EA 400P

KONGSBERG

Portable dual-channel hydrographic echo sounder

General description

The **Kongsberg Simrad EA 400P** consists of a laptop computer and a General Purpose Transceiver (GPT) housed in a protective case. The echo sounder can be configured to operate on a single or dual frequenies between 38 and 710 kHz. A side-looking transducer is also available.

The computer employs either Microsoft Windows NT® or 2000® operating systems to perform operator interface and data storage tasks. Communication between the transceiver and the computer is via a short ethernet cable. The system's transceiver operates on either AC or DC voltage.

Main features

- Laptop computer for operatation and data storage
- Compensation for sound velocity
- Compensation for heave affecting transducer depth
- Advanced, built-in bottom digitiser
- Internal storage of data to file with time reference: digitises depth, position, heave and annotations
- Internal storage of sample data (for replay) including all input signals
- Replay of sample data
- Echograms can be shown on the LCD display
- Choice of depth units: metres, feet or fathoms
- On-line help function

Interface

- Positioning systems equipped with a NMEA 0183 serial line
- MRU with an analogue or serial line
- External post-processing tools

Menu presentation

The menu system is navigated using menu bars, pull-down menus and pop-up menus. Context sensative pop-up menus are activated by moving the cursor to specific areas of an echogram and pressing the right mouse button.

Options

- Display - hydrographic chart with gridline or map with navigational information: including vessel's track, colour coded depths on a grid window, survey planning and helmsman's displays.
- Bottom classification - separates up to four classes simultaneous, defines new classes on-line and displays colour coded bottom classes on a grid window.

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Operating specifications

Range presentation.....1-10,000 m in steps of 1 m
Phasing..... 0- 2,500 m in step of 1 m
Display capacity.....1 or 2 echograms shown simultaneously on the display
Settings..... Individual settings for each channel
Colour scale .....Related to true bottom surface scattering coefficient
Ping rate .....Adjustable with max 15 ping per second
(D)GPS input ..... GLL, GGA
Motion sensor input formats ..... TSS, Simrad EM and analogue
Measurement resolution:
- Display presentation..... 0.01 m
- Output data file..... Floating-point number

Measurement accuracy when the average sound velocity is correct:
- 38 kHz .....5 cm
- 50 kHz .....4 cm
- 120 kHz .....2 cm
- 200 kHz .....1 cm

Transmitting power ..... 100 W to 1kW (adjustable)

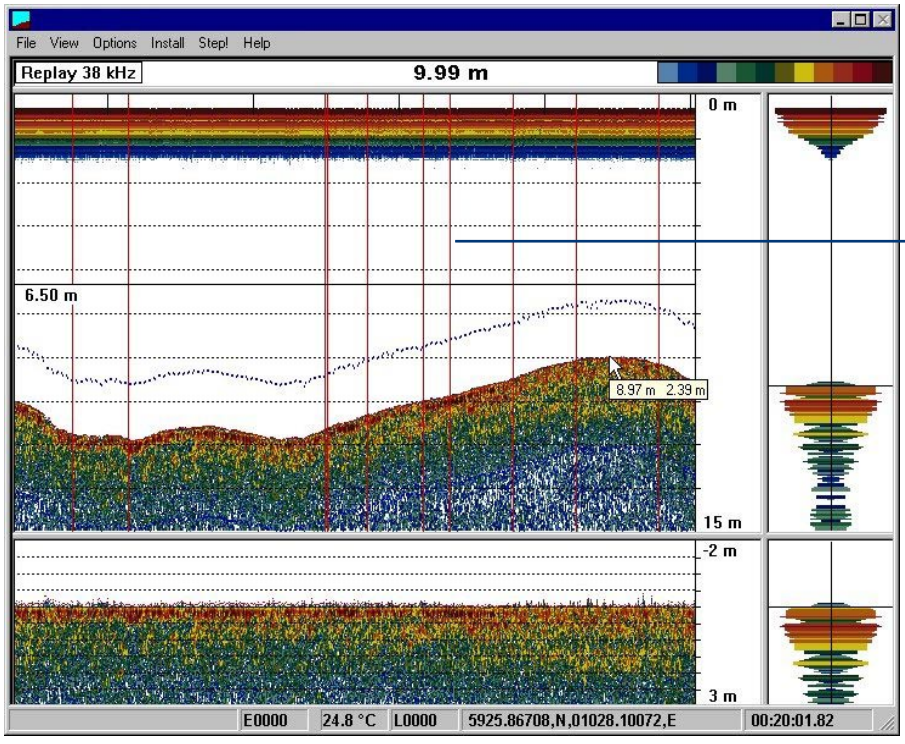
Physical specifications

Supply voltage:
- AC supply.....95 to 265 Vac, 50-60 Hz
- DC supply.....11 to 15 Vdc

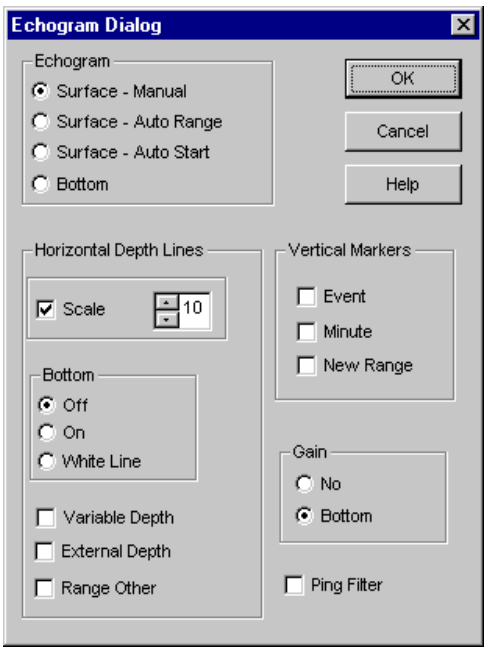
Power consumption.....25 - 40 W
Operating temperature: .....0 to 40 deg Celsius
Transceiver dimensions:
- Width 284mm
- Height ..... 112 mm
- Depth ..... 252 mm
- Depth with plugs ..... approx 330 mm

Protective case dimensions:
- Width ..... 460 mm
- Height ..... 220 mm
- Depth:.....390 mm (includes grip and boom)

Weight:
- Transceiver, 1 channel:.....2.7 kg
- Transciver; 2 channels:.....3,3 kg
- Protective case:..... Approx 10 kg



Typical echogram



Typical dialogue box

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