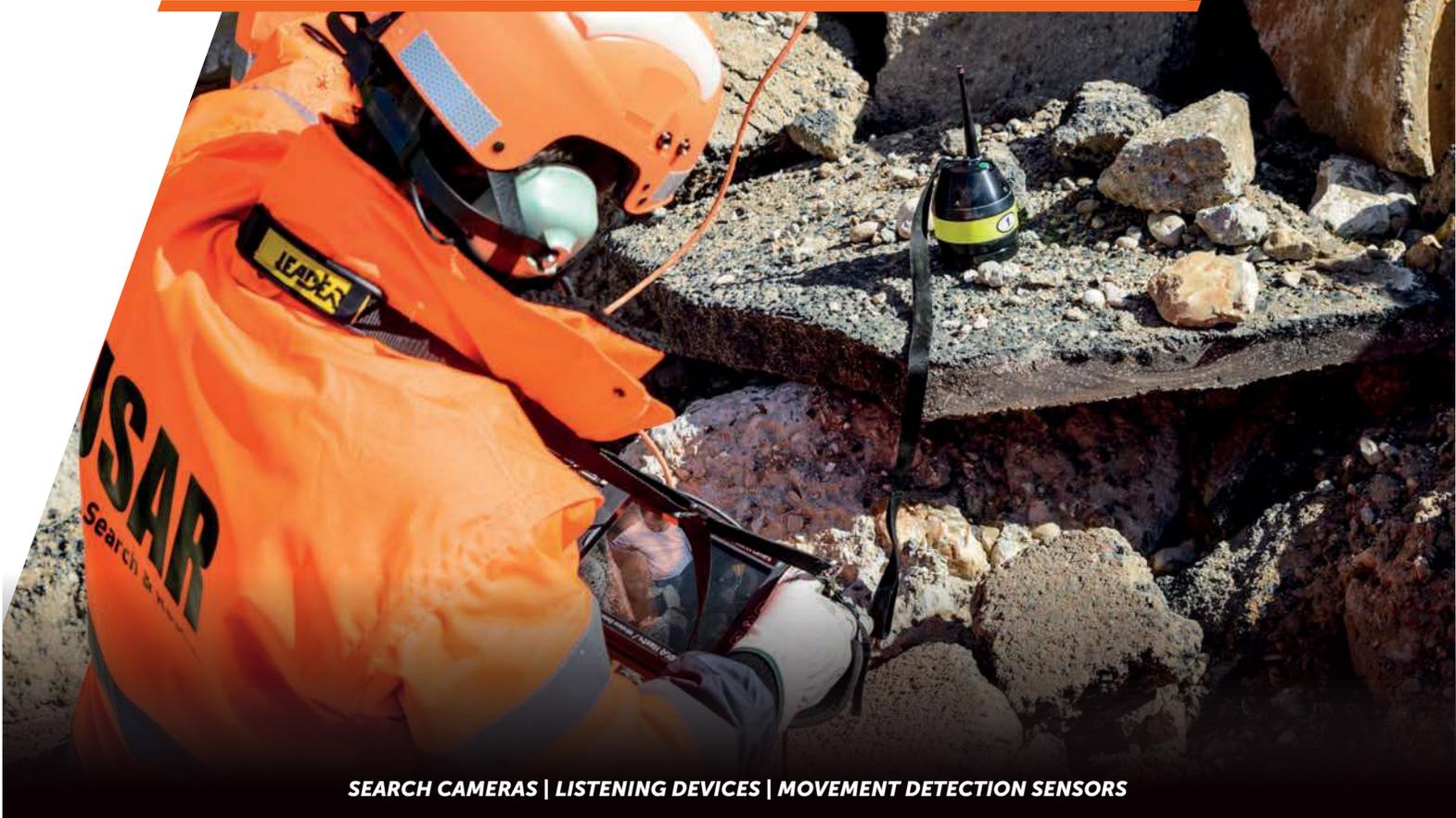# LEADER ®

Fighting for performance

USAR EQUIPMENT

DETECTING AND LOCATING VICTIMS

AUG. 2021

SEARCH CAMERAS | LISTENING DEVICES | MOVEMENT DETECTION SENSORS

CONTENTS
DETECTION AND LOCATION DEVICES TO SEARCH FOR AND RESCUE BURIED VICTIMS

USAR EQUIPMENT

USAR EQUIPMENT (URBAN SEARCH AND RESCUE) DESIGNED WITH AND FOR SEARCH AND RESCUE SPECIALISTS
A COMPREHENSIVE RANGE OF SEARCH EQUIPMENT TO DETECT AND LOCATE BURIED VICTIMS

For over 20 years, LEADER has designed special USAR (Urban Search and Rescue) equipment to speed up the process to rescue victims buried in dangerous or inaccessible areas following structural collapse, landslides, industrial accidents, explosions, fires, etc.

Thousands of LEADER devices are used in harsh environments by an extensive number of SAR teams worldwide. These robust and effective devices are tried-and-tested!
LEADER is the only manufacturer to offer a comprehensive range of USAR equipment to locate buried victims. LEADER has developed its own devices based on its technical expertise combined with real-life experience of USAR equipment: color camera, infrared camera, waterproof camera, seismic sensors, radar sensor.

NEW APPROACH

MULTI-APP AND MONO-APP BOX:
TWO TYPES OF BOX AT THE HEART OF LEADER EQUIPMENT

For some years now, LEADER has offered "single and dual application" search devices, notably the LEADER HASTY which combines camera and listening technologies.
The range has expanded to become more versatile, as all the peripherals can be connected to the same box for "multi-application" uses.

Two types of control box are now available: MONO-APP and MULTI-APP boxes.
Rescuers still benefit from a user-friendly interface, and LEADER devices remain easy to use, whether training or in the field.

■ MONO-APP BOX
MONO-APP is the name given to single application control boxes used to connect a single peripheral dedicated to one application.
Below is a list of devices which used this box and were sold until now. Only LEADER CAM and LEADER SEARCH are still available.

(1) LEADER CAM: Equipment with a camera for a visual search

(2) LEADER SEARCH: Listening device to detect vibrations

(3) LEADER SCAN: Equipment with a radar sensor to detect movements

(4) LEADER HASTY: Visual search or seismic listening. It allowed initial versatility in the field.

■ MULTI-APP BOX:
The MULTI-APP control box was created to connect even more peripherals, allowing multiple applications with the same box.

