



LRAD & ACOUSTICS

Overview



genasys.com



Long Range Acoustic Devices

Innovated by Genasys in response to the deadly October **2000 terrorist attack** on the USS Cole, LRADs are purpose-built to communicate, resolve uncertain situations, minimize the use of force, and save lives. Powered by Genasys' advanced Driver and Waveguide technology, LRADs broadcast audible voice messages and alert tones with incomparable clarity over long distances and loud background noise.

The global leader and de facto standard of Acoustic Hailing Devices, LRADs are deployed in diverse applications by more than **100 countries** to ensure critical communications are clearly heard and understood.





The **LRAD** Advantage

LRAD systems focus sound in a 30° beam to broadcast live or recorded voice messages and attention-commanding ALERT tones with exceptional clarity from close range out to 5,500 meters

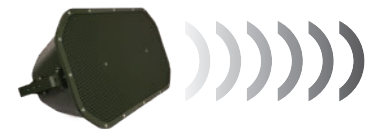
- ***Audible, focused, clear sound***
- ***Long-range broadcasts***
- ***Industry-leading vocal clarity***



Conventional
loudspeakers
disperse sound in all
directions



Bullhorns and PA
systems have limited
broadcast range and
poor voice intelligibility



LRAD's proprietary
audio technology
focuses sound in front
and significantly
reduces audio levels
behind the device and
in surrounding areas



Controlled voice broadcast dispersion



Live and recorded voice messages broadcast with industry-leading intelligibility



Focused 30° voice and tone broadcasts



Clear voice and tone broadcasts from close range out to 5,500 meters



Warn, Notify & Inform



Determine Intent



Resolve Uncertain Situations



Establish Large Safety Zones



Minimize the Use of Force



Saves Lives

LRAD Applications

Defense



- Support all missions from combat and counterinsurgency to disaster and humanitarian response
- Clear communication and scalable escalation of force to aid in mission success
- Deployed by all US military branches and many international defense forces

Law Enforcement



- Ensure warnings, commands and notifications are clearly heard and understood
- Change the way agencies conduct everyday duties and elevated risk operations with rugged, reliable and easy-to-operate LRADs
- Resolve uncertain situations, safeguard the public, and protect police officers

Fire & Rescue



- Communicate critical information to individuals and groups in harm's way
- Broadcast real-time voice messages with exceptional clarity up to hundreds of meters away
- Send alert tones and voice broadcasts heard inside buildings and vehicles

Homeland & Border Security



- Provide essential long range communication and First Reponse capabilities
- Broadcast critical information, instructions, and warnings from close range to 5,500 meters away
- Enhance public safety in an escalated threat environment with versatile, rugged, easy-to-operate LRADs

Critical Infrastructure Protection



- Enhance security at dams, ports, nuclear facilities, power plants, substations, data centers, water and wastewater plants, and other critical facilities
- Provide the vital First Response capability missing from observe-only integrated security systems
- Modernize passive surveillance by adding broadcasts of warnings, critical information, and instructions

Maritime Safety



- Send audible warnings and commands, clearly heard and understood over wind, ship, and engine background noises
- Deploy intelligible verbal warnings and commanding alert tones when nearby vessels do not respond
- Communicate over long distances, extend ship security perimeters, determine intent, and deescalate dangerous situations

LRAD Products

Hand-Portable LRADs

100X



Base Model

100X

The world's best-selling AHD broadcasts voice messages 20 – 30 decibels louder and with significantly more intelligibility than legacy bullhorns and vehicle-based P.A. systems. Live and recorded voice and tone broadcasts are clearly delivered over crowd and background noise. Portable, rugged, and lightweight, ensure every voice communication is heard and understood with the LRAD 100X.

Range

600m 1968ft

100X-MAG-SYS & VAC-SYS



MAG-HS or VAC-SYS WIRELESS KIT

100X + wireless + mount (vac or mag)

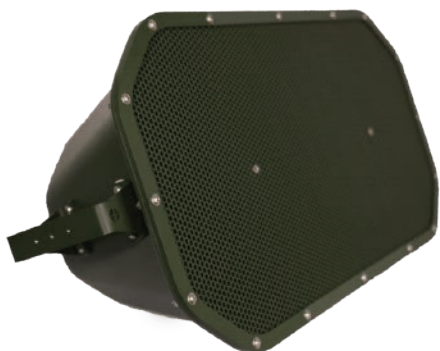
Broadcasting audible voice messages 20 – 30 decibels louder and with significantly more intelligibility than legacy bullhorns and vehicle-based P.A. systems, the world's best-selling AHD kit includes wireless, remote, and mounting options. Live and recorded voice and tone broadcasts are clearly delivered over crowd and background noise. Ensure every voice communication is heard and understood with the portable, rugged, lightweight LRAD 100X.

Range

600m 1968ft

Mid-Range LRADs

450XL-RT



450XL-RT

This next generation LRAD includes automatic system health check after powering on and a native Ethernet interface for full-featured operation that supports both local and remote control. Versatile and low profile, the 450XL-RT can be mounted on tripods, vessels, vehicles, UAS', UAVs, UGVs, and CROWS. Ensure critical communications are clearly heard and understood in every operational scenario.

