



## **NaviLED® 2 Nautical Mile Port, Starboard, Stern Lamps**

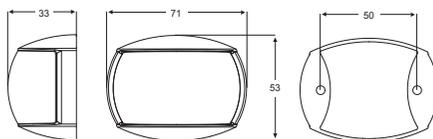
### **Introduction**

Hella marine LED Navigation Lamps offer many advantages over conventional bulb lamps.

Significantly reduced power consumption, ultra long life and high tolerance to shock and vibration make Hella marine LED lamps the ideal choice for the harsh marine environment.

Hella marine NaviLED® Navigation Lamps are 'Precision Optical Instruments', tested and type approved to comply with international maritime regulations.

<b>Housing Description</b>	UV resistant lens, High impact shroud
<b>Light source</b>	LED
<b>Installation</b>	Pre-wired with 120mm of marine cable
<b>Operating Voltage</b>	Multivolt™ 8-28V DC
<b>Voltage Protection</b>	Spike protected to 500V Reverse Polarity protected to -700V
<b>Power Consumption</b>	Port and Starboard < 2W combined, Stern < 2W.
<b>Protective System</b>	IP 67



### **Electromagnetic Compatibility (EMC)**

This LED lamp is an electronic device. The electrical circuits contain components that suppress possible interference, both emission as well as susceptibility, to the limits prescribed in EN 60945.



### **Protection against damage due to voltage spikes**

This lamp is protected against reverse polarity connection and negative voltage spikes of up to 700 volts.

## **2 Nautical Mile NaviLED® International Approvals**

This Hella marine 2 Nautical Mile NaviLED® Navigation Lamp is tested and type approved for Powerboats and Sailboats to comply with international maritime regulations.

Approval Type Length (LOA)	ABYC and NMMA Powerboats and Sailboats up to 20 meters in length.
Additional Approval Length (LOA)	USCG / IMO COL REG Powerboats and Sailboats up to 50 meters in length.
Approval Type Length (LOA)	RINA Powerboats and Sailboats up to 20 meters in length.

Please refer to [www.hellamarine.com](http://www.hellamarine.com) to view the RINA certificates.

### **Warranty Statement**

**Congratulations! The product you have selected comes from Hella marine - one of the world's leading manufacturers marine lighting products.**

Hella marine branded products are covered by a warranty against manufacturing or material defects. (For further details please check the terms of trade with your Hella marine agent).

The lamp module is sealed and does not have any serviceable parts inside; opening the module will invalidate warranty. In the unlikely event that you should experience a problem with your purchase, please contact your Hella marine agent where you purchased the product.

For general comments products please contact us on E-mail at [techfeedback@hellamarine.com](mailto:techfeedback@hellamarine.com)



### Positioning of Port and Starboard Lamps

#### Installation angle.

Parallel to the vessels centre line (see Fig.1) and so the rear surface of the mounting shrouds are vertical. Direction arrows point right ahead.

#### Position on a vessel.

Mounted in the same thwartships position and at the same height above the water line and mark the effective beam of the vessel.

### Positioning of Stern Lamps

#### Installation angle.

At right angles to the vessels centre line and so the rear surface of the mounting shrouds are vertical. Direction arrow points right astern.

#### Position on a vessel.

As close as practical to the stern of the vessel.

**When the lamps are operating, the light should not be obstructed or concealed by superstructures or other objects.**

Fig.1 Parallel to the vessels centre line.

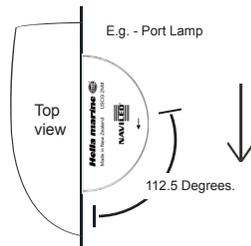
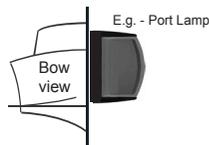


Fig.2 Vertical to the vessels centre line.



### Wiring Colour Coding

LED modules are polarity conscious.

Reverse polarity will not damage this product but will inhibit its function.

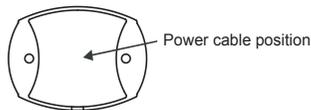
Hella marine recommends wire connections be soldered, and heat shrink tubing applied to seal the joint.

Colour	Connect to	Power
Black	Negative (-ve)	
Red	Signal (+ve)	Port and Starboard <2W each
Grey	Signal (+ve)	Stern <2W each.

**Wiring**  
- Supply Voltage 8-28V (DC only)

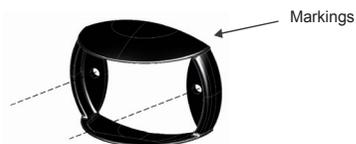
**NB:** Lamp must be protected by a fuse rated at 5 amperes maximum.

### Installation Steps



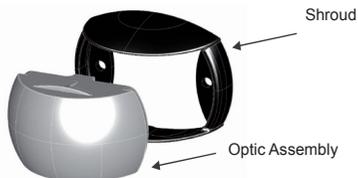
#### Step 1

Make provision for the power cable.



#### Step 2 - Mount the Shroud

- 2.1 Shroud must be installed with markings on the TOP horizontal surface.
- 2.2 Arrow must point right ahead for Port and Starboard lamps and right astern for Stern lamps.



#### Step 3 - Insert the Optic Assembly

*Note - Arrow on top of Shroud and Arrow on top of Optic Assembly must point right ahead for Port and Starboard lamps and right astern for Stern lamps.*

- 3.1 Connect power
- 3.2 Feed power cable
- 3.3 Push optic assembly into Shroud