



Bluefin Led Underwater lights.

Domestic DL12 Installation manual.

Thank you for choosing Bluefin LED underwater lights, our products have been designed and tested rigorously to ensure the optimum performance and longevity.

All Bluefin Led lights are water tested so please be aware there may be moisture present on the light. Please ensure that your product is installed as per our instructions below, failure to do so may invalidate your warranty.

Specs: electrical/fuse ratings

| | Voltage | Current | Fuse rating |
|-------|----------|---------|-------------|
| DL12D | 24V ONLY | 24v2amp | 8 amp |

Warnings:

- **Do not under any circumstances hold the light by the cable.(the light is not designed to be hung by the cable and will result in damage to the unit).**
- Ensure that the correct input voltage is used for the light (Power supplies can be supplied by BluefinLed at additional cost.Part No: PSU 24V-UNI, PSU 24v/200w-110to220v SINGLE COLOUR 1 X PSU per 4 lights.
- Ensure that a fuse or breaker is installed with the correct fuse/breaker rating per the light is installed.
- Care should be taken when planning your electrical feeds/cables to the lights so as to ensure voltage drop between the batteries or power supply is minimised, If the cable gauge & connections are not sufficient for the lighting load attached you may experience incorrect operation of the lights & intermittent illumination as the supply dips below specification.
- For help with calculations always consult with a qualified professional or contact BluefLED directly.
- The cable must be protected with an outer tube or pipe to the standards specified in this manual (which can be supplied by BluefinLed at additional cost Part No: DL-PP-M1, DOCK LIGHT PVCU 1MTR PIPE/GLAND 4MM WALL THICKNESS. Part No: DL-PP-M2, DOCK LIGHT PVCU 2MTR PIPE/GLAND 4MM WALL THICKNESS).
- Ensure all connections made are water tight, all connections **MUST** be above the waterline
- Do not use abrasives on the lenses.

Tools required for installation:

- 3mm(1/8") drill bit
- Drill
- Posi head hand screwdriver
- Marine sealant 3M 4200 or equivalent
- 3/4" NPT TAP/THREAD (if threading your own pipe or cutting down the pipe supplied).

Installation:

There are two mounting methods to the dock light product which will depend on your mounting point, these are show below as option 1 and 2.

The light can be mounted with a top or side entry, either can be used depending on your cable exit route.

All lights are configured for top or side entry as standard.

Ensure that you plan your cable piping and fitment before progressing with the light installation.

The light must remain underwater at all times so please ensure that you take into consideration tides and the water line.

Ensure that your pipe is threaded to the Dock Light puck before installation to the dock. Seal the threads with Marine sealant 3M 4200 or equivalent and then tighten to create a water tight seal.

(See Fig 1)

Option 1 screw mounting

Drill 3mm(1/8") pilot holes to match the mounting holes on the Dock light puck. (See Fig 1)

Screw the dock light puck to the dock or piling using the 4 countersink screws provided. (See Fig 1)

Option 2 Strap/wire mounting.

The dock light puck has side entry holes for strapping to pilings or docks. (See Fig 2)

Strap the Dock light puck to the dock or piling using an appropriate strap or wire to hold the dock light in position securely, please ensure that you do not modify the light to achieve this and use wire or straps that will fit the hole size diameter on the Dock light puck.

For both Option 1 and 2

Feed the light cable through Dock light puck and the pipe.(see fig 3)

Apply marine sealant to the rear of the light on the circumference of the light and around the base of the cable gland to ensure a complete continuous bead of sealant is applied in both areas. (see fig 3)

Mount the light to the Dock light puck using the **3 screws provided**. (see fig 3)

Tighten the cable gland at the top of the pipe to ensure a water tight seal.(if using your own pipe ensure that the ends of the pipes are sealed from the elements). (See Fig 4)

Protective Tubing/pipe

The cable of the light must be protected by pipe or tubing as the harsh water environment will erode the cable and damage will occur.

Bluefin Led supply optional protective tube/piping at additional cost(please contact your local dealer or distributor for information)

If you choose to supply your own pipe protection please ensure that the specified material and cable glands are used. The pipe must be threaded using a 3/4" NPT TAP/THREAD, all pipe connections and threads must be sealed using a Marine sealant 3M 4200 or equivalent to create a water tight seal then screwed into the Dock Light.

