

PLASTIMO COMPASS INSTRUCTIONS

Thank you for purchasing a Plastimo compass. This instrument is the result of our more than 40 year of experience in compass development. The choice of components we use and the care that we take in our manufacturing process is reflected in the high quality of each Plastimo compass we produce.

1. Installation

Check that the place where you would like to mount your compass is at a sufficient distance from magnetic objects that may interfere with your compass's local magnetic field, such as other compasses, fire extinguishers, loudspeakers, electric wires and equipment, metallic parts of steering systems, cameras, tools, etc.

Make sure that:

The compass main lubber line is parallel to your boat's centre line. This is especially important for bulkhead compasses mounted on an inclined surface.

For flush or bracket mount compasses, the mounting surface is perfectly stable and horizontal.

For flush mount compasses, place the supplied mounting template where you would like to position the compass. Drill out the mounting holes and the hole for the lighting wire if applicable. Cut out the hole for the main body of the compass using a hole saw or portable jigsaw.

Use non-magnetic screws only (screws which do not adhere to a magnet like 316L stainless steel, brass or aluminium screws..) to mount your compass.

2. Deviation

The course discrepancy (in degrees) between the compass heading North and the true magnetic North is called deviation. It can be negative or positive.

In order to minimise this error, your compass should be installed as far as possible from objects interfering with its local magnetic field.

Once the deviation errors are calculated and adjusted for, your compass will be a perfectly reliable navigation instrument.

Your deviation should be recorded graphically on a deviation curve, and kept handy for future reference. To ensure ongoing accuracy, your compass deviation should be checked and updated once a year.

How to plot a deviation curve

Check that the compensation screws are in a neutral position (according to the compass model, the screw slot will either be horizontal, or aligned with a dot).

Although simple, calculating your compass deviation must be done carefully. Deviation can be checked effectively by comparing different headings on your compass, with those obtained from a hand bearing compass held well clear of any interference. Standing at the stern of your boat is usually the best position, provided it is a "non magnetic" area.

Example: if the hand bearing compass reads 30° and the steering compass reads 34° , deviation on a course of 34° is -4° .

- **Step 1 : Find a position that is well away from any source of interference**

Choose a nice day with smooth water. Select a distant object or landmark (at least 3 miles away from the boat), whose bearing is known.

Sight the landmark with the hand bearing compass and while running your boat under power, steer the boat slowly around in a circle, while maintaining the sight of the landmark.

If the bearing remains constant, it means that you are in an area well clear of any interference. If not, repeat the operation, re-situating yourself at another place on your boat until the bearing remains constant through a 360 degree circle.

- **Step 2 : Compare headings from hand bearing and steering compasses**

Reversing your circle direction, compare the 2 compass's headings at 30 degree intervals (North, 30° , 60° , East, 120° etc.). Any difference noted is due to the deviation on the steering compass.

- **Etape 3 : Establish the deviation curve**

Plot the deviation (positive or negative) noted in Step 2 above on your compass deviation card.

3. Compensation

Compasses are generally supplied with built-in compensation, but some models can accept optional compensation modules.

Compensating a compass consists of adjusting the position of the 2 built-in compass magnets, in order to affect the horizontal component of the compass card with respect to the North/South and East/West deviation.

The compensation procedure is a delicate operation and should ideally be carried out by a professional and qualified compass service centre.

How to compensate a compass:

You will need a second compass to be used as the reference for your steering compass; a hand bearing compass is often the most convenient, provided it is interference-free. The north-south labelled screw on the compass corrects the north-south heading; the east/west screw corrects the east-west heading (see figure E).

- Run your boat under power along a northerly course as indicated by your hand bearing compass and adjust your steering compass by turning the north-south screw either way, until the steering compass also points north.
- Repeat the procedure, running the boat on an eastern course, adjusting your steering compass by turning the east-west adjusting screw until the steering compass points east.
- Run the boat on a southern course reducing the deviation by half.
- Run the boat on a western course reducing the deviation by half.

Note: Upon completing the compensation procedure, it is important to plot a new deviation curve.

