

WHEN IT'S ALL ABOUT GETTING THE RIGHT SIGNAL



SURVEY ECHO SOUNDER



E-SEA SOUND

A WAVE OF USEFUL PRODUCTS



E-SEA SOUND FEATURES

- Robust design
- Portable
- PC technology
- Thermal recorder
- Self check functions
- Wide range of inputs and outputs
- VGA colour output
- AC and DC supply
- Annotation functions with built-in clock and calendar
- Easy-touch membrane buttons
- Oscilloscope for scientific use
- Portable and fixed hull mounting of transducers
- Complies with IMO standards

THE SURVEY ECHO SOUNDER BASED ON PC TECHNOLOGY

The E-Sea Sound echo sounder covers a wide range of applications thanks to its numerous facilities. The compact and robust design of the E-Sea Sound makes it the perfect portable echo sounder. It is also ideal for permanent integrated systems because of its high degree of sophistication and the use of PC-based technology.

TYPICAL HYDROGRAPHIC APPLICATIONS ARE:

- Rivers
- Lakes
- Harbours
- Offshore
- Research
- Environmental surveys
- Sediment surveys

PERFORMANCE

The E-Sea Sound echo sounder is easily operated by means of the menu select button. This button ensures fast access to the many settings, all of which are memorised. Range and recorder speed are operated from individual buttons.

The flat panel screen is easily read, even in bright sunlight.

The E-Sea Sound echo sounder is designed for carrying out surveys down to a depth of 1,600

metres, optionally down to 5,000 metres. Measurement ranges can be selected automatically or manually between 0 and 1,600 metres.

Depth is displayed on screen in real time, either in metres, feet, fathoms or braccia.

The standard E-Sea Sound is equipped with a built-in 8" thermal recorder. Depth recordings are printed in black and white in a range of sixteen grey shades. A separate button allows for adjustment of the paper speed.

An alarm, which can be set to warn against shallow water, is also standard in the E-Sea Sound.

Two models of the E-Sea Sound are available. E-Sea Sound 103 single channel echo sounder, and E-Sea Sound 206 dual channel echo sounder.

E-SEA SOUND 103

This single channel echo sounder has the ability to switch between three frequencies. The standard frequencies are 33 kHz, 50 kHz and 200 kHz. Other frequencies are available upon request.

E-SEA SOUND 206

This dual channel echo sounder allows for the simultaneous operation of two frequencies. The standard frequencies are 33 kHz and 200 kHz. Other frequencies are available upon request.

CAPABILITIES

More presentation formats are available from the E-Sea Sound than from any other echo sounder currently on the market. The settings

and commands available from the menu are listed below.

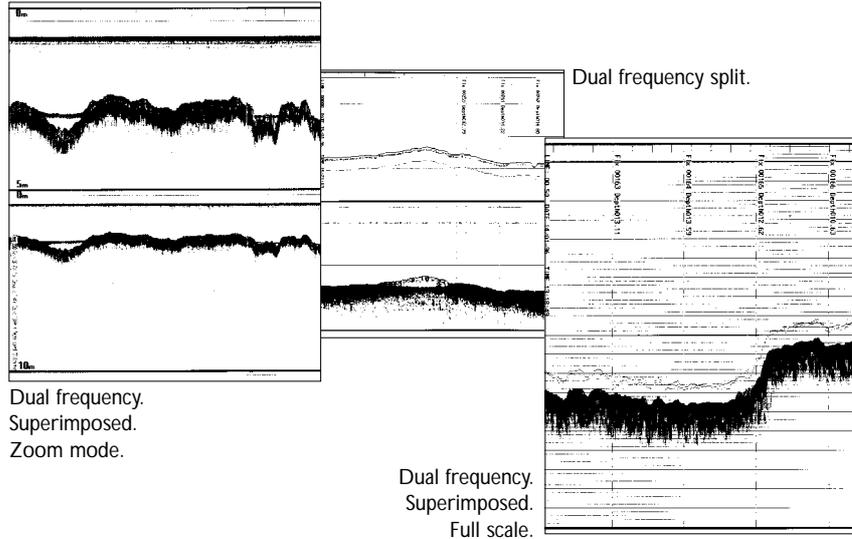
- Automatic range
- Bar check
- Bottom alarm
- Data output configuration
- Date/time
- Depth units
- Digitising level
- Digitising line
- External transmission control
- External VGA output
- Frequency selection
- Fully scaleable range
- Grid type
- History
- Input gain
- Language
- Manual marker
- Oscilloscope for scientific use
- Output format control
- Power output
- Pulse length
- Recorder contrast
- Sound velocity
- Store current user settings
- Surface blanking
- System diagnostic
- Time marker
- Transducer draft
- TVG (Time Variable Gain)
- Window size
- Window off-set
- Zoom

