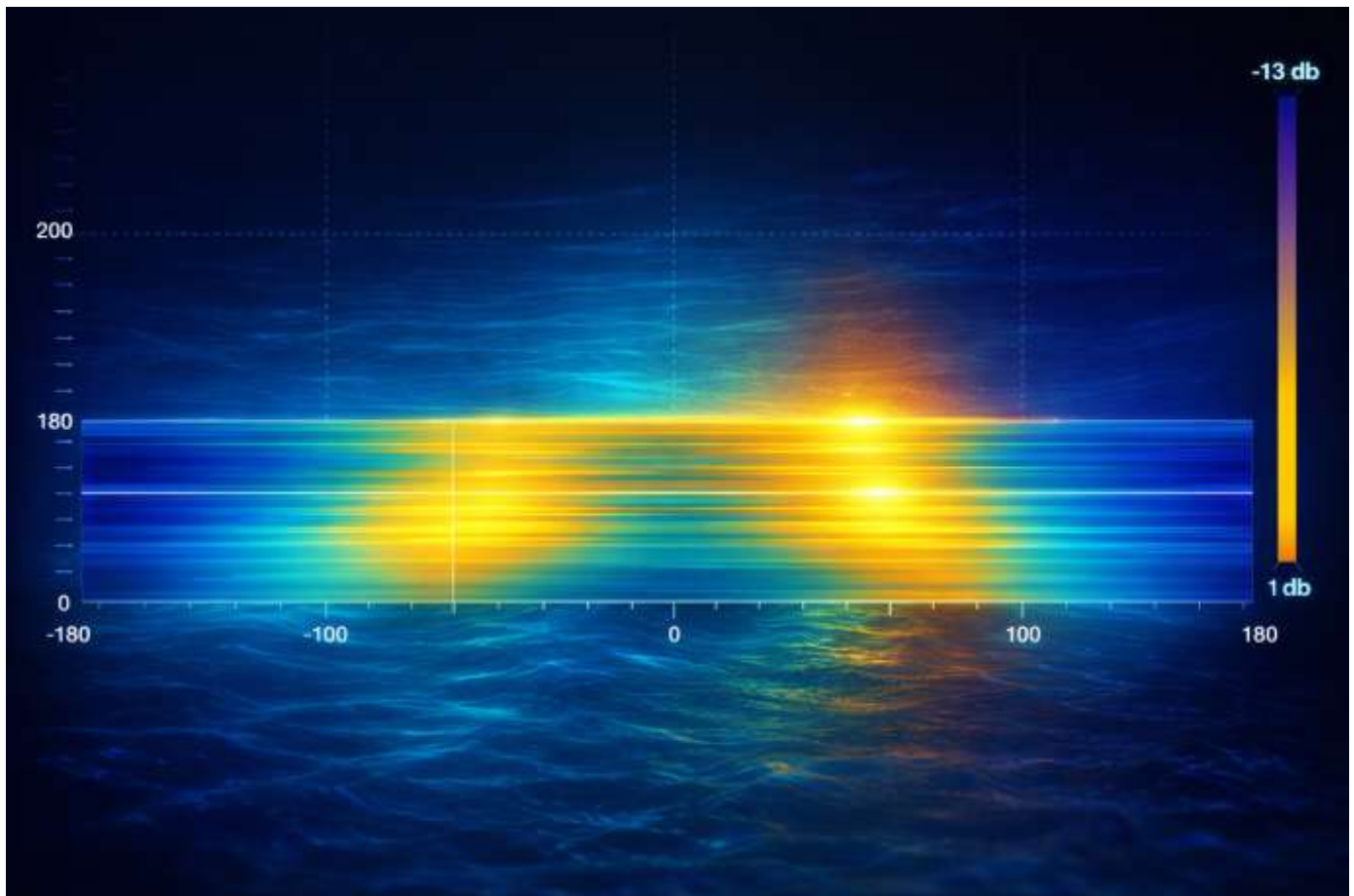


TECOTEC TECHNOLOGIES

VIETNAM ACOUSTIC ANALYSIS SOFTWARE AND POST PROCESSING



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Technologies



01

Overview

VAAS (Visual Acoustic Analysis Software) is an advanced solution for underwater acoustic signal processing, passive surveillance, and post-processing analysis. Designed for both live operations and mission replay, VAAS transforms raw underwater sound into actionable intelligence.

VAAS provides accurate detection, tracking, and classification of acoustic sources in cluttered and dynamic maritime environments. Its modular architecture integrates seamlessly into new command installations or existing fleet infrastructure, supporting flexible deployment across platforms. It mirrors naval workflows with intuitive visualization tools, automated replay modes, and training modules.

02

Features

- Perform real-time and post-processing analysis for passive surveillance and mission replay
- Configurable beamforming with 32, 64, or 128 beams and 3° angular resolution
- Display Bearing-Time Records (BTR) with symmetrical waterfall plots (-180° to +180°)
- Provide spectrograms and Lofargrams for frequency-over-time visualization
- Support DEMON (Detection of Envelope Modulation on Noise) analysis up to 200 Hz with 0.25 Hz resolution
- Built-in background noise suppression for cluttered environments
- Enable beam pattern modeling and 3D visualization for acoustic array optimization
- Integrated cursor tools (delta, harmonic, velocity) for precision measurements
- Structured signal database for archiving, retrieval, and long-term analysis
- Training and simulation modes with recorded or synthetic datasets for operator skill development
- Modular, Windows-based architecture, compatible with legacy and modern systems

03

Benefits

- Enable flexible deployment across legacy and modernized fleet infrastructure
- Reduce training time with workflows aligned to standard naval practices
- Support future adaptability with open architecture and modular scalability