4. Lighting

Our compasses with lighting include in series a 12V bulb and two wires twisted around each other to avoid interfering with the magnetic field. Compasses equipped with 2 x 12V bulbs can be used on 24 V power, when the provided bulbs are mounted in series (see figure D).

5. Utilisation

You can now use your compass. It must be read from the front (see figure A : Front Reading / B : Double Reading / C : Back Reading), with the lubber line (1) indicating your boat's heading. Some compasses have lubber lines (2) on either side to enable accurate readings whatever the angle.

Keep in mind that even the proximity of a simple screwdriver may cause important deviation and give you a bad course reading.

To calculate your course, use the following formula **TH = MH + V + D**

TH : true heading (determined on the marine chart)

MH : magnetic heading (indicated by the lubber line (1))

D : deviation (see paragraph 2)

V : variation (shown on marine chart).

6. Maintenance advice

Clean your compass with soapy water. Do not use solvents that include methylene, ethylene or acetate.

To reduce scratches on the dome of your compass, use a rubbing cream and polish.

When mounting your compass, do not use mastic acetic acid (smell of vinegar), which could damage your compass.

7. Troubleshooting

If your compass presents the slightest defect, including the appearance of a persistent bubble, do not try to open the magnetic cell (3), but contact your Plastimo dealer or directly our factory service centre:

Hamilton Business Park
Botley Road
Hedge End
Southampton, Hants SO30 2HE
United Kingdom
www.plastimo.com

8. Warranty conditions

Dear Boat Owner,

Our compasses have been thoroughly checked and are covered by Plastimo's 5-year warranty for defects in materials and manufacturing process. This warranty provides for the free repair or replacement of defective parts from our certified service centres.

Local law:

This warranty grants you specific legal rights. You may also have different legal rights depending on the laws of your state or country. To the extent that this warranty is inconsistent with any local laws, this warranty will be deemed to be modified to be consistent with such local laws.

