



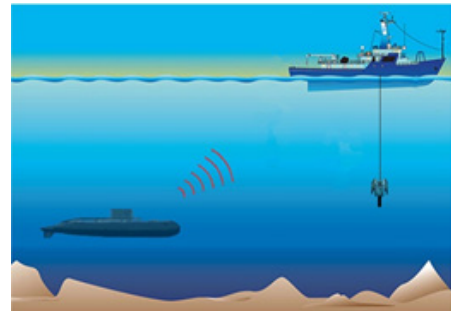
### GENERAL DESCRIPTION

The DSF-3 is a dipping sonar system, which is mainly "passive sonar" that detects and tracks submarines and surface vessels. It can estimate movement's data of the vessels by receiving and processing underwater sounds produced by such vessels. This system can also be modified to be "active/passive sonar", with regarded to customer requirements. This system has been designed to operate on surface vessels and its antenna is thrown in to the water and dives to appropriate depth by a simple winch.

In addition, the system can be minimized as a tactical system, which is able to operate on small ships or boats. At this situation the antenna is thrown in water by hands.

### TECHNICAL AND OPERATIONAL SPECIFICATIONS

- Omni-directional coverage
- Maximum range of each array depends on the vessel's type and environmental conditions
- Detection of surface vessels and submarines
- Tracking three targets simultaneously
- Ability to record and play back the received sound
- Containing camouflaging and operating without sound radiation (passive mode)
- Including the standard outputs of sonar systems
- Bearing accuracy: 1 degree
- Containing advanced algorithm for estimating target's bearing and displaying Bearing Time Record (BTR)
- Feasible to estimate spectrum of targets and spectrogram display
- Self-testing ability
- Ability of data's simulation
- Operating in environmental condition up to sea-state 3
- Power supply: 220 VAC or UPS as backup



### OPTIONS

- Adding GIS maps corresponding to desired areas and connecting to GPS or other positioning systems
- Processing data and preparing them to send through RS232 bus
- Classifying targets and adding to the vessel's classes

### EXECUTIVE PLAN STRUCTURE

The dipping sonar system consists of four main parts:

- Acoustic antenna
- Electronic unit
- Processing & monitoring
- Unit winch

#### Typical illustration of the system



#### Typical illustration of the minimized (tactical) system