Range

1700m 5577ft

LRAD Products

Mid-Range LRADs

450XL-MMT



450XL-MMT

LRAD takes flight with this helicopter mounted, air-to-ground communication AHD. Self-powered and completely autonomous from other aircraft systems, the LRAD 450XL-MMT temporarily mounts and is quickly removed following mission completion. The rugged MMT mount provides a full range of pan & tilt motion and easily locks in a desired orientation. Broadcasting audible, exceptionally clear voice messages and attention commanding alert tones over wind, engine, and rotor noise, the 450XL-MMT is the air-to-ground communication System of Choice for public safety, law enforcement, and defense applications.

Range

1700m 5577ft

500X-RT



500X-RT

This next generation LRAD includes automatic system health check with a native Ethernet interface, for full-featured operation that supports both local and remote control. Compact and designed for applications ranging from fixed security installations to mid-sized vehicles and vessels, the LRAD 500X-RT easily mounts and transports to provide unparalleled long-range communication and safe, scalable, non-kinetic escalation of force for law enforcement, homeland security, and defense applications.

Range

2000m 6561ft

500X-MMT



500X-MMT

The 500X takes flight with this helicopter mounted, air-to-ground communication AHD. Self-powered and completely autonomous from other aircraft systems, the LRAD 500X-MMT temporarily mounts and is quickly removed following mission completion. Providing a full range of pan & tilt motion, the rugged MMT mount easily locks in a desired orientation. The 500X-MMT broadcasts audible, exceptionally clear voice messages and attention commanding alert tones out to 2000 meters over wind, engine, and rotor noise.

Range

2000m 6561ft

LRAD Products

Longer-Range LRADs

950NXT



950NXT

Communication, Surveillance, Security, and First Response all in one system. The 950NXT's easy-to-use controls enable operators to identify possible threats on a live video feed, position the 950NXT's IP-addressable full pan & tilt to target threats, and broadcast focused, attention-commanding alert tones and verbal warnings with exceptional clarity from the safety of command and control centers.

When integrated with radar or motion sensors, the 950NXT becomes a fully functional, automated security alert, communication, and first response system that can alleviate the use of force and save lives.

Range

3000m 9843ft

1000Xi



1000Xi

The U.S. Navy's Communication System of Choice, the LRAD 1000Xi is designed for extended range communication and safe, scalable EOF for defense, critical infrastructure, and border security applications. Featuring a rugged carbon fiber emitter head integrated with electronics and amplification, the 1000Xi is resilient and reliable in any environment and operational scenario.

Range

3000m 9843ft

1950XL



1950XL

The world's Loudest, Longest Range single head AHD. Utilizing technology developed and patented by Genasys Inc., the LRAD 1950XL broadcasts voice messages and alert tones far beyond normal standoff distances with exceptional intelligibility. The 1950XL's optimized frequency range and advanced technology ensure communications are clearly broadcast in any language out to 5,000 meters in most environmental conditions.

Range

5000m 16404ft

LRAD Products

Mobile Systems

Mobile Sound Shield



Mobile Sound Shield

LRAD's integrated Communication and Vehicle Security System was purpose built for government and high profile vehicles as well as outdoor entry ways to government and critical infrastructure facilities. Broadcasting attention-commanding warning tones and highly intelligible voice messages in a 360° radius out to 100 meters, the Mobile Sound Shield creates a safe acoustic security barrier that quickly moves most threats away from vehicles and entry ways.

Range

100m 328ft

Mobile Range System



Mobile Range System

Versatile and quickly-deployed the Mobile Range System provides operators highly effective emergency warning and public address capabilities anytime, anywhere. Featuring the mass notification industry's highest speech intelligibility rating, the Mobile Range System is ideal for incident management and range communications.

Range

1700m 5577ft

360XT



360XT

Instant Mass Notification and Public Address...anytime, anywhere. The 360XT is a fully self-contained mobile mass notification system that delivers Genasys' world renowned, highly intelligible voice broadcasts with full 360° coverage. Built on a ruggedized trailer and featuring solar power and satellite connectivity options, the 360XT provides emergency warnings and public safety notifications for large events or when power and cellular infrastructure goes down.

Range

2200m 7217ft

LRAD Accessories

Enhancements & Upgrades



VAC MOUNT

The VAC mount is equipped with mounting fasteners to secure the mount in position. Each mounting fastener has a capacity of 40 lbs of upward force to ensure the VAC Mount will remain secure even when positioned upside down or on a moving vehicle.

ORDERING INFO

100X-MNT-VAC	LRAD 100X VAC Mount
450XL-MNT-VAC	LRAD 450XL/300X VAC Mount
FKIT-05-1	Mobile Sound Shield VAC Mount*



LRAD TRIPOD

Military grade tripod and hard storage case.

ORDERING INFO

TRIPOD-SYS	LRAD Tripod
------------	-------------



LRAD WIRELESS SYSTEM

Wireless control for LRAD 100X, LRAD 450XL, and all manually operated systems. Operates up to 16 LRAD systems simultaneously.

