

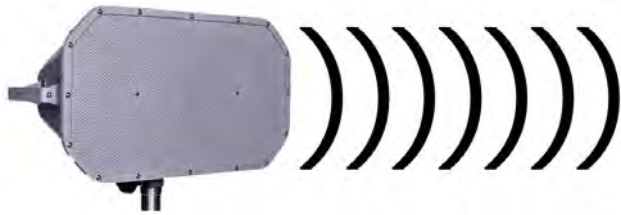
# Border Security Communication & Safety

Modern security technology and communication systems that enhance public safety and national security are top priorities in today's escalated threat environment. In any any operational scenario, the tools that border security officials use must be versatile, rugged, easy to operate and cost effective.

LRAD® turns passive surveillance systems into first responders by broadcasting critical information, instructions and warnings from close range out to 3,000 meters.

LRAD systems safely determine intent, eliminate false alarms, reduce personnel demand, and create a permanent perimeter presence along borders including remote rural areas, crossing points, checkpoints and other critical sites.

Throughout the world, border security agencies are deploying LRAD systems to enhance their ability to safely secure borders, conduct special operations, facilitate humanitarian and search & rescue missions, and interdict and prevent acts of terrorism, human trafficking and drug smuggling.



**Focused, Clear Sound**  
Long Distance Communication  
Exceptional Voice Quality



**Sound Diffuses**  
Limited Communication Distance  
Poor Voice Quality

## ADVANCED TECHNOLOGY & SUPERIOR INTELLIGIBILITY

From hand portable devices to larger systems that mount temporarily or permanently on towers, buildings, vehicles, vessels, trailers or helicopters, LRAD systems go anywhere communication is needed., LRAD systems hail, warn and communicate to crowds, individuals, and into buildings, vehicles and vessels from close range out to over 3,000 meters, saving lives on both sides of the Long Range Acoustic Device®. LRAD broadcasts are safely optimized to the primary human hearing range of 1 - 5 kHz to generate live or recorded voice messages with exceptional clarity.

LRAD's proprietary driver and waveguide technology maintain a smooth frequency response with an intensity variation of less than 5dB to prevent audio fading and produce clear, unambiguous communication in any language, over background noise, and across all broadcast frequencies.

LRAD systems are safe, rugged, portable, easy to operate. Every LRAD system comes with an all-weather microphone for live broadcasts and a hardened MP3 player to record and playback messages. Fully functional in austere environments, LRAD's wide area broadcasts free border security personnel to attend to other critical duties.



## BORDER SECURITY APPLICATIONS

### VEHICLE PATROLS / DISMOUNTED OPERATIONS

The LRAD 450XL is the loudest and most intelligible acoustic device for its size and weight. Low profile, lightweight and designed for temporary or fixed mounting on tripods any armored or soft skinned vehicles. Using an enhanced, patent pending technology, the 450XL generates the audio output of a unit almost twice its size and weight with the same high level of clarity and intelligibility consistent with the LRAD product line.

The LRAD 450XL is easily transported to provide a highly effective, long range communications and warning capability during mobile patrols and dismounted operations.

An automated surveillance network built on the Greek - Turkish border is being used to detect migrants and deter them from crossing illegally, with river and land patrols using searchlights and Long Range Acoustic Devices.

*“Our task is to prevent migrants from entering the country illegally. We need modern equipment and tools to do that.”*

Major Dimonsthenis Kamargios, head of the region’s border guard authority



### AIRBORNE / HUMANITARIAN

Border Patrol Search, Trauma, and Rescue (BORSTAR) Unit operations are conducted in varying climates and topographies. Missions last a few hours to prolonged FEMA supported natural disaster operations lasting several weeks. These scenarios vary in difficulty from helping migrants needing water and medical attention to supporting complex rescues requiring helicopters to search remote areas and canyons.

LRAD provides BORSTAR agents a multifaceted communications capability deployable on the ground or in the air to quickly find, communicate to and rescue migrants. LRAD’s highly intelligible, multilingual voice and alert tone broadcasts are clearly heard and understood over wind, engine, rotor wash and background noise at distances ranging from 50 meters out to 3 kilometers.

LRAD systems go anywhere communication is needed. From the hand portable LRAD 100X to larger systems mounted temporarily or permanently on towers, vehicles, trailers or helicopters, LRAD is mobile, self-contained and does not rely on external power or communication infrastructure.





## INTEGRATED BORDER SECURITY

Integrating remotely operated Long Range Acoustic systems with radar, cameras and other sensors provides added security for fenced and unfenced border areas. The ability to remotely hail and warn provides border security agencies with a proactive approach to securing borders not possible through camera-only solutions.

Designed for integrated surveillance and security applications, the LRAD 950NXT is controlled remotely across an IP network enabling system operators to create a fully functional, unmanned perimeter security solution and respond to potential threats from a safe location.

The LRAD 950NXT achieves a maximum peak output of 156dB and broadcasts highly intelligible voice messages and warning tones from close range out to 3,000 meters.

Featuring an integrated HD camera, high-intensity searchlight (optional) and robust, full pan and tilt drive for precise aiming and tracking, the LRAD 950NXT can also be integrated with radar to provide automated intruder alerts. Because of its automated capabilities, the LRAD 950NXT reduces personnel, false alarms and alleviates uncertain situations.

The LRAD 950NXT's ability to immediately interact with an intruder or potential threat remotely provides border security personnel more time and distance to accurately assess situations and scale their response appropriately.

IP addressable full pan and tilt drive for precise aiming and tracking. The LRAD 950NXT system is remotely monitored and activated from a central command and security center to provide 24/7 surveillance and a highly effective first response capability. Broadcasting safe, audible warning tones and voice commands, the LRAD 950NXT moves trespassers away from borders and other restricted areas.



LRAD 950NXT



## LRAD Systems

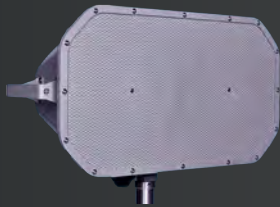
- Turn passive surveillance systems into remote first responders
- Cover more border area with less personnel
- Facilitate local and wide-area communications
- MILSPEC tested and certified for all weather use
- Seamlessly integrates with cameras & other systems
- Cost effective alternative to fencing borders

## Applications

- Communicate to Individuals and Large Groups
- Direct Refugees to Aid & Assistance Centers
- Conduct Special Operations and Law Enforcement Missions
- Facilitate Humanitarian and Search & Rescue Missions
- Interdict & Prevent Terrorism, Human Trafficking & Drug Smuggling



LRAD 100X



LRAD 450XL



LRAD 500X-MMT



LRAD 950NXT

## 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.

For more information: [sales@genasys.com](mailto:sales@genasys.com)

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**DEMO**

