



# LEADER WASP: STRUCTURE STABILITY MONITORING SENSOR

## EARLY WARNING OF MOVEMENT FROM THE STRUCTURE IT IS ATTACHED TO

LEADER WASP is designed to protect emergency services workers and members of the public. This device is the world's first digital monitoring system created especially to assist emergency services crews and keep them safe in a variety of scenarios. The LEADER WASP, or Warning Alarm for Stability Protection, attaches to any surface in any position and provides an early warning of movement and vibration.

The LEADER WASP continuously detects slight movements and can detect rotational movement from 0.1° to 2.6° and/or vibration from 0.5Hz to 100Hz. Its magnetic base provides for quick and easy attachment to metal – and is supplied with a variety of attachments to provide fixings to glass, metal, concrete and other structures. Portable and lightweight with rapid deployment, it is simple. LEADER WASP triggers audio and visual alarms as soon as movement goes beyond selected threshold for any scenario.

Emergency services personnel can concentrate on the task working

safely in areas of extreme pressure!

LEADER WASP provides protection from:

- Collapsed structures
- Road traffic collisions
- Trench rescues
- Movement of shoring systems
- Structural fires
- Internal breach operations
- Dangerous structures following fire / flood
- Other incidents



LEADER WASP

# FEATURES AND BENEFITS



## Intuitive control board

The WASP has only few buttons to set the Movement and Vibration alarms: 3 push buttons and 2 rotary dials. They can be set independently or simultaneously. A transparent protective shield prevents unwanted settings change during close operation.



## Set movement alarm

Adjustable movement sensors dial allows setting angle threshold from 0.1° to 2.6° to monitor movements accordingly.



## Set vibration alarm

Adjustable vibration sensor dial allows setting sensitivity threshold from 0.5Hz to 100Hz to monitor accordingly.



## Audio and Visual alarms

The WASP is armed with 8 red LED strobes to provide visual warning and an adjustable audible siren. They are triggered when movement or vibration goes beyond selected threshold to alert users.

There is a comfort blink every 15 seconds to indicate device is working



## Built in magnetic base

The WASP integrates a magnetic base for easy and quick attachment to metal. The device will work in ANY position at ANY angle.

It comes with other fixings with built in metal plate to allow attachment to glass, concrete, wood, strut and other structures (see accessories).



## Cell batteries power supply

Simple 4x C dry cell batteries power supply providing 1 week run time. Easy to find on the field and no transportation constraints compared to Lithium batteries.



# LEADER WASP FUNCTIONS



- 1 | Power On-Off
- 2 | Siren sound volume control button
- 3 | Set button: Allows engaging the alarms once Movement and / or Vibration thresholds are selected.
- 4 | Movement dial: Allows setting movement threshold from 0.1° to 2.6°
- 5 | Vibration dial: Allows setting vibration threshold from 0.5Hz to 100Hz

Device does not integrate any display for better robustness in harshest environments.

For giving battery level information, device will flash the letter 'B' in Morse code to indicate low battery.

For informing rescue crews that device is active, it will offer a comfort flash four times a minute to indicate that it is in monitoring phase.

Movement and Vibration thresholds can be selected at the same time for simultaneous monitoring.

