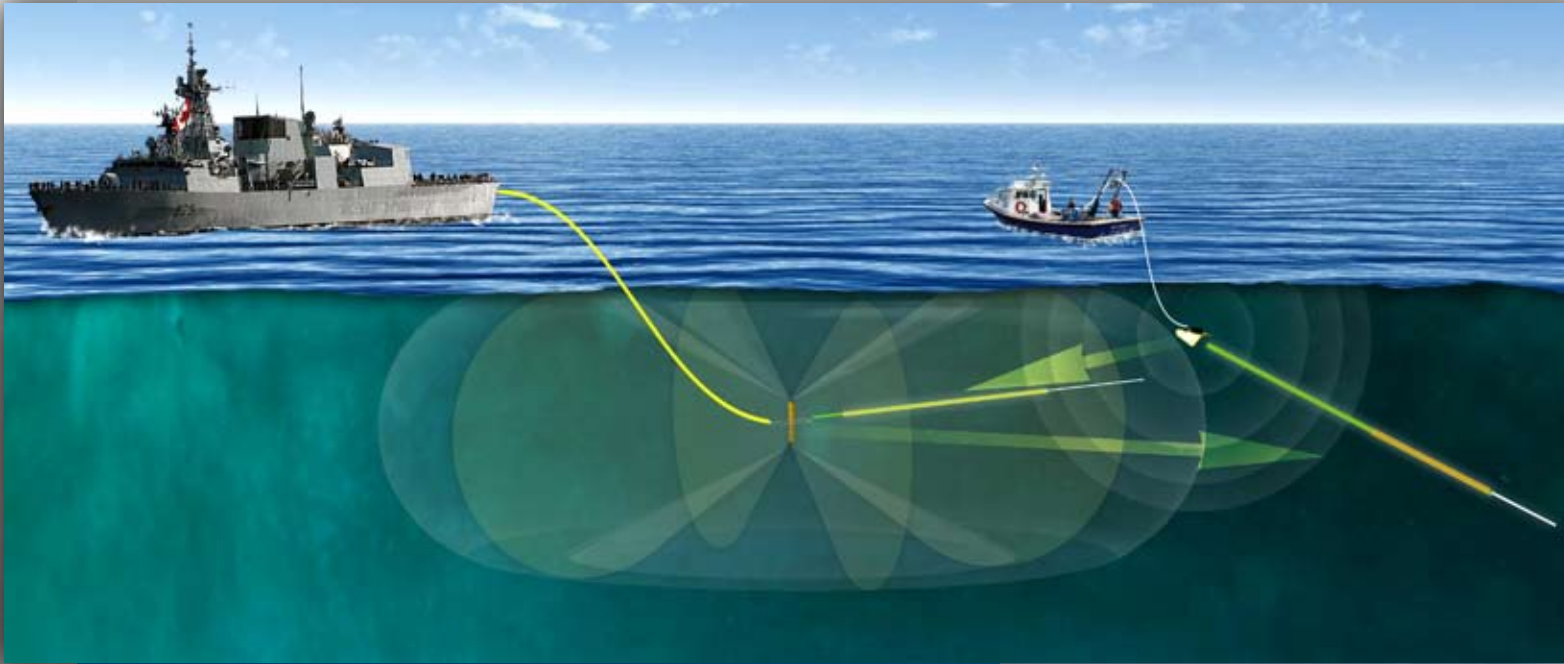




GeoSpectrum Technologies Inc
Customizing Detection

M610-300 - Portable Acoustic Target

Portable Acoustic Target for ASW Training



Acoustic Signature Emulation of Submarines

The M610-300 Portable Acoustic Target (PAT) system provides a substitute for submarines when conducting coordinated ASW (CASEX) exercises. It can also be used to support tactical and technical development activities.

Cost-effective At-sea Training for ASW Sonar Operators

The PAT allows ASW operators to retain and improve their skills, and new operators to be properly trained in non-combat environments. The system generates flexible, designated echo return and/or noise source characteristics similar to real world targets and payloads, providing robust and diversified acoustic noise generation to support acoustic systems development and trials, including in-the-field, real-time ASW training.

Turnkey Solution for Installation on Small Vessels and USVs, Complete with Launch & Recovery Options

The PAT is compact, lightweight, and can be operated from a small vessel or USV. The Portable Acoustic Target provides a "front-to-back" solution and is configurable to accommodate a variety of towable sensors / sound sources to suit a required application.

