

# PELANGI

## Portable Laser Docking Aid

## MARINER COMPACT



Compact Hand Held Laser Gun, in operation. Sighting Scope with in-scope red dot enables easy aiming. Measurements are displayed on a large LCD display.



Supplied in robust weather proof carrying case containing, Laser Instrument, 2 'C' Cell Batteries, and a Detailed User Manual

The Mariner Compact is a Hand Held portable laser device for determining closing distance and speed of approach to a berth or SBM.

- The Mariner permits docking staff to gauge a vessel's distance and speed of approach without the need for expensive permanently installed equipment.
- Simple push button control panel, and easy to read LCD screen, configured to display the customer's choice of measuring units – imperial or metric.
- Sighting Scope with Red Dot to enable simple, accurate aiming. Adjustable stock helps with aiming.
- Light weight (1.34 kgs) enables the Mariner to be carried from berth to berth on multi complex facilities for each docking.
- Batteries are conveniently stored in the handgrip.
- Weather and dust proof construction permits use in all weathers.
- Serial port for connection to a data logger or computer.
- Laser emitter is safety rated to FDA Class 1 (CFR21) EN 60 825, and will not cause eye damage in normal use.
- Long operation distance of 600m.
- **MARINER** measures both range and speed simultaneously making it possible to advise pilot of approach velocities while there is still time to correct them.

### Options:

- Data Collector and Software
- Turk 4-pin to DB 9-pin cable
- Turk 4-pin to HP 200/48 10-pin cable.

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The Mariner is lightweight, compact, and shown here with shoulder rest.



Mariner Compact is light enough to be used without the shoulder rest.

### Possible Applications:

- Berthing Master assisted berthing on jetties with restricted berthing speeds due to increased tonnage on an old berth.
- Berthing of Submarines.
- Measuring available swing distances.
- Monitoring Dock approaches.
- Monitoring or Policing speed of traffic in inland waterways or speed restricted areas.
- Pilot carried for use on approaches to S.B.M. mooring or similar facilities.
- Certifying speed of approach on damaged structures.

### TECHNICAL SPECIFICATION

#### Laser Sensor

|                 |                       |
|-----------------|-----------------------|
| Type            | : Pulsed Infrared     |
| Wavelength      | : 904nm               |
| Output power    | : 52 Micro watts      |
| Beam Divergence | : 3mRad 0.2 degrees   |
| Eye Safety      | : FDA Class 1 (CFR21) |
| Operating Temp  | : -30 to +60 degree C |

#### General System

|                  |                        |
|------------------|------------------------|
| Distance range   | : 23-610 metres        |
| Range Resolution | : 0.1m                 |
| Velocity range   | : 0-299 mph            |
| Speed Accuracy   | : +/- 1mph             |
| Acquisition Time | : <0.4s                |
| Weight           | : 1.34 Kgs             |
| Size             | : 21 x 7 x 28cm        |
| Power            | : 12 volt nominal D.C. |

#### Electrical

|                   |                        |
|-------------------|------------------------|
| Reverse polarity  | : Protection included  |
| Surge Protection  | : Included             |
| Low Battery       | : message on LED       |
| Battery duration  | : 25 hours per battery |
| Communications    | : RS232 Serial         |
| Format            | : NMEA                 |
| Output Connection | : Lemo FGG1B           |



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