

QtLED QTS-100 HP4 White

- *The **QTS-100-HP4** underwater light fixture uses a high impact borosilicate glass with a flat lens for a 140 degree wide beam angle. The fixture also allows for an increase in Led power for extra light output.
- *Never feel trapped by this fixture as the LED projector is designed for White,Blue, Dual or RGB+W and can be easily removed for servicing and upgrades without the hassle of hauling your boat.
- *The cool white LED has an output of 25,000 lumens. With its 140 degree beam angle, the flush fixture provides a perfect illumination.
- *The **QTS-100-HP4** is recommended for GRP and Wooden hull yachts of 20m +.
- *Distance between lights on the transom can vary from 1 to 1.5m and from 1 to 5m for port and Starboard.
- *The **QTS- 100** 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- 100** is made from anodized Aluminium and titanium for extra protection.



AVAILABLE

YES



Maintenance
Inside the hull



Control Optio
ON/OFF & DALI



Driver
Remote



Growth Resistant Lens
Borosilicate Glass



Power
110-240 vac



Installation
Thru Hull

Hull Material

GRP and Wood



Boat Size

20m+



Lumens

25,000



Kelvin

6,500K



Beam Angle

140 Deg



IPX8
Underwater

www.underwaterlights.com



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



QTS- 100 HP4

Thru-Hull - Led serviced From inside

Mounting

| | |
|---------------------|-------------------------------|
| Hull Material | GRP / Fiberglass |
| Boat size | 20meters+ (65ft+) |
| Spacing | 1-1.5M /1-5M port & Starboard |
| Beam Angle | 140° |
| Installation Angles | Flush |

Technical

| | |
|-----------------------------|-----------------|
| Lumens | 25,000 |
| Kelvin | 6,500 |
| Typical LED Life Expectancy | 40,000 hrs |
| Min-Max Operating Voltage | 110-240 V AC |
| Current / Amp draw | 1.4-0.7 amp |
| Driver Type | Remote |
| Driver Output | 97VDC @1.4A |
| Control Options | On / Off & DALI |
| Bonding | Locking Ring |

Physical

| | |
|-------------------------------|---------------------------|
| Length of fixture | 140mm (5.5") |
| Diameter of fixture | 100 mm (4") |
| Profile (height) of fixture | 5 mm (0 3/16") |
| Removal Space Required | 170 mm (6 11/16") |
| Total weight | 1.7KG (3.74lbs) |
| Driver Dimensions (L x W x H) | 220 X 120 X 90MM |
| Cable Length | 6 meters (19,68 ft) |
| Hole Cut-out | 74mm (2.91") |
| Material | Titanium + 5083 aluminium |
| Growth Resistant Lens | Borosilicate Glass |
| Maximum Hull Thickness | 80mm (3 1/4") |

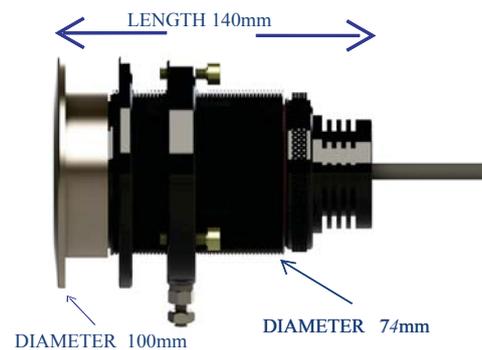
Color

White



Part Number

QTS- 100-HP4W



Your Local Dealer



© 2017 Underwater Lights Limited All Rights Reserved.
Underwater lights limited reserves the right to change specifications without notice.

The Great Dunton Forge, London Road
Dunton Green, Sevenoaks, Kent TN13 2TD UK
T: +44 (0) 1732 455753 @F: +44 (0) 1732 743233
E: uwl@underwaterlights.com

www.underwaterlights.com

VAT NO: 556 4425 31

Registered in England No: 2348038

QtLED QTS-100 Install

***QTS LED 100 Installation (Maximum hull thickness 80mm) and Operation instructions.**

The QTS 100 RGB+W is a “through- hull” submersible marine light using 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 24vdc driver (4 channels @72vdc) or a mains Driver 110/240 vac.

***Qualified/Approved personnel must be used to carry out installation**

Before cutting a 74mm hole in the hull, check the hull wall thickness is not greater than 80mm. The location of the holes must be below the waterline. After finishing the hole surface, check the Body (1) can be inserted.

***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. The wall thickness of the hole should not to less than 5mm-0.25inch. Apply 3M-4200FC sealant to the ‘Body’ (1) flange. Slide the body into the hole and from inside the hull put the ‘compensating ring’ (3) on and screw the securing ring’ (4) up hand tight. Gently tighten the adjustment screws (7) so the compensating ring is flush to the hull and the sealant has flowed completely around the flange and hull.

***Do NOT overtighten the bolts** as this will squeeze the sealant from the surfaces. Allow the sealant to solidify and remove surplus. Finally tighten the bolts (5) to 4Nm. / 3ft. lbs.

*It is not necessary to remove the heat sink parts (2, 5 & 7) when carrying out installation.

*To remove the heat sink (2) unscrew the clamp ring (5).

*Before fitting the new LED heat sink (2) ensure the barrel part of the body (1) and the lens is clean. Use silicone spray to lightly coat the heat sink (2), clamp ring (5) and sealing ‘O’ rings (6). Slide the heat sink (2) into the barrel and tighten the knurled securing clamp ring (5) to secure the heat sink (2) into the body. When the heat sink (2) cannot be rotated the clamp ring (5) has secured all in place. If this is not done it will cause overheating of the LED and the LED could fail.