The MULTI-APP box is the heart of the LEADER MULTISEARCH system. Depending on operational needs in the field, it is used to connect up to 5 interchangeable peripherals in turn:

1 | a color camera (CAM) for a visual victim search,
2 | a thermal imaging camera (TIC) to detect hot spots generated by victims,
3 | a camera which is waterproof to a depth of 295 ft (RD90),
4 | three wireless seismic sensors (SEARCH) to detect noise made by a victim,
5 | a radar sensor (SCAN) to detect movements through materials.

The versatility of the MULTI-APP box allows numerous peripheral combinations. The MULTISEARCH (MS) system is:

▶ Versatile: Up to 5 interchangeable peripherals using the same box!
▶ Configurable: Create a kit suited to your needs in the field,
▶ Upgradeable: Add new peripherals which can be changed at any time to supplement a kit.

Ready-made MULTISEARCH (or MS) kits are listed on page 32 to help users with their decision.

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2 TYPES OF LEADER CONTROL BOX

MULTI-APP: TO MANAGE 1 TO 5 PERIPHERALS
MONO-APP: TO MANAGE A SINGLE PERIPHERAL

■ **MULTI-APP multi-application box to connect up to 5 peripherals in turn:**

▶ 1 color camera (CAM) for a visual victim search,
▶ 1 thermal imaging camera (TIC) to detect hotspots generated by victims,
▶ 1 camera waterproof to 295 ft (RD90),
▶ 3 wireless seismic sensors (SEARCH) to detect noise made by a victim,
▶ 1 radar sensor (SCAN) to detect movements through materials.

Benefits: Allows you to create custom kits. Configurable, as you can add one or several peripherals later. Ready-made kits are also offered on page 32 to help you make your decision.

■ **MONO-APP single application boxes to connect a single peripheral.**

2 models available:

▶ LEADER CAM MONO-APP box to connect the CAM camera.

▶ LEADER SEARCH MONO-APP box to connect SEARCH seismic sensors (2 wired, or 3 wireless + 3 wired). It includes a smaller screen and 6 buttons to directly control each sensor.

These two MONO-APP boxes are not upgradeable, unlike the MULTI-APP box.

FEATURES AND BENEFITS

Lightweight, compact and water-resistant

Boxes which weigh around 3.1 lb (with battery) and water-resistant (IP54) for use in dusty environments or in the rain. Their screens have a 0.1 in anti-scratch transparent protection.

2 screen sizes depending on box type

- MULTI-APP box: 7" screen and high brightness to see in broad daylight. Clear images filmed by the cameras, bar charts generated by the seismic sensors or movements detected by the radar sensor.
- MONO-APP box: 7" screen for LEADER CAM and 5" screen for LEADER SEARCH, smaller as the device is dedicated to listening only, with 6 buttons below the screen to directly control the 6 seismic sensors.

Ergonomic

- Same keyboard at the top and bottom for left-handed/right-handed use,
- Protruding edges to protect the screen if placed facing downwards on the floor,
- Rubber band to absorb impacts.
- Anchor rings at the 4 corners to fasten the neck strap,
- Hand strap to keep a good grip on the box.

Wireless & wired connection

- Wireless connection with 3 SEARCH seismic sensors (328 ft range),
- Wireless connection with the SCAN radar sensor (230 ft range). Alternative wired connection (16 ft) if needed.
- Wired connection for CAM, TIC and RD90 cameras for clear image quality.
- IP68-rated connectors for a waterproof seal. A color code helps the user to connect quickly.

Intuitive to use

Easy to use all features due to a clear menu.

Power supply

Lithium-Ion rechargeable battery (37 Wh). Compact and lightweight, with 2.5 hours running time.
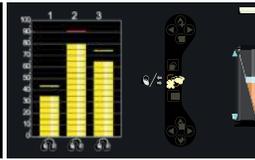
DISPLAYS DEPENDING ON CONNECTED PERIPHERAL

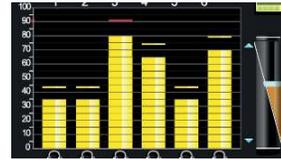| **In visual search mode with CAM and RD90 cameras** | **In thermal search mode with TIC camera** | **In listening mode with SEARCH seismic sensors** | **In movement detection mode with the SCAN radar sensor** |

Display on the MULTI-APP BOX

Display on the MONO-APP BOX

The LEADER SEARCH MONO-APP box is designed for listening. Its screen is smaller and includes buttons underneath to directly control each sensor. The screen displays up to 6 seismic sensors.

FUNCTIONS AVAILABLE DEPENDING ON BOX USED

	CAM (color camera)	TIC (thermal imaging camera)	RD90 (waterproof camera)	SEARCH (seismic sensors)	SCAN (radar sensor)
	VISUAL SEARCH MODE			LISTENING MODE	MOVEMENT DETECTION MODE
MULTI-APP BOX	•	•	•	•	•
LEADER CAM MONO-APP BOX	•				
LEADER SEARCH MONO-APP BOX				•	
Indication of control box battery level	•	•	•	•	•
Adjustment of screen brightness	•	•	•	•	•
Right or left-handed use	•	•	•	•	•
x2 digital zoom	•	•	•		
Adjustment of headset(s) volume	•	•			
Adjustment of microphone volume	•	•			
Push to Talk *(speak with the victim via the speaker/microphone on the camera)*	•	•			
Rotation of screen image up (0°) and down (180°)	•	•	•		
Indication of camera head rotation	•	•			
Indication of camera head LED illumination level	•		•		
Display of thermal viewing modes		•			
Taking photos	•	•	•		
Video recording	• with sound	• with sound	• no sound		
Photo and video gallery to view recordings/images	• with sound	• with sound	• no sound		
Adjustment of noise filters *(low and high)*				•	
Mono or stereo listening mode *(listening to sensors in 1 or 2 ears)*				•	
Individual listening to each seismic sensor				•	
Visualization trackers to identify the highest seismic peak				•	
Indication of wireless seismic sensor charge level				•	
Push to Talk *via the communication probe (MONO-APP box only)*				•	
Option of wired or wireless box connection					•
Indication of box connection status to sensor					•
AUTOMATIC search mode *(automatic analysis of selected depth in 10 ft sections)*					•
REAL-TIME searCHmode *(manual management by rescuer of different parameters to view real-time movements)*					•
Oscillogram function to view frequency of movement					•
Selection of minimum search depth (start)					•
Selection of maximum search depth (end)					•
Indication of weak or strong movements					•
Save movement data					•
Gallery of saved movement data					•

CONTROL BOX ACCESSORIES

Optional headsets
2 noise-canceling headsets with microphone can be connected for:
• Listening mode using SEARCH seismic sensors
• Communication between the rescuer and victim using CAM and TIC cameras.
The first pair is delivered as standard with the control box. The second pair is optional and is connected using the built-in Y-connector.

