QtLED 80 RETRO

*The **QT-80-40 Retro** LED underwater light LED heatsinks can be fitted into existing small Bulleyts, type A or B, and the UL Ti MATE 80 range of underwater lights allowing an easy upgrade to LED without changing the hull fitting or hauling the boat.

*The **QT-80 Retro** LED is available in the standard QT-80-40 white & Blue configuration with a 6,000 lumen output for the White.

*The 68 deg beam (Dome Lens) angle produces a perfect underwater illumination.

*Installation requires no modification to class approvals and fitting these fixtures can take as little as one hour to totally transform an existing underwater lighting setup.

*The **QT-80 Retro** is designed for boats with the Original small screwed Bulleyt,UL Ti MATE 80 Halogen and UL Ti MATE 80 Xenon from Underwater Lights Limited.

Maintenance
Inside the hull

Control Option
On/Off Switch

Driver
Internal

Growth Resistant Lens
Borosilicate Glass

Power
40w 12-24VDC

Installation
From Inside The Hull

Hull Material
GRP and Wood

Boat Size
Up to 20 meter

Lumens
Max 6,000

Kelvin
6,500

Beam Angle
68 degrees

AVAILABLE YES

AVAILABLE YES

IPX8
Underwater

www.underwaterlights.com

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

QT 80 -Retro

RetroFit LED heat sink

Color		Part Number
White	Domed	QT- 80-RW-
Blue		QT- 80-RB-

Mounting

Hull Material	GRP / Fiberglass
Boat size	Up to 90 Feet- Up to 30m
Spacing	1-1.5m & 1-3m port& starboard
Beam Angle	68°
Installation Angles	Flush

Technical

Lumens	6,000 for white
Kelvin	6,500
Typical LED Life Expectancy	20,000 hrs
Min-Max Operating Voltage	11 - 28V DC
Current / Amp draw	4- 1.8A
Driver Type	Integral
Driver Protection	Reverse Polarity Thermal Protected
Control Options	On / Off witch

Physical

Removal Space Required	6.5" (160mm)
Cable Length	13'- 2m
Growth Resistant Lens	Borosilicate Glass

UL Ti MATE 80
Xenon/Halogen

Type -A

UL Ti MATE 80
20W LED

Type -B

Small Screwed Bulleyt

Your Local Dealer

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VAT NO: 556 4425 31 Registered in England No: 2348038

QtLED 80 RETRO INSTALL

Instructions for converting the original UL Ti MATE 80 range to QT-80-LED
The following procedure is achieved from inside the hull.
The "EXISTING LIGHT" parts indicated below should not be removed. All other parts must be carefully removed. Thoroughly clean the glass lens and the inside of the light barrel.

*Check that the LED heat sink (1) slide into the existing barrel and land on the glass retaining ring. Remove item and check that the existing connecting screws onto the barrel. With these parts successfully checked for fitting follow the assembly procedures below.

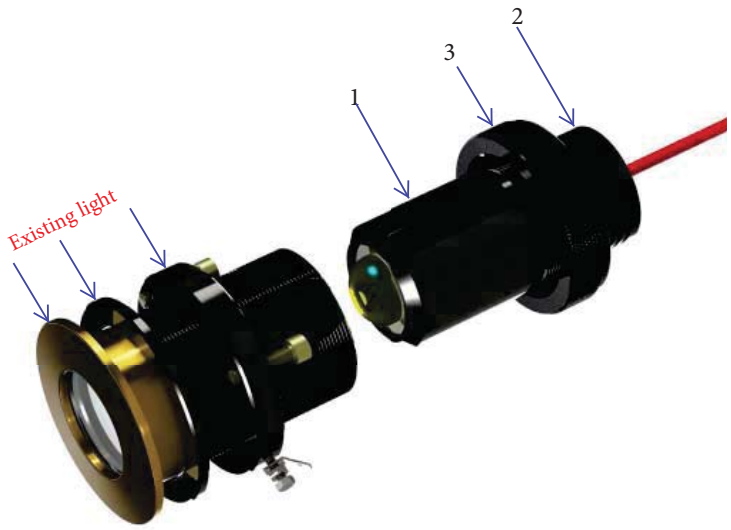
***Assembly procedure** -Use silicone grease to lightly coat the heat sink (1), clamp ring (3) and sealing 'O' rings. Slide the heat sink (1) into the barrel and tighten the knurled securing clamp ring (3) to secure the heat sink (1) into the body. When the heat sink (1) cannot be rotated the clamp ring (3) 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.

