Originally designed for the US Military, the Soundscan 101 Ultrasonic Inspection System is now used in many industries throughout the world for predictive maintenance, quality control, and leak detection.

The Soundscan 101 Receiver converts ultrasound signals produced by industrial machinery and vehicles into easily recognizable audible sounds so the user can evaluate the condition of individual components, even in extremely noisy plant environments. Early warning signs and defects can be detected thus preventing costly repairs, safety related injuries, and downtime.

**KEY PRODUCT FEATURES**

- Unmatched sensitivity, signal-to-noise ratio, and selectivity
- Provides the capability for diagnosing component and system faults
- Designed for a wide range of applications from bearing analysis to leak detection
- Non-destructive; can be used while equipment is operating
- Convenient, handheld design for ease of use
- User-friendly controls include potentiometer for on/off and sensitivity adjustment; output switch; and gain mode switch
- Dual-sensitivity analog meter for ultrasonic signal and battery level indication
- No calibration or special maintenance required
- Operated on a single 9V alkaline battery
- Extruded aluminum case maximizes life in harsh industrial environments
- Includes a range of attachments for testing in contact and scan mode
- Selectable length probes increase the reach for testing
- Includes industrial grade headset suitable for use with hardhat in high ambient noise areas
- Compatible with SoundCTRL System for signal logging, benchmarking, and trend analysis
Applications
Mechanical Equipment Condition Monitoring/Analysis
- Bearings
- Gearboxes
- Steam traps
- Engines
- Fuel injectors
- Pumps
- Compressors
- Butterfly valves
- Belts/chains/pulleys

Electrical Inspection
- Power transformers
- High voltage insulators
- Ignition systems
- Alternators
- Switches/relays
- Power boxes
- Electric motor brushes/bushings
- Sparkplugs

Pressure & Vacuum Leak Detection
- Pipelines/hoses/fittings
- Underground pipelines
- Steam traps and lines
- Condensers
- Heat exchanger tubes
- Exhaust/intake manifolds
- Pumps
- Cylinder head gaskets
- Internal cylinder leaks
- Check/control valves
- Valve stems
- Pneumatic control boxes

Non-Pressurized Vessel Integrity Testing
- Storage tanks
- Pipelines and hoses
- Door/window seals
- Bulkhead/hatch seals
- Gaskets & fittings
- Check/control valves
- Exhaust
- Clean rooms
- Railroad cars
- Airplane cabins
- Automobile truck cabs

Soundscan 101 Components

A) Soundscan 101 Receiver
B) UT2000 Transmitter
C) Industrial Grade Headset
D) One-Inch Acoustic Probe
E) Large Concentrator
F) Mini-Concentrator
G) Acoustic Tip
H) Set of 4 Solid Probes
I) Acoustic Extension Probe Set
J) 9-volt Alkaline Batteries (2)
K) Carrying Case
L) Training CD (not shown)
M) Operator’s Manual (not shown)

Free place at one of our regular 1 and a half day training sessions is also included with the purchase of each Soundscan 101 full inspection system. Currently training is held in Westminster, MD. Other locations will be offered in the future.
Soundscan 101 Receiver and Attachments

Dimensions
- Soundscan 101 Receiver: 222mm x 32mm x 32mm (8.75in x 1.26in x 1.26in)
- UT2000 Transmitter: 105mm x 32mm x 32mm (4.125in x 1.26in x 1.26in)
- Kit Dimensions: 462mm x 340mm x 170mm (18in x 14in x 7in) 4.5kg

Weight
- Soundscan 101 Receiver: 330g (11.60oz)
- UT2000 Transmitter: 175g (6.2oz)

Housing
- Extruded Aluminum
- Wall thickness 2.3mm (.09in)

Power Supply
- 9V Alkaline battery

Battery Life
- Soundscan 101 Receiver: > 45 hours
- UT2000 Transmitter: > 300 hours

Distance of receiver reception
- Up to 150 feet

Receiver threshold of sensitivity
- Minimum Intensity: 10-12 W/m²
- Minimum Ultrasonic Pressure:

Soundscan 101 Specifications

- Frequency: 1.8 - 2.2 kHz at level 0.7 (or -3dB)
- Bandwidth: 40 kHz +/- 1.5 kHz
- Working Resonance Frequency: 40 kHz +/- 1.5 kHz
- Receiver Output: 300 Hz - 2,000 Hz (to Headset/Analog Meter)
- Receiver Displays Indicator: Analog Meter/Battery level
- Operating Temperature Range: -20°C (-4°F) to +54°C (+130°F)
- Controls: Soundscan 101 Receiver: On/off potentiometer switch
- Headset: Industrial grade
- 600 Ohm impedance; 21-24 dB Ext. Noise attenuation
- Warranty: 1 year parts and labour extended warranty available
Soundscan 101 System Options:

- Full Kit/Standard................................. P/N: 101-000031*
- Full Kit/Intrinsically Safe...................... P/N: 101-000033
- Air Audit System, Standard .................. P/N: 101-000036
- Air Audit System, Intrinsically Safe ....... P/N: 101-000037

* US Govt/Military NSN: 6635 01 183 8948

Headset Style:

- Behind-the-Head - Allows use with hardhat... P/N: 101-025005

Accessories:

- Belt Pouch........................................... P/N: 101-005035
- Receiver Jacket.................................... P/N: 101-005055
- Gel Ear Seals....................................... P/N: 101-005007
- Defect Tags, Red................................. P/N: 101-030085
- Defect Tags, Orange............................. P/N: 101-030086
- Defect Tags, Yellow............................. P/N: 101-030087
- A/C Adaptor & Power Supply.................. P/N: 101-000046
- Y-Splitter.......................................... P/N: 101-005045

Recommended Complimentary Products:

- SoundCTRL System.............................. P/N: 101-000010
- PowerBeam 300..................................... P/N: 101-007025

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