Sun shade (included with the box)
Ideal for searches in full sunlight. Easy to attach to the box using its elastic bands. It can fold flat, making it easy to store.

Optional battery
Rechargeable battery (Lithium-Ion 37 Wh). 2.5 hours running time. It is compatible with MULTI-APP boxes and MONO-APP boxes for the LEADER HASTY, CAM, SCAN and SEARCH devices.

Charger (included with the box)
Designed for LEADER batteries. Able to recharge them in 3.5 hours. Supplied with international adapters.
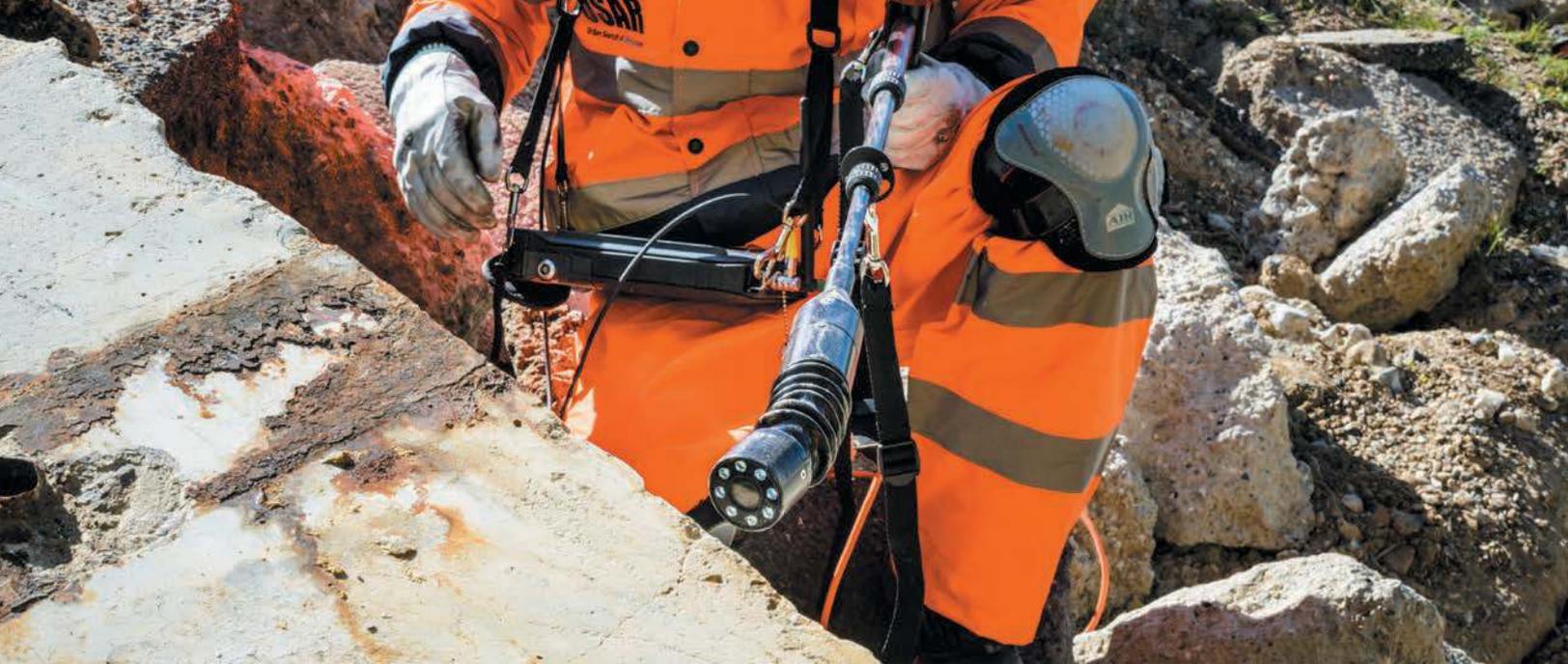

Back-up battery pack (included with the box)
Can hold 10 x AAA batteries (not supplied). Allows you to use the control box when all batteries are out of service.

Neck strap (included with the box)
Includes hooks to fasten to the 4 corners of the box to allow the rescuer to work hands-free. The screen is kept facing upwards, so the rescuer always has it in view.

CAM PERIPHERAL: COLOR CAMERA
FOR VISUAL SEARCH AND COMMUNICATION WITH THE VICTIM

The color camera is used to inspect inaccessible areas up high or confined spaces which are difficult to access. Once the victim has been located, the built-in microphone and speaker make it possible to communicate with them. The CAM camera head can be tilted and it is robust and waterproof.

It is detachable and depending on operational requirements, it can be connected to:

▶ a 12 ft telescopic pole
▶ a 82 ft cable
▶ a 295 ft reel-mounted cable
▶ two 295 ft reel-mounted cables for a total length of 590 ft

The CAM camera head can be connected to the following boxes:

🔺 **MULTI-APP BOX**   🔺 **MONO-APP BOX**

CAM FEATURES AND BENEFITS

Tiltable head
Head can be tilted 170° (85° left, 85° right). 260° field of vision.

Camera protection
The head has scratch-proof sapphire glass to protect the camera lens.

Cushioned impacts
Flexible camera hinge to cushion impacts.

Waterproof head
Waterproof to a depth of 6.6 ft (once the camera is fitted with its plug) for searches in very damp environments or underwater.

LED lighting
Adjustable lighting with 8 intensity levels.

Communication
Built-in microphone and speaker to communicate with the victim using Push to Talk (PTT).

CAM AVAILABLE FUNCTIONS

Control box screen display in visual search mode with the CAM color camera

Once the CAM color camera is connected to the control box, it offers the following functions:

FUNCTIONS	CAM (COLOR CAMERA)
Indication of control box battery level	•
Adjustment of screen brightness	•
Right or left-handed use	•
x2 digital zoom	•
Adjustment of headset(s) volume	•
Adjustment of microphone volume	•
Push to Talk (speak with the victim via the speaker/microphone on the camera)	•
Rotation of screen image up (0°) and down (180°)	•
Indication of camera head rotation	•
Indication of camera head LED illumination level	•
Display of thermal viewing modes	NA
Taking photos	•
Video recording	• with sound
Photo and video gallery to view recordings/images	• with sound

CAM ACCESSORIES

Telescopic pole *(included depending on the chosen kit)* Connects the CAM camera to the control box. Ultra-lightweight carbon fiber pole for optimal weight/strength ratio (3.7 lb without camera). 3.7 m unfolded/1.2 m folded. IP67-rated connector which makes it waterproof once the camera is connected.

