# **NAVISOUND 200**

#### HYDROGRAPHIC SURVEY ECHO SOUNDERS



Product line of hydrographic echo sounders with built in paper recorder mechanisms, providing a selection of performance and prices, designed for a wide range of hydrographic survey applications.

## **NAVISOUND 215**

An enhanced echo sounder using one receiver channel to operate two transducers in a true real time multiplexed operation giving two frequencies at low cost.

### **NAVISOUND 210**

Basic one channel survey echo sounder for high performance hydrographic survey operations.

## **NAVISOUND 205**

One channel survey echo sounder with reduced sounding performance.

#### Common features:

- Waterproof design for open sea use.
- High performance and easy operation, portable, light weight, and very reliable.
- Single / multiplexed channel operations.
- Selectable 33/210 kHz sounding frequency (others upon request).
- DC power supply (10-28 VDC).
- RS-232C interfacing.

The **NAVISOUND 200** family of professional hydrographic echo sounders permits easy operation and reliable depth measurements. All sounders are handy and easy to operate, however also featuring advanced facilities normally only found in larger echo sounders.

The compact size and low weight means easy handling, and makes the **NAVISOUND 200** family ideal for any portable survey system.



#### **TECHNICAL DETAILS**

NAVISOUND	205	210	215
Heave input:	-	+	+
Data output resolution:	dm	cm	cm
NMEA output:	+	+	+
DESOxx output protocol:	-	+	+
Max. range:	100 m	400 m	400 m
Channels / Transducers:	1/1	1/1	1/2
Max. sounding rate (PRF):	5 Hz	15 Hz	15 / 7 Hz

NAVISOUND 2xx Specifications

Operating frequencies: 28 - 35 kHz or 190 - 225 kHz (Others upon request)

Useable transducers: Including all ATLAS, RESON and SONAR Research types in the operating frequency ranges

Impedance: 100 Ohm (others on request)

Transmission power (max.): 300 W

Transmission power control: Manual or automatic

Transmission pulse length: Manual, 5 steps

Echo approval length: 100 µs for 210 kHz / 400 µs for 33 kHz

Depth range: 0.5 -100/400 m frequency dependent

Resolution: 1 cm

Accuracy: 1 cm at 210 kHz (1 sigma) / 7 cm at 33 kHz (1 sigma) assuming correct sound velocity, transducer depth etc.

TVC detection level: 20 Log (depth)

**Sound velocity calibration:** 1350 - 1600 m/sec in 1m/sec step

Transducer draft comp.: 0 - 99.99 m

Initial delay calibration: On digital data

Additional feature: Barcheck possibility

Graphic recording: 11 cm integrated thermal paper recorder

**Graphic resolution:** 700 pixels in grey levels

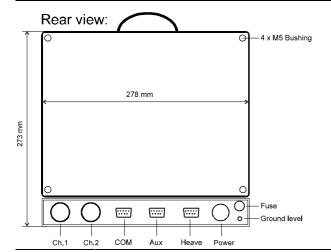
Graphic transfer speed: 20 lines/sec

Serial interfaces: 1: Communication, 2: Heave input, 3: Auxiliary loop through (e.g. positioning system input)

**Dimensions:** Height: 273 mm, Width: 278 mm, Depth: 115 mm, Weight: 5.5 kg

Supply voltage: 10 - 28 VDC

EMC radio noise: According to CE



Due to improvements information shown above may be subject to change without notice March 2000/MAC



NAVITRONIC SYSTEMS AS

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