***Caution:** do not operate lights unless totally submerged. Maximum cable length should not exceed 6m due to voltage drops. After completing the installation procedure it is highly recommended to coat the BODY (1) face with antifouling and bond the lights to the anodes or a cathodic protection system as shown below.

***EARTHING LIGHT FOR CATHODIC PROTECTION**-tighten the earth screw (8) on the securing ring (4) so that it bites into the screwed barrel. Check there is continuity to the front face. This prevents galvanic corrosion.

***ALL EXISITING WIRING, BREAKERS & FUSES MUST BE CHECKED BEFORE UPGRADING BY A REPUTABLE INSTALLER OR SURVEYOR**

***The light must be installed onto a flat (not curved) surface. Mount on transom or side hull only.**

***The light is supplied with the LED heatsink (2) done up tight. You must check this is still done up hand tight with the clamp ring (5) after install whether you remove the insert or not**

| QTS 100 Description | Qty. |
|----------------------|------|
| 1; BODY | 1 |
| 2; LED HEAT SINK | 1 |
| 3; COMPENSATING RING | 1 |
| 4; SECURING RING | 1 |
| 5; CLAMP RING | 1 |
| 6; 'O' RINGS | 2 |
| 7; ADJUSTMENT SCREWS | 3 |
| 8; EARTH SCREW | 1 |



TECHNICAL SPECIFICATION

- *Supply Voltage 24vdc. Maximum 150w- current 6.1 Amps
- *Supply Voltage 110-240vac. Maximum 150w-current 1.3-0.7 Amps
- *LED Driver Remote
- *BODY Materials Titanium & 5083 ALU.

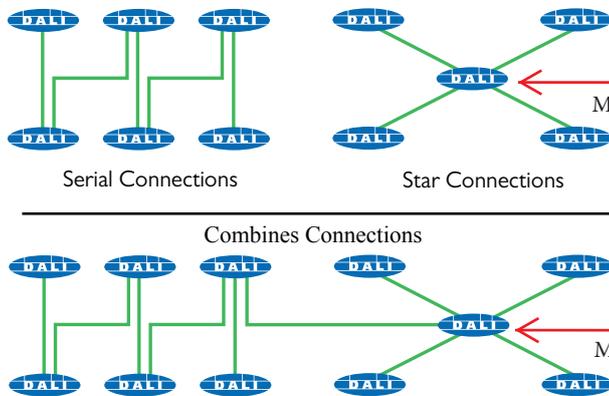




HP4 DALI AND LIGHT ELECTRICAL CONNECTIONS

- * The information below is ADVISORY only. Please check with the installer who is responsible for the design and installation of the system.
- * DALI permits a combination of star and series connections using two core cable for the data connection as seen below. However if there is no decision to chose a single colour underwater light (DALI control) or RGB+W (DMX control) it would be advised to install a suitable three or four core cable that can be used for both DALI and DMX .
- * Obviously there will be changes to the hardware such as drivers, LED and DMX splitters but the installed wiring can be used. Please see the DMX specification sheets.

DALI permits a combination of star and series connections, as illustrated below:



Series wiring may provide easier cable laying, while star configurations can offer an advantage with respect to cable length. The maximum distance between two communicating units should be 300 meters (984 feet)

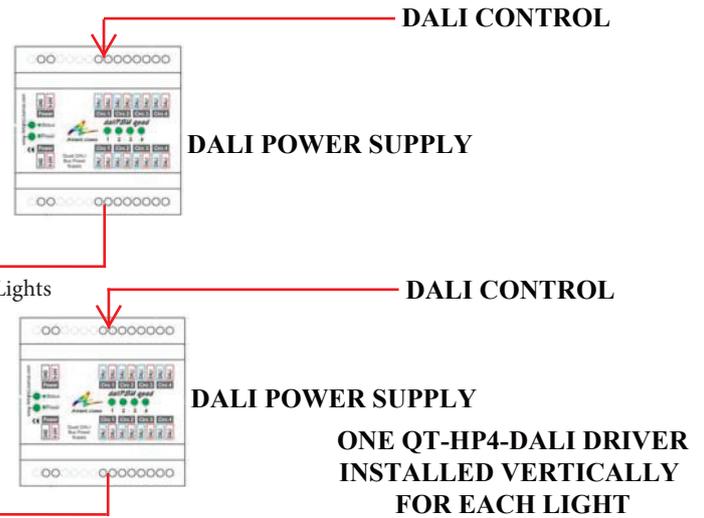
Maximum system current input of 250mA. Each component connected to the interface may consume a maximum of 2mA. This must be taken into consideration when selecting the power supply. Maximum number of 64 units with an individual address.

Volyage Supply (Control)

In general, the digital interface voltage is 16V, ranging from 22.4 - 9.5V. Different units are capable of supplying the interface: Due to the low transmission rate, there is no need to use special cables or wires such as twisted or shielded cables. As a rule, a distance of 984 feet (300 meters) should not be exceeded between two communicating units.

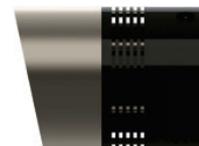
WIRE SELECTION

Due to the low transmission rate, there is no need to use special cables or wires such as twisted or shielded cables. As a rule, a distance of 984 feet (300 meters) should not be exceeded between two communicating units.



POWER IN & OUT

DALI IN & OUT



To Underwater light



DISCONNECT POWER BEFORE DISMANTLING

- * INPUT 110/240vac 50-60Hz.
- * AMP Draw 1.4a - 0.7a
- * Maximum LED wattage 150 watts
- * OUTPUT Max 97 VDC