Extension leads
82 ft or 295 ft extension leads which can be used with the CAM camera head. It is possible to link two 295 ft reels for a total length of 590 ft, which is useful for searches in wells, crevasses or any other inaccessible space.

Hinged arm (supplied with the pole)
Accessory used to fasten the control box to the pole and adjust its position.

TIC PERIPHERAL:
THERMAL IMAGING CAMERA
FOR SEARCHES TO DETECT
HOT SPOTS & COMMUNICATION WITH THE VIC-
TIM

The TIC is a tiltable thermal imaging camera which is robust and waterproof.
It can be used to drastically speed up a victim search by detecting the warmth of their body.

Uses: Reconnaissance, searches in dark confined spaces, dusty environments, smoky environments, etc.

It is detachable and depending on operational requirements, it can be connected to:
▶ a 12 ft telescopic pole
▶ a 82 ft cable
▶ a 295 ft reel-mounted extension lead
▶ two 295 ft reel-mounted extension leads for a total length of 590 ft

The TIC thermal imaging camera connects to the MULTI-APP box:

TIC FEATURES AND BENEFITS

Tiltable head
Head can be tilted 170° (85° left and 85° right). 226° field of vision.

Camera protection
The head has a germanium window to protect the infrared module.

Cushioned impacts
Flexible camera hinge to cushion impacts.

Waterproof head
Once the camera is fitted with its plug, it is waterproof for searches in very damp environments.

Communication
Built-in microphone and speaker to communicate with the victim using Push to Talk (PTT).

Temperature range
Temperatures detected from 0 to 120°C with a 160x120 pixel resolution sensor to detect the presence of a body.

TIC AVAILABLE FUNCTIONS

Control box screen display in thermal visual search mode with the TIC head. 3 color modes:
Multicolor, Hot black and Hot white.

Once the TIC camera is connected to the control box, it offers the following functions:

FUNCTIONS	TIC (THERMAL IMAGING CAMERA)
Indication of control box battery level	•
Adjustment of screen brightness	•
Right or left-handed use	•
x2 digital zoom	•
Adjustment of headset(s) volume	•
Adjustment of microphone volume	•
Push to Talk (speak with the victim via the speaker/microphone on the camera)	•
Rotation of screen image up (0°) and down (180°)	•
Indication of camera head rotation	•
Indication of camera head LED illumination level	NA
Display of thermal viewing modes	•
Taking photos	•
Video recording	• with sound
Photo and video gallery to view recordings/images	• with sound

TIC ACCESSORIES

Telescopic pole *(included depending on the chosen kit)*

Connects the control box and the TIC camera. Carbon fiber pole for optimal weight/strength ratio (3.7 lb without camera). 3.7 m unfolded/1.2 m folded. IP67-rated connector which makes it waterproof once the camera is connected.

Extension leads

82 ft or 295 ft extension leads which can be used with the TIC camera head. It is possible to link two 295 ft reels for a total length of 590 ft, which is useful for searches in wells, crevasses or any other inaccessible space.

Hinged arm (supplied with the pole)

Used to fasten the control box to the pole and adjust its position in relation to the user.

RD90 PERIPHERAL:
CAMERA WATERPROOF TO 295 FT
FOR VISUAL SEARCHES
IN EXTREME SITUATIONS
TO A DEPTH OF 590 FT

The RD90 camera is a color camera attached to a 295 ft cable, itself mounted on a reel. It is waterproof to a depth of 295 ft. Optional 82 ft and 295 ft extension leads can be used to reach a depth of 590 ft to inspect cavities, crevasses and wells.

The RD90 camera can be connected to the MULTI-APP box:

RD90 FEATURES AND BENEFITS

Fixed head
The RD90 camera is housed in a very strong box providing a 90° field of vision.

LED lighting
Adjustable lighting with 8 intensity levels.

Waterproof head
Waterproof to a depth of 295 ft for searches in very damp environments or underwater.

Camera protection
The head has scratch-proof sapphire glass to protect the camera.

Searches to a depth of 590 ft
The RD90 camera can be connected to 82 ft or 295 ft extension leads for searches requiring more length. The 82 ft extension lead is supplied alone, and the 295 ft extension lead is supplied on a reel.

RD90 AVAILABLE FUNCTIONS

Control box screen display in visual search mode using the RD90 waterproof camera.

Once connected to the control box, the RD90 waterproof camera offers the following features:

FUNCTIONS	RD90 (WATERPROOF CAMERA)
Indication of control box battery level	•
Adjustment of screen brightness	•
Right or left-handed use	•
x2 digital zoom	•
Adjustment of headset(s) volume	NA
Adjustment of microphone volume	NA
Push to Talk (speak with the victim via the speaker/microphone on the camera)	NA
Rotation of screen image up (0°) and down (180°)	•
Indication of camera head rotation	NA
Indication of camera head LED illumination level	•
Display of thermal viewing modes	NA
Taking photos	•
Video recording	• no sound
Photo and video gallery to view recordings/images	• no sound

SEARCH PERIPHERALS:
WIRED & WIRELESS SEISMIC SENSORS
TO DETECT NOISE
AND TRIANGULATE A VICTIM'S POSITION

Ultra-sensitive for optimal sound quality in the search area, SEARCH seismic sensors detect the most subtle vibrations caused by a victim (scratching, hitting, shouting, etc.) and help triangulate their position. The wireless technology allows rapid deployment of seismic sensors in the field.
There is no need to deal with cables trapped under rubble, allowing a search on average 3 times faster than with wired sensors.
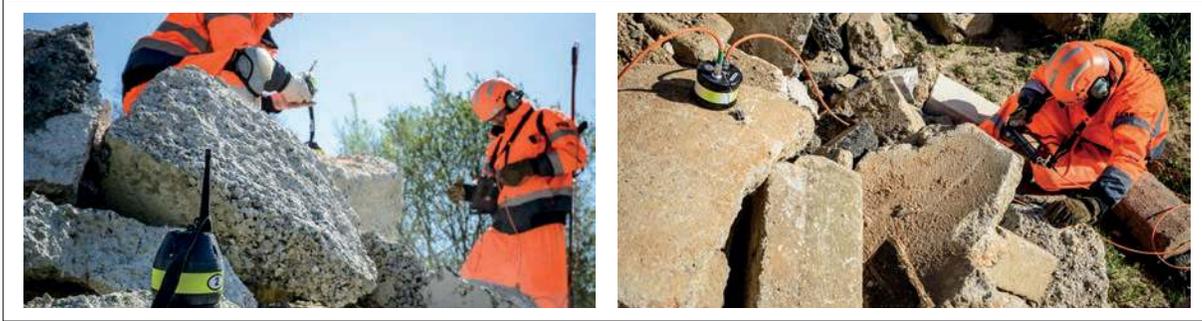
SEARCH sensors can be connected to the following boxes:

▶ MULTI-APP box (multi-application): connect up to 3 wireless SEARCH sensors.

