



# LEADER Search

Wireless equipment: Unique worldwide!  
Detection technology : Seismic

## WIRELESS AND / OR WIRED SEISMIC SENSOR



### KEY POINTS

- WIRELESS technology for fast set up and ease of movement: no more cables getting caught in the debris!
- 1 to 6 connectable seismic sensors
- Up to 3 wireless sensors, each with a range of 100 m
- Up to 3 wired sensors, each with 8 m of cable
- Compact and lightweight
- Ergonomic control box
- Intuitive navigation interface and menu

### INCLUDED ACCESSORIES:



**Sunshade**  
Ideal for search in bright sunlight



**Hand strap**  
Provides a practical and ergonomic grip. Shoulder strap also supplied.



**Magnets and spikes**  
To allow use on metal debris, loose soil etc., by fixing them to the base of the sensors.



**Responder's backpack**  
To easily carry the sensors and control box on a rescue mission



**Transport case**  
Rugged, waterproof and shockproof

# THE ADVANTAGES THAT MAKE THE DIFFERENCE

## AN ERGONOMIC CONTROL BOX :

- Lightweight
- Compact
- Extra-wide colour screen
- High brightness screen for viewing in full daylight
- Menu and intuitive navigation.
- Run time: 5 hours
- Easily replaceable lightweight compact rechargeable battery.
- Battery compatible with LEADER Hasty, LEADER Cam and LEADER Scan control boxes.
- Backup pack for 10 AAA batteries (not supplied). Makes the device functional even if the battery cannot be charged during rescue operation.



## A MULTIFUNCTION DEVICE :

FUNCTION*	IN SEISMIC SEARCH MODE
 Audio headphones volume adjustment*	Yes
 Microphone volume adjustment*	Yes
 Push to Talk*	Yes
 Screen brightness adjustment*	Yes
 Left- and right-handed use*	Yes
 Noise reduction filter adjustment* (low and high)	Yes
 Listen to each seismic sensor individually*	Yes
 Mono or Stereo listening mode* (selected sensors heard in one or both ears)	Yes
 Display trackers* to identify the strongest movement peak	Yes
 Wireless sensors' charge indicated	Yes
 Battery charge indication	Yes

\*Usable simultaneously



## HIGH SENSITIVITY LISTENING MODE :

### WIRED AND / OR WIRELESS SEISMIC SENSORS :

- 1 to 6 seismic sensors can be connected to detect sounds from victims such as scratching, knocking, cries, etc.
  - Up to 3 wireless sensors with a range of about 30 m in the field (no cable management because equipment is wireless)
    - Range in excess of 100 m in open field
    - Sensor battery life: approx. 8 hrs
  - Up to 3 wired sensors, each with 8 m cable
- Adjustable noise reduction filters to eliminate unwanted low/high noises from pneumatic drills, vehicles, the wind, electric power cables, etc.
- Mono or Stereo mode for listening to the selected sensors in one or both ears

### WATERPROOF COMMUNICATION PROBE :

- Included in the complete version (3 wired + 3 wireless sensors) (optional in other versions).
- Waterproof to IP67
- With 8 meter cable
- Push to Talk function using the probe's microphone and speaker to communicate with buried victims

## HIGH-PERFORMANCE NOISE-REDUCING AUDIO HEADPHONES :

- Noise-reducing design to provide great listening quality without disruptions.
- Microphone with integrated noise reducer for clear communication with victims
- 1 or 2 sets of headphones can be connected simultaneously for :
  - either listening to the sensors in seismic listening mode
  - or communicating with victims through the communication probe.

### TECHNICAL DATA

PAGES 38 & 39



## AVAILABLE VERSIONS

Contents of case	1 control box + 2 wired sensors	1 control box + 3 wired sensors	1 control box + 2 wireless sensors	1 control box + 3 wireless sensors	1 control box + 3 wired sensors + 3 wireless sensors
Ref	D11.04.330	D11.04.331	D11.04.332	D11.04.333	D11.04.334
Control box	1	1	1	1	1
Antenna	-	-	1	1	1
Pair of noise-reducing headphones	1	1	1	1	1
Sunshade	1	1	1	1	1
Shoulder strap	1	1	1	1	1
Hand strap	1	1	1	1	1
Wired seismic sensors	2	3	-	-	3
Wireless seismic sensors	-	-	2	3	3
Communication probe	option	option	option	option	1
Spikes for sensors	2	3	2	3	6
Magnets for sensors	2	3	2	3	6
Battery	1	1	1	1	1
Charger	1	1	1	1	1
International connection adaptor kits	1	1	1	1	1
Spare battery pack (without batteries)	1	1	1	1	1
Orange transport case	1	1	1	1	1
User manual	1	1	1	1	1

