



MAGNETIC COMPASSES  
CLOCKS AND METEOROLOGY

## PELORUS INSTRUCTIONS

The pelorus Tax-00123 can be used for coastal navigation, astronomical bearings, for taking the compass azimuth and for compass deviation control. The gimbal suspension consists of the gimbal ring weight and arrest.

With this pelorus relative bearings (measured against ship's ahead) and compass bearings (measured against compass heading) can be carried out.

Included in the range of delivery are two deck shoes, one separate and one fixed at the wooden box for a safe storage, and a shadow pin.

### **Place of Installation**

The place of installation should allow all-round view. Therefore the compass bridge on merchant vessels is a suitable location.

### **Installation**

Fix the pelorus on the supplied deck shoe with the arrest knob. It is important to watch carefully that ahead mark points exactly to ship's ahead direction! Any misalignment will cause an error in bearings!

Proceed as follows for alignment: Rotate the graduated scale with north mark to ahead mark and fix it by using the rest knob. Observe a landmark in at least 3 nm distance by bearing over mast and stay until you have an exact ahead direction landmark. With the pelorus prepared as above take a bearing of this landmark and mark the position of the deck shoe. Fix it by screws and the alignment procedure is finished.

### **HOW TO USE THE PELORUS**

- 1.- Stay near the helmsman, set the lubber line and the pelorus pivot on a plain parallel to the center line of the vessel.
- 2.- Loosen both rings and set the graduated pelorus rose on the same course of the vessel indicated by the helmsman.
- 3.- Adjust the small rings in order to fix the rose.
- 4.- Look for a reference point that is plotted on your nautical chart.  
Line up the forward and aft transit sights see below, with the object to be plotted (e.g. lighthouse, building, etc.)
- 5.- When the helmsman indicates the vessel is on course or calls out "Mark", note the relevant reading of the marked object.
- 6.- In order to obtain a bearing, identify a second object following the instructions given previously.
- 7.- If you wish to carry out a third plotting, you can store the last plotting and fix the reading in the rose by adjusting the big ring.
- 8.- To obtain the true bearing, the following rule applies:

TRUE BEARING=COURSE+RELATIVE BEARING

Applying this rule we obtain the three true bearings in order to obtain our true position.

### **AUTONAUTIC INSTRUMENTAL S.L.**

Italia,1  
08320 El Masnou  
Spain

[www.autonauticinstrumental.com](http://www.autonauticinstrumental.com)