

## **Maritime Safety**

## Long Range Communication Systems Enhance Safety and Security

Protecting high value assets against terrorism, piracy and other maritime security threats requires a military-tested shipboard protection system. The Long Range Acoustic Device® (LRAD®) has been successfully used to thwart maritime security threats on multiple occasions beginning with the *Seabourn Spirit* incident off the coast of Somalia in November 2005.



LRAD systems broadcast audible live or recorded warnings, commands, and notifications that are clearly heard and understood

over ship, wind, engine, and maritime background noise from close range out to 3,000 meters. When approaching boats do not respond to radio calls, deploying LRAD's ultra intelligible verbal warnings and attention-commanding alert tones ensure communication over long distances, determine intent, and provide more time to resolve potentially dangerous situations.

As an essential component in all escalation of force (EOF) protocols, LRAD systems safely initiate and scale EOF, extend ship security perimeters, and demonstrate a ship's preparedness at safe distances. When properly deployed, in most confrontations, LRAD causes attackers to abort their assault and seek out less prepared targets.



LRAD provides crews and security teams more time and distance to determine the intent of potential threats not responding to radio calls and to initiate and scale EOF protocols accordingly.





## The LRAD Advantage

- Clearly communicate and establish security perimeters and standoff distances from other vessels
- Initiate an effective, appropriate, and scalable response to potential vessel intrusions
- Avoid confrontations and deter unintentional intrusions into ship security zones
- Unambiguously establish intent of vessels not responding to radio calls by broadcasting audible, attention-commanding warning tones and clear voice communication in any language
- Ensure warnings, commands, and instructions are clearly heard and understood
- LRAD's 30° broadcasts direct warning tones and voice commands only to intended targets
- Choose from a range of scalable, portable systems easily mounted to existing ship infrastructure
- The only acoustic hailing device to meet stringent US Navy / US Army / JIFCO requirements

	LRAD 450XL	LRAD 500X-RE	LRAD 1000XI	LRAD 950NXT
Max dB	150 dB	154 dB	159 dB	151 dB
Continuous dB	145 dB	149 dB	153 dB	
Max Range	1700 meters	2000 meters	3000 meters	3000 meters
Power	12-28 VDC	12-28 VDC	90-260 VDC	48 VDC (+/- 3%)
		100 - 220 VAC	50/60 Hz	at 35 amps max

LRAD's unmatched acoustic technology is enclosed in a rugged housing and operates reliably and effectively in the harshest maritime conditions.

Interfaces include a weatherized microphone and rugged MP3 player / controller designed for ease of use and operation.