The PAT has been successfully delivered to advanced navies.



The Portable Acoustic Target can be adapted for use on Unmanned Underwater Vehicles (UUVs)

NAVAL

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M610-300 - Portable Acoustic Target

Portable Acoustic Target for ASW Training

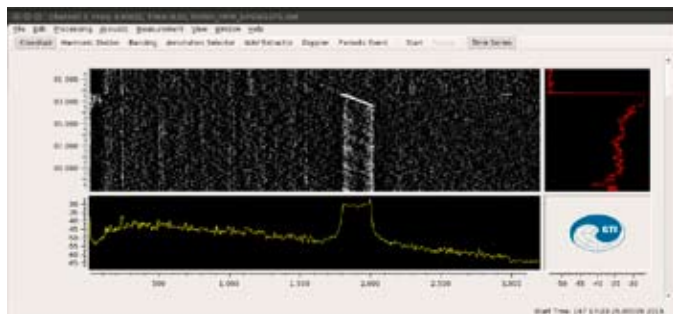
The Portable Acoustic Target will transmit an echo return with the target strength and characteristics of the desired submarine. It will also emulate the broadband acoustic signature of the submarine resulting from self-noise. The operator will be able to conduct full narrowband analysis of up to ten lines including Doppler.

Features

- Transmits flexible, designated echo returns and broadband passive signatures
- Robust & diversified acoustic noise generation to support acoustic systems development and trials
- Compact, lightweight and low cost
- Sound source can be reconfigured to meet training mission requirements and can echo repeat at frequencies from 1 kHz to 10kHz
- Configurable to accommodate a variety of towable sensors / sound sources to suit required application
- Optimized for maximum performance per designated requirement
- Can be operated from vessels as small as 10 m
- Reusable & environmentally-friendly

Specifications

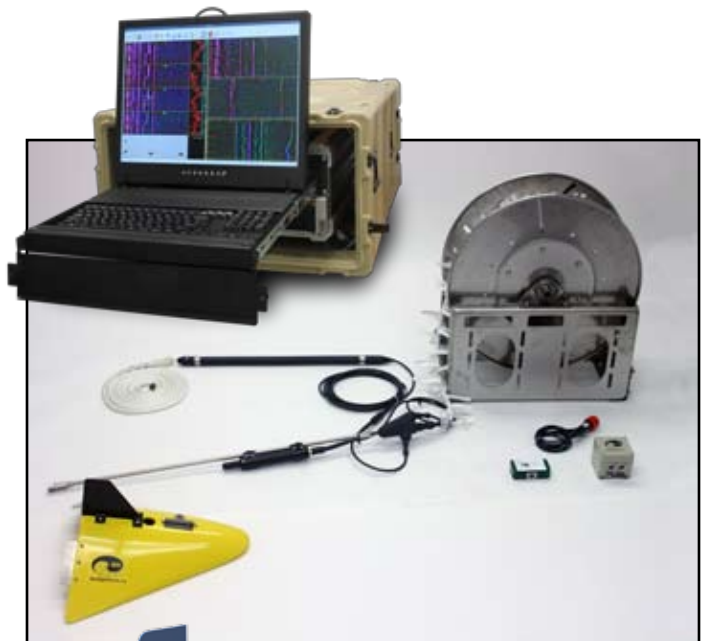
Operating Depth	75 m depth @ 4 knots 55 m depth @ 6 knots 45 m depth @ 8 knots (Higher tow speeds and increased depths are possible if desired)
Winch/A-frame Footprint	2.4 m L X 1.4 m W X 1.5 m H
System Weight	900 kg
Echo Repeater/Sound Source	Passive, Echo Repeater



User Interface Screen

Components

- Wet end consisting of V-Wing depressor, sound source, directional hydrophone & tow cable
- Electric winch and A-frame on modular base with towing sheave equipped with cable scope meter
- Operator console with power amplifier, ruggedized notebook PC, and software with signal generator and monitoring system for training session development, operation, and evaluation



Ultra portable system for shallow water/ low speed missions can be operated from a very small vessel



Optional Wideband Towed Sound Source



Can be Quickly Installed on Vessels of Opportunity

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