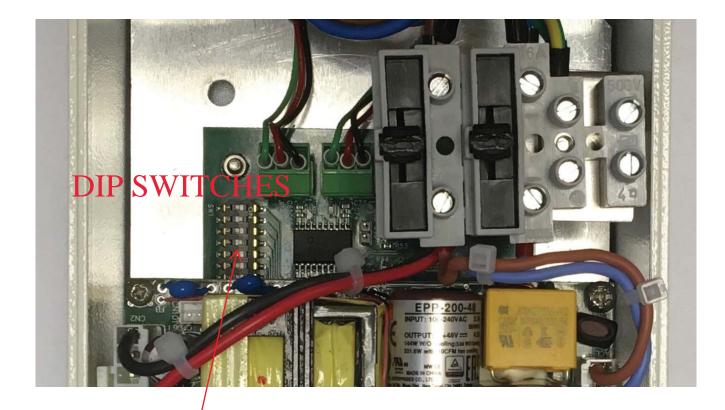
\* DMX cable - Shown below is the recommended DMX 120 ohm impedance cable specification. The termination resistance is 120 ohm. This cable must be used for connecting the Devices, Splitter and DMX controller. Cable lengths from driver to light - standard 3m and 6m. Can be extended to 24 meters (80ft)
\* Four channel DMX driver- Shown installed into an IP 66 enclosure (dimensions 220 x 120 x 90mm)



OT LED - DMX CONNECTION

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|      | =1   |
|------|------|
| N    | =2   |
| ω    | =4   |
| 4    | =8   |
| U1 🔜 | =16  |
| 0    | =32  |
| 7    | =64  |
|      | =128 |
| 9    | =256 |
|      |      |

| Add values of 'ON' |
|--------------------|
| for DMX address    |
|                    |

