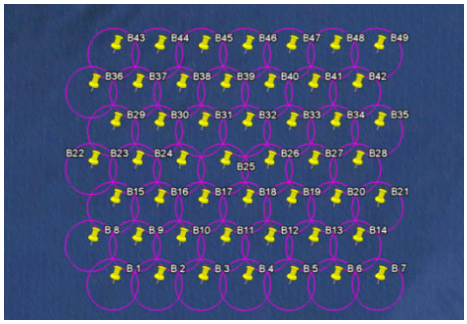
DETECTOR-1000

ULB* fast relocation over extremely wide search areas

**** ULB: Underwater Locator Beacon.***

Steps:

- **Dip Detector up to 300m depth**
- **Acquire signal for 10 minutes**
- **Recover it back on board**
- **Process data: ULB detected or not**
- **If detection: dip again to localize**



Key features & benefits

- ✓ Extremely long detection range
- ✓ Pinger localization over a very wide search area
- ✓ Simple and robust
- ✓ Easy to use even in bad weather
- ✓ Immediate deployment from various platforms : craft of opportunity, helicopter, submarine, rubber inflatable boat…
- ✓ Fitted for deep water as well as for shallow water
- ✓ Intuitive and friendly user interface
- ✓ Increased coverage speed (by a factor of 20)
- ✓ Dramatically reduced Search and Recovery (SAR) costs

Applications

- ✓ Search and Recovery operations : ULBs, NATO helicopter pingers and submarine distress signal…
- ✓ Drug enforcement : detection and localization of underwater drugs canisters.

Operational concept

Thanks to its large acoustic detection range, DETECTOR-1000 allows to quickly cover wide areas when searching ULB pingers. The DETECTOR-1000 is used in 2 steps.

❑ First step consists in detecting the ULB:

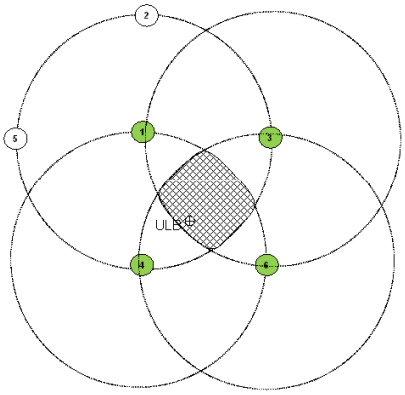
a. First the DETECTOR-1000 is immerged between 10 m and 300 m and records a few minutes of signal. Recording starts and stops automatically at a predefined depth.

b. As soon as the DETECTOR-1000 has been recovered, the recorded file is automatically transmitted to a PC.

c. The DETECTOR software of the PC processes the data in 7 minutes while the vessel is under way to the next station. As a result, the operator is informed of ULB presence or not. He also gets the measured ULB frequency and a quality level information.

Stations are repeated until the ULB is detected.

❑ Second step consists in locating the ULB by refining the detection area thanks to few measuring points like described on the right picture.



Technical Data

Size	1,44 x 0.27 x 0.27 m
Battery life:	8 hours
Weight	26 kg (in air) – 5 kg (in water)
Frequency range	1 kHz to 50 kHz
Data Transmission	Ethernet
Internal recording memory	8 hours
Maximum depth	300 m
Detection range*	Deep water: **4 to 5 km** @ 37.5 kHz (source level= 160 dB) **10 km** @ 10 kHz (source level= 175 dB) Shallow water**:** **2 to 3.5 km** @ 37.5 kHz (source level= 160 dB) **5 km** @ 10 kHz (source level= 175 dB)
Refined search area	Less than 500m x 500m

(*) : Performance depends on environnemental/noise conditions

Specifications subject to change without notice

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