



# LEADER Search

WIRELESS AND/OR WIRED LIFE DETECTOR

## The world's only wireless listening device for search operations



**Sunshade**  
Ideal for shading the screen in bright conditions



**Magnets & Spikes**  
To allow use on metal debris, loose soil, etc., by attaching to the bottom of the sensors



**Hand strap**  
Offers an ergonomic grip when using as hand held. Also comes with neck strap



**Orange carrying case**  
Rugged, waterproof and shockproof

## ADVANTAGES THAT MAKE THE DIFFERENCE

### > CONTROL BOX

- Lightweight and compact:
  - > 1.3 kg (2.9 lbs)
  - > W 240mm x H 152mm x D 51mm (W 9 1/2" x H 6" x D 2")
  - > Extra-large full colour screen (5" – 800x480 px) with high luminosity

### > INTERFACE

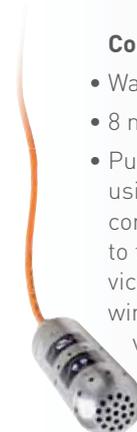
- User friendly menu and graphics
- Yellow and red peak tracers to identify the highest peak
- Battery level always shown



### > LISTENING MODE WITH:

#### Seismic Sensors:

- Usable with 1 to 6 seismic sensors to cover a wider area
- Up to 3 wireless sensors for a general use of about 30m (98') on the field with over 100m (330') range each in open field
- Up to 3 wired sensors with 8m (26') of cable for each sensor
- Adjustable high and low frequency noise filters to eliminate unwanted noises from pneumatic drills, breakers, vehicles, wind, power cables, etc.



#### Communication Probe:

- Waterproof IP67
- 8 m of cable length (26')
- Push to Talk function using the two way communication probe to talk with buried victims (included in full 3 wireless + 3 wired sensors versions. Optional for other versions)

### > HEADSET

- One or two headset option for use in seismic listening or for 2-way victim communication when using the communication probe
- High performance noise reducing headsets with noise cancelling boom microphone for clear communication with victims
- Optional 2<sup>nd</sup> noise-reduction stereo headset

### > POWER SUPPLY

- Lithium Ion polymer (LiPo) rechargeable battery pack to supply control box and wired sensors
- Standard running time of about 5 hours (Recharge time of 3.5 hours)
- Rechargeable battery pack - small, lightweight – fits easily in pockets - W.63 x D.127 x H.25mm (2 1/2" x 1" x 5")
- Interchangeable with LEADER Cam, LEADER Hasty and LEADER Scan (available end of 2014)
- Spare clam shell battery pack holds 10 AAA batteries (not included). Makes the device functional even when conventional battery charging is not possible!
- Wireless sensors with a running time of about 8 hours powered by 3 AAA batteries (not included)

**2-year guarantee**



# TECHNICAL SEARCH TOOLS FOR USAR RESPONSE

DESIGNED FOR TECHNICAL SEARCH SPECIALISTS BY TECHNICAL SEARCH SPECIALISTS. THESE INNOVATIVE PRODUCTS ARE **LIGHTWEIGHT, ERGONOMIC** AND **EFFICIENT** TO GIVE THE **GREATEST ADVANTAGE IN ALL PHASES OF SEARCH** (HASTY, PRIMARY AND SECONDARY) TO FIND ENTOMBED VICTIMS IN COLLAPSED STRUCTURES, LANDSLIDES, AVALANCHES... FOLLOWING DISASTERS.

## LEADER Search - Wireless and/or wired Life Detector



LEADER Search is used in rescue operations to **detect** and then **locate the position of entombed victims**. LEADER Search will **pinpoint and detect the slightest of vibrations** by effectively turning the entire structure into a giant microphone. Featuring **3 wireless seismic sensors** for a general use of about 30m (98') on the field

with a range in excess of 100m (328') in open field, and the **additional option of up to 3 wired sensors**, the LEADER Search delivers unequalled flexibility, sound quality and sound propagation. **Designed for rapid deployment and mobility of use** (no cable), LEADER Search quickly identifies sound sources and then locates the precise positions of potential victims.