Electrical connection:

Only attach the light cable to a waterproof connection or junction box, the cable must have a watertight connection otherwise your **warranty will be void**.

Attach the light cable to suitable VDC power ,ensuring that you protect the light with an inline fuse or breaker connected to the positive(red) wire, ensure that you create a water tight connection at this point.

Fig 1 Dock Light Puck

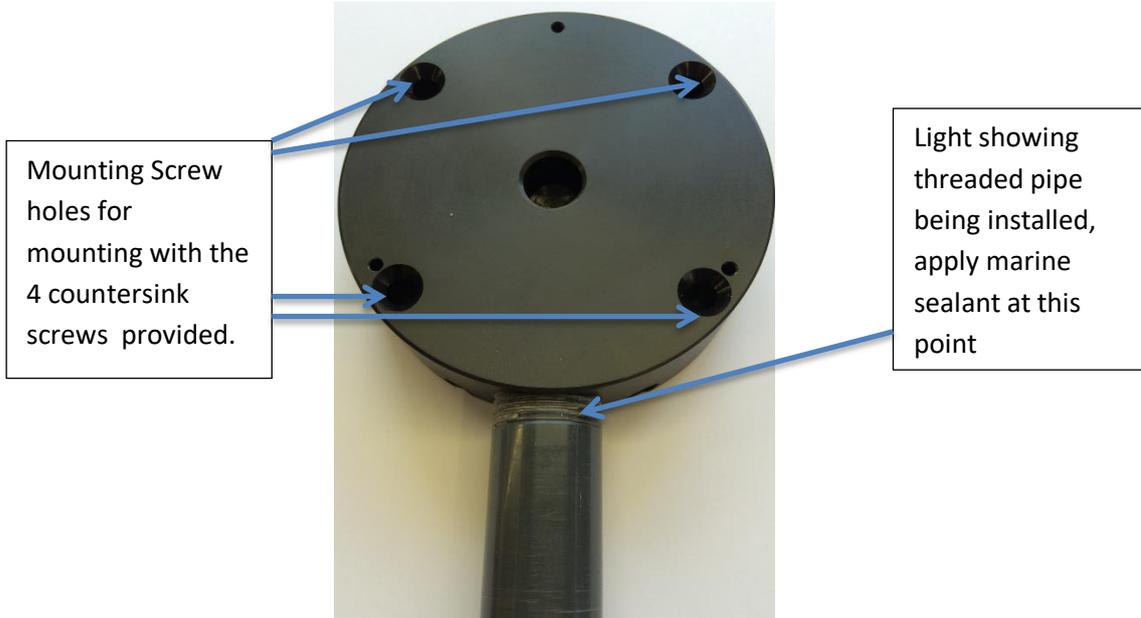


Fig 2

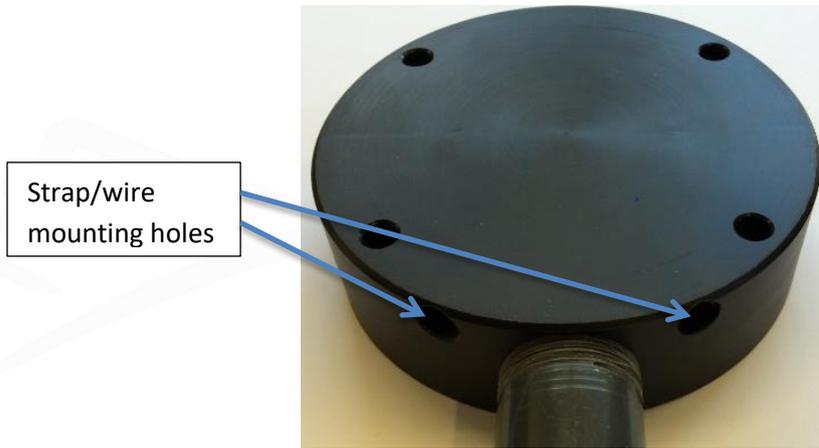


Fig 3