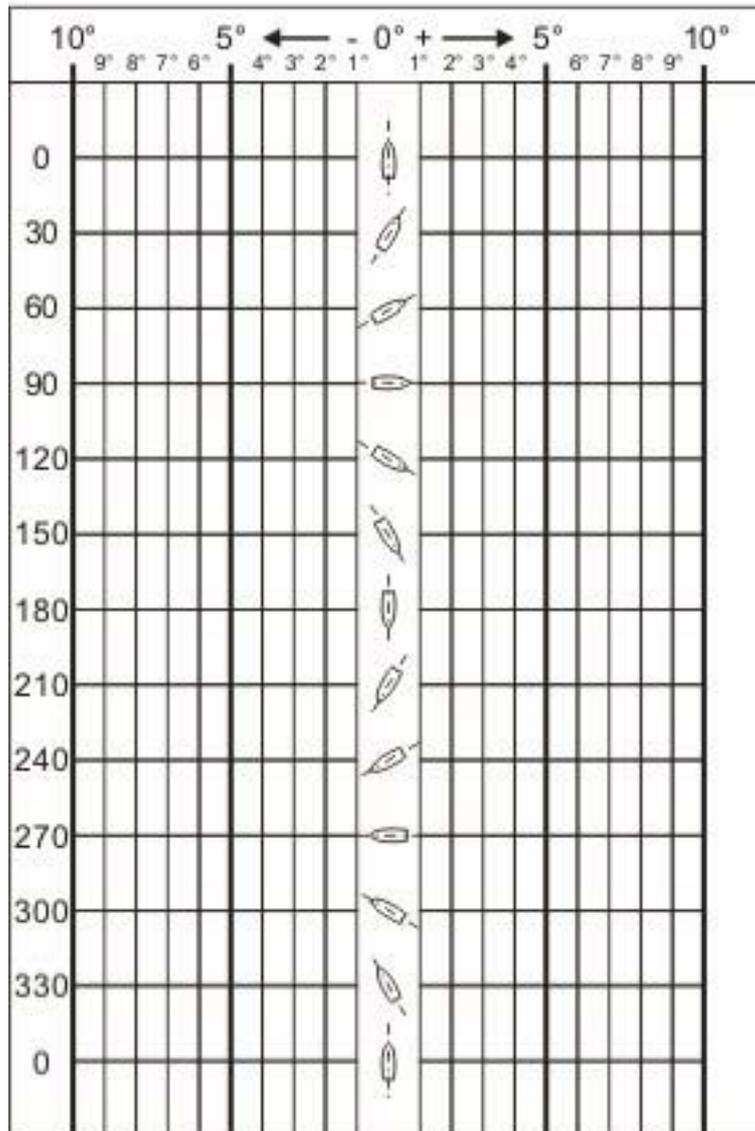
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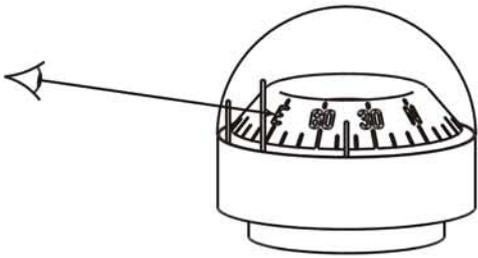
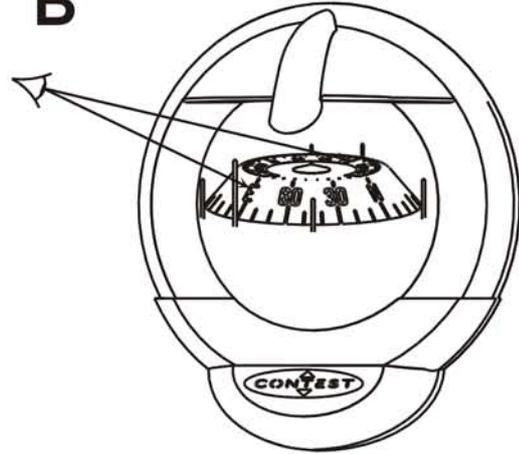
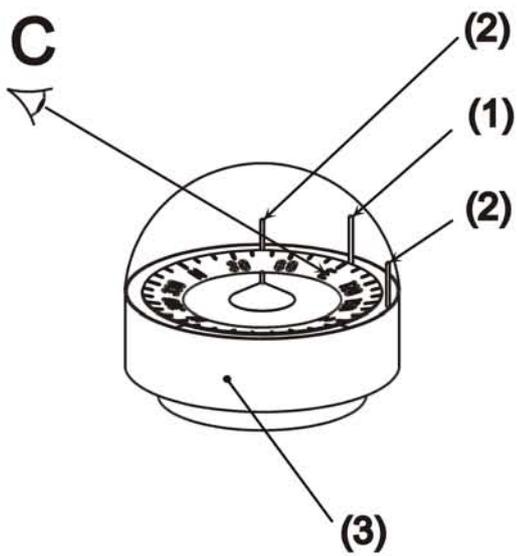
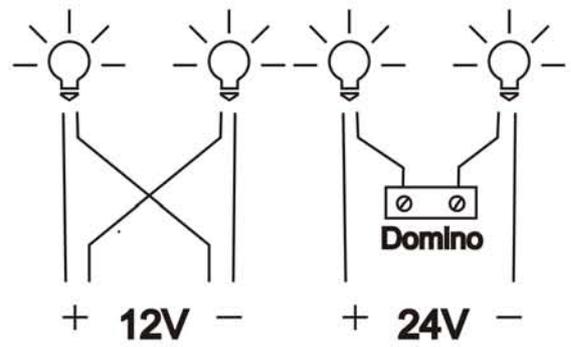
Warranty does not cover:

- Compass mounting/dismounting costs.
- Damages as a result of non authorized modification or repairs, incorrect installation or misuse.

To make a claim under this warranty, the compass has to be returned prepaid to your dealer or to our customer service centre with its original invoice or its warranty card, duly filled in.

COURBE DE DÉVIATION



A**B****C****D****E**