OPTIONS

- 5,000 m depth range
- 19" rack mounting
- Bulkhead mounting
- Colour monitor
- DESO-25 plug kit
- External VGA colour monitor
- Input for motion compensation, TSS and Seatex *
- Input for sound velocity compensation *
- Remote digital repeater
- Trailer echoes * (three echoes for mud layer detection)

* Applies only to E-Sea Sound 206

The E-Sea Sound can be delivered without the 8" themal recorder.



E-Sea Sound 103



The E-Sea Sound is excellent for portable use



Dual channel screen presentation



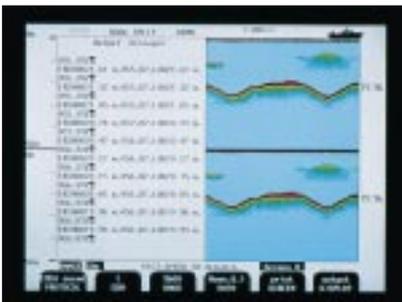
Dual frequency transducer with outboard rig



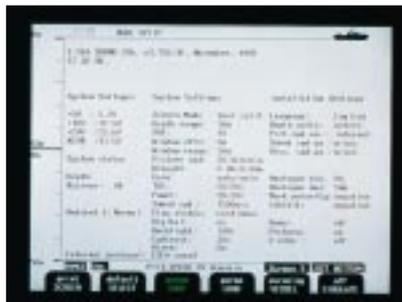
Transducer and housing for hull mounting



