



Coda Octopus

Sound Underwater Intelligence

OEM Integrators' Package for Vehicles

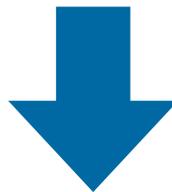
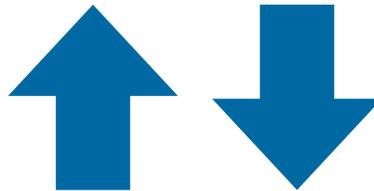


Version 1.3.7.21

OEM Integrators' Package

Echoscope PIPE® Real-Time XYZ Series

Real-Time XYZ Control and Status
(JSON Control Interface)

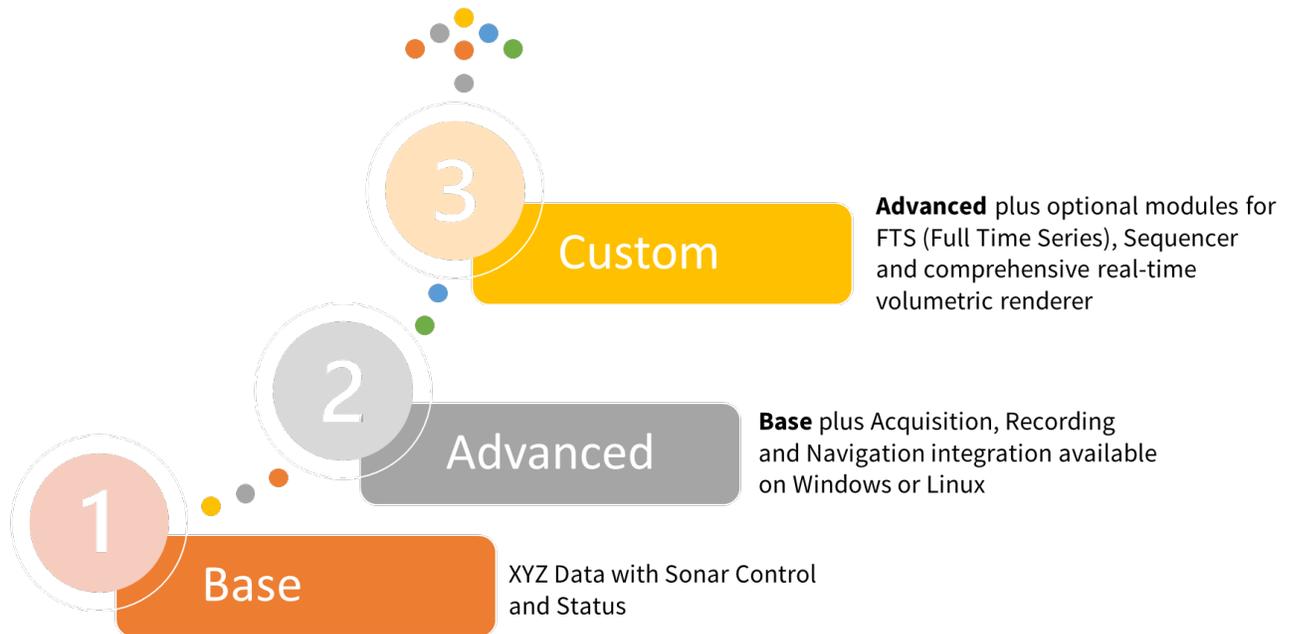


Real-Time XYZ Data
(Ethernet UDP data broadcast)

OEM Integrators' Package

Integration Overview and Options

The OEM Integrators Package provides different levels of integration, functionality, and accessibility to the Coda Octopus family of sensors and accessories. From the Base level of direct XYZ live data and sonar control to the Advanced and Custom levels that allow complete sensor integration, acquisition and survey quality data provision, the Integrator can select the appropriate level based on needs for the key application and critically time to market.



Whilst the standard approach of the OEM Integrator is to develop all aspects of the sensor integration, acquisition and data fusion, Coda Octopus has over 25 years of commercial and defense experience in developing cutting-edge application software. To aid the OEM Integrator and reduce time-to-market, we offer the ability to use our “building blocks” of industry tested software modules and allow the Integrator to focus on their niche application differentiators and ensure that data acquisition, integration and fusion is 100% ensured.

