



Kenyon Laboratories
12 Scovil Rd.
Higganum, Ct. 06441
860-345-2097 or 800-253-4681
Fax 860-345-8652
Tech Support: rondenman@comcast.net

COMPASS ADJUSTING GYRO OPERATING INSTRUCTIONS

I. CONTROLS

- 1) **Caging Plunger** - Located at lower right hand corner of face. The function of this control is to erect the gyro in a centralized attitude. This is accomplished by pressing down firmly on the plunger.
- 2) **Azimuth Disc Setting** - Located at lower left hand corner of face. The function of this control is to set the Azimuth Disc to lubber line. This is accomplished by pressing down on the caging plunger and springing the Azimuth set knob inward against the edge of the disc, and rotating the disc until the desired alignment is Obtained.
- 3) **On-Off Switch** - Located at upper left hand corner of face. The switch turns the power to the gyro on or off.
- 4) **Charging Receptacle** - Located in rear wall of case. The receptacle is polarized for proper charging. The larger pin is positive(+). An external source of 12VDC can also be plugged into this receptacle, if available, providing the large pin is positive.

II. OPERATION

- 1) Turn switch on.
- 2) Press down caging plunger.
- 3) Allow gyro to come up to speed for about 10 minutes.
- 4) Bring the boat to North compass heading.
- 5) Again press down caging plunger and set Azimuth disc to bring 0° to lubber line.
- 6) Bring boat to 180° *gyro reading* and note error relative to compass heading.
- 7) Compensate compass for ½ error shown.
- 8) Repeat 4,5 & 6 to check and remove any small residual error.

- 9) Bring boat to East compass heading and set Azimuth disc to 90°.
- 10) Bring boat to 270° *gyro reading* and note error relative to compass heading.
- 11) Compensate for ½ error shown.
- 12) Repeat 9 & 10, check and remove any small residual error.
- 13) Put boat on 0° magnetic and **reset gyro Azimuth disc to 0°**
Swing boat in steps of 30° and note compass readings. Make final adjustments if necessary. Record compass readings against gyro readings.

III. MAINTAINENCE

- 1) Only ordinary instrument care is necessary to keep the gyro in good condition for years. Bearings are lifetime lubricated and will last for thousands of hours.
- 2) The battery should be maintained in a charged state. The Gel Cell 7 amp hour battery installed in the bottom of the case will run the gyro for approximately 3-5 hours.
- 3) A meter is mounted on the front wall to read battery voltage when the button is pressed in.
- 4) Periodic checks of battery voltage may be made while operating. A reading of 10.5 volts with the gyro running indicates the battery should be recharged.
- 5) The battery is fully charged when an indication of 14.5 volts is obtained while charging.
- 6) Slow boat speed and calm water is essential to get accurate readings.
- 7) Keep notes on headings and error.