## CHARACTERISTICS

<b>Fire and Rescue applications</b>	■	For use where crews are at work in confined space and outdoor situations	<b>Monitoring technology</b>	■	Accelerometers and Seismic sensor
<b>Design concept</b>	■	Portable sensor with integral magnet for quick fixing on metal + warning alarm	<b>Accurate</b>	■	Accuracy: +/-0.1mm - Resolution: +/-0.01mm
<b>Monitoring method</b>	■	Detects rotational movement and / or vibration	<b>Lightweight</b>	■	Unit: 3.1kg
<b>Implementation</b>	■	Attached to structure	<b>Compact</b>	■	Unit: H140 x D150 x W170 mm
<b>Positioning</b>	■	Rescuers get protection during operation close to monitored structure	<b>Strong material</b>	■	High impact resistant composite with integral transparent lid and magnetic contact pad
<b>Alert thresholds</b>	■	Angle from 0.1° to 2.6° (360° in 3 directions) and / or vibration from 0.5hz to 100hz	<b>Cell Batteries run time</b>	■	Alkaline (supplied): 1 week Lithium (not supplied): >1 week Rechargeable NiMH (not supplied): >1 week
<b>Visual alarm</b>	■	8 blinking red flash lights for 360 visibility	<b>Operating t°C range</b>	■	-
<b>Audible alarm</b>	■	78.5 dB alarm, choose volume levels, or Mute	<b>Storage t°C range</b>	■	-
<b>Calibration</b>	■	Need about 20 sec to calibrate VS environment	<b>Protection for carriage</b>	■	<b>Single:</b> IP67 hard case / H216 x D429 x L557 mm Full: 11.9kg <b>Double:</b> IP67 hard case / H224 x D505 x L638 mm Full: 19.1kg
<b>Robust</b>	■	2m drop test onto gravels	<b>Warranty</b>	■	24 months
<b>Water resistant</b>	■	IP66	<b>Made in France</b>	■	Designed in the UK, manufactured in France
<b>Dry cell batteries power supply</b>	■	4 x 1.5V C type cells			<b>Dual:</b> Back pack / H225 x D440 x L575 mm Empty: 3.2kg / Full: 17.3kg Optional IP67 hard case: Empty: 7.3kg / Full: 24.6kg
<b>Wasp Single</b>	■	1 WASP in case with standard accessories			
<b>Wasp Double</b>	■	2 WASP in case with standard accessories			
<b>Safety Dual Pack</b>	■	1 SENTRY + 1 WASP in back pack with standard accessories			

## AVAILABLE MODELS

<b>LEADER WASP SINGLE</b>	D11.06.030	1 Wasp unit, 4x C supplied alkaline batteries, Attachment accessories (1 Clamp, 1 Sucking pad, 1 Strut bracket, 1 Multi-purpose plate, 1 String with carabiners), 1 Delimitation tape, IP67 hard case, user manual
<b>LEADER WASP DOUBLE</b>	D11.06.031	2 Wasp units, 8x C supplied alkaline batteries, Attachment accessories (2 Clamps, 2 Sucking pads, 2 Strut brackets, 2 Multi-purpose plates, 2 Strings with carabiners), 1 Delimitation tape, IP67 hard case, user manual
<b>SAFETY DUAL PACK SENTRY + WASP</b>	D11.06.032	1 WASP unit, 4x C supplied alkaline batteries, Attachment accessories (1 Clamp, 1 Sucking pad, 1 Strut bracket, 1 Multi-purpose plate, 1 String with carabiners), user manual. + 1 SENTRY telemeter with telescope, tripod, ball-joint mount, 4 battery packs to receive 12 AAA supplied alkaline batt., 110/220V mains power supply with international adaptors, 12/24V cable cigar lighter adaptor, straps with hooks, user manual. ALL stowed into a back pack (hard case in option).

### LEGEND

- As standard
- Option adaptable afterward

## BRACKETS / ACCESSORIES

KEEP IN MIND THE WASP FEATURES A MAGNET AT ITS BASE TO ATTACH TO ALL ACCESSORIES



### **Metal clamp** (comes as standard)

The clamp is a toughened plastic bracket with a steel base. Thanks to its built in magnet the WASP will attach to the clamp. The WASP can be located in the area where the crews operate. It can be attached by the clamp directly to ladders, scaffolding, door frames...



### **Sucking pads** (comes as standard)

In conjunction with the clamp, the sucking pad will allow the WASP to be used on any non-metallic magnetic flat surfaces.



### **Rescue strut bracket** (comes as standard)

It consists of a bracket with strap and a steel plate. It enables to attach the WASP to circular objects including rescue struts and street furniture.



### **Multi-purpose plate** (comes as standard)

It is a steel plate which can be used as a nail plate and attached to wood shoring systems, or any wood elements. A ratchet strap (not provided) can also be used in conjunction with it to attach WASP on column or any other means.



### **Carabiner with cord** (comes as standard)

The multi-purpose plate can be used in conjunction with it to monitor areas at angles where the unit may slip.



### **Delimitation tape** (comes as standard)

It visually helps identifying a monitored area. Also helpful for restricting access to a dangerous zone.