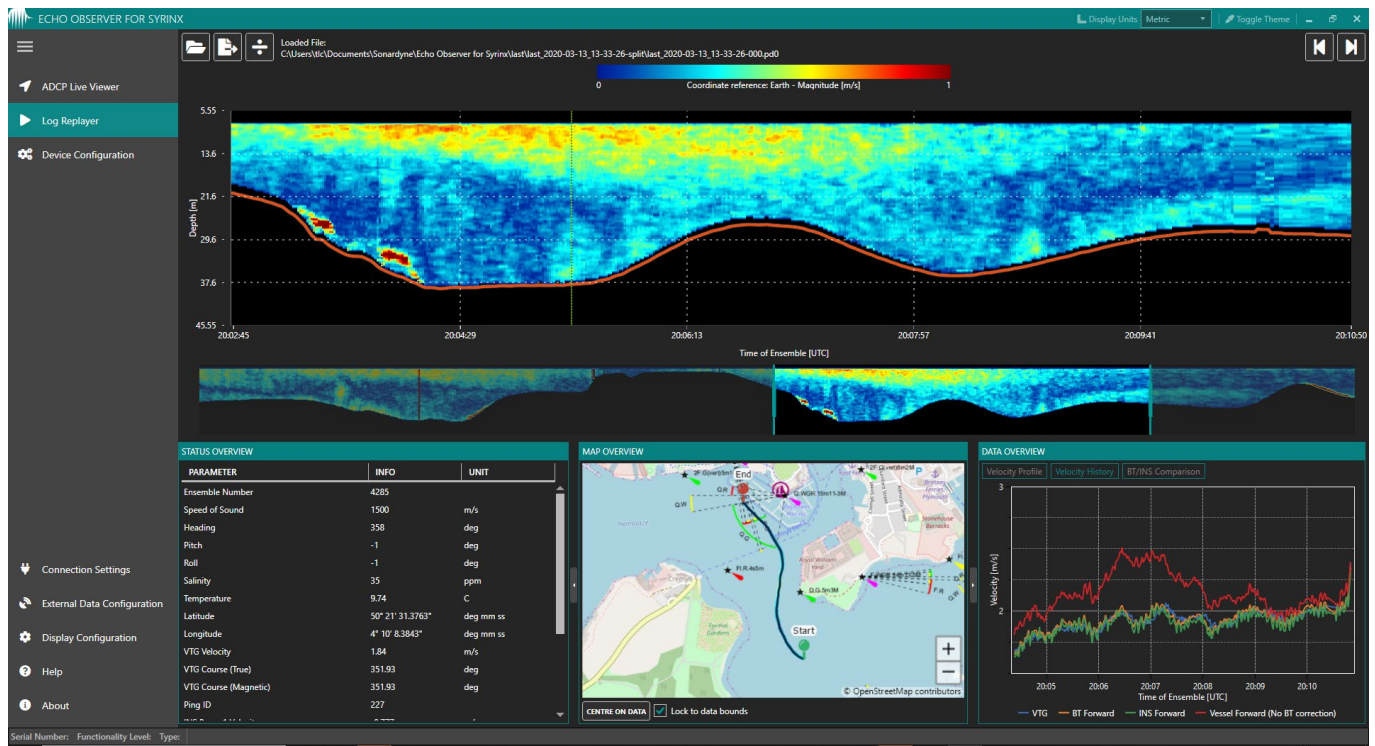


Datasheet

Echo Observer for Syrinx – Water Profile QC Software



Echo Observer for Syrinx (EOS) is a software application for Syrinx and SPRINT-Nav systems allowing Acoustic Doppler Current Profiling (ADCP) data to be viewed, quality controlled, logged, and then exported.

This standalone application is compatible with Windows®7 or 10 and requires only modest processing resources.

EOS provides an intuitive interface to Syrinx, allowing the device to be configured over serial port or ethernet with a quick setup procedure for ADCP measurements. Users can immediately view the profile data and make any necessary adjustments before committing to a long-term deployment.

A simple traffic light system shows the system status, alerting you to any problems as they occur. This allows faults to be corrected immediately, to prevent loss of valuable data.

Once mission parameters have been set, they can be saved into a configuration file. This file can be reused for a repeat or entirely new mission, saving time and cost.

For manned surface vessel or ROV mounted Syrinx deployments, ADCP data can be visualised in real time. EOS Live mode also permits you to pause the live data stream when interesting events occur, while continuing to capture and log in the background.

AUV operators are also well catered for: After recovery, ADCP log files downloaded from Syrinx or SPRINT Nav can be immediately loaded into EOS and inspected.

In both Live and Replay mode, a simple user interface allows zooming in on specific sections of the data, right down to visualising individual ping profiles. Conversely, the entire ADCP log history can also be viewed, alongside external data sources such as GGA positions, VTG speeds, and inertially derived vessel velocities (when integrated with SPRINT Nav).

A variety of data visualisation options are available. Vessel velocities can be easily subtracted from profile velocity data, allowing you to view the true water velocities free from the influence of vessel motion. Subtracted vessel speeds can be chosen from both bottom tracking and inertial estimates (when available), allowing accurate profile velocities to be measured.

Once initial data inspection has been completed, EOS provides the link to the onward data processing chain: Industry standard PD0 data can be exported as comma separated variable (CSV) files, ideal for importing into Excel or Matlab for analysis and post processing. The exported PD0 data can be tailored to match your analysis needs, such as specific portions of the water column, or a favoured frame of reference. Specific sections of the PD0 data can be omitted in CSV export if they are not relevant to your analysis, reducing on file size and therefore processing time.

Echo Observer for Syrinx is included with the ADCP functionality upgrade for both Syrinx and SPRINT Nav.

Specifications

Echo Observer for Syrinx – Water Profile QC Software

Key Features

- Live ADCP data visualisation
- Pause and continue feature in Live data mode
- Inspect data offline in Replay mode
- Intuitive data history zoom in/out function
- Visualise profile data alongside geographic location
- Inspect data from individual pings
- Visualise historic profile velocities alongside bottom track velocity and inertial velocity (when used with SPRINT Nav)
- Visualise true water profile velocities with vessel velocities subtracted
- Configure Syrinx modes and profiling parameters
- Configure connection to Syrinx and data export protocol
- Proxy external data sources such as GGA & VTG NMEA strings to Syrinx through EOS
- Export PD0 data in simple CSV format suitable for Excel or Matlab
- Software included with ADCP upgrade firmware for Syrinx or SPRINT Nav
- Compatible with Windows 7 and 10

Features	Specification
Operating System	Windows 7 or 10
Minimum CPU Speed	2 GHz Dual-core
Required RAM	200 MB
Installation Size	3 MB
Installation Method	Windows Installer
Connectivity	RS232 or ethernet (UDP or TCP)
Input ADCP Data Format	PD0 binary with Sonardyne extensions
Output ADCP Data Format	PD0 binary or PD0 CSV
Display Units	Metric or imperial
Display Palette	Light or dark