Specifications

Received frequency	40 kHz
Sensitivity indicator	8 selectable sensitivity levels
Incoming sound signal strength indicator	10-step LED and double-digit display
Leak amount indicator	19 steps
Output	Headphone jack (with volume control)
Power source	6 AAA nickel-metal-hydride rechargeable batteries
Operating time	Approx. 4.5 hours (at an ambient temperature of 25 °C ; varies with operating conditions) Low battery LED indicator
Auto power-off	Approx. 15 minutes
Connection to PC	Serial communications (9-pin D-sub port)
Mass	Approx. 1.3 kg
Accessories	Strap, and headphones
Optional accessories	Laser pointer, storage case and sound-collecting probe

Azbil Corporation
Advanced Automation Company

Yamatake Corporation changed its name to Azbil Corporation on April 1, 2012.

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1st Edition : issued in MAY 2013-O

CA2-AAM261

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Sound -based equipment diagnosis

IF-ASSET

PlantWalker™ LeakDetector II

Labor-saving tool for equipment diagnosis

Highly sensitive detection of ultrasonic vibration generated by gas leaks or machine abnormalities

For energy conservation, CO_2 reduction, the environment, and safety, this convenient tool quickly provides significant benefits.

azbil

PlantWalker™
LeakDetector II

For energy savings, CO_2 reduction, the environment, and safety!

This ultrasonic detector with a highly sensitive sound-collecting parabolic hood detects ultrasonic vibration generated by gas leaking from pipes, as well as flaws or poor lubrication of bearings on rotary machines. The detector can identify the location of leaks and detect abnormalities in bearings.

Used for What!

- Finding leaks of air, etc. from piping
- Detecting a high-pressure valve seat leak
- Checking safety of a high-pressure steam leak
- Simple leak check for steam condensers, etc.
- Detecting corona discharge from equipment
- Detecting bearing flaws in rotating equipment
- Detecting belt slippage on belt-driven devices

Features

1. Operable by anyone with ease
2. The strength of the ultrasonic waves is indicated 3 ways: by LED bar graph, by digital display, and by sound (via headphones).
3. Excellent cost performance
4. Laser pointer shows location of ultrasonic wave generation*1
5. Allows pinpointing of the ultrasound source*2 after detachment of the parabolic hood from the sensor and indicator/operations panel
6. Easily understood display of leak size*3
7. Storage of 500 readings, which are transferable to a PC

*1 Optional
*2 Effectiveness is enhanced when the optional sound-collecting probe is attached to the sensor.
*3 The conversion of ultrasound intensity into leak size is based on data under particular conditions, and yields a rough estimate only.

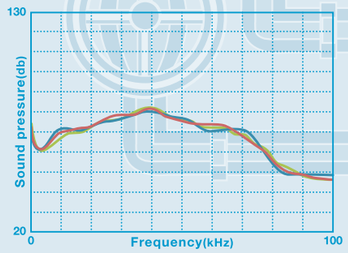
Used Where!

- Automobile plants
- Chemical plants
- Home appliance plants
- Power plants
- Semiconductor plants
- Office buildings
- Pulp and paper mills
- Theme parks
- Pharmaceutical plants
- Aviation repair facilities
- Food-processing plants
- Ships
- Oil refineries
- Auto repair garages

etc. ...

Picks up ultrasonic waves generated by leaks

When a gas is discharged into the atmosphere at a certain speed, a vortex is generated at the boundary between the stationary atmospheric air and the moving gas, resulting in the generation of ultrasonic waves. Under these circumstances, regardless of the type of gas, ultrasonic waves are generated prominently at a frequency of about 40 kHz.



Picks up ultrasonic waves generated by machine abnormalities

A flaw or poor lubrication of the bearings causes not only vibration and temperature change, but also ultrasonic vibration. Belt slippage on belt-driven devices, and other types of friction between solid bodies, are also sources of ultrasonic waves.

Laser pointer

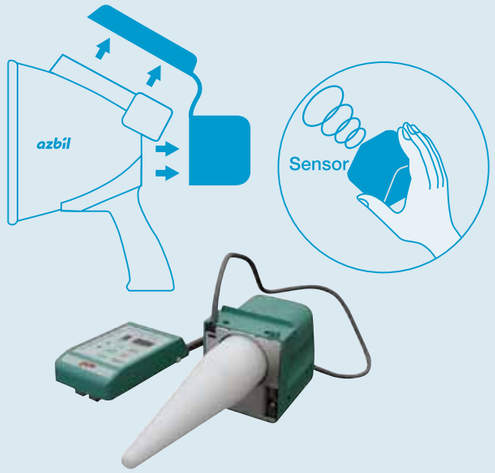
The source of ultrasonic waves can be detected quickly and accurately using the directionality of the sound-collecting parabolic hood and the laser pointer. While the button on the grip of the sound-collecting parabolic hood is pressed, the laser pointer emits a beam of laser light parallel to the sound-collection axis.

Simplified and easy-to-see operation panel

For easy use by anyone, frequently used buttons (such as the sensor sensitivity adjustment and data saving buttons) require only simple operation without complicated mode switching. The panel has super-luminosity LEDs and an anti-glare sheet to enhance outdoor daytime visibility.

Detachable sensor! Detect sound waves even in tight spaces

The sound-collecting parabolic hood, sensor, and indicator/operations panel can be used separately. Detaching the sensor from the parabolic hood allows pinpointing of ultrasound sources in narrow spaces, using the sound-collecting probe (optional).



Parabolic hood collects only the sound coming from the targeted direction (acoustic lens effect and directivity)

This product is equipped with a deep parabolic hood that is developed for the diagnosis of equipment using acoustic signals. To enhance sensitivity, the parabolic hood collects sound waves that come from sound sources directly in front of it, and reflects them to the acoustic sensor located at the paraboloidal focus point.
In contrast, if a sound source is not directly in front of the hood, its sound waves, except those directly reaching the acoustic sensor, are out of focus, or are blocked by the hood. In short, fewer sound waves arrive at the sensor. As a result, the device has strong directivity.