



## **Bluefin Led Underwater lights.**

### **V12/V24CC 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.

**If you are installing a V24CC please refer to the Driver instructions for electrical installation.**

### **Specs: electrical/fuse ratings**

	Voltage	Current	Fuse rating
Mako M12IFM12V	12V only (Absolute min of V 10V under load @ light).	12v-5Amp	8amp
Mako M12IFM 24V	24V only (Absolute min of V 20V under load @ light).	24V-2.6Amp	8amp

### **Warnings:**

- Do not attempt to install the lights whilst the boat is in the water.
- Ensure that the correct voltage is used for the light.
- Ensure that an in line fuse is installed with the correct fuse rating per the light installed.
- Ensure that use the Screws provided (**failure to do so will invalidate your warranty**).



- Ensure all connections are made water tight or your **warranty will be Void**.
- Do not remove the inline Moisture Guard or your **warranty will be Void**.
- Do not hold the light by the cable.
- Do not use abrasives on the lenses.

### **Tools required for installation:**

- 2.5mm(3/32") drill bit
- 30mm(1.1/4") drill bit Drill
- Posi head hand screwdriver
- Marine sealant 3M 4200 or equivalent

### **Installation:**

For optimum affect effect the light should be positioned between 8-12" (200-300mm) below the water line and at a 90 deg angle. (**Please be aware that the cable gland is not central to the light and is offset so take this into consideration when drilling the 30mm hole**)

Recommended spacing from 3-3"(1mtr) to 5-11" (1.8mtrs) between the lights.

Drill a 30mm (1.1/4") hole for the light access through the hull, ensuring that there are no obstructions internally in the hull.

Key the area to where the light is to be mounted with abrasive sand paper to ensure there is a clean area for the marine sealant to bond too.

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 2) Feed the cable through the hole and mount the light to the hull using the **screws provided**.

Wipe off any excess sealant and ensure the light is seated correctly without any gaps in the sealant. (It is good practice to have excess marine sealant to clean off as this can ensure that there is a water tight seal to the hull)

**Electrical connection:**

**It is advised that if installing V12SM12V Models no more than 8 lights should be installed on your low voltage system and Mains Power Units should be installed (contact BluefinLED for advice).**

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**.

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, on 12V systems this is especially important as the lower system voltage means a high current requirement which in turn means the potential for more voltage drop in the cable runs & connections.

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.

**Please see the wire gauge guide which is attached to this manual.**

For help with calculations always consult with a qualified professional or contact BluefinLED directly.

**You will notice an inline moisture guard attached to your cable (Fig 1). If this guard is removed you warranty will be void**

Pic 1



Attach the light cable to the VDC power on the boat ensuring that you use the in line fuse supplied connected to the positive(red) wire, ensure that you use the heatshrink provided to create a water tight fit into the fuse holder. (See fig 3)

Ensure that an earth bond cable is attached to the earth tab on the cable gland using the nuts and bolts supplied and is attached to the earth bonding system on the boat before installation.(See fig 2)

Fig 2

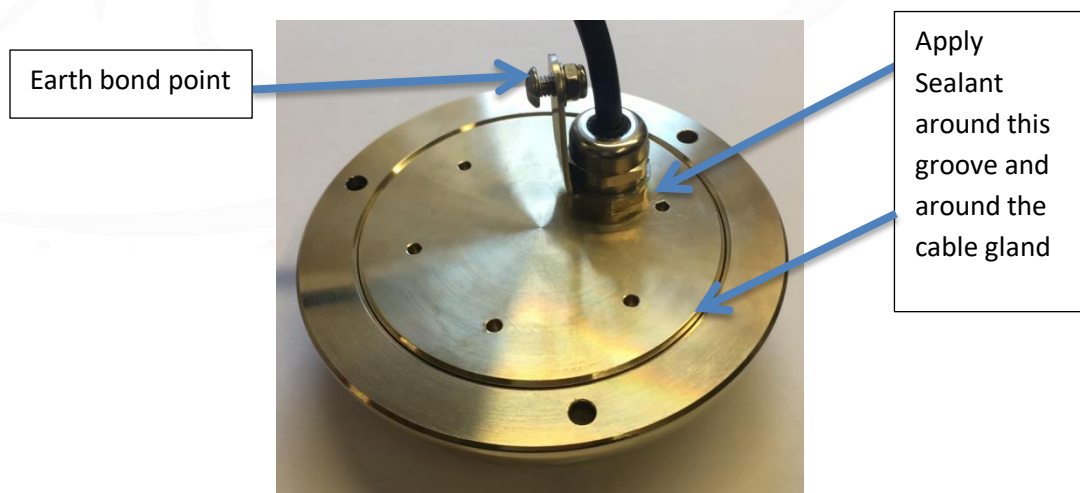
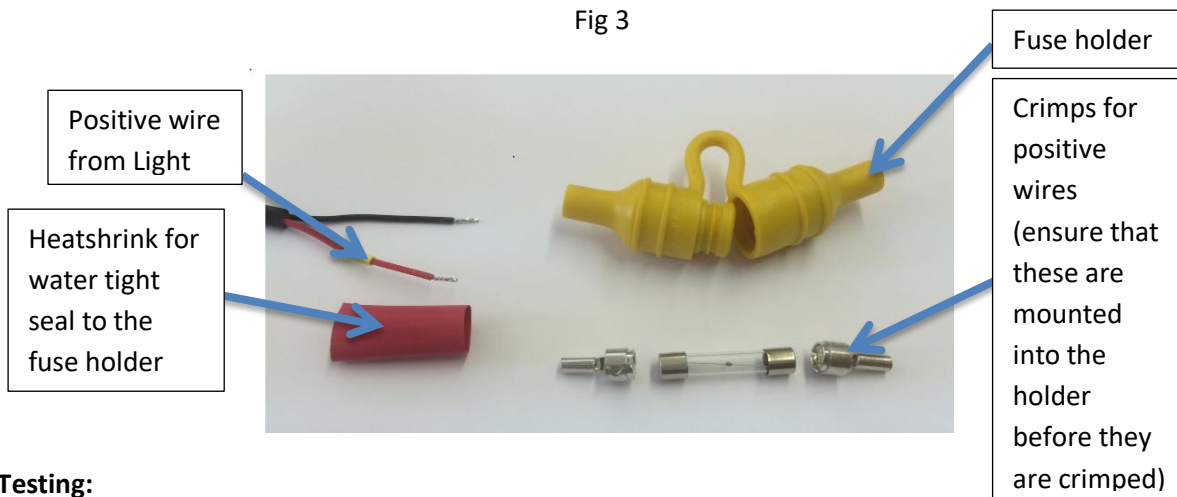


