

# GeoDAS-MB

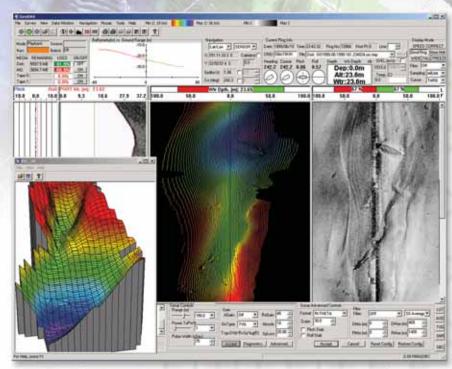
GeoDAS-MB supports acquisition and processing of bathymetry and back-scatter data from multi-beam sonars.

**GeoDAS-MB** is OIC's standalone multibeam acquisition software package. Standard features such as our Survey Management package, easy-to-use bathymetry processing tools and advanced Event and Target tracking make the surveying process easier than ever.

### Features & Benefits

- Simultaneous multi-beam and sidescan logging and display.
- Serial, ethernet and analog inputs.
- Configurable navigation, attitude and environmental inputs (Tide and S-vel)
- Full motion and attitude compensation, with realtime latency correction.
- Real-time robust filtering, outlier rejection.
- Supports viewing profiles, contours, 3-D and digital terrain models.
- Built-in "Patch-Test" calibration module.
- Interfaces to the OICToolkit and OICcleansweep for advanced post-processing.
- Logs raw data to HDD, JAZ and Tape in OIC and other formats.
- Simultaneous Sidescan Options: Beam amplitude, "snippets," and full analog sonar data.

## Dedicated Multibeam data acquisition and control software



The GeoDAS MB interface showing bathymetry and sidescan data from Sydney Harbour, acquired with the Reson SeaBat 8101. A real-time 3-D view of the bathymetry waterfall is displayed in a separate window to the left.

## Supported Systems Include:

Reson: SeaBat 8101, 8102, 8125, 8160, 9001

Simrad: EM12, EM300, EM1000, EM3000

· Odom: Echoscan

Ultra: Deepscan 60,120,325

SeaBeam: Any XSE (2112 series)

· Elac: Any XSE

Atlas: FANSWEEP, HYDROSWEEP

Imagenex: Delta-T



## GeoDAS-MB

Features and Specifications

#### Logging

GeoDAS Sonar Acquisition and Processing software capable of logging of up to 8 channels of data, displayed on one user-friendly geocoded graphical interface.

Double-precision data logging and display format allow millimeter accuracy.

Full logging control pop-up to configure output file and media target for acquisition of data size and resolution.

#### Real-time Mosaicking

Real-time navigation display showing location of the swath, target items, path of the sonar and boat and sonar coverage.

A Finite Impulse Response (FIR) realtime smoothing filter to eliminate spurious and noisy navigation and heading data.

#### **Targets**

Geo-coded Target Display with zoom, measurement, comments, classification and automatic databasing of flagged targets with easy thumbnail viewing and auto play back feature.

#### Processing

Comprehensive on-line suite of processing tools include navigation smoothing, bottom-tracking, slantrange and speed correction.

Bathymetry processing and correction tools include: heave, pitch, roll, latency, draft, tide, and SVEL.

#### Project Databasing

Project database tool logs all associated survey records in one directory no hunting for records!

#### Meta-data

Complete suite of Meta-data inputs including tidal data, vessel draft correction, motion/heading, event generation and sound velocity input.

Configurable output of sonar metadata to files, ports and printers

#### Survey Management

User-definable coordinate system, datum & projection; UTM, SPCS (NAD 27 & 83), British Coordinate System, Japanese Coordinate System & more.

Survey design / execution: Create, edit and run surveys, using user-supplied, hand-drawn or auto-gen modes.

New! Charts package support raster (ARCS & BSB) and vector (DNC & S-57) electronic nautical charts.

#### **Bottom Tracking**

Automatic or manual, user-definable processing, with hold-off, tracking sensitivity & collision warning alarm.

Auto Range / Depth function automatically tracks and adjusts multibeam range setting and display gates.

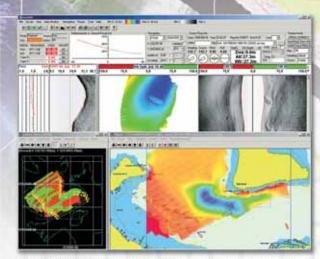
#### Events

Externally or internally generated navigation events, either fixed time or distance, displayed on the waterfall, printer and to the event log. Event information can include number, time, position, water depth, heading, speed and more.

#### Displays

3-D bathymetric displays with contour / mesh / shading overlay.

Oscilloscope display including ping profile, histogram or spectral display.



GeoDAS Main GUI showing RESON 8101 MBES data of Sydney Harbor with navigabon display showing coverage map and survey layout, and mosaic window displaying bathymetry data over an Electronic Navigational Chart.

### Recommended Hardware

#### Rack-Mount

Single processor, removable 36GB HDD, CD/DVD-RW or 4/8 mm tape drive; 1280 x 1024 graphics, 256MB RAM; 10/100 Ethernic; 18" screen; Win 2000 or NT; Options: dual processors, media drives, HDD, ethernet; up to 2GB RAM

#### Lunch-Box

Single processor; 36GB HDD; CD/DVD-RW; 1280 x 1024 graphics; 512MB RAM; 17" screen; removable keyboard; 10/100 Ethernic; Win 2000 or NT; Option: second HDD or tape drive.

#### Laptop

Single processor; 40GB HDD; 512 MB RAM; 6 serial ports; 10/100 Ethernic; 1024 x 768 graphics; Win 2000 or NT

## Complete Data Acquisition Packages Available!

Integrated Rugged Monitor, Keyboard, Mouse and CPU.

Disk, Tape and Magneto-optical logging options plus CD/DVD-RW archive.

Rack-mountable & ruggedized packaging.

User-specified multibeam with sensor-specific software.

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