

Naval and Port Applications and Systems

In response to the to the deadly October 2000 attack on the USS Cole, Genasys created the acoustic hailing device (AHD) market by developing and launching its proprietary LRAD technology and systems.

Broadcasting highly intelligible voice messages and warning tones that are clearly heard and understood above engine, wind, and background noise, LRAD systems enable ship-to-ship communication with vessels not responding to radio calls and enlarge vessel and maritime standoff zones beyond 3,000 meters.



By extending a ship's security perimeter, LRAD systems provide captain and crew more time and distance to determine intent, assess the situation, and scale the escalation of force (EOF) commensurate to the threat.

Since successfully defending the *Seabourn Spirit* in November 2005, LRAD systems have been used many times around the world to protect ships, ports, and personnel, have become an essential component in all maritime communication, security, and EOF protocols.

LRAD is the most thoroughly tested AHD available having successfully passed approximately 40 separate U.S government tests including all MILSPEC testing for heat, humidity and shock



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.





Advanced Technology and Superior Voice Intelligibility

Genasys' proprietary driver and waveguide technology eliminates the shortcomings of other maritime communication systems by maintaining a smooth frequency response with an intensity variation of less than 5dB, which prevents audio fading and produces clear, unambiguous communication across all broadcast frequencies.

LRAD is unique in its ability to broadcast either live or recorded voice messages in any language with exceptional intelligibility and tonal clarity.



From the low-profile LRAD 450XL to the remotely operated LRAD 950NXT integrated with radar, HD cameras, high powered spotlights, and sensors, LRAD systems are rugged, reliable and built to withstand the harshest maritime conditions.

Shipboard Protection

During maritime operations, LRAD systems protect ships, ports, and personnel by clearly communicating to vessels not responding to radio calls to determine intent and expand standoff zones for ships underway, pier side, or at anchor. LRAD provides a scalable shipboard protection capability that is highly effective and non-kinetic.

Naval Forces and Coast Guards

Vastly superior to traditional marine speakers, LRAD's long-range communication and EOF capabilities significantly enhance operational effectiveness in a variety of naval and maritime missions, including ship-to-ship communication, interceptions and interdictions, search and rescue missions, environmental responses, coastal water control, shore side security, anti-piracy, and maritime immigration events.

LRAD systems are on every U.S. Navy surface combatant and deployed by 31 international Navies and Coast Guards







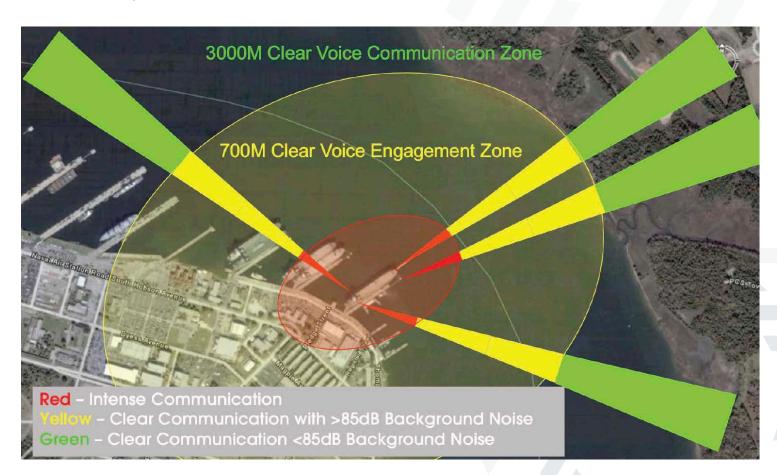
Remotely Operated, Integrated Naval Base and Port Security

Utilizing technology developed and patented by Genasys, the LRAD 950NXT's ability to identify and interact with targets from a distance provides naval and maritime security personnel the additional time and information necessary to accurately assess situations and appropriately scale responses.

Featuring an integrated HD camera, high-intensity searchlight (optional), and robust, IP-addressable full pan & tilt drive, when integrated with radar or motion sensors the LRAD 950NXT provides automated intruder alerts and becomes a fully functional, unmanned perimeter security and first response system.



Because of its automated 24/7 surveillance capabilities, the LRAD 950NXT reduces manpower and false alarms, and provides a highly effective, cost efficient security solution.



When an approaching vessel does not respond to radio calls, naval base and port security personnel broadcast warning tones and voice commands in any language to determine the vessel's intent. If the vessel continues to approach, LRAD provides security teams more time and distance to initiate and scale EOF protocols. LRAD systems resolve misunderstandings, prevent security breaches, protect personnel and critical infrastructure, and save lives.





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 500X-RE



LRAD 1000Xi



LRAD 950NXT

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.

Genasys

Global Provider of Protective Communications Solutions

Protecting people and saving lives for over 40 years, Genasys Protect covers more than 100 Million people in over 100 countries worldwide, including more than 500 U.S. cities, counties and states.

LRAD products are available for purchase through multiple channels including DLA TLS SOE, GSA Advantage, Federal and State grants, FEMA Authorized Equipment List (AEL), and others.

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