Fig 3



**Testing:**

Test the light before installation ensuring that you use the correct voltage and the light is illuminated correctly.

After installation ensure again that the light is illuminated correctly before the boat goes back into the water and the lens label is removed.

After your boat goes back into the water check internally for water tightness around where the light is installed.

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

- Over temperature will show RED.(allow the light to cool down and check if submerged)

**Bluefin LED Underwater lights. YOU MUST INSTALL THIS GEL CONNECTOR OR YOUR WARRANTY WILL BE VOID !!!**

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.

**Warnings:**

- Do not attempt to install the lights whilst the boat is in the water.

**Installation:**

**Fig 1 showing how the Gel connector is wired up.**

**Fig 2 showing how the finished Gel connector should look when finished.**

**Ensure that the black outer sheath is inside the gel connector.**

**The IP68 GEL CONNECTOR MUST BE INSTALLED CORRECTLY OR YOU WARRANTY WILL BE VOID.**

Fig 1

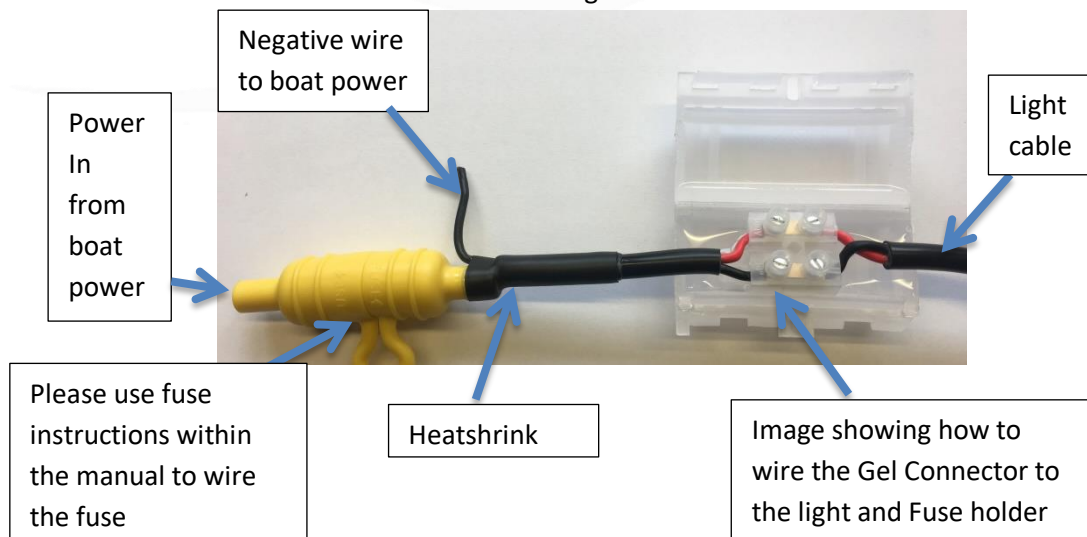


Fig 2



**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.  
For any warranty issues please contact your point of sale retailer or go to [www.bluefinled.com](http://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**

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**Bluefin LED**

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