▶ MONO-APP box (single application): connect up to 6 SEARCH sensors (3 wireless + 3 wired). This box is designed for listening only.

SEARCH FEATURES AND BENEFITS

Ultra-sensitive seismic sensors
Heightened sensitivity for exceptional sound quality to accurately triangulate the victim's position.

Wireless: : Can be used at a distance of over 328 ft from the box in open space and around 98 ft in the field depending on the obstacles. No cables trapped under rubble. Up to 3 sensors which can be connected to MULTI-APP and MONO-APP boxes.

Wired: Up to 3 wired sensors which can only be connected to the LEADER SEARCH MONO-APP box, including 26 ft of cable for a 79 ft range.

Adjustable noise filters
Help eliminate high/low-pitched interference from jackhammers, vehicles, wind, power cables, etc.

Complete listening modes
Mono and Stereo modes to listen to selected sensors in 1 or 2 ears, allowing a wide variety of listening combinations.

Developed for the field
• Compact (1.5 lb) so it can easily fit in your pocket.
• IP67 rating
• Flexible antenna for optimal connectivity.
• Carry handle for easier placement and transport.
• LED button to indicate box connection.

Battery life
• Wireless sensors: powered with three AAA batteries for 8 hours running time. They are easy to change and avoid the use of special rechargeable batteries.
• Wired sensors: powered by the control box via the cable.

SEARCH AVAILABLE FUNCTIONS

MULTI-APP box screen display in listening mode with 3 SEARCH seismic sensors
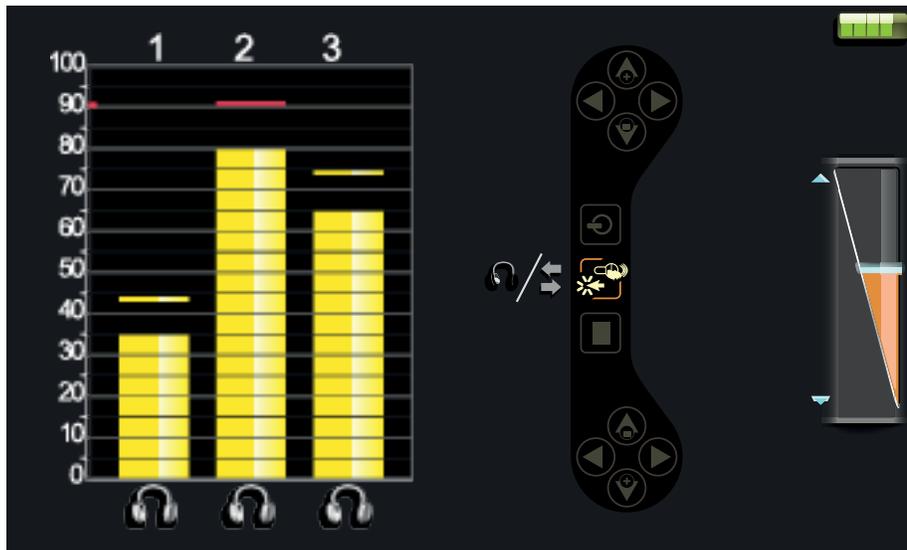
LEADER SEARCH MONO-APP box screen display in listening mode with
6 SEARCH seismic sensors (3 wireless + 3 wired)
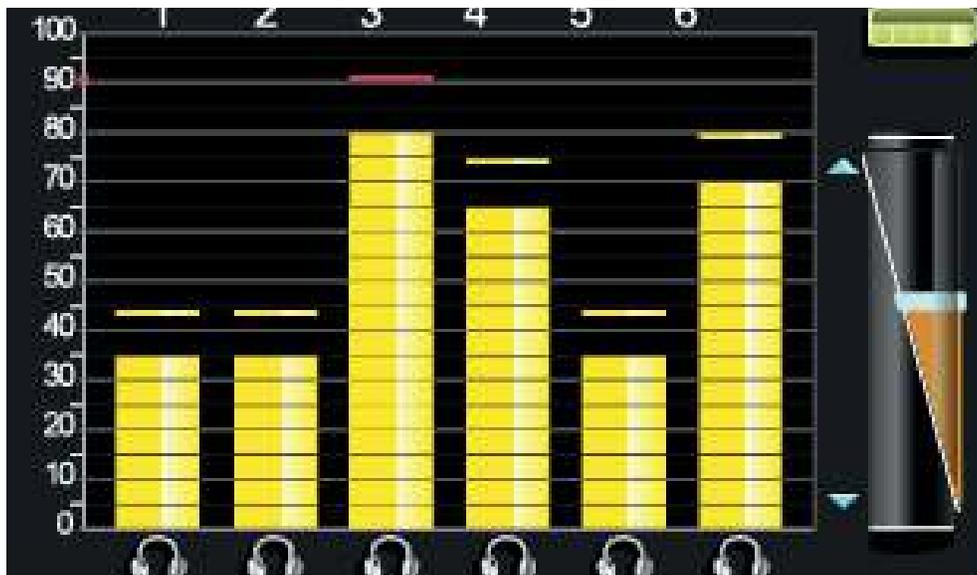
Once the SEARCH sensors are connected to the control box, they offer the following functions:

FUNCTIONS	SEARCH (SEISMIC SENSORS)
Indication of control box battery level	•
Adjustment of screen brightness	•
Right or left-handed use	•
Adjustment of noise filters (low and high)	•
Mono or stereo listening mode (listening to sensors in 1 or 2 ears)	•
Individual listening to each seismic sensor	•
Visualization trackers to identify the highest seismic peak	•
Indication of wireless seismic sensor charge level	•
Push to Talk (speak with the victim via the communication probe)	• with communication probe and MONO-APP box

SEARCH ACCESSORIES

Spike (included as standard)

Supplied with each sensor for improved stability on loose ground, material joins or cracks. The spike also allows improved detection of vibrations in soft ground (sand, earth, etc.)

Magnet (included as standard)

Supplied with each sensor for mounting on metal elements which are very common in operational areas.

Communication probe (optional)

Supplied with a 26 ft cable, it is used to reach a located victim and communicate with them.

For use in conjunction with the headset using the box's Push To Talk function.

Option only available for the LEADER SEARCH MONO-APP box. Included in the complete version 3 wired sensors + 3 wireless sensors (as an option in other versions).