***Electrical installation-** The QT 80 retro is supplied with 2 meters of cable ready for connection into the IP 68 fused enclosure also supplied.

*The fused enclosure connection terminal have a higher rating than 20 amps but we strongly advise a maximum supply current to the enclosure of 20 amps.

*When the fused enclosure is used for distribution to the underwater lights the 10 amp fuse must be used to protect the out-going supply cable to the lights.



EARTH SCREW
ITEM 8

TECHNICAL SPECIFICATION

***Supply Voltage** 11-28vdc Maximum current at 11vdc = 4 amps
***Power** 40 watts
***LED Driver** - Integral- **YES**
***LED** Cool white (6,000 lm)/ Blue
***BODY Material -** Nickel plated AB2 Bronze & 5083 Aluminium
***LED lamp life -** 20,000 hours @ 60° C

QtLED 80 RETRO INSTALL

***Instructions for converting the original small screwed bulleyt to QT-80-LED**
The following procedure is achieved from inside the hull.
The "EXISTING LIGHT" parts indicated below should not be removed. All other parts must be removed.
Thoroughly clean the glass lens and the inside of the barrel before installation.

*Check the glass securing arrangement. See type 'A' or 'B' and check the diameter of the existing barrel and confirm on order.

*Check that the LED heat sink (1) slide into the existing barrel and land on the glass retaining ring. Remove item and check that the existing connecting ring screws onto the barrel. With these parts successfully checked for fitting follow the assembly procedures below.

***Assembly procedure** -Use silicone grease to lightly coat the heat sink (1), clamp ring (3) and sealing 'O' rings. Slide the heat sink (1) into the barrel and tighten the knurled securing clamp ring (3) to secure the heat sink (1) into the body. When the heat sink (1) cannot be rotated the clamp ring (3) has secured all in place. If this is not done it will cause overheating of the LED and the LED could fail.

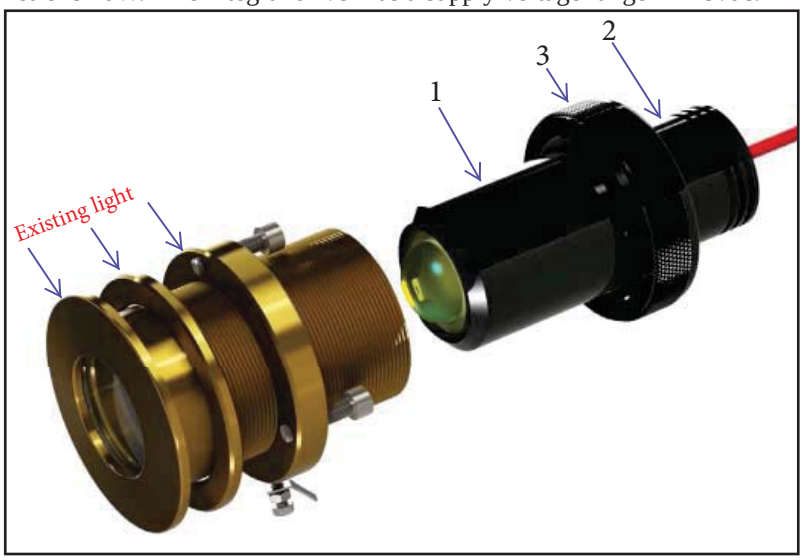
*Caution: do not operate lights unless totally submerged.

***Electrical installation-** The QT 80 retro is supplied with 2 meters of cable ready for connection into the IP 68 fused enclosure also supplied.