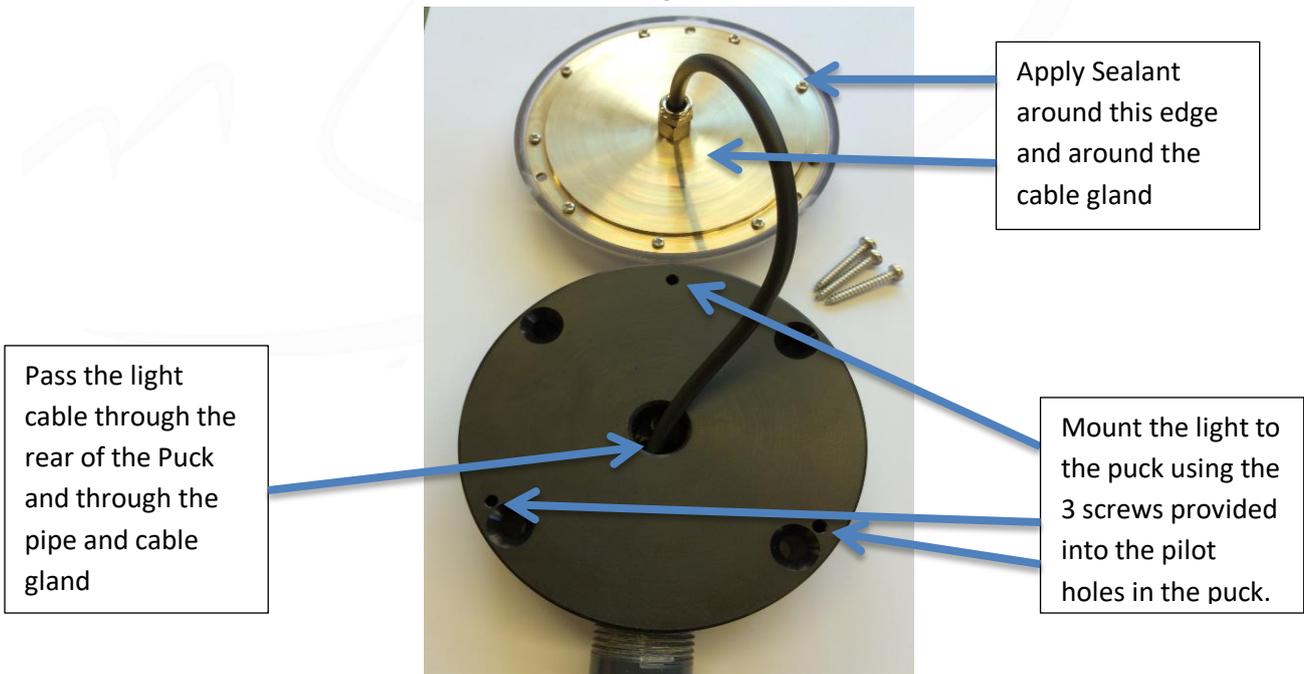
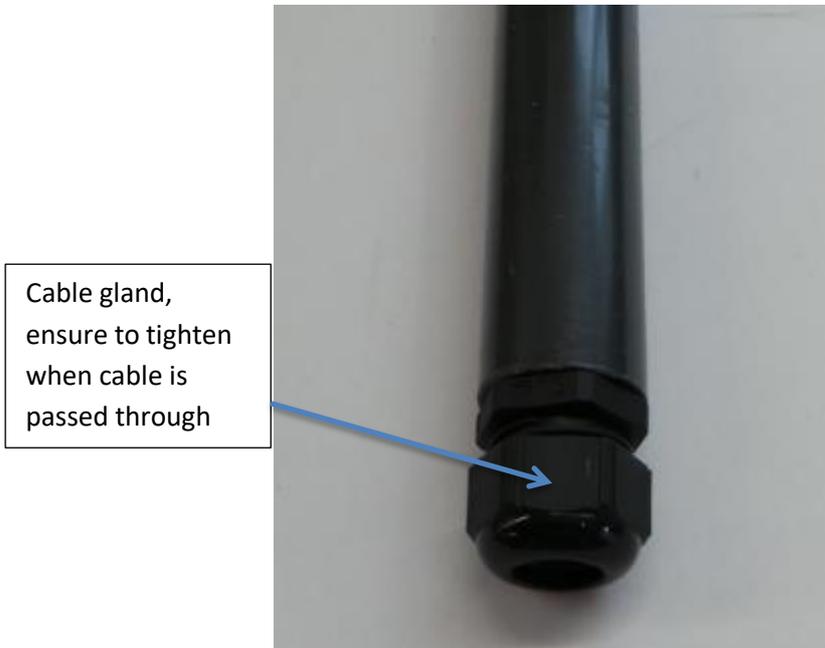


Fig 4



Testing:

Test the light before installation ensuring that you use the correct input voltage and the light is illuminated correctly.(take care to not look directly at the light as this could cause damage to eyes) After installation ensures again that the light is illuminated correctly and the lens label is removed. The Dock Light is fully IP68,care must be taken to ensure that all electrical and pipe connection are water tight.

