



NAVIGATION SOUNDER

MODEL F-3000

MAIN FEATURES:

Full color echogram across 10.4-inch daylight-viewing TFT LCD screen with 3 selectable background colors. Echoes are shown in up to 7 user-definable colors. Up to 4 echo dynamic ranges are also selectable depending on bottom conditions.

Dual frequency operation covering 5 to 1000 meters of depth in 8 range steps manually or automatically, with a single keypress selecting high frequency (200, 135 or 100 kHz) or low frequency (50 kHz). Depth readout in fathoms or feet is also available.

1kW (max.) transmit output with power level automatically adjusted to suit the range selected. Manual override is also possible in special situations where more power is needed for shallow water soundings.

Shows LAT/LON and water temperature data in addition to sounding data and associated dateline when appropriate optional sensors are plugged in. These types of data are automatically output via RS-232C and RS-422 ports for use by ECDIS, VDR and other onboard electronics.

Up to 24 hours of sounding and other data are automatically stored in non-volatile (flash) memory protected from power outage/shutoff or system reset.

General Specifications

●**Display Screen:** 10.4 inch 7-analog RGB-color TFT-LCD, VGA (640 × 480 pixels) ●**Transducer Frequencies:** 50 & 200 kHz (standard, single housing), 100 kHz (user-supplied, separate housings) or 135 kHz (user-supplied, single frequency). ●**Depth Ranges:** 5, 10, 20, 40, 100, 200, 400, 1000m (2.5-500 fathoms or 20-4000 feet) ●**Range Discrimination:** 6.5 mm/m (20m range), 0.65 mm/m (200m range) ●**Minimum Detectable Depth:** 0.5m (200 kHz), 1m (50, 135 kHz) ●**Transmit Power:** Approx. 1kW RMS adjustable in 4 steps (1/1, 1/4, 1/25, 1/100) automatically for range in use or manually. ●**Sounding Rate:** 120 to 30/minute automatically selected for range in use. ●**Accuracy:** Better than ±0.5 meters (20m range), ±5m (200m range) ●**Data Storage:** Up to 24 hours of data in non-volatile memory. Up to 10 minutes of full color echogram in temporary storage. ●**Data Retrieval:** Data of past 15 min., 1, 3, 6, 12 & 24 hours via history window. ●**Echogram Feed Rates:** 1/1, 1/2, 1/4, 1/8, 1/16, freeze ●**Echogram Presentation:** 7 analog RGB colors, depending on strength ●**Echo Dynamic Ranges:** 3, 4, 5, and 6 dB ●**Echogram Display Duration:** Approx. 20 minutes at fastest feed rate. ●**Background Colors:** Dark blue, black, and white ●**Noise Reduction:** 3 steps ●**Alarms:** Depth (shallow), missing bottom, voltage drop, power shutoff (audible only). Alarm output available via open collector. ●**Dimensions & Weight:** 366W × 275H × 110D mm (cabinet), 6.6 kg (with mounting bracket). ●**Power Requirements:** 110-220 VAC or 11 to 40 VDC, approx. 1.5A at 12V ●**Ambient Temperature:** -15 to +55°C, 95% RH (operating, without condensation), -40°C (storage) ●**Compass Safe Distance:** 1.2 meters ●**Data I/O Interface:** NMEA-0183 sentences via RS-232C and RS-422 ports, and 8-pin I/O DATA connector ●**Printer Output:** Centronics parallel, for monochrome printers with ESC/P protocol ●**Temperature Sensor:** T-200 thermistor (option)

* External GPS or optional GPS sensor required. ** Optional temperature sensor required

NOTE: Specifications other than those stipulated in IMO resolution MSC.74(69) Annex 4 are subject to change without notice or obligation.

Stored data can be displayed graphically as well as digitally in a special data history window accessible with a single keypress, and can be uploaded to a PC for off-line processing and analysis.

A graphics printer can be plugged into a devoted rear panel connector to print out a monochrome hard copy of the current echogram.

Echogram feed rate can be changed in 3 steps for extended display period across the screen without affecting the sounding rate.

An extensive alarm function audibly and visually warns the navigator against decreasing depth, missing or weakening bottom echo, power supply voltage drop and power outage.

Both AC and DC power supplies are built in, with automatic switchover to DC power source in the event of AC power line failure.

Complies with IMO Resolution MSC.74(69) and Wheel Mark regulations.

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