The Class in Seabed Classification

RoxAnn GD-A

FEATURES

- Small, light, robust and easy to install.
- Real time seabed material classification.
- Data export to GIS.
- Available in 2 and 4 frequency operation.
- Quantitative numerical classifications.
- USB or RS232 (COM port) compatible.
- Sounder frequencies between 24kHz and 210kHz.
- User configurable to suit any sounder.
- Power from USB or mains power adaptor (supplied)
- Includes RoxMap Scientific plotter software package
- Depth range 0.5m to more than 1000m (depending on sounder characteristics)
- Includes all cabling and connectors.
- Compatible with third party commercial plotters.

APPLICATIONS

- Fisheries Habitat Monitoring
- Marine Archaeological Surveys
- Sediment and Pollution Monitoring
- Coral Studies
- Estuary Management
- Seagrass Condition Monitoring

DESCRIPTION

RoxAnn GD-A is an acoustic ground discrimination system for use by the hydrographic survey industry and scientific community. It determines the material on the surface of the seabed by analysing the echo signals from the transducer of a conventional sounder. It measures both a roughness and hardness coefficient which, when combined, uniquely identify the type of seabed material beneath the vessel. Analysis is carried out in real time.

The RoxAnn GD-A is intended to be permanently installed onboard a survey vessel and is supplied in a small wall or panel mounted housing with a simple interface to both a power supply and computer hardware.

The data from the unit is processed by a compatible navigational plotter package running on a PC. This adds GPS position data allowing real time seabed material classification and mapping.

Compatible plotters include RoxMap and Hypack as well as a many other commercial plotter packages.

The RoxAnn GD-A system is available with options for operation with either two or four different sounders. After setting up the individual sounders, these are selected one at a time using a simple software utility.

Utilising the standard plotter functions, position, time, depth and seabed classification data can be logged at regular intervals to a computer database. This data can then be exported to a GIS for further customised analysis and combination with other relevant spatial data. The user can then determine the benthic habitat boundaries, geology and bathymetry differences between successive surveys.

The RoxAnn seabed classification technique has a pedigree of more than 20 years and the RoxAnn GD-A is the latest incarnation of this method. It has been used extensively in continental shelf and inshore coastal waters, lakes, riverbeds, reservoirs and inland waterways for bathymetric and bottom type classification.

TECHNICAL SPECIFICATIONS

Sounder frequency compatibility	24kHz to 210kHz
Sounder power capability	100W to 10KW
Power supply	PC USB supply or universal adaptor (worldwide plug adaptors)
Power consumption	280mA at 5vdc
Data output	Standard 'RoxAnn' string at 4800 baud
Overall size	200mm wide x 60mm high x 110mm deep
Weight	600g approximately
Operating temperature range	0°C to 45°C
COM port connector (RS232)	9 way D type connector male
USB connector	USB type B
Transducer connector	XLR 3 pin male

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
5262-10-0001	RoxAnn GD-A, 2 frequency capability
5264-10-0001	RoxAnn GD-A, 4 frequency capability

WHAT'S IN THE BOX

RoxAnn GD-A Unit	Plug top power supply (worldwide compatibility)
USB lead (1.8m), RoxAnn GD-A to PC	RS232 lead (2m), RoxAnn GD-A to PC
Transducer lead (2m), RoxAnn GD-A to transducer	RoxAnn GD hardware installation CD
RoxMap Scientific Plotter Installation CD	RoxMap software lock (dongle)

COMPATIBLE SOUNDERS

Odom, Simrad, Knudsen, Marimatech, Atlas, Navitronic, Innerspace, Odec, Furuno and many more.

COMPATIBLE PLOTTERS

RoxMap, Hypack, Sodena, Macsea, Piscatus and many more.

OTHER PRODUCTS IN THE ROXANN GD FAMILY

RoxAnn GD Fishing, optimised for use by the commercial fishing industry.

RoxAnn GD-S Swath, a self contained portable seven beam unit for use in 2m to 40m water depth.

RoxAnn GD-Z, a two channel unit allowing concurrent operation with two sounders for sediment assessment.

RoxAnn GD-X, a self contained portable dual frequency unit with pole mounted transducer and monochrome display.

RoxAnn GD-X2, a self contained portable dual frequency unit with pole mounted transducer and colour display.