The light has internal indicator Led's for fault finding, these are as follows:

- Over voltage will flash red.(check the voltage to the light)
- Under voltage will show a constant red. (check the voltage to the light)
- Over temperature will show amber.(allow the light to cool down and check if submerged)

Maintenance:

Regularly check the installation for water tightness.

Only clean the light with a soft bristle brush.

Warranty:

Your product has a 2 year limited warranty for defects.

Please ensure if returning your product that the cable is fully intact and not cut off.

For any warranty issues please contact your point of sale retailer or go to www.bluefinled.com for further advice.

Installer please ensure that the SERIAL NUMBERS of the lights are written below and the manual is handed over to the end user.

Please make a note of the serial numbers of the lights here.

SERIAL NUMBERS

| | | | | | |
|--|--|--|--|--|--|
| | | | | | |
|--|--|--|--|--|--|

Dock lights Gel Connector Instruction Manual.

Thank you for choosing Bluefin LED underwater lights, our products have been designed and tested rigorously to ensure the optimum performance and longevity.

Please ensure that your product is installed as per our instructions below, failure to do so **WILL INVALIDATE YOUR WARRANTY.**

Use these instructions in conjunction with the light instructions to ensure that all is fitted correctly.

Installation:

Fig 1 showing how the Gel connector is wired up. Please use the instructions supplied with the Gel Connector kit.

**Fig 2 showing how the finished Gel connector should look when finished.
 The IP68 GEL CONNECTOR MUST BE INSTALLED OR YOU WARRANTY WILL BE VOID.**

Fig 1

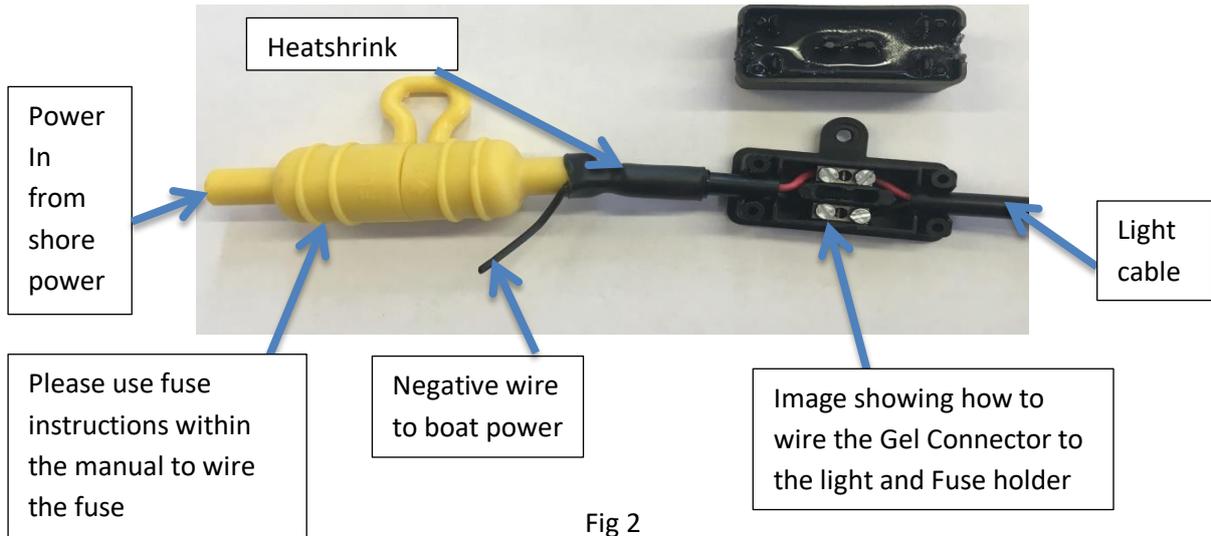


Fig 2



Bluefin LED

Cottage Farm, Cottage Lane,
 Norton Juxta Twycross, Atherstone. CV9 3QH

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Registered Address: Square Rig Limited, t/a Bluefin Led, Cottage Farm, Cottage Lane, Norton Juxta Twycross, Atherstone, CV9 3QH
 Company Registration Number: 08871451 VAT Number: 179 2690 64