SCAN PERIPHERAL:
ULTRA-WIDE BAND RADAR SENSOR
TO DETECT A VICTIM'S
MOVEMENTS THROUGH RUBBLE

The SCAN sensor detects the smallest breathing movements of a conscious or unconscious person buried under rubble!

It generates electromagnetic waves which can pass through materials. It can scan through 20 in of dense concrete or any other construction material such as bricks, roofing, sand, tiles, bitumen, plastic, plaster, glass... Note that the waves cannot pass through water or metal.
The SCAN radar sensor is one of the 5 peripherals which can be connected to LEADER control boxes, MONO-APP or MULTI-APP.

It is the smallest and lightest radar sensor in its category. It is compact which means it can be used in small spaces!

The SCAN peripheral is connected to the MULTI-APP box:

SCAN FEATURES AND BENEFITS

High sensitivity sensor
- UWB (Ultra-Wide Band) technology is used to detect strong movements with 3 ft precision (e.g. the movement of an arm) for up to 98 ft in open space, and weak movements (e.g. breathing) for up to 33 ft in open space.
- The generated electromagnetic waves are used to search through 20 in of dense concrete.

2 types of box connection
- Wi-Fi with 164 ft range (no issues with cables trapped under rubble)
- Waterproof wired USB (16 ft cable): Alternative in the event of surrounding interference preventing the use of Wi-Fi

2 search modes
- Real-time mode: allows almost instant monitoring of movements,
- Automatic mode: displays a response once the depth analysis is complete.

The depth at which the movement is detected is indicated. The device also displays whether they are weak movements (e.g. breathing) or strong movements.

Movement analysis
An oscillogram is used to view and track movement in real-time, illustrated by a sine wave. Repeated wide oscillations indicate a repeated movement (e.g. a victim tapping). The depth of oscillations indicate the intensity of the movement (strong or weak). The frequency of movements helps deduce whether or not it is a human.
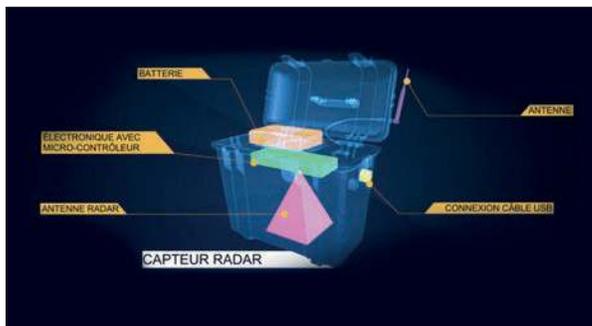
A well-protected UWB antenna
The radar antenna and associated electronics are housed in a small waterproof and shockproof case. The sensor is lightweight and compact to make it easier to handle and search in small spaces.

4 hour running time
Lithium-Ion battery which is easy to change. A battery level indicator can be seen on the outside of the sensor to avoid opening it in the field.

SCAN AVAILABLE FUNCTIONS

MULTI-APP control box screen display in movement detection mode using the
SCAN radar sensor peripheral

Once connected to the control box, the SCAN peripheral offers the following functions via an intuitive navigation interface:

FUNCTIONS	SCAN (RADAR SENSOR)
Indication of control box and radar sensor battery level	•
Adjustment of screen brightness	•
Right or left-handed use	•
Option of wired or wireless box connection	•
Indication of box connection status to sensor	•
AUTOMATIC search mode *(automatic analysis of selected depth in 10 ft sections)*	•
REAL-TIMESEARCH mode *(manual management by rescuer of different parameters to view real-time movements)*	•
Oscillogram function to view frequency of movement	•
Selection of minimum search depth (start)	•
Selection of maximum search depth (end)	•
Indication of weak or strong movements	•
Save movement data	•
Gallery of movement save files to replay them	•
Gallery to view recordings/images	•

SCAN ACCESSORIES
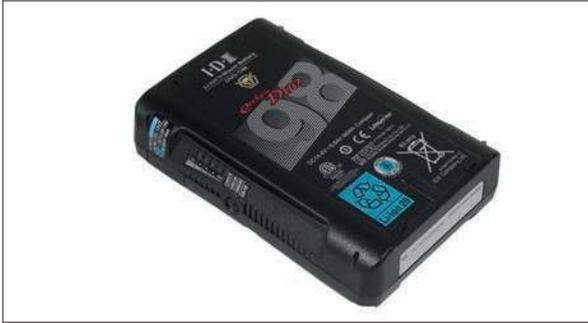
Additional battery (optional)
Useful in the event of a long search, offering an extra 4 hours running time.

Radar sensor battery charger (included as standard)
Used to charge the battery in 3.5 hours.

16 ft cable (included as standard)
Provides a wired connection in the event of interference with the Wi-Fi connection. Once connected, the connections are sealed for the radar sensor and the control box. For the Wi-Fi connection, the connector is sealed with a dedicated plug.

READY-MADE LEADER KITS
MULTI-APPLICATION
AND SINGLE APPLICATION EQUIPMENT

LEADER offers a comprehensive range of USAR equipment using all technologies commonly used in the field by USAR teams to detect and locate buried victims.

Two types of equipment:

▶ **Multi-application devices** configured around the MULTI-APP box which can be used to connect up to 5 peripherals, making them upgradeable: One or several peripherals can be added and connected at any time.

▶ **Single application devices** made up of a MONO-APP box including a unique, non-upgradeable configuration.

MULTI-APPLICATION UPGRADEABLE KITS: LEADER MULTISEARCH

SCAN
(MOVEMENT DETECTION RADAR SENSOR)

SEARCH (WIRELESS SEISMIC SENSORS)

CAM (COLOR CAMERA)
TIC (THERMAL IMAGING CAMERA)

MULTI-APP BOX
(LEADER CONTROL BOX)

RD90
(CAMERA WATERPROOF TO 295 FT)

The MULTI-APP box is the heart of the LEADER MULTISEARCH (or MS) system. Depending on operational needs in the field, it is used to connect up to 5 interchangeable peripherals in turn (CAM, TIC, RD90, SEARCH, SCAN). Ready-made MULTISEARCH kits have been created to help the user make their decision (see next page). Other configurations are available - Contact us.