*The fused enclosure connection terminal have a higher rating than 20 amps but we strongly advise a maximum supply current to the enclosure of 20 amps.

*When the fused enclosure is used for distribution to the underwater lights the 10 amp fuse must be used to protect the out-going supply cable to the lights.

*The LED power consumption for the Qt -80-retro is 40W. The integral driver has a supply voltage range 11-28vdc.



TECHNICAL SPECIFICATION

***Supply Voltage** 11-28vdc Maximum current at 11vdc = 4 amps
***Power** 40 watts
***LED Driver** - Integral- **YES**
***LED** Cool white (6,000 lm)/ Blue
***BODY Material -** Nickel plated AB2 Bronze & 5083 Aluminium
***LED lamp life -** 20,000 hours @ 60° C

EARTH SCREW
ITEM 8

QTS-100 RETRO Dual

*The **QTS-100-Retro Dual** underwater light LED heatsinks can be fitted into all existing QT- LED 100 range of underwater lights allowing an easy upgrade to White & Blue Dual LED without changing the hull fitting or hauling the boat.

*The 90 deg beam (Dome Lens) angle produces a perfect underwater illumination.

*Installation requires no modification to class approvals and fitting these fixtures can take as little as one hour to totally transform an existing underwater lighting setup.

*The **QTS-100 Retro** is designed for boats with the Original QT- 100 Single colour White or Blue and RGB+W.

Maintenance
Inside the hull

Control Option
Momentary Switch

Driver
Integral

Growth Resistant Lens
Borosilicate Glass

Power
12-24VDC

Installation
From Inside The Hull

Hull Material
GRP and Wood

Boat Size
20m+

Lumens
White 7,000

Kelvin
6,500

Beam Angle
90 degrees

Dual Colour

IPX8
Underwater

www.underwaterlights.com

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

QTS 100- DUAL

RetroFit LED heat sink

Color	Part Number
White/Blue DUAL	QTS- 100-R B/W

Mounting

Hull Material	GRP / Fiberglass
Boat size	20 meters + (65ft +)
Spacing	1-1.5m & 1-3m port& starboard
Beam Angle	90°
Installation Angles	Flush

Technical

Lumens	7,000 for white
Kelvin	6,500
Typical LED Life Expectancy	20,000 hrs
Min-Max Operating Voltage	11 - 28V DC
Current / Amp draw	4.8- 2.4A
Driver Type	Integral
Driver Protection	Reverse Polarity Thermal Protected
Control Options	Momentary switch

Physical

Removal Space Required	6.11/16" (170mm)
Cable Length	2m (6.5ft)
Growth Resistant Lens	Borosilicate Glass

QT 100 Single Colour

QT 100 RGB+W

Your Local Dealer

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Registered in England No: 2348038

QtLED 100 RETRO INSTALL

Instructions for converting the original QT 100 range to QTS-100- Dual colour LED
The following procedure is achieved from inside the hull.
The "EXISTING LIGHT" parts indicated below should not be removed. All other parts must be carefully removed. Thoroughly clean the glass lens and the inside of the light barrel.

*Check that the LED heat sink (1) slide into the existing barrel and land on the glass retaining ring. Remove item and check that the existing connecting screws onto the barrel. With these parts successfully checked for fitting follow the assembly procedures below.