## LEADER Cam - Search Camera with Communication



LEADER Cam is used during rescue operations to **visually locate and communicate with burried victims**. The **lightweight control box**, linked to a **flexible telescopic camera probe**, is designed to **help in identifying with accuracy the positional location of buried victims** in difficult to enter confined spaces,

to **communicate with them, evaluate and monitor their condition**. The telescopic probe extends between **1.1m and 2.40m (3' 6" to 8')** or a versatile **1m to 4m (3' 6" to 13')** option to allow **visual inspection of inaccessible areas** either at **height or sub-terrain and confined space**.

## LEADER Hasty - Wireless Life Detector & Search Camera



The **WORLD'S only multi-functional HASTY tool: SEE, SEARCH and SAVE** with just one tool!

LEADER Hasty combines:

- A **search camera mode for a visual and precise location of victims** with an ultra-lightweight camera probe.
- A **listening seismic detection mode** for use with up to **two wireless sensors for detecting signs of life**.

The ability to **switch instantly between "visual search mode" and "wireless audible search mode"** in one deployment vastly improves the effectiveness and mobility of the rescuer and greatly reduces the time taken to find victims while increasing their chance of survival.

## LEADER Scan - Life search & Breathing detection device



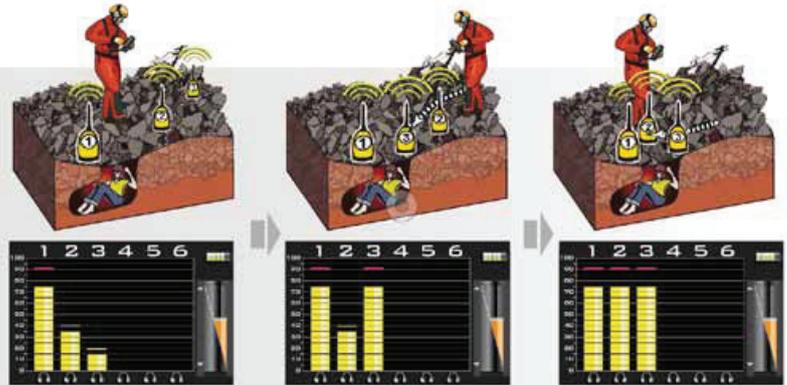
The world's only patented UWB device capable of detecting and locating the slightest of chest movements produced by breathing!

Using a stabilized **UWB (Ultra Wide Band)** technology, LEADER Scan **interrogates the**

**sub-surface to identify the victim's location by detecting movements**. Its superior sensitivity means the device can detect both irregular movements, such as **finger movement**, and **regular movements, such as chest movements from breathing**.

# OPERATIONAL EXAMPLES

**LEADER Search** allows fast victim detection and then, by introducing more sensors, simple and fast triangulation to locate the victim. By systematically moving sensors within a virtual grid across the disaster area, and always leaving the highest peak sensor in place, the victim location is identified when all sensors peak at the highest equal level.



**LEADER Cam** cable reel versions can also be used for inspections of vessels, wells, cavities, crevices etc., to a distance of 90m or 180m (295' and 590'). A waterproof version is available for deep entry into many environments.



**LEADER Hasty** allows the rescuer to detect, locate and communicate with use of a single control box for maximum efficiency! Its dual function also makes it very useful on "Primary" and "Secondary Search" phases: a rescuer can now single-handedly, or with the help of search team members, accomplish a Hasty Search and/or a more detailed investigation of a catastrophe area with this unique multi-functional control box. LEADER Hasty will allow a quick conclusion for reconnaissance, size up, and triage.



**LEADER Scan** has a rugged plastic case containing the sensor which is moved systematically on the rubble within a virtual grid across the disaster area to map underground objects, while an operator monitors the progress from a control box. It is dedicated more realistically to Secondary search as UWB detects movement directly in the path of the sensor.

The signal shape is basically an inverted cone that precisely detects reflection from moving objects or breathing characteristics into an about 5200 m<sup>3</sup> (183,600 ft<sup>3</sup>) search volume.