SINGLE APPLICATION KITS: LEADER CAM AND LEADER SEARCH

LEADER CAM
(WITH MONO-APP BOX)

LEADER SEARCH
(VERSION WITH 3 WIRELESS SENSORS + 3 WIRED SENSORS WITH MONO-APP BOX)

LEADER SEARCH
(VERSION WITH 2 WIRED SENSORS WITH MONO-APP BOX)

READY-MADE KIT CONFIGURATIONS*

	CONFIGURATION	REF.	MULTI-APP BOX	MONO-APP BOX	HEADSET	2ND HEADSET	CAM	TIC	3.7 M TELESCOPIC POLE	82 FT EXTENSION LEAD	R90	RD90	SEARCHx2W	SEARCHx3W	SEARCHx2C	SEARCHx3W +SEARCHx3C	COM	SCAN	ADD. BATTERY CONTROL BOX	ADD. BATTERY RADAR SENSOR	SEARCHx1W	SEARCHx1C
MULTI-APP	LEADER CAM MS 1	D11.01.13	■		■	□	■	□	■	□	□	□	□	□				□	□			
	LEADER CAM MS 2	D11.01.14	■		■	□	■	■	■	□	□	□	□	□				□	□			
	LEADER CAM MS 3	D11.01.15	■		■	□	■	□	□	□	■	□	□	□				□	□			
	LEADER CAM MS 4	D11.01.17	■		■	□	□	□	□	□	□	■	□	□				□	□			
	LEADER S SEARCH MS 1	D11.01.18	■		■	□	□	□	□	□	□	□	■	□				□	□			□	
	LEADER SEARCH MS 2	D11.01.19	■		■	□	□	□	□	□	□	□	□	■				□	□			
	LEADER HASTY MS 1	D11.01.05	■		■	□	■	□	■	□	□	□	■	□				□	□			□	
	LEADER HASTY MS 2	D11.01.06	■		■	□	■	□	■	□	□	□	□	■				□	□			
	LEADER HASTY MS 3	D11.01.07	■		■	□	■	■	■	□	□	□	■	□				□	□			□	
	LEADER HASTY MS 4	D11.01.08	■		■	□	■	■	■	□	□	□	□	■				□	□			
	LEADER SCAN MS 1	D11.01.20	■		■	□	□	□	□	□	□	□	□	□				■	□	□		
	LEADER MULTISEARCH 1	D11.01.11	■		■	□	■	■	■	□	□	□	□	□				■	□	□	□	
	LEADER MULTISEARCH 2	D11.01.12	■		■	□	■	■	■	□	□	□	□	□				■	□	□	□	
	LEADER MULTISEARCH 3	D11.01.09	■		■	□	□	□	□	□	□	□	■	□				■	□	□	□	
	LEADER MULTISEARCH 4	D11.01.10	■		■	□	□	□	□	□	□	□	□	■				■	□	□		
	LEADER MULTISEARCH 5	D11.01.03	■		■	□	■	□	■	□	□	□	■	□				□	□			□	
	LEADER MULTISEARCH 6	D11.01.04	■		■	□	■	■	■	□	□	□	□	■				□	□			
	LEADER MULTISEARCH 7	D11.01.01	■		■	□	■	□	□	□	□	□	■	□				□	□			□	
	LEADER MULTISEARCH 8	D11.01.02	■		■	□	■	□	■	□	□	□	□	■				□	□			
MONO-APP	LEADER CAM	D11.04.343D			■		■		■		■							■				
	LEADER SEARCH 2C	D11.04.330			■												■	■			■	■	■
	LEADER SEARCH 3W+3C	D11.04.334			■													■				

KEY
■ As standard
□ Optional

Other configurations available - Contact us.

COMPONENTS TO SUPPLEMENT A KIT

PRODUCT NAME	CONTENTS OVERVIEW	REF
MULTI-APP CONTROL BOX	MULTI-APP BOX (UPGRADEABLE) WITH BATTERY AND ACCESSORIES	D11.01.21
TIC	THERMAL IMAGING CAMERA HEAD ONLY	D11.04.370
CAM	COLOR CAMERA HEAD ONLY	D11.04.372
TELESCOPIC POLE	3.7 M TELESCOPIC POLE + HANDLE + SHOULDER STRAP	D11.04.373
82 FT EXTENSION LEAD	82 FT EXTENSION LEAD ONLY	D11.04.356D
295 FT EXTENSION LEAD	R90 EXTENSION LEAD (295 FT REEL-MOUNTED CABLE) + CASE	D11.04.348D
RD90	WATERPROOF RD90 CAMERA FASTENED TO 295 FT REEL-MOUNTED CABLE + CASE	D11.04.347
SCAN	RADAR SENSOR ONLY (NO BATTERY OR CHARGER)	D11.07.020
SCAN & ACCESSORIES	RADAR SENSOR + ACCESSORIES (USB CABLE, BATTERY, CHARGER, BACKPACK) + CASE	D11.07.025
SCAN BATTERY	BATTERY FOR RADAR SENSOR	D11.07.015
SCAN BATTERY CHARGER	CHARGER FOR RADAR BATTERY	D11.07.016
SEARCH	WIRELESS SEISMIC SENSOR + MAGNET + POINT	D11.04.335
SEARCH	WIRED SEISMIC SENSOR + MAGNET + POINT	D11.04.336
COMMUNICATION PROBE	AUDIO COMMUNICATION PROBE (FOR LEADER SEARCH ONLY)	D11.04.337
SUN SHADE	LEADER SEARCH SUN SHADE	D11.04.338
SUN SHADE	LEADER-MULTISEARCH, -CAM, -HASTY, -SCAN SUN SHADE	D11.04.339
HEADSET	2ND NOISE-CANCELING HEADSET WITH MICROPHONE AND Y-CONNECTOR	D11.04.340
CONTROL BOX BATTERY	SPARE BATTERY FOR MONO-APP AND MULTI-APP CONTROL BOXES	D11.04.341
SEARCH CASE	SHOCKPROOF & WATERPROOF CASE FOR LEADER SEARCH LISTENING DEVICES	2007836
CAM/HASTY CASE	SHOCKPROOF & WATERPROOF CASE FOR LEADER CAM/HASTY DEVICES	2008099
CAM-R90-RD90 CASE	SHOCKPROOF & WATERPROOF CASE WITH FOAM FOR LEADER CAM R90 AND RD90 DEVICES	2006617
SCAN CASE	SHOCKPROOF & WATERPROOF CASE FOR LEADER SCAN DEVICES	2007684
SEARCH BACKPACK	BACKPACK FOR LEADER SEARCH LISTENING DEVICES	2007837
CAM/HASTY BACKPACK	BACKPACK FOR LEADER CAM/HASTY DEVICES	2009799
SCAN BACKPACK	BACKPACK FOR LEADER SCAN DEVICES	D11.07.102

EQUIPMENT PACKAGING AND STORAGE

Each kit is packed in a backpack, itself placed in a hard, waterproof case.

In the field, the rescuer has two options:
▶ To just carry the backpack for a lighter load by leaving the heavy case behind
▶ To carry the whole unit

In both cases, the equipment stays protected.

