

INSTRUCTION SHEET: 2NM Port, Starboard, Stern and Towing

for: **2LT 980 520-xxx**

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 the LED lamps the ideal choice for the harsh marine environment. HELLA marine NavILED® series are Precision Optical Instruments, tested and type approved to comply with international maritime regulations.

Product specifications:

Material Description: UV resistant lens, high impact shroud
 Minimum Visible Distance: 2 Nautical Miles
 Cable: Pre-wired with marine cable
 Operating Voltage: Multivolt™ 12V/24V
 Power Consumption: Port and Starboard < 2W combined, Stern or Towing < 2W
 Degree of protection: IP 67 - Completely sealed
 Approvals: ABYC A-16 and NMMA / USCG33 CFR 183.810 2NM / IMO COLREG 72 / RINA



Electromagnetic Compatibility (EMC): This Multivolt™ 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 international regulations.

Wiring & Protection: 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. Lamp must be protected by a fuse rated at 3 amperes maximum. Note: do not attempt to open - no serviceable parts inside.

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

Service life: It is an inherent characteristic of LEDs that they will degrade and lose luminous intensity over time. Hella marine design LED Navigation lamps with a significant performance safety margin however as a precautionary measure due to normal service degradation, we recommend NavILED lamps be replaced after 10,000* hours of operation.

* e.g. With a usage of 500 hrs per year the lamps should be replaced after 20 years.

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 (see Fig.2). Direction arrows point right ahead.

Position on the vessel:

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

Positioning of Stern or Towing 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. Towing lamp must be mounted in a vertical line above the stern lamp.

Position on the 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.

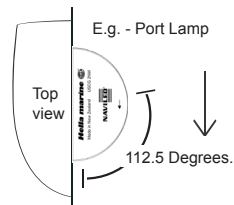
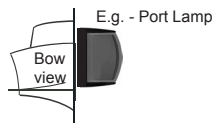
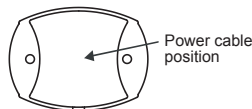


Fig.2 Vertical to the vessels centre line.



Installation Steps

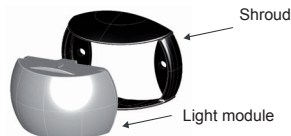
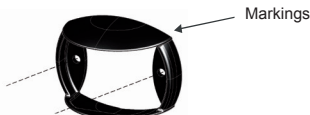


Step 1: Power cable

Make provisions 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 and Towing lamps.



Step 3: Insert the Optic Assembly

- 3.1 Connect power
- 3.2 Feed power cable and test lamp
- 3.3 Firmly push light module into Shroud