



ORDERING INFORMATION

LRAD-1000RX LRAD RX remote long range communications pan and tilt system

INCLUDED ACCESSORIES

Day Camera	Composite video camera with adjustable boresight mount 26x optical zoom lens.
Connection and Cable Kit	Provided to provide for configuration and test. Cables for permanent installation not included.
Surveillance Software	The RX is controlled across a TCP/IP, network, allowing it to be easily integrated with other network enabled sensors. The included LRAD Controller software allows for full command and control of all LRAD-RX functions, including camera zoom controls, movement and broadcast of live or prerecorded sounds. The LRAD Controller also provides detailed health diagnostics from the LRAD-RX.

OPTIONAL ACCESSORIES

Software API	The available software Application Programming Interface allows systems integrators to quickly and easily develop applications that allow for the LRAD to receive position and tracking commands from other networked sensors. As part of an integrated system, the LRAD can be programmed to respond to alarms or to follow radar tracks to automatically respond to potential threats.
Commissioning	Check installation, wire connection and system start up to confirm proper operation (Required for Warranty)
Maxabeam Kit	12 million candlepower in a lightweight, mounted searchlight, illuminates targets up to 3,500 meters away
Steel Pedestal	18" galvanized steel mounting pedestal, available in various heights

DIRECTIONALITY, OUTPUT & RANGE

- › Powerful, intelligible communication up to 3,000 meters
- › Safely communicate beyond stand-off distances to determine intent
- › Clear, long-range directional communication
- › Creates instant acoustic standoff perimeter

FEATURES

- › Remotely control all functions through TCP/IP connection
- › Respond to a threat from a safe environment
- › Low power requirements
- › All-weather use
- › Fixed infrastructure
- › Simple to operate - Increased coverage with single operator
- › Increased security coverage
- › Improved operational efficiency
- › Increased response capabilities
- › Safe alternative to non-lethal deterrent options

MARKETS SERVED

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

INTEGRATED SURVEILLANCE FOR VESSELS, COASTAL, BORDER, PORT & CRITICAL INFRASTRUCTURE SECURITY

The LRAD-RX is designed for integrated applications ranging from maritime vessels to coastal, border and port security solutions. It can be controlled remotely across an IP network enabling system operators to respond to potential threats from a safe environment while creating a complete unmanned perimeter security solution.

The LRAD-RX accepts motion commands from the LRAD Controller software through a point and click interface. Simply click on a target and the LRAD will move to center its acoustic beam onto the target. A standard USB joystick (not included) can also be used to control the LRAD's motion. The LRAD Controller's easy to use interface allows a user to visually spot a potential threat on the live video feed, aim the LRAD and deliver a powerful warning message or alert tone from the safety of a secure control room. The LRAD's ability to immediately interact with a potential threat gives security personnel time to assess a situation and escalate response if necessary.

Featuring an integrated camera, high-intensity searchlight (optional) and robust, IP-address-able full pan and tilt drive for precise aiming and tracking, the LRAD-RX can also be integrated with radar to provide automated intruder alerts. Because of its automated capabilities, the LRAD-RX reduces manpower and false alarms while providing a highly effective, cost efficient remote first responder security solution.

ACOUSTIC PERFORMANCE

Maximum Continuous Output	153dB SPL @ 1 meter, A-weighted
Sound Projection	+/- 15° at 1 kHz/-3dB
Communications Range	Highly intelligible voice messages over distances up to 3,000 meters; max range of 1,250 meters over 88 dB of background noise. 6+ dB above background noise is based on field trials conducted by independent sources.

ENVIRONMENTAL PERFORMANCE¹

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 514.6, Wheeled vehicles
SRS Shock	MIL-STD-810G, Method 516.6, Procedure I, (Functional shock)

¹Tested by the U.S. Navy following MIL-STD-167-1A & MIL-S-901D.

MECHANICAL

Dimensions	56.1" W x 64.7" H x 21.5" D (142.5 cm x 164.3cm x 54.6cm)
Weight	340 lbs. (154kg)
Construction	Molded low smoke composite, 6061 Aluminum, 316 Stainless hardware
Positioner Velocity	420° non-continuous rotation (+/- 210°), +95° to - 95° tilt
Positioner Resolution	0.01 degrees

ELECTRICAL REQUIREMENTS

Power Consumption	Peak power consumption 1350 Watts
Power Input	90-260VAC 50/60Hz
Control Interface	Discrete inputs for power and communications, Stainless steel MIL-DTL-D38999 ² connectors
Communication Interface	Ethernet Interface with TCP/IP protocol, Proprietary LRAD control command language, Graphical user interface included for Windows XP/ Vista based systems, Software development tools available.

²Specification covers series of miniature, high density, bayonet, threaded, or breech coupling, circular, environment resistant, electrical connectors using removable crimp or fixed hermetic solder contacts, and are capable of operation within a temperature range of -65°C to +200°C.

ELECTROMAGNETIC COMPATIBILITY (EMC)⁴

FCC Part 15 class A radiated emissions, CE

⁴Requirements for the control of electromagnetic interference characteristics of subsystems and equipment.

INTEGRATED CAMERA

Lens	26x Zoom, F=2.5 mm (WIDE) to 91 mm (TELE), F1.6 to F3.8
Zoom Movement Speed	Optical WIDE/Optical TELE 4.0 sec
Angle of View (H)	54.2 degree (WIDE end) to 2.2 degree (TELE end)
Min. Illumination	1.0 lux/1/60 sec (NTSC), 0.07 lux/1/4 sec (NTSC)
Outdoor Enclosure	Watertight, solar shield, nitrogen filled