



# SDT Ultrasound Solutions

*Industry Listens To Us*



## Flex.US Ultrasound Detector



# Flex.US

## Ultrasound Detector

Flex.US is a powerful diagnostic instrument that guarantees results. Ultrasonic waves are detected by Flex.US and converted into representative audible sounds that are heard in the headset. Flex.US is not affected by high levels of ambient factory noise. Its design is a unique approach to traditional testing methods.

### 1 Compressed air leaks = wasted money.

Compressed air leaks account for between 30 and 40% of the total air demand in a factory. The compressor room ranks as the 3rd highest consumer of energy in most facilities. Finding and fixing leaks is the best opportunity we have for both energy and operating cost reduction.

### 2 A leak = danger.

Detecting pneumatic leaks in vehicle brake systems is a high priority measure that ensures safer vehicles on our roadways.

### 3 Tightness integrity = quality and comfort problems.

To verify the tightness of any volume ( vehicles, aircraft, clean rooms, building envelope, nuclear containment wall, etc... ) you need the reliability and precision of the ultrasonic testing method. Ultrasonic leak testing is the most widely-used method for identifying wind noise and water leaks in vehicles, and integrity issues in other closed volumes.

The design of the Flex.US is based on the popular "Flexible Sensor" from SDT. Mounted on the end of a flexible steel pipe, the ultrasound sensor can access any hard-to-reach location. Bend, twist and curve your Flex.US to suit your inspection. Safely scan electrical cabinets and behind machinery guards without putting your hands in danger. To ensure comfort, the volume control is quickly adjusted when very loud ultrasounds are encountered. This sensitivity provides a high level of precision making leak detection a pleasure, not a chore.

Flex.US maintains the turbulent sound quality of a leak as it converts the ultrasonic noise to a sound humans can hear ( hissing sound ). Some instruments produce electronic signals (beeping) in the headset. These false signals do not distinguish a leak sound from other phenomena and make leak detection all but impossible.

**Appearances are not deceiving... The Flex.US is a solid tool, built to last. Expect the same level of quality synonymous with the SDT name. Easy to use, it works with 2 AA sized alkaline batteries.**



Flex.US Kit shown with optional 200mw Bi-Sonic Transmitter

## Flex.US Technical Specifications

<b>Controls:</b>	One button operation (sealed with silicon rubber) includes the functions on-off and volume adjustment.
<b>Amplification:</b>	7 levels: 20, 30, 40, 50, 60, 70 and 80 dB.
<b>Ultrasound sensor:</b>	Open sensor with a 16 mm (5/8"Ø) diameter (19 mm - 3/4"Ø - exterior), central frequency of 40 kHz.
<b>Detected frequencies:</b>	38.4 kHz, ± 2 kHz (- 3dB).
<b>Audio output:</b>	Stereo jack connector of 6.35 mm (1/4") (use only the headset supplied with the unit).
<b>Power:</b>	Two alkaline AA batteries, 1.5 V. Rechargeable batteries can also be used but the usage time will be reduced.
<b>Usage time:</b>	± 20 hours. This can vary based on several variables including the charge of the battery in the detector, the level of amplification used and the quality of the batteries.
<b>Body:</b>	Made with machined and assembled sheets of high impact polystyrene and is shock resistant.
<b>Dimensions:</b>	Body: 170 x 42 x 31 mm (6.70 x 1.65 x 1.22 inches) Flexible tube length: 400 mm (15.75 inches).
<b>Weight:</b>	412 grams with the batteries (14.53 ounces).
<b>Operating temperature:</b>	From -10°C to +50°C / 14°F to 122°F.



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