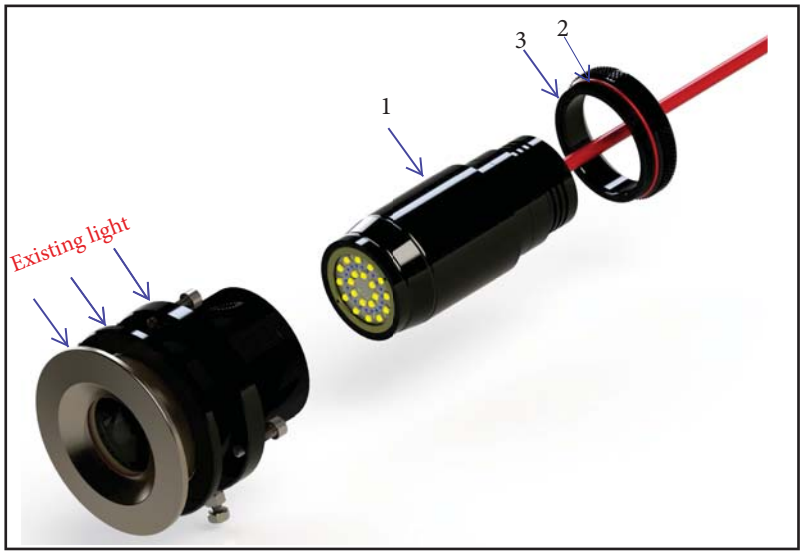
***Assembly procedure** -Use silicone grease to lightly coat the heat sink (1), clamp ring (3) and sealing 'O' rings (2). Slide the heat sink (1) into the barrel and tighten the knurled securing clamp ring (3) to secure the heat sink (1) into the body. When the heat sink (1) cannot be rotated the clamp ring (3) 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.

***Electrical installation-** The QTS 100 retro is supplied with 2 meters of cable and Switch ready for connection into the Hub fused enclosure also supplied.

*The Switch has a maximum rating of 20 amps. Check battery maximum current draw. Maximum of THREE lights on 12 volt supply (14.4A) and SIX on 24 volt supply (14.4 A).

*It is your responsability to run the correct size supply cable (min 2.5mm sq) to the light connection enclosure and the switch. The connection enclosure has a 10 amp fuse that will protect the LED supply cable. When you have made the connections, ensure the polarity is correct and switch on the light for testing.



EARTH SCREW
ITEM 8

TECHNICAL SPECIFICATION

***Supply Voltage** 11-28vdc Maximum current at 11vdc = 4.8 amps
***LED Driver** - Integral- **YES**
***LED** Dual Blue & White (7,000 Lumens White)
***BODY Material -** Nickel plated AB2 Bronze & 5083 Aluminium
***LED lamp life -** 20,000 hours @ 60° C

-

QTS 100 RETRO DUAL

CONNECTION & WIRING INSTRUCTIONS FOR QTS- 100 -RETRO DUAL

*With your purchase you will have the Retro fit Kit, an IP 68 connection enclosure and a switch.

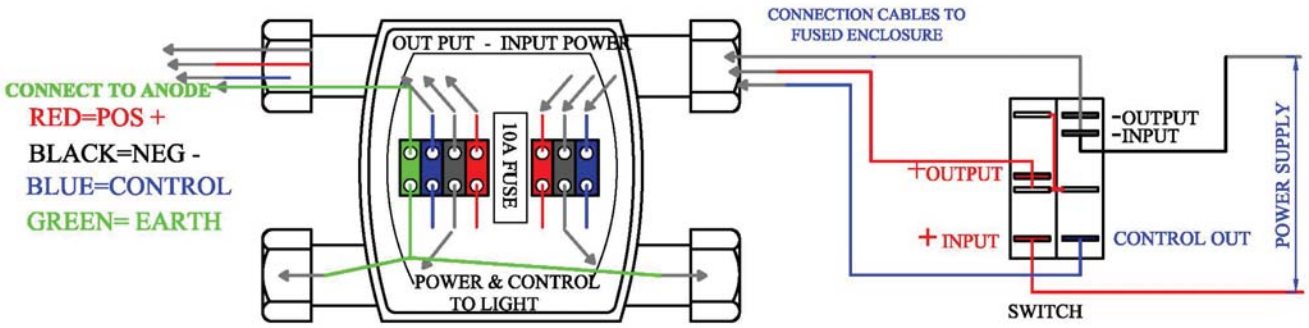
*It is important to locate the connection enclosure close to the light and above the bilge so that you have good access to make the connections. Short cables will lower the cable volt drop. See below for cable connections in the enclosure. RED is positive, BLACK is negative, BLUE is control and GREEN is earth/anode.

