

# LRAD® 100X

Lightweight, Portable, Long Range Communication



# ORDERING INFORMATION

LRAD-100X-BLK* BASE SYSTEM	LRAD 100X battery powered portable long range communication system
LRAD-100X-BLK-MAG	LRAD 100X system includes magnetic base and accompanying mounting yoke to secure the LRAD to metallic surfaces including vehicle roofs
LRAD-100X-BLK-STUD	LRAD 100X system includes yoke for mounting on tripod (purchased separately)

# **INCLUDED ACCESSORIES**

MP3 Player	MP3 player records/plays up to 2GB of messages and tones
Record on the Fly Mic	Microphone with record and playback feature for immediate playback
MP3 Auxiliary Cable	Allows connection to any audio device with a headphone jack
USB Cable	USB cable for downloading files to the MP3 player
Li-Fe-PO4 Battery	8-Hour Lithium Iron Phosphate rechargeable battery
Battery Charger	AC powered battery charger with LED battery charge status display
Hard Case	Watertight, dust proof, rugged enclosure for storage and transport
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# **OPTIONAL ACCESSORIES**

Wireless Kit	Windows assertion of LDAD systems are supported as 200 meters 25 mm share inch assertion attended
Wireless Kit	Wireless operation of LRAD systems over ranges up to 300 meters, 35mm phone jack connects to a standard MP3 audio device (UHF, US only). Lightweight hypercardioid headset microphone is included
HD Action Camera	During LRAD operation, record High Definition, date/time stamped video and audio with this compact, rugged digital camera
AC Power Supply	Can be powered by a standard AC source in place of the battery
Cigarette lighter/plug cable	Cigarette lighter/plug cable powers LRAD through 12 VDC cigarette lighter
Stud Mount	Mounting yoke kit for LRAD-100X, compatible for LRAD tripods (tripod not included)
Stud Kit	Weldment Stud Kit
Medium-Duty Tripod Kit	Includes reusable hard case
Table Mount Kit	Fixed mount for flat surfaces
Tactical Pack	Rugged backpack for operation of the LRAD 100X within the pack or on the move
Front Carry Pack	For mobile or stationary operation of the LRAD 100X

# DIRECTIONALITY, POWER & RANGE

- Powerful, intelligible voice communications up to 600 meters
- Focused, directional broadcasts for targeted communication
- Safely communicate beyond standoff distances
- Create instant acoustic standoff perimeter
- Deliver clearly heard and understood communications into buildings & vehicles

#### **FEATURES**

- > 8-hour rechargeable battery
- Operate easily with gloves or MOPP gear
- Optional power sources
- Simple operator interface
- Water-resistant
- HD Camera (optional) Quick connect/disconnect camera and mount for recording video and audio during LRAD operation. Includes 4GB micro SDHC for up to 210 minutes of date and time stamped recordings

# **MARKETS SERVED**

- Law Enforcement
- Defense
- Commercial Security
- Critical Infrastructure Security
- Maritime
- Homeland Security
- > Fire Rescue & Incident Management
- Port & Border Security
- Emergency Warning
- Mass Communication
- Wildlife Preservation & Control



# SELF-CONTAINED, PORTABLE

The LRAD 100X is a self-contained. portable communication system for on-scene and tactical communication.

**COMMUNICATION SYSTEM** 

With unparalleled vocal clarity and up to 30db louder than bullhorns, megaphones, and vehicle P.A. systems, the LRAD 100X is also four to six times louder than other acoustic hailers of comparable size and weight. LRAD's optimized driver and wavequide technology ensures every message is clearly broadcast, heard and understood, even above engine, crowd, siren, and background noise.

The LRAD warning tone commands attention to the voice messages that follow and provides a safer alternative to non-lethal and kinetic measures for changing behavior.

# **LRAD-100X**







Magnetic Roof Mount





& Receiver

# LRAD® 100X

Lightweight, Portable, Long Range Communication

# ACOUSTIC PERFORMANCE

Maximum Peak Output	140dB SPL @ 1 meter, C-weighted
Maximum Continuous Output	137db SPL @ 1 meter, A-weighted
Sound Projection	+/- 15° @ 1kHz/-3dB
Communication Ranges	Maximum range up to 600 meters in ideal conditions. Operational range up to 250 meters over 88dB of background noise. Ranges based on continuous output.

### ENVIRONMENTAL PERFORMANCE<sup>1</sup>



Hot Operating Temperature	MIL-STD-810G, Method 501.5, Procedure II, Design type Hot, 60°C
Cold Operating Temperature	MIL-STD-810G, Method 502.5, Procedure II, Design type Basic Cold, -33°C
Hot Storage Temperature	MIL-STD-810G, Method 501.5, Procedure I, 70°C
Cold Storage Temperature	MIL-STD-810G, Method 502.5, Procedure I, -40°C
Operating Humidity	MIL-STD 810G, Method 507.5, Procedure II – Aggravated Cycle
Rain	MIL-STD-810G, Method 506.5, Procedure I, Blowing rain
Salt Fog	MIL-STD-810G, Method 509.5
Shipboard Vibration	MIL-STD-167-1A
Shipboard Shock	MIL-S-901D, Class I, Shock grade B
Random Vibration	MIL-STD-810G, Method 516.6, Procedure I, (Functional shock)

TESTED BY NATIONAL TECHNICAL SYSTEMS (NTS) FOLLOWING MIL-STD-810G, MIL-STD-167-1A & MIL-S-901D.

# **MECHANICAL**

Dimensions	14" W x 14" H x 6.5" D (35.6 x 35.6 x 16.5 cm)
Weight	15 lbs.(6.8 kg) with battery, accessories and cables
Construction	Injection molded, impact resistant polymer, 6061 Aluminum

# **ELECTRICAL REQUIREMENTS<sup>2</sup>**

Power Consumption	Typical Power consumption 85 Watts (With tone) Normal power consumption 20 Watts (With voice content)
Power Input	10.8 to 16.8 VDC, Included rechargeable 13.2VDC Li-Fe-PO battery for up to 2 hours of continuous operation at maximum volume on a full charge.

<sup>&</sup>lt;sup>2</sup>BATTERY LIFE UP TO 2 HOURS OF CONTINUOUS OPERATION AT MAXIMUM TONE ON A FULL CHARGE. ADAPTERS AVAILABLE FOR AUTO CIGARETTE LIGHTER AND FOR 2590 RECHARGEABLE MILITARY BATTERY.

# **SAFETY**<sup>3</sup>

MII - STD-1474D

# **ELECTROMAGNETIC COMPATIBILITY (EMC)**4

CE

FCC Part 15 class A radiated emissions, CE







<sup>3</sup>MIL-STD-1474D STANDARD ESTABLISHES ACOUSTICAL NOISE LIMITS AND PRESCRIBES TESTING REQUIREMENTS AND MEASUREMENT TECHNIQUES FOR DETERMINING CONFORMANCE TO THE NOISE LIMITS SPECIFIED THEREIN.

<sup>4</sup>REQUIREMENTS FOR THE CONTROL OF ELECTROMAGNETIC INTERFERENCE CHARACTERISTICS OF SUBSYSTEMS AND EQUIPMENT.