ORDERING INFO

WIRELESS-CU-CH14	Wireless System - US & Canada
WIRELESS-CU-RES	Wireless System - International (Radio not included)



HD ACTION CAMERA

The HD Action Camera provides video and audio recording capability for all LRAD systems.

ORDERING INFO

100X-GOPRO	LRAD 100X HD Action Camera
450XL-GOPRO	LRAD 450XL HD Action Camera



LRAD POWER PACK

The Power Pack allows users to power units without being tethered to an outlet, resulting in greater deployment flexibility.

ORDERING INFO

24V-PACK	Power Pack with Charger, 24 VDC, 21 AH, Type B Power Plug (USA, Canada, Japan, etc.)
24V-PACK-EU01	Power Pack with Charger, 24 VDC, 21 AH, Type E/F Power Plug (France, Belgium, Poland, etc.)



28V, 500W POWER SUPPLY

The 24-volt DC Power Pack provides up to 5 hours of continuous use for LRAD 450XL and 500X systems.

ORDERING INFO

28V-PS	Kit, Power Supply, 28 VDC Out, 500 W, SS, Type B Power Plug (USA, Canada, Japan, etc.)
28V-PS-EU01	Kit, Power Supply, 28 VDC Out, 500 W, SS, Type E/F Power Plug (France, Belgium, Poland, etc.)



By repurposing LRAD Driver and Waveguide technology, outdoor mass notification notification has been transformed with voice-based Genasys ACOUSTICS. While outdoor sirens can alert, most are incapable of broadcasting highly intelligible voice notifications that detail the nature of an emergency and provide recommended life safety actions to at-risk populations. ACOUSTICS broadcast audible sirens and voice messages with the mass notification industry's highest Speech Transmission Index – 0.95 out of 1.0.

The **ACOUSTICS** Advantage

- Large, omnidirectional broadcast capabilities
- Solar power battery backup
- Satellite connectivity for communication redundancy
- Integrated software controls to enhance multi-channel communication
- Remote operation to a single location or multiple devices at once



ACOUSTICS Devices



360XT

Range 800M - 3,500M

Instant Mass Notification and Public Address

The 360XT delivers Genasys' world renowned, highly intelligible voice and alert tone broadcasts with full 360° coverage, anytime, anywhere. Solar power and satellite connectivity options available.



360XL

Range 1,700M - 7,000M

Advanced Public Safety Mass Notification

Featuring industry-leading voice intelligibility and outdoor communication area coverage, the 360XL comes in multiple configurations and with optional solar power and satellite connectivity.



360XL-MID

Range 800M

Rapidly Deployable Mass Notification

Ideal for small campuses, industrial sites, and temporary events, this compact, omnidirectional mass notification system ensures every word can be clearly heard throughout its broadcast coverage area.



60XL

Range 300M - 3,500M

Emergency Warning and Public Address

The modular form factor customizes mass notification audio dispersion to distribute voice communications more effectively. Featuring flexible 60 to 360 degree broadcast coverage areas, the 60XL can be enhanced with solar power and satellite connectivity options.

ACOUSTICS Accessories

Enhancements & Upgrades

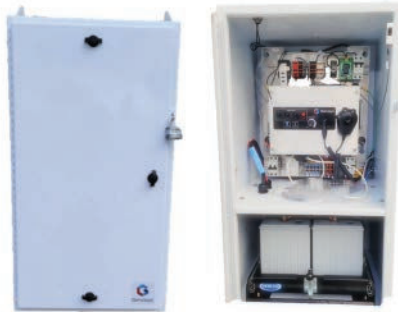


Edge 600

Compatible with Genasys speakers and existing public address and notification systems, Remotely operate speakers and acoustic hailing devices

ORDERING INFO

EDGE 600-120	120 VAC, 2 Amplifier, AC Input Only
EDGE 600-240	240 VAC, 2 Amplifier, AC Input Only
EDGE 600-MICPB ADDON	Microphone and Playback Buttons Cover Plate



Edge 800

Integrated, flexible indoor/outdoor control unit. 4 Channels, 160W each powers and controls a 360XL Single Emitter, or 360X Double Emitter, or up to four 60XL units

ORDERING INFO

EDGE 800-MICPB ADDON	Add on MP3 / PTT Microphone plate, cabinet not included
120976-00	Cellular modem kit
117737-00	Satellite terminal kit
117740-00	Optional solar panels



Edge 1200

Integrated, flexible indoor/outdoor control unit. 4 Channels, 160W each powers and controls a 360XL Single Emitter, or 360X Double Emitter, or up to four 60XL units

ORDERING INFO

EDGE 1200-MICPB ADDON	Add on MP3 / PTT Microphone plate, cabinet not included
120976-01	Cellular modem kit
117737-00	Satellite terminal kit
117740-00	Optional solar panels



16262 W Bernardo Dr.
San Diego, CA, 92127
858 676 1112
info@genasys.com
www.genasys.com

© 2025 Genasys Inc.



SCAN

genasys.com