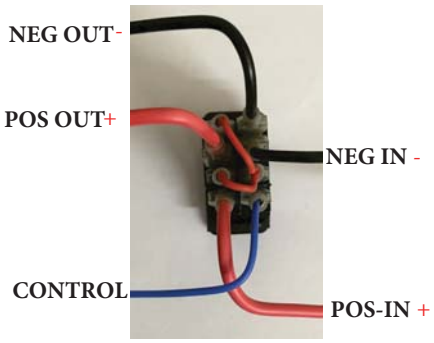
* Then proceed with screwing the connection enclosure to a safe location inside the hull and work a route for the light cable to the connection enclosure. Pass the cable into the connection enclosure and cut the cable to a length so that you can do the connection as shown on the next page.

* It is your responsability to run the correct size supply cable (min 2.5mm sq) to the light connection enclosure and the switch. The connection enclosure has a 10 amp fuse that will protect the LED supply cable. When you have made the connections, ensure the polarity is correct and switch on the light for testing.

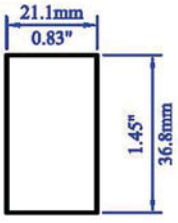
*Note The switch has a maximum rating of 20 amps. Check battery maximum current draw . Maximum of THREE lights on 12 volt supply (14.4A) and SIX on 24 volt supply (14.4A).

* The 20 amp control switch has two actions. The bottom part switches the lights on and off. The top part is momentary and changes the colour.





MOUNTING HOLE AND CUTOUT
PANEL THICKNESS SNAP IN BRACKET
MIN MAX
0.03" - 0.76mm - 0.187" - 4.75mm



QtLED 130 RETRO

*The **QT-130 Retro** LED underwater lights features inserts that can be fitted into existing metal halide underwater lights allowing an easy upgrade to LED without changing the hull fitting or hauling the boat..

*The **QT-130 Retro** LED is available in either the standard QT-130 HP or the QT-130 RGB+W configuration. The lumen output is 20,000 and the 90 degree beam angle provides the perfect illumination.

*Installation requires no modification to class approvals and refitting these fixtures can take as little as one hour to totally transform an existing underwater lighting setup.

* The **QT-130 Retro** LED is designed for boats with the metal halide Original screwed Bulleyt, UL Ti MATE fixed and UL Ti MATE SA range from Underwater Lights Limited.

*The LED heat sinks can also be retro fitted into some of the OceanLED and Sea Vision underwater lights. Please inquire for details.

Maintenance
Inside the hull

Control Option
DMX-Color change
On/ Off Switch

Driver
Remote

Growth Resistant Lens
Borosilicate Glass

Power
110-240vac

Installation
From inside the hull

AVAILABLE YES

AVAILABLE YES

AVAILABLE YES

Hull Material
GRP/Wood

Boat Size
20 meter +

Lumens
20,000

Kelvin
6,500K

Beam Angle
90 Degrees

IPX8
Underwater

www.underwaterlights.com

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

QT- I 30 Retro

RetroFit Insert

	QT-130 HP3		QT-130 RGBW & Blue
Technical			
Lumens	20, 000		Not Applicable
Kelvin	6,500		Not Applicable
Typical LED Life Expectancy	40,000 hrs		40,000 hrs
Min-Max Operating Voltage	110 - 240V AC		110 - 240V AC
Current / Amp draw	1.4 - 0.7 amps		1.4 - 0.7 amps
Driver Type	External		External
Driver Output	55Vdc @ 2.8A		36VDC @1A for each channel- 4 channels
Control Options	On / Off Switched		DMX & On/Off Switched
Physical			
Removal Space Required for existing fitting	6.70" (170mm)		6.70" (170mm)
Total weight	13 lbs		13 lbs
Driver Dimensions (L x W x H)	10.2" x 6.3" x 3.5" (220 x 120 x 90mm)		10.24" x 6.3" x 3.5" (260 x 160 x 90mm)
Cable Length	10 feet - 3 meters'		10 feet - 3 meters