Depending on the chosen configuration, the kits are packed in 1 or 2 backpacks. The unit is delivered in 1 or 2 hard waterproof cases for storage and transport in an active area.

A backpack including the equipment for easy transport by the rescuer in the field

TYPE E
H 43 X W 15 X D 6 IN

TYPE F AND G
H 22 X W 19 X D 8 IN

A hard IP67-rated waterproof and shock-proof case

TYPE A
H 46 X W 18 X D 6 IN

TYPE B
H 26 X W 20 X D 9.5 IN

TYPE C
H 26 X W 20 X D 15 IN

TYPE D
H 26 X W 20 X D 9.5 IN

Overview of ready-made kits and their respective packaging:

KIT CONFIGURATION	BRIEF OVERVIEW OF KIT CONTENT	REF.	CASE + BACKPACK	CASE QTY	KIT WEIGHT
LEADER CAM MS 1	MULTI-APP BOX, CAM	D11.01.13	A + E	1	31.1 LB
LEADER CAM MS 2	MULTI-APP BOX, CAM, TIC	D11.01.14	A + E	1	32.8 LB
LEADER CAM MS 3	MULTI-APP BOX, CAM-R90	D11.01.15	D	1	50.7 LB
LEADER CAM MS 4	MULTI-APP BOX, CAM-RD90	D11.01.17	D	1	51.8 LB
LEADER SEARCH MS 1	MULTI-APP BOX, SEARCHx2	D11.01.18	B + F	1	42.1 LB
LEADER SEARCH MS 2	MULTI-APP BOX, SEARCHx3	D11.01.19	B + F	1	43.6 LB
LEADER HASTY MS 1	MULTI-APP BOX, SEARCHx2, CAM	D11.01.05	A + E	1	33.7 LB
LEADER HASTY MS 2	MULTI-APP BOX, SEARCHx3, CAM	D11.01.06	A + E	1	35.3 LB
LEADER HASTY MS 3	MULTI-APP BOX, SEARCHx2, CAM, TIC	D11.01.07	A + E	1	35.5 LB
LEADER HASTY MS 4	MULTI-APP BOX, SEARCHx3, CAM, TIC	D11.01.08	A + E	1	37 LB
LEADER SCAN MS 1	MULTI-APP BOX, SCAN	D11.01.20	C + G	1	57.3 LB
LEADER MULTISEARCH 1	MULTI-APP BOX, SCAN, CAM	D11.01.11	A + E + C + G	2	31.1 LB + 57.3 LB
LEADER MULTISEARCH 2	MULTI-APP BOX, SCAN, CAM, TIC	D11.01.12	A + E + C + G	2	32.8 LB + 57.3 LB
LEADER MULTISEARCH 3	MULTI-APP BOX, SCAN, SEARCHx2	D11.01.09	A + E + B + F	2	42.1 LB + 57.3 LB
LEADER MULTISEARCH 4	MULTI-APP BOX, SCAN, SEARCHx3	D11.01.10	A + E + B + F	2	43.6 LB + 57.3 LB
LEADER MULTISEARCH 5	MULTI-APP BOX, SCAN, SEARCHx2, CAM	D11.01.03	A + E + C + G	2	33.7 LB + 57.3 LB
LEADER MULTISEARCH 6	MULTI-APP BOX, SCAN, SEARCHx3, CAM	D11.01.04	A + E + C + G	2	35.3 LB + 57.3 LB
LEADER MULTISEARCH 7	MULTI-APP BOX, SCAN, SEARCHx2, CAM, TIC	D11.01.01	A + E + C + G	2	35.5 LB + 57.3 LB
LEADER MULTISEARCH 8	MULTI-APP BOX, SCAN, SEARCHx3, CAM, TIC	D11.01.02	A + E + C + G	2	37 LB + 57.3 LB
LEADER CAM	MONO-APP BOX, CAM	D11.04.343D	A + E	1	31.1 LB
LEADER SEARCH 3W + 3C	MONO-APP BOX, SEARCHx3 WIRELESS, x3 WIRED	D11.04.334	B + F	1	56.4 LB
LEADER SEARCH 2C	MONO-APP BOX, SEARCHx2 WIRED	D11.04.330	B + F	1	42.3 LB

LEADER®

Fighting for performance

SINCE 1985, LEADER HAS DEVELOPED   AND MANUFACTURED INCREASINGLY HIGH-PERFORMANCE FIREFIGHTING , FIRE SAFETY TRAINING AND SEARCH AND RESCUE EQUIPMENT, SUPPLYING THEM ACROSS FIVE CONTINENTS TO FIRE & RESCUE DEPARTMENTS, SECURITY SERVICES, AT-RISK INDUSTRIES, THE NAVY, NGOS, ETC.

A MAJOR FOCUS: INNOVATION

To deal with ever-changing fire risks and search and rescue missions, equipment must continue to develop and adapt to be increasingly efficient, whilst ensuring that workers are as safe as possible.

To respond to these challenges, LEADER is strongly focused on **innovation and new technologies,** with its own Research and Development team.

This team develops and promotes future equipment to end users.
To test our equipment and assess performance, LEADER continues to invest in its own infrastructures:

▶ Test facility - High-expansion foam and water (4300 sq ft)
▶ Test facility - Ventilation (4300 sq ft)
▶ Fire chamber test room - Fire extinguishing equipment
▶ Test room - Victim search equipment

OUR COMMITMENT

When you choose LEADER equipment, you can be confident in the quality and compliance of our products. These products have been created in our workshops by professionals specializing in mechanics and electronics.

ISO 9001 certified since 1999, LEADER:

► Performs inspections throughout the manufacturing process, as well as on finished products before dispatch,

► Continually trains all employees.

EQUIPMENT WARRANTIES

Every LEADER product has a specific contract warranty.

CLOSE TO OUR CUSTOMERS

Through its sales team, its subsidiaries (in Germany, Austria, China and the USA) and an international distribution network, LEADER operates throughout the world to work as closely as possible with its customers.

ADAPTED TRAINING

To ensure optimal and long-term use of the equipment, LEADER can offer you training on setup, use and maintenance. This training can be provided at our premises or on site.

AN INTERNATIONAL PRESENCE

SUBSIDIARIES AND AN EXTENSIVE RETAILER NETWORK

LEADER GR○UP

MOBILE VENTILATION

HIGH-FLOW VENTILATION

THERMAL VISION

FIRE EXTINGUISHING

FIRE TRAINING DEVICES

SEARCH AND RESCUE EQUIPMENT

CHAINSAWS

FIRE FOAM CONCENTRATES

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