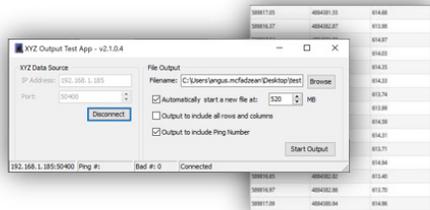
	Base	Advanced	Custom
Live XYZ Data and JSON Control Interface	✓	✓	✓
Sensor Configuration Manager	OEM Integrator	✓	✓
Live XYZ Acquisition and Data Recorder	OEM Integrator	✓	✓
Position and Attitude data fusion for mapping and survey applications	OEM Integrator	✓	✓
Real-Time 3D Renderer	OEM Integrator	OEM Integrator	✓ Optional
PIPE Sequencer Capability	N/A	N/A	✓ Optional
PIPE FTS (Full Time Series) Capability	N/A	N/A	✓ Optional

OEM Integrators' Package

Validation Tools Supplied

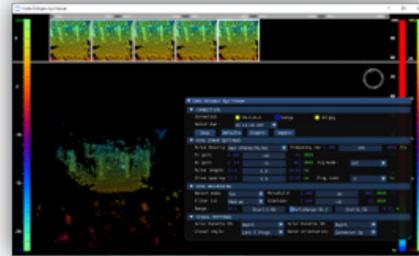
The OEM Integrators Package is supplied with two validation toolsets to allow Integrators to ensure that the live XYZ data can be received and decoded correctly and additionally rendered within an accurate volumetric 3D display.

Echoscope PIPE® Real-Time XYZ Logger



- Tool to validate XYZ Output Decoding in 3rd Party Bespoke Software
- Capture and Log XYZ data in Industry Standard CSV format
- Selectable XYZ, Intensity, Ping Number data output options
- CSV Fully compatible with many XYZ toolsets including Cloud Compare

Echoscope PIPE® Real-Time XYZ Viewer



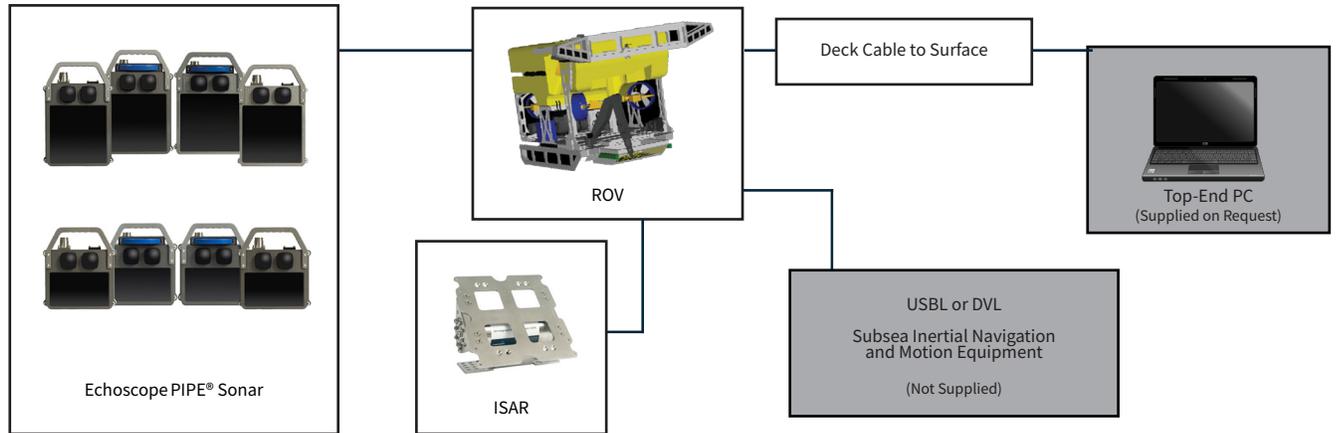
- View PIPE Real-Time XYZ data
- Complete control of the Real-Time XYZ Series sonar live
- Load/Save sonar settings to required JSON file format for ease of implementation in 3rd Party Bespoke Software

Custom developed software will need to control, acquire and render all live XYZ data as a single solution and may not be used in conjunction with the PIPE Developers Kit Applications