Your Local Dealer

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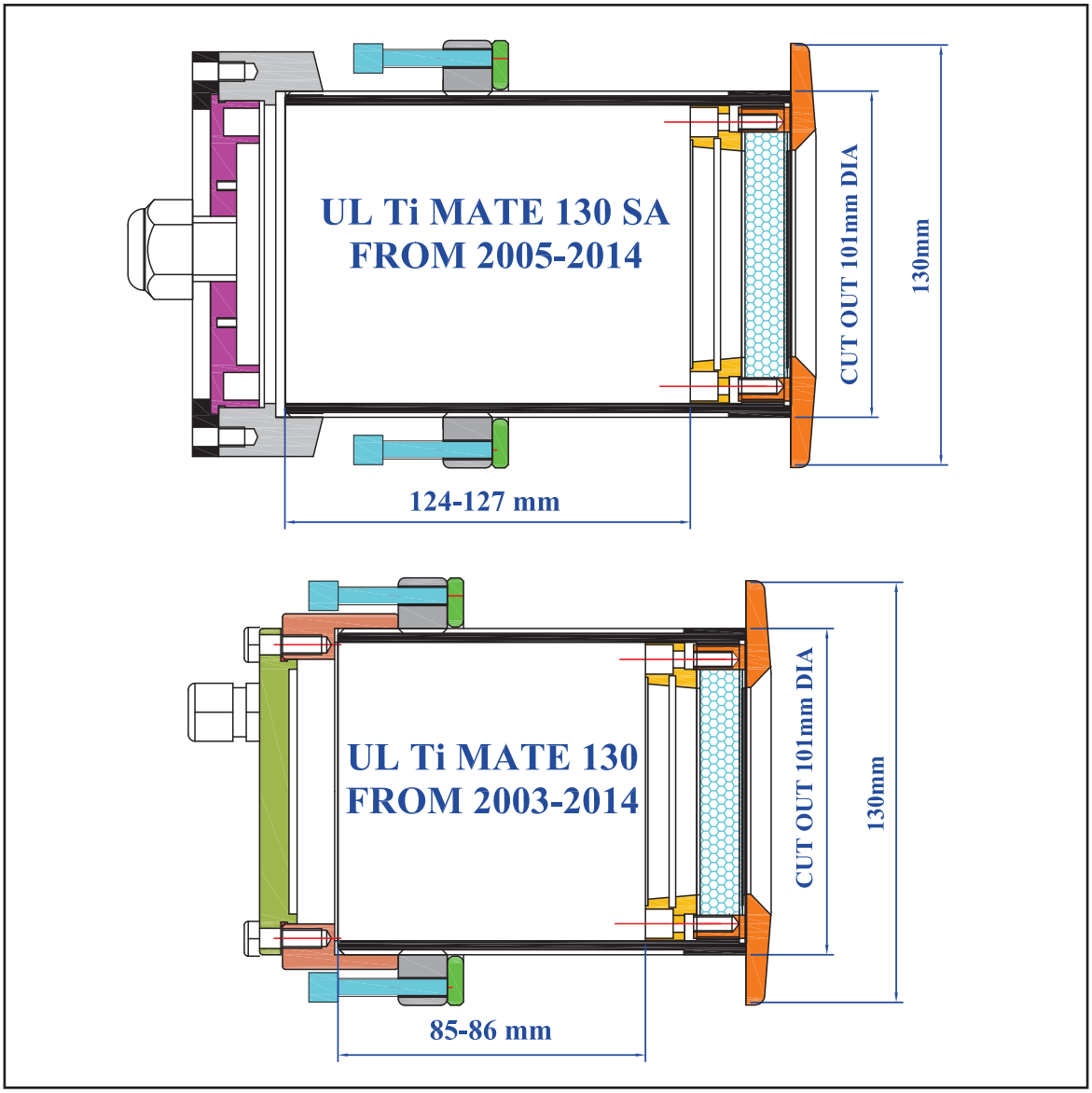
QtLED 130 RETRO

CONVERSION FROM UL Ti MATE 130- TO QT-LED



QtLED 130 RETRO

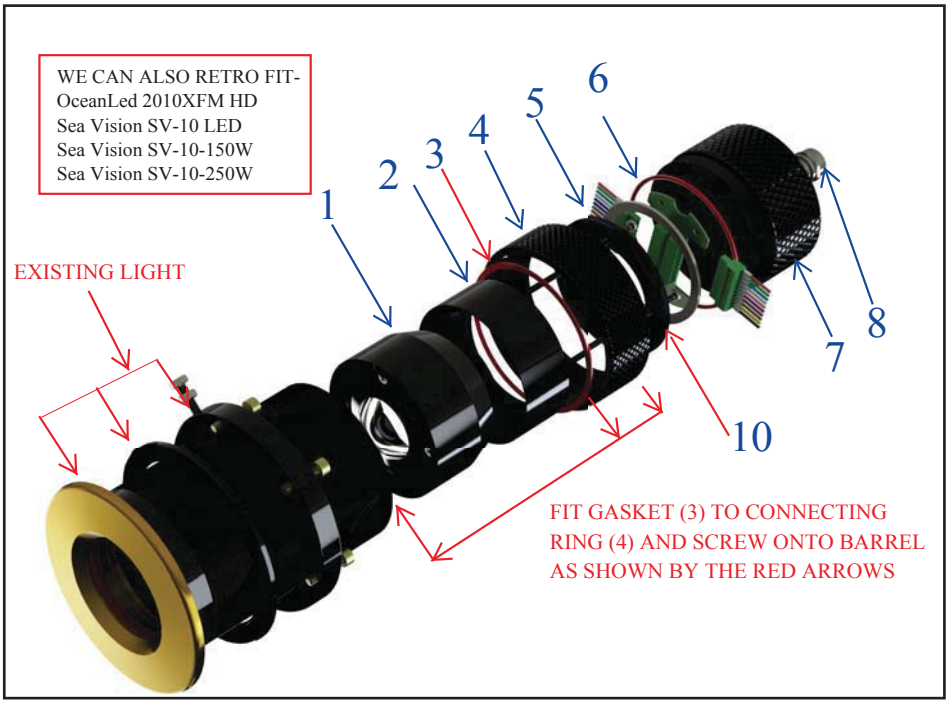
INSTRUCTIONS FOR CONVERTING THE UL Ti MATE 130 (HQI) TO QT-130 HP3 (25,000 lm Cool White, Blue or RGB+W)

*The following procedure is achieved from inside the hull. The **" EXISTING 130 LIGHT "** parts indicated below should not be removed. All other parts must be carefully removed. Thoroughly clean the glass lens and the inside of the barrel.

***Check that the LED heat sink (1) and the rear heat sink (2) slide into the barrel and land on the glass retaining ring. Remove both items and check that the connecting ring (4) screws onto the barrel. With these parts successfully checked for fitting follow the assembly procedures below.**

***Assembly procedure-** Lightly coat the heat sink (1) and the rear heat sink (2) with a silicone grease and slide into the barrel. Lightly grease the gasket (3) and fit into the connecting ring (4). Lightly grease the thread on the connecting ring (4) and screw the connecting ring (4) onto the barrel so the gasket (3) and forms a good seal. The clamp ring (5) is then screwed into the connecting ring (4). The clamp screws (10) are lightly screwed up to compress the rear heat sink (2) This will expand the rear heat sink onto the barrel and press the heat sink (1) onto the lens retaining ring. Plug the LED into the PCB socket See further connecting instructions for this procedure.
The gasket (6) is lightly greased and fitted onto the connecting ring (4). The cover (7) is then secured onto the connecting ring (4). Ensure that no cables have been trapped and the cable gland (8) is 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 **standard** underwater light is fitted with three meters of cable and a IP 68 plug that fits into the driver enclosure socket.



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Manufacturer of the Original underwater lights™ Brand
Marine Lighting Products Since 1991

QtLED BULLEYT RETRO

cute on size big on light

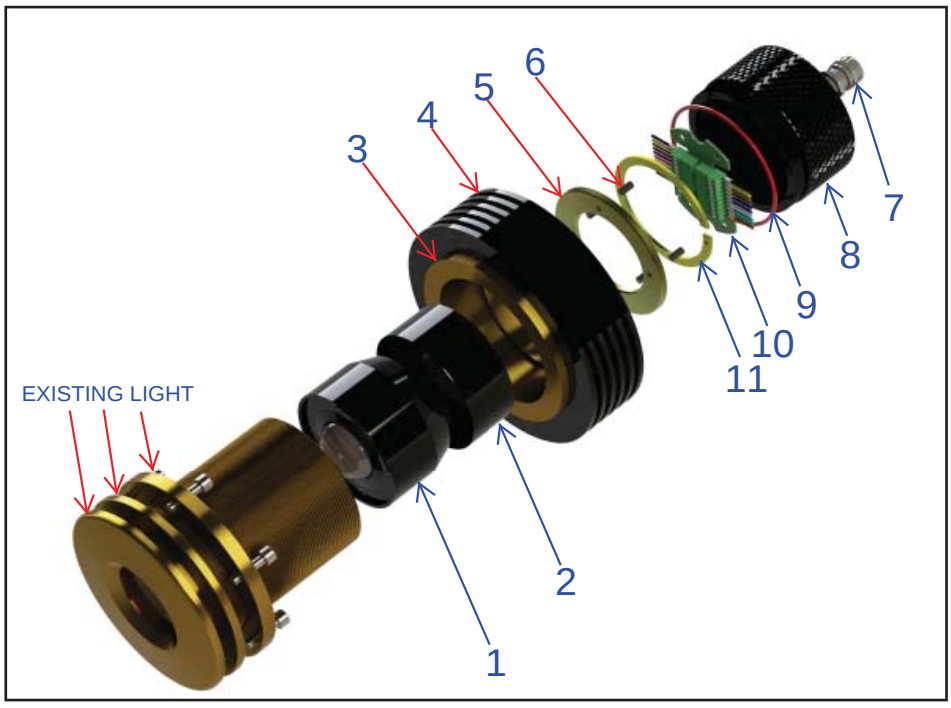
INSTRUCTIONS FOR CONVERTING THE SCREWED BULLEYT TO QT-130 (Standard 10,000 lm) or QT-130 HP (18,500 lm Cool White or RGB+W)

***The following procedure is achieved from inside the hull. The **" EXISTING LIGHT "** parts indicated below should not be removed. All other parts must be carefully removed. Thoroughly clean the glass lens and the inside of the barrel.

***Check that the LED heat sink (1) and the rear heat sink (2) slide into the barrel and land on the glass retaining ring. Remove both items and check that the connecting ring (3) screws onto the barrel. With these parts successfully checked for fitting follow the assembly procedures below.**

***Assembly procedure-** Lightly coat the heat sink (1) and the rear heat sink (2) with a silicone grease and slide into the barrel. Screw the additional heat sink (3 + 4) onto the light barrel. The clamp ring (5) is then screwed into the back of the heat sink ring (3). The clamp screws (6) are lightly screwed up to compress the rear heat sink (2) onto the front heat sink (1). This will expand the rear heat sink into the barrel and press the heat sink (1) onto the lens retaining ring. Plug the LED into the PCB socket (10) See further connecting instructions for this procedure.
Slacken the cable gland so the cable will not turn when screwing the cover (8). The cover (8) with the 'O' ring (9) is then screwed into the back of the heat sink ring (3). Ensure that no cables have been trapped and finally tighen the cable gland (7).

***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 **standard** underwater light is fitted with three meters of cable and a IP 68 plug that fits into the driver enclosure socket.



PLEASE REGISTER YOUR PRODUCT WARRANTY DIRECT TO
WWW.REGISTER-UWL.COM
For sales telephone numbers visit www.qtled.com

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

QT LED - 130 - SCREWED BULLEYT RETRO

CUTE ON SIZE - BIG ON LIGHT
For sales and information visit WWW.QTLED.COM