FLUXGATE COMPASS
Model C-500

- Inexpensive fluxgate heading sensor with high accuracy and stability
- Automatic correction for local magnetic variation with an appropriate GPS navigator or manual correction with the optional remote display RD-30
- Compact waterproof housing with visual status indicators for a simple installation
- Three heading data output ports: two IEC/NMEA ports, one AD-10 port
- High speed heading data output in IEC 61162-2 format
The FURUNO C-500 is an inexpensive fluxgate heading sensor that outputs highly accurate and stable ship’s heading to interfaced equipment. The compact and waterproof housing allows easy installation and is perfect for pleasure craft and coastal fishing boats.

The C-500 consists of a fluxgate sensor, processor and serial data interfaces. The sensor detects the heading relative to the magnetic north as induced within the fluxgate coils by terrestrial magnetism. For outputting to various equipment, the detected heading is converted to serial data in IEC 61162, NMEA 0183 or FURUNO AD-10 format.

The C-500 can provide True Heading by using its correction facilities for magnetic deviation and variation. Deviation (errors mainly caused by shipboard environment) can be automatically corrected by swinging the boat over full 360 degrees. Variation (errors subject to geographical location) can also be automatically corrected when interfaced with a GPS navigator.

The C-500 can interface with the Remote Display RD-30 for displaying the heading data in graphic and alphanumeric forms. You can directly operate menu settings and correction for variation from the RD-30. This function gives speedy and straightforward operation.

**SPECIFICATIONS OF C-500**

1. **Accuracy**  
   ±1.0° (excluding magnetic anomalies)

2. **Correction**  
   Deviation: Automatic by running the boat over 360°  
   Variation: Automatic through GP-32, GP-1850W or Manual with RD-30

3. **Roll and Pitch**  
   ±35°

4. **Follow-up**  
   6°/s max.

5. **Output Rate**  
   IEC 61162, NMEA 0183: 25, 100, 200 ms, 1 s (selectable)  
   AD-10: 25 ms

6. **Interface** (IEC 61162-1/61162-2*, NMEA 0183, AD-10)  
   Output: HDG (Heading by compensating compass heading for magnetic deviation and variation)  
   Input: VTG (SOG, COG), RMC  
   (* output only)

**POWER SUPPLY**  
12 - 24 VDC, 2 W

**EQUIPMENT LIST**

**Standard**

1. Heading Sensor C-500 1 unit
2. Interface Cable (with 6p-6p connectors) 1 pc  
   MJ-A6SPF0007-100, 10 m
3. Installation Materials  
   (including power/interface cable:  
   MJ-A7SPF0009-020 with 7p-7p connectors, 2 m, 1 pc)

**Option**  
Interface Cable
   For IEC 61162, NMEA0183:  
   MJ-A7SPF0006-100 with 7p-7p connectors, 10 m  
   MJ-A7SPF/SRMD-100 with 7p-7p connectors, 10 m  
   MJ-A6SPF0003-050* with 6p connector, 5 m  
   (* also available in AD-10 format)
   For AD-10:  
   MJ-A6SPF0007-100 with 6p-6p connectors, 10 m

**INTERCONNECTION DIAGRAM**

**DIMENSIONS**  
0.3 kg 0.7 lb  
3.12” 78 mm  
5.6” 141 mm  
2.5” 64 mm  
6.2” 160 mm

**ENVIRONMENT** (IEC 60945 testing)

Temperature: -15° to +55°C  
Waterproofing: IPX5 (IEC 60529), CFR-46 (USCG standard)