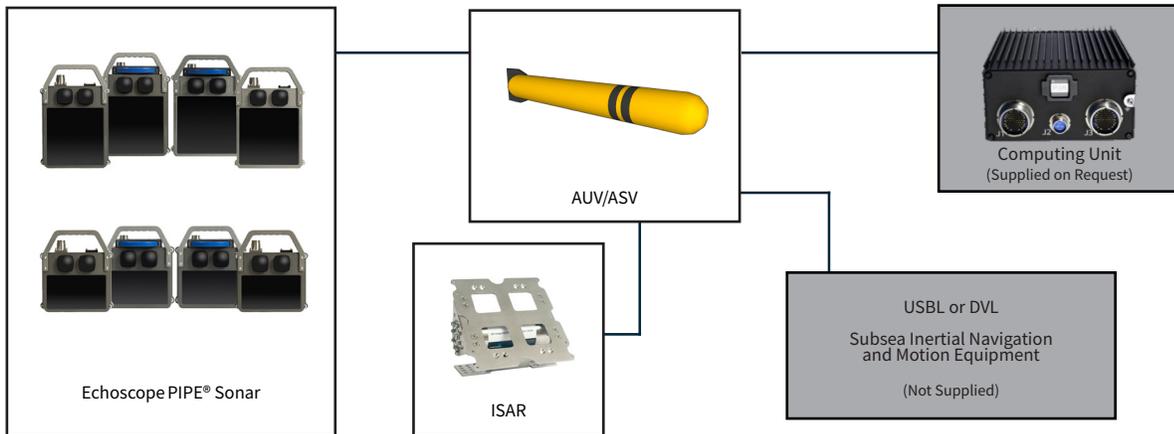
OEM Integrators' Package

Vehicle System Map

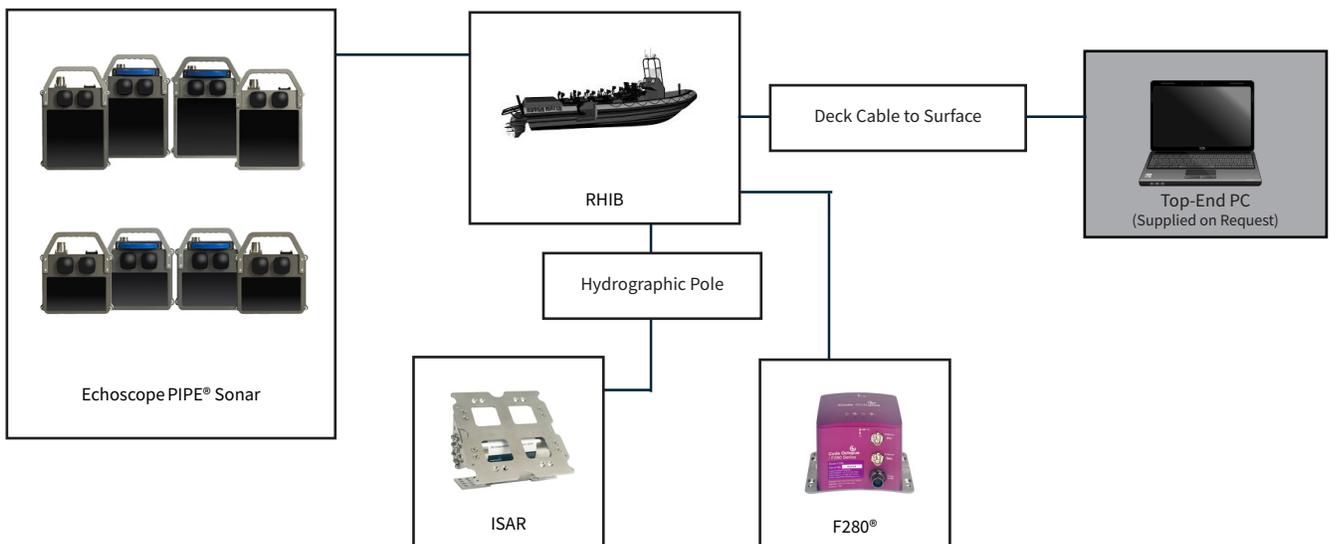
ROV Integration



AUV Integration



Vehicle Integration



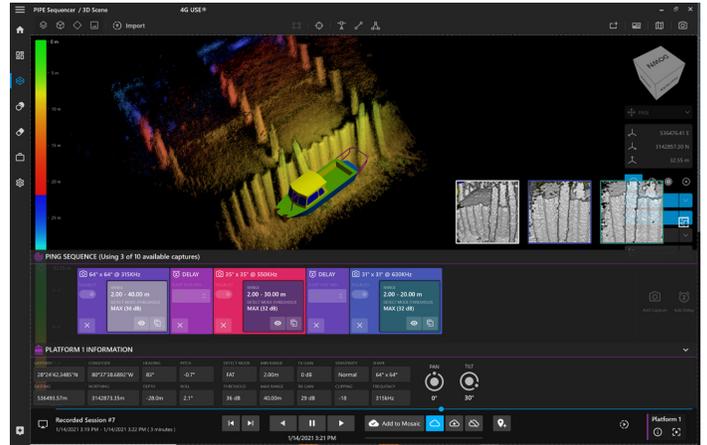
OEM Integrators' Package

Custom Level Licensable Interfaces

PIPE Sequencer JSON Interface

Our PIPE Sequencer JSON Interface gives integrators access to some of our other PIPE Capabilities for integration into their Software Environment.

Sequencer allows users of Echoscope PIPE® sonars to pre-program a sequence of up to ten (10) different real-time 3D acoustic data captures using different acoustic and processing parameters such as frequency, range, pulse length, TVG, transmit and receive gain or sonar processing parameters such as filters, bottom detection methods or sidelobe clip levels. This gives the user the ability to capture and view in real time up to 10 different 3D datasets, with different capture or processing parameters, all of which can be viewed in real time from different perspectives – thus providing a more comprehensive understanding of underwater targets/structures being imaged and visualized in real time. Depending on the setup, the captured data can also be viewed in the 3D Data Window by multiple users – using independent 3D Data Windows.



The image to the right is from Coda Octopus 4G USE® Software (implementing SEQUENCER capability).

Full Time Series (FTS) JSON Interface

FTS Interface gives integrators access to PIPE Full Time Series Data for integration into their Software Environment.

CodaOctopus® Render Engine (Windows PC Only)

Render Interface gives access to Coda Octopus real time 3D rendering capabilities.