A wide range of transducers is available



Check of data output in real-time

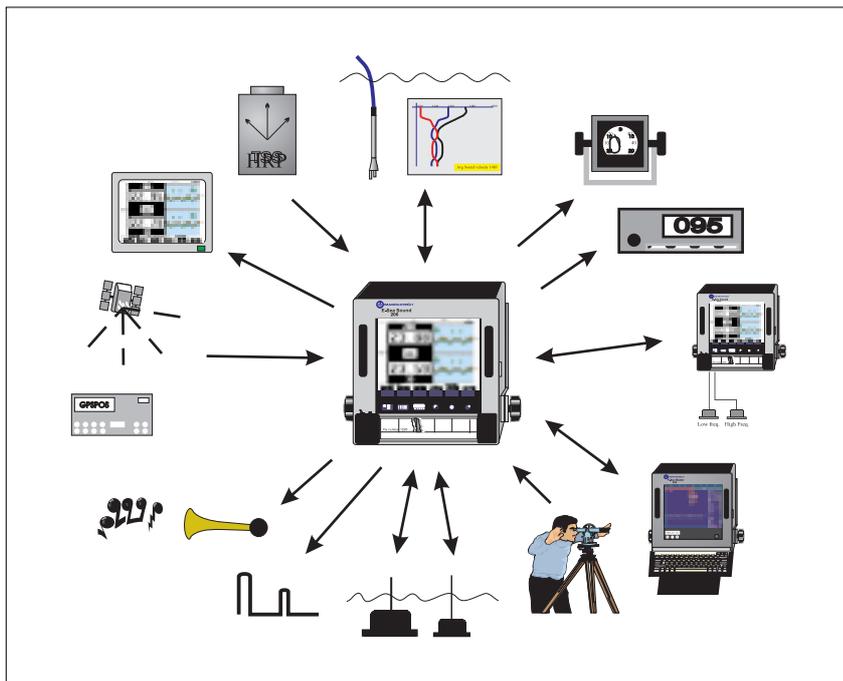


System diagnostic and documentation for survey



Oscilloscope function for scientific use

SPECIFICATION AND PERFORMANCE DATA



Remote sounding control
Burst or single ping modes.

Transmitter and bottom pulse output
TX and RX pulse.

Analogue depth output
0-10V or 4-20 mA.

Alarm output
Shallow water relay output.

Computer interfacing
RS-232C, data format selectable. Compatible with other echo sounders. Includes annotation and remote control.

External monitor
A standard colour VGA CRT or a TFT/LCD display can be connected.

Languages
English, Spanish, French, Russian, German, Danish.

Units of measurement
Depth: metres, feet, fathoms, braccia.
Sound speed: m/sec, feet/sec.
Picture speed: min/sec, km/distance, Nm/distance.

Required voltage / power consumption
90-260V AC (max. 60 VA) and/or 18-36V DC (40 W).
Simultaneous connection to AC and DC is possible.

Environmental conditions
Storage temperature: -20 to +70°C.
Operating temperature: 0 to 45°C, max. 90% relative humidity, non-condensing.
Complies with IMO standards.

Installation
Standard: Carrying handle / desk stand.
Option: Bulkhead mounting or 19" rack kit (height 8 PU).

Transducers
A wide range of models is available for portable use as well as for hull mounting.

Measurement range

From 0...5 m to 0...1,600 m with automatic or manual range and phasing (optional 0...5,000 metres).

Power

Transmission power 600 to 2,000 W.

Accuracy

1 cm ± 0.1% of depth value (200 kHz)
4 cm ± 0.1% of depth value (50 kHz)
5 cm ± 0.1% of depth value (33 kHz)
This high accuracy implies a correction of sound velocity.

Resolution

1 cm.

Display

Adjustable back lighting. Graphic dot-matrix super triple twisted LCD display, 9.4" on the E-Sea Sound 103 and 10.4" on the E-Sea Sound 206. TFT high tension double back light display, 10.4" on both the E-Sea Sound 103C and the E-Sea Sound 206C.

Recorder

8" x 59 ft. paper (216 mm x 18 m).
High sensitive thermal paper, type ESS 2160020.
800 pixels per line in a range of 16 grey shades.
External start/stop facility.

Paper speed

Internal 0.25-20 cm/minute, selectable.
External paper speed in metres or nautical miles.

Sound velocity correction (option)

Dynamic compensation of true measured profiles from HMS 1820-CTD sound velocity profiler.

Sound velocity settings

1,400 – 1,600 m/sec in intervals of 1 m/sec.

Transducer draft setting

0-99.99 m in intervals of 1 cm.

Motion compensation (option for 206)

Corrects depth for heave, roll and pitch.
Will interface to TSS and Seatex (RS-232C).

Dimensions	E-Sea Sound 103	E-Sea Sound 206	Transport container
Height	350 mm	350 mm	400 mm
Width	320 mm	320 mm	500 mm
Depth	280 mm	280 mm	300 mm
Weight	17 kg	18 kg	9 kg

Specifications may be changed without notice. 03/98.

Address:

Marimatech AS
Samsøvej 30
DK-8382 Hinnerup
Aarhus
Denmark

Phone: +45-86 91 22 55
Fax: +45-86 91 22 88
BBS: +45-86 91 11 00
e-mail: mail@marimatech.com
Web: www.marimatech.com

A W A V E O F U S E F U L P R O D U C T S

