10.4” COLOR LCD DISPLAY
SEARCHLIGHT SONAR
Model CH-250

- High definition active matrix color LCD
- Choice of frequency: 60, 88 or 150 kHz
- BlackBox system configuration allows use of optional CRT or LCD monitors
- Target lock on a fish school or L/L position for a designated fishing area
- Pulse length automatically range to optimize performance on all ranges
- A specific color can be shown in thite to enhance the echo level display
- Instant selection of eight different operational modes
- Audible target detection freeing the operator from continuous display watch
- Customized fishing menu
The CH-250 is a revolutionary, high-performance searchlight sonar designed for a wide range of commercial fishing vessels. Fish and underwater objects are displayed on a compact color LCD screen. Target echoes are presented in 8 or 16 colors depending on the received echo strengths. The highest echo level is painted in red and next strongest echo in orange, and other colors follow with reducing echo levels. One of the echo strengths can be displayed in white to enhance the specific echo level. The background color may be customized for optimum viewing at day or night. An operating frequency can be selected from 60, 88 or 150 kHz.

The CH-250 is provided with eight operational modes including half or full circle scan, zoom, vertical scan, vertical sounder, the combination of full or half circle with vertical scan, full circle with history, full circle with strata and full circle with VideoPlotter. The combination of full circle and vertical scan mode helps evaluate the distribution of fish schools in horizontal and vertical planes simultaneously.

The CH-250 has another unique mode to view the vertical plane called “Cross Section Scan”. When you find a specific echo, press the “CUSTOM MODE BUTTON” and then the cross section scan window appears.

The CH-250 provides three modes to track a targeted echo: manual mode, target lock mode and L/L mode. The target lock mode permits automatic tracking of a target fish school within a predetermined search zone after it has been acquired in manual operation. In the L/L mode, the beam is locked to the position (such as a fish shelter or reef) specified by the target marker. This mode can be enhanced with DGPS position input.

The compact display design allows a flexible and space-saving installation at your navigation station. With an optional interface unit, a conventional CRT or LCD monitor can be connected as a substitute, backup or remote display of the standard display unit. The low-profile hull unit requires only a limited space for installation. There is a choice of hull units, either 250 mm or 400 mm travel.

CROSS SECTION SCAN

The CH-250 has an unique “Cross Section Scan” mode. You can instantly view the vertical plane in a specified direction by pressing the “CUSTOM MODE BUTTON”. It is useful for evaluating concentration and location of targeted fish schools. You can also use the Cross Section Scan for navigation.

Power search in eight modes for fishing and other sonar applications
The vertical sounder displays how the depth and bottom hardness are changing ahead of own ship. When the soundome tilt is set to 90 degrees, the picture is the same as a vertical sounder. It displays fish schools and seabed conditions directly under the vessel.

Combination of FULL/HALF CIRCLE with VERTICAL SCAN

A unique feature of this sonar is the mode integrating the two images shown to the left. This sonar image can also be switched to a Half Circle with Vertical scan.

The full circle scan helps to detect fish schools at any bearing, all around the vessel.

The vertical scan paints the bottom profile within user-specifed vertical plane. The cursor indicator reads slant range and soundome tilt.

Combination of FULL CIRCLE SCAN with VideoPlotter

Own ship track is monitored with respect to sonar sounding area. Unrivaled feature for purse seining.

Vertial Scan

The vertical scan paints the bottom profile within a user-specified vertical plane. The cursor indicator reads slant range and soundome tilt.

Combination of FULL CIRCLE with VERTICAL SCAN

Combination of HALF CIRCLE with VERTICAL SCAN

Vertial Sounder

The vertical sounder displays how the depth and bottom hardness are changing ahead of own ship. When the soundome tilt is set to 90 degrees, the picture is the same as a vertical sounder. It displays fish schools and seabed conditions directly under the vessel.

Interconnection Diagram

BlackBox configuration (with custom monitor)

Standard configuration (with standard LCD monitor)
### SPECIFICATIONS OF CH-250

#### 1. Range scales and Pulse length

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Max. scale depends on the system frequency. 1600 m (60 kHz), 1200 m (88 kHz), 1000 m (150 kHz). Training speed is subject to the system frequency and range scales. Two speeds on long range scales.

#### 2. Display

- 10.4" TFT color LCD (VGA: 640 x 480 pixels)

#### 3. Color

- 8 or 16 colors

#### 4. Display Mode

1. Full Circle scan
2. Zoom (x 1.5)
3. Vertical scan
4. Vertical Sounder
5. Full/Half Circle and Vertical scan
6. Full Circle and History
7. Full Circle and Strata
8. Full Circle and VideoPlotter
9. Audio Monitor
10. Language

#### 5. Audio Monitor

- 1000 Hz

#### 6. TX Output Power

- 0.8-1.2 kW

#### 7. Beamwidth

- (at -3 dB)
  - 60 kHz: 15° (H) x 12° (V)
  - 88 kHz: 11.5° (H) x 9.5° (V)
  - 150 kHz: 6.5° (H) x 6.5° (V)

#### 8. Transducer Control

- Tilt: 0° to -180° at 9° or 6° steps (in vertical scan)
- Training Sector: Manual or automatic training at 6° or 12° steps
- Training Sector: in search sector 6°-360°
- Tilt: +5° to -90° at 1° steps (in full circle scan)

#### 9. Interface

- Input: DBS, DBT, DPT, GGA, GLL, HDG, HDM, MDA
- Output: SSTLL

#### 10. Language

- English, Spanish, Danish, Portuguese, French, Norwegian, Italian, Swedish, Thai

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### EQUIPMENT LIST

#### 1. Display Unit MU-100C

- 1 unit

#### 2. Control Unit CH-252

- 1 unit

#### 3. Hull Unit CH-254 (travel 400 mm) or CH-255 (travel 250 mm)

- 1 unit

#### 4. Transceiver Unit CH-253

- 1 unit

#### 5. Installation Materials and Spare Part

- 1 set

#### 6. Interface Unit IF-8000

- (BlackBox type only)

- 1 unit

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### TRANSCEIVER UNIT

#### CH-253

- 3.2 kg, 7.1 lb

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### REMOTE CONTROLLER

#### (OPTION) CH-256

- 0.3 kg, 0.7 lb

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### DISPLAY UNIT and CONTROL UNIT

#### MU-100C and CH-252

- 5.7 kg, 12.6 lb

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**Beware of similar products**

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