



Sonatest



Soundscan 101
PowerBeam 300
SoundCTRL Version 1.0

Leaders and Innovators in the science of NDT

Sonatest Limited has one over-riding and driving motivation - to design, manufacture and market the worlds best 'Non Destructive Evaluation' (NDE or NDT) products. From our UK based HQ, we design and produce a wide range of high performance ultrasonic equipment and NDT accessories, employing cutting edge technology in our range of non-destructive testing equipment.

Sonatest's product range has a reputation for quality, reliability, high performance and exceptional value. The Soundscan range brings our extensive experience into the field of condition monitoring, with products approved by some of the largest manufacturers and industrial plant owners in the world. The Soundscan delivers improvements in safety and reduces cost by providing rapid inspection without the need for plant shut down.

If you require further information on the products and how they can bring benefit to your organisation please contact your Sonatest sales representative, or Sonatest direct.

**Sonatest Ltd
Dickens Road
Old Wolverton
Milton Keynes
MK12 5QQ
United Kingdom**

Tel: +44 (0)1908 316345

Fax: +44 (0)1908 321323

Email: sales@sonatest.com

Web: www.sonatest.com



CONTENTS

Soundscan 101	Page 4-6
Ultrasonic Inspection Kit	Page 4
Components Included	Page 4-6
Accessories	Page 6-7
PowerBeam 300	Page 7
SoundCTRL Version 1.0	Page 8
Warranty Information	Page 8

SOUNDSCAN 101

Originally designed for the U.S. Military, the SOUNDSCAN 101 is now used worldwide for predictive maintenance. The SOUNDSCAN 101 Receiver converts ultrasound signals produced by critical equipment into audible sounds that are easily recognizable so the user can evaluate the condition of individual components, even in extremely noisy environments. Early warning signs and defects can be detected preventing costly repairs, safety-related injuries and downtime.



Components Included in SOUNDSCAN 101 Kit



SOUNDSCAN 101 RECEIVER

Hand held sensor with analog meter detects ultrasound from a greater distance with a higher signal to noise ratio than any other sensor on the market today. Easy-to-use controls include output switch, gain mode switch and potentiometer. No calibration or special maintenance necessary. Operates on a single 9-volt battery for approximately 33 hours of continuous use.

UT2000 UNIVERSAL TRANSMITTER

Fills non-pressurized vessels/cavities with ultrasound by emitting an ultrasonic signal to create a sense of pressure. Enables the detection of leaks in seals, gaskets, and welds with a quick scan of the Receiver. No calibration or special maintenance is necessary. Operates on a single 9-volt battery for 300 hours of continuous use.



INDUSTRIAL GRADE HEAD SET

Allows the user to hear the converted ultrasound while reducing the amount of ambient audible sound. This is the same headset used by pilots. Headset is Behind the Head (BTH) model, for use with hardhat. Provides >20dB noise attenuation.

SOUNDSCAN 101

Components Included in SOUNDSCAN 101 Kit

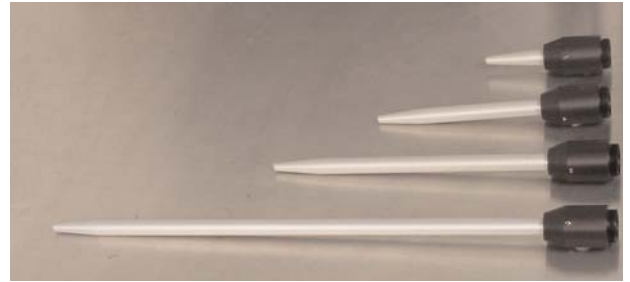


CONCENTRATOR SET

Self-threaded, high-grade plastic attachments for scan mode increase the scope and precision of inspection. The conical shaped Large Concentrator more than doubles the distance for reception of ultrasound and narrows the focus of reception from approximately 45° to 5° from center beam. The conical shaped Mini Concentrator narrows the area of reception to less than 5° from center, blocking competing sounds and improving accuracy in pinpointing specific failures. The small size provides the ability to access hard to reach locations. Inverted conical shaped Acoustic Tip attachment pinpoints airborne ultrasound with high precision from