## CONTROL BOX CHARACTERISTICS

CONTROL BOX	
Dimensions	L 24 x W 15.2 x H 5.1 cm
Control box weight without battery	950 g
Control box weight with battery	1.225 kg
Control box material	Polypropylene
Anti-shock bumper	Rubber belt around the thickness
Shock resistance	Drop test performed up to 2 m.
Control box water and dust resistance	IP54
Run time	5 hours
Startup time	< 1 minute
Keyboard	Phosphorescent
Connections	3 metal ports for connecting headphones, antenna, communication probe or wired sensors
Antenna for interconnection of seismic sensors	Removable and orientable for a range of up to 100 m in unobstructed space
Connector water and dust resistance	IP68
Operating temperatures	From -10° to +60°C
Storage temperature	From -40° to +70°C

SCREEN	
Type	TFT LCD
Resolution	5" - 800 x 480 px WVGA
Brightness	1000 candela /m <sup>2</sup>
Backlighting	LED
Colours	16-bit RGB
Protection	Transparent thermoplastic: 3 mm colourless scratch-resistant PMMA

# SEISMIC SEARCH EQUIPMENT CHARACTERISTICS

	SEISMIC SENSORS	
	Wireless connection to control unit	Wired connection to control unit
Dimensions with antenna	Height 212 mm x Diameter 90 mm	Height 85 mm x Diameter 90 mm
Weight (with standard cell batteries)	840 g	1400 g
Specificity	Up to 3 sensors with 100 m range each in unobstructed space	Up to 3 sensors, each with 8 m of anti-abrasion high-viz orange cable
Sensor/control box communication frequency	2.4 GHz	-
Water and dust resistance	IP67	
Shock resistance	Yes	
Audio response frequency	1 Hz to 3000 Hz	
Run time	Approximately 8 hrs depending on battery make	-
Individual control of each sensor from control box	Each sensor can be listened to alone or simultaneously with the second sensor.	
Noise-reducing filters adjustable from control box	Low-pass filter: Removes high sounds. Adjustable from 600 to 3000 Hz High-pass filter: Removes deep sounds. Adjustable from 20 to 300 Hz	
Mono or Stereo listening mode	For listening to the selected sensors in both ears, right ear only or left ear only	
On-screen display trackers	Yellow trackers above each bar graph for clear reading of peaks. Red tracker identifies the highest seismic peak, staying on screen for an additional brief period.	

COMMUNICATION PROBE	
Option, except in the 3 wired sensors + 3 wireless sensors version	
Ref	D11.04.337
Material	stainless steel
Diameter	38 mm
Ingress protection	IP67
Microphone/loudspeaker	Yes
Response frequency	300 Hz to 3500 Hz
Cable length	8 m
Cable type	Orange anti-abrasion cable

NOISE-REDUCING HEADPHONES	
Weight	Approx. 430 g
Mono or Stereo	Stereo
Built-in microphone	Yes, to communicate with victims in search camera mode
NRR (Noise Reduction Rating) hearing protection	23 dB
Number of simultaneously connectable pairs of headphones	2 pairs simultaneously connectable, one being optional (supplied with a Y connector for connecting 2 pairs of headphones to the same control box)

## POWER SUPPLY

CHARGER + TRANSFORMER	
Charger dimensions	H 10.5 x W 4.5 x L 3.5 cm
Charger weight	200 g
Charger input voltage	100 - 240 VAC / 50-60 Hz
International connection adaptors	Yes: UK, EU, AUS, USA

CONTROL BOX BATTERY	
Dimensions	L 6.5 x W 13 x H 3 cm
Weight	280 g
Type	4 Lithium Ion Polymer cells. 37 Wh
Capacity	2500 mA/hour
Run time	5 hours
Charging time	3 hours 30 min
Recharging cycles	500
Charging temperature	0° to +45°C
Water and dust resistance	IP54
Battery compatible and interchangeable	Yes with LEADER Hasty, LEADER Cam and LEADER Scan
Charge level indication	Continuously displayed on control box screen

SPARE BATTERY PACK	
Dimensions	L 6.5 x W 13 x H 3 cm
Weight with 10 batteries (not supplied)	300 g
Type and number of batteries required	10 x AAA-LR03 lithium batteries
Run time	Approx. 1 h 30 m depending on battery make

WIRELESS SENSORS POWER SUPPLY	
Type and number of batteries required	3 x AAA - LR03 alkaline batteries
Run time	Approx. 8 hrs depending of the standard cell batteries brand

## TRANSPORT CASE

TRANSPORT CASE	
Material	Rigid impact-resistant polypropylene shell
Suitable for air transport	Integral pressure equalising valve
Dimensions	L 65 x W 51 x H 24.2 cm
Empty weight	7 kg
Loaded case weight (maximum configuration)	25.6 kg
Water and dust resistance	IP67

RESPONDER'S BACKPACK	
Material	Polyester 1200
Dimensions	L 57 x W 47 x D 20 cm
Empty weight	2.5 kg
Colour	Red