



### Benefits

- Real-time visualization software for Echoscope® 3D sonar range
- Patented rendering techniques for clear 3D imagery
- Multiple editions to meet client budget and project requirements
- Modern user interface for ease of operation
- Feature-rich tools for reporting and data output
- Additional software modules to enhance capabilities
- Expert 24x7 Technical Support

### Applications

- High definition seabed surveys and inspections
- Subsea asset inspection and real-time monitoring
- Marine construction monitoring
- Port Security and UXO surveys
- Scour monitoring, dredging and rock dumping
- Cable lay monitoring in real-time
- Decommissioning and salvage operations

## World leading, real-time, 3D software solutions for use with the unique Echoscope® 3D sonar

CodaOctopus® Underwater Survey Explorer Professional (USE Pro) is a state-of-the-art software package for recording, displaying, processing and reporting on real-time 3D sonar data across our Echoscope® and Echoscope<sup>4G</sup> ranges. Using the very latest in software development techniques and patented rendering algorithms, USE Pro software will enable you to view the subsea scene in the highest definition possible and has been developed specifically to provide significant productivity and result processing capability. Now, with our unique Volume Rendering engine and further enhanced by optional software modules and application specific solutions, USE Pro can be used for a host of subsea projects to increase productivity and enhance underwater visualization.

USE Pro captures all software features for optimizing the visualization of Echoscope 3D data with options for live tagging and full editing of markers, simultaneous export to 3rd party navigation systems, beam-by-beam editing, alongside a number of digital terrain model (DTM) output methods and Volumetric Rendering engine which enables data to be rendered as a textured model with much higher resolution than normal and a more efficient memory storage.

Designed specifically for optimizing data imagery from the world's leading real-time 3D volumetric sonar, the Echoscope, USE Pro will deliver unsurpassed results whatever your subsea operational needs.

### New Features in Version 8

- Automatic Pan & Tilt Tracking for automatic object tracking
- Support for Echoscope<sup>4G</sup> Performance Pack Upgrade including:
  - Increased ping rate to 20Hz
  - Reduced minimum imaging range to 0.5cm

### Features

- Interactive 3D and 2D Display
- User configurable data display
- Multiple data displays to maximize subsea feature visualization
- Chart overview display
- Intuitive software set-up and controls
- Real-Time Measurement Management and Reporting
- User selectable navigation data set-up
- On-line data measurement with automatic output options
- Color-coded sonar data from user defined datum point
- 3D Beam editing and image processing
- Volumetric Data Rendering Engine

## Included in USE Professional (USE PRO)

<b>Software Views</b> Interactive 3D and 3D display	<b>Advanced Measurement Options</b> Real-time measurement output via serial or UDP	<b>Advanced Processing</b> Create 3D image mosaic
Chart View	Real time measurement logging to file	Beam Editing
Real-Time Mosaic	Repeat measurements	Create mosaic for importing to marker suite
Data Rendering Options	Simultaneous output to text file, UDP and serial	Edit data per ping
User defined color palettes	<b>Data Correction Options</b> Patch offsets and SVS corrections	Beam clipping from 128x128 to user-defined range
<b>Markers</b> Full Marker Suite	SVP correction input options	
<b>3D Modelling</b> Use of standard modelling set	Navigation and tide correction input with smoothing	
Color range by height from model datum	On-line navigation smoothing	
Volume models	<b>Data Output Exports</b> Screen Image Capture	

### Live & Replay Mode

Live mode enables users to view and record real-time 3D Echoscope sonar data. Replay mode is used for post-processing and off-line review of previously acquired Echoscope sonar data.

### Exporting+

Exporting+ delivers an improved range of export options from the standard USE Digital Terrain Model (DTM) output capabilities. The Exporting module includes the unique and advanced 3D binning option that delivers the full range of benefits of working with 3D sonar data.

### Models+

Now included in USE PRO, Models+ provides the user with the ability to import user-created computer models. Importing in ".x" format enables computer models to be overlaid onto the Echoscope sonar data to significantly aid on-line and post-survey visualization. Furthermore, the position and orientation of multiple models can be controlled and manipulated on-line via a series of incoming navigation and motion matrix strings.

## Optional Modules

### Baseline Comparison

The optional Baseline Comparison software automatically compares on-line or recorded data from an area with previously recorded data of the same area in order to make immediate comparisons and to identify underwater features that have either been added or removed from the area of interest. Originally designed for the port security market, other sectors such as subsea IRM, scour monitoring, and marine construction companies monitoring post-storm damage are putting Baseline Comparison to great effect.

#### System Requirements

Processor	Intel® Core™ 2 DUO at 2.2 GHz or equivalent (Intel® Core™ i7 recommended)
Memory	2 GB (4 GB for 64 bit systems)
Disk Space	100 MB for installation (approximately 3.0 to 3.5 GB per hour, dependent on ping rate)
Graphics	Min: Discrete NVIDIA® GTX460 (Desktop) or NVIDIA® GTX580M (laptop) or equivalent, Rec:NVIDIA® Geforce GTX 1060 or equivalent
Operating System	Microsoft® Windows® 10/ 8.1 /7 SP1
Ports and I/O	Ethernet: 2 minimum, 3 recommended
USB 2.0 Port	4 minimum, 6 recommended
Serial	4 minimum, or via USB to serial adaptor

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