Wire Gauge selection guide using information from ABYC E-11 & US Coast Guard guidelines for marine electrical installations

| Circuit Type | | Current flow in Amps | | | | | | | | | | | |
|--|---|----------------------|--------|--------|--------|--------|--------|--------|--------|----------|----------|-------|----------|
| 10% V Drop - Power Non Critical (P series Single colour) | Low- Power/Critical (H, S & GW Plus colour change Series) | 5A | 10A | 15A | 20A | 25A | 30A | 40A | 50A | 60A | | | |
| 20ft | 6m | 16 AWG | 16AWWG | 14AWWG | 14AWWG | 12AWWG | 12AWWG | 10AWWG | 10AWWG | 8AWWG | 16mm CSA | 6AWWG | 25mm CSA |
| 30ft | 9m | 10ft | 14AWWG | 12AWWG | 12AWWG | 10AWWG | 10AWWG | 8AWWG | 8AWWG | 10mm CSA | 10mm CSA | 6AWWG | 25mm CSA |
| 50ft | 15m | 15ft | 12AWWG | 10AWWG | 10AWWG | 8AWWG | 8AWWG | 6AWWG | 6AWWG | 16mm CSA | 16mm CSA | 4AWWG | 40mm CSA |
| 65ft | 20m | 20ft | 14AWWG | 10AWWG | 8AWWG | 8AWWG | 6AWWG | 6AWWG | 6AWWG | 25mm CSA | 25mm CSA | 4AWWG | 40mm CSA |
| 80ft | 24m | 25ft | 12AWWG | 10AWWG | 8AWWG | 6AWWG | 6AWWG | 4AWWG | 4AWWG | 40mm CSA | 40mm CSA | 2AWWG | 70mm CSA |
| 100ft | 30m | 30ft | 10AWWG | 8AWWG | 6AWWG | 6AWWG | 4AWWG | 4AWWG | 4AWWG | 70mm CSA | 70mm CSA | 1AWWG | 70mm CSA |
| 130ft | 40m | 40ft | 8AWWG | 6AWWG | 4AWWG | 4AWWG | 2AWWG | 2AWWG | 2AWWG | 70mm CSA | 70mm CSA | 1AWWG | 70mm CSA |
| 165ft | 50m | 50ft | 6AWWG | 4AWWG | 2AWWG | 2AWWG | 1AWWG | 1AWWG | 1AWWG | 70mm CSA | 70mm CSA | 1AWWG | 70mm CSA |
| 200ft | 61m | 60ft | 4AWWG | 2AWWG | 1AWWG | 1AWWG | 1AWWG | 1AWWG | 1AWWG | 70mm CSA | 70mm CSA | 1AWWG | 70mm CSA |
| | | 70ft | 2AWWG | 1AWWG | 1AWWG | 1AWWG | 1AWWG | 1AWWG | 1AWWG | 70mm CSA | 70mm CSA | 1AWWG | 70mm CSA |
| | | 80ft | 1AWWG | 70mm CSA | 70mm CSA | 1AWWG | 70mm CSA |
| | | 90ft | 1AWWG | 70mm CSA | 70mm CSA | 1AWWG | 70mm CSA |
| | | 100ft | 1AWWG | 70mm CSA | 70mm CSA | 1AWWG | 70mm CSA |
| | | 110ft | 1AWWG | 70mm CSA | 70mm CSA | 1AWWG | 70mm CSA |
| | | 120ft | 1AWWG | 70mm CSA | 70mm CSA | 1AWWG | 70mm CSA |
| | | 130ft | 1AWWG | 70mm CSA | 70mm CSA | 1AWWG | 70mm CSA |

To use for BluefinLED underwater lights select the appropriate current Column for you lights, power & quantity from the top row. then the cable distance run in one direction i.e. from panel or batteries to the light placement or group.

Then at the point the Column & row crosses read the cable suggestion in US or EU gauges for your installation.

Failure to install the correct power feeds may invalidate your warranty, if in doubt please consult with BluefinLED or a qualified professional.