

NAVIGAT X MK 2

Digital Gyrocompass System



Sperry Marine

OVERVIEW

Sperry Marine is pleased to announce the introduction of its new-generation NAVIGAT X MK 2 digital gyrocompass system, which provides a cost-effective solution that satisfies international carriage requirements for a type-approved marine gyrocompass.

The NAVIGAT X MK 2 gyrocompass is a compact, one-unit design that runs on a 24-volt power supply with two independent DC inputs. It can drive up to four analogue repeaters and provides five additional serial data outputs and one six-steps/degree output. Based on the proven Sperry Marine NAVIGAT X MK 1 design, the new gyrocompass provides better than 40,000 hours mean time between failures. The system remains north-stabilized for up to three minutes in the event of a power interruption.

The NAVIGAT X MK 2 complies with International Maritime Organization (IMO) regulations A.424(XI) and A.694(17) as well as the International Standards Organization (ISO) standard 8728, and is fully Wheelmark typeapproved.

The introduction of this new gyrocompass completes the Sperry Marine range of heading sensors, which now comprises the NAVIGAT 2100 fiber-optic gyrocompass, NAVIGAT X MK 1 and NAVIGAT X MK 2 digital gyrocompasses and the NAVISTAR satellite compass.

Main Features

- Performance in accordance with IMO A.424(XI), A.694(17), and ISO 8728
- MED (Wheelmark) approval.
- Comprises one single unit.
- Power supply: two independent 24 VDC inputs.
- Control and display in front cover (not removable) with 4-digit heading display and 6 operating keys.
- Heading accuracy
 Static < 0.1° secant latitude
 Dynamic < 0.4° secant latitude
 Settle point error < 0.1° secant latitude
- Automatic static north speed error correction no extra unit required.
- Rate-of-turn output.
- High speed transmission and follow-up system 100°/sec.
- Highly accurate heading data transmission by shaft encoder.
- Self-aligning repeater compasses with serial interface IEC-61162-1 / RS 422.
- Gyro system remains north-stabilized during power interruptions of up to three minutes.
- Twin rotors (19.000 rev./min.) and liquid damping system eliminates latitude error.
- ± 180° electronic alignment error correction in setup program (mechanical correction not necessary).

- High MTBF (40.000 hours).
- 18-month maintenance intervals
- Monitoring and alarm functions for all voltages, gyroscope current and follow-up system.
- Short maintenance and repair times low service costs
- Permanent storage of operational data (gyrosphere current, temperature, elapsed operation time).
- Over 400 Sperry Marine service locations worldwide.



Analogue Console Repeater



NAVIDATA Multifunction Digital Display



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Outputs

- 4 analogue repeaters (NMEA TTL) gyrocompass heading magnetic compass heading (when available) rate of turn heading reference status 4 x supply 24 VDC, max. 7 W each
- 2 sensor data (RS 422) gyrocompass heading magnetic compass heading (when available) rate of turn position (when available) speed (when available) heading reference status
- 1 RS 422 Fast IEC-61162-1 gyrocompass heading magnetic compass heading (when available) rate of turn heading reference status
- 1 RS 422 SuperFast IEC-61162-1 or IEC-61162-2, selectable gyrocompass heading magnetic compass heading (when available) rate of turn heading reference status
- 6 step/° output current heading, supply 24 VDC, max. 18W

- AD10 output gyrocompass heading
- Rate of turn, analogue ±0.1 - 999.9 mV/°/min.; max. 10 V, 10 mA
- Furuno interface output, selectable
- Alarm signal output (heading difference)
- Status signal output (power failure)
- NAVIPRINT navigation data printer, selectable through one of the available RS 422 interfaces.

Inputs

- IEC-61162-1 position input
- IEC-61162-1 speed input or 200 p/nm
- Electronic compass input (IEC-61162-1)
- Mute function
- Status gyro/magnetic
- Steering mode status

Power Consumption

Start-up DC 80 W Operation DC 45W Each repeater (analogue) 8 W

Dimensions and Weight

 Width
 404 mm

 Height
 520 mm

 Depth
 420 mm

 Weight
 21 kg



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NAVITWIN III
Compass Monitor



Universal Digital Repeater

Sperry Marine

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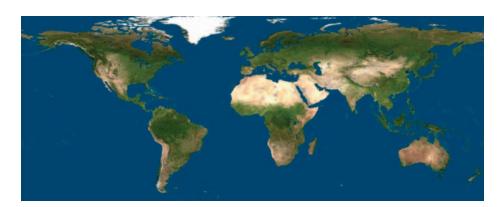
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Sperry Marine, with worldwide headquarters in Charlottesville, VA, and major engineering and support offices in Melville, NY, New Malden, England, and Hamburg, Germany, is part of the Northrop Grumman Electronic Systems sector.

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