



TECHNICAL DATA SHEET

LRAD 100-X

Long Range Bird Control Device

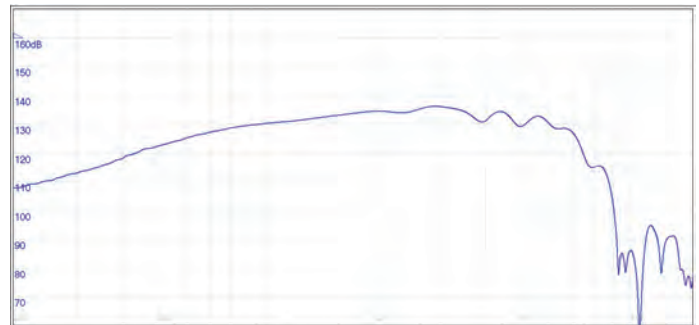
The LRAD 100X is a self contained, handheld, portable acoustic emitter that outperforms omnidirectional bioacoustics, pyrotechnics and gas cannons for effective, long range bird and wildlife deterrence with reduced risk of habituation.

- System:** Long Range Acoustic Device model 100-X
- Application:** Extended range, bioacoustic bird & wildlife control for airfields, industrial impoundments, oil & gas waste ponds, landfills, & other large wildlife exclusion areas
- Configuration:** Portable, handheld manual system
- Emitter:** Waterproof, high impact injection molded polymer construction and 6061 Aluminum to MILSPEC 810G
- Accessories:** Mp3 player includes pre-loaded bird distress calls and supports .wav and .mp3 formats, ruggedized, 1GB capacity; Shure handheld microphone for verbal commands
- Performance:** 30 degree (\pm 15 degree) focused primary beam; effective range to 1/2 mile; variable volume to 136 dB
- Power:** 50 watts power consumption (normal)/ peak 75 watts; 10.8 to 16.8 VDC, included rechargeable 13.4 VDC Li-Fe-PO battery for up to 2 hours of continuous operation
- Physical:** 14" W x 14" H x 6.5" D; 15 lbs with battery, accessories and cables



UPPER: The LRAD 100-X is a lightweight, durable, easily transported and operated handheld wildlife control device that emits a wide range of bioacoustic and other sounds at extended ranges.

LOWER: LRAD 100-X Frequency Response



DeTect is an authorized application specialist and distributor for LRAD systems for bird and wildlife control. The units are military grade systems and can use either recorded distress calls (bioacoustics) or various sounds (such as sirens, bells, etc) at variable levels to disperse wildlife in a controlled manner at close-in or extended ranges (up to 1000 meters). System options include vehicle and gimbal mounts, and the technology can be integrated with a MERLIN detect & deter Bird Control Radar System to provide automated wildlife control and exclusion.



DeTect's MERLIN detect & deter bird control radar system is an advanced radar system designed to monitor user-defined bird and wildlife control zones, automatically activating bird deterrent devices to deter and harass birds entering restricted areas. The system is based on DeTect's proven MERLIN Avian Radar System technology that is used by the USAF, NASA and airports worldwide to detect and monitor hazardous bird activity on and around airfields for bird-aircraft strike hazard management. MERLIN detect & deter applications include control of birds at industrial waste impoundments, oil & gas drilling frac ponds, landfills, stormwater retention basins, crop fields and any site from small to large that requires automated bird control.

The technology includes the capability to custom define the multiple, zoned control perimeters within the MERLIN software and any bird targets detected entering the control area, will trigger activation of the deterrent devices. Systems are available as fully self-contained and powered fixed, skid mounted or mobile units and multi-unit networks can be provided for complete, zoned coverage of large areas. The system interfaces with a wide variety of non-lethal bird deterrent devices including bioacoustics and propane cannons as well as the Long Range Acoustic Device (LRAD) and DeTect's Programmable Bird Control Laser system. MERLIN detect & deter uses automated randomized deterrent selection that varies the specific deterrent and volume applied with each response to reduce habituation. The system also includes a complete library of standard recorded acoustic deterrent files or can use client-provided files (supports .wav, .mpg and other formats).

MERLIN detect & deter is a complete turnkey system that includes the bird control radar master unit (radar sensor, radar tower, processor equipment, software and equipment enclosure), deterrent devices, installation, start-up and support, or can be integrated with existing deterrent systems. Systems provide reliable bird & wildlife detection and deterrent hazing in virtually any terrain, over water and weather conditions, including in fog, rain and snow. MERLIN detect & deter systems are fully remote controllable and networkable through TCP/IP, wide area wireless and other protocols.



Skid-mounted single MERLIN detect & deter system for small gas processing facility waste pond resident & migratory bird control (Colorado USA).

All equipment is industrial-grade and designed for use in outdoor and extreme environments with exceptionally high reliability. The MERLIN radar and processor equipment is housed in a NEMA outdoor rated environmentally controlled enclosure that is pad mountable. Each system includes an available full 3 year labor and parts warranty and is supported 24-7 by DeTect's Technical support team that includes applications support experts (biologists, radar ornithologists and engineers). MERLIN technology has been tested and proven at installations throughout the U.S., Canada, Europe and Africa and represents the most advanced avian radar and bird control technology on the market.

Satellite deterrent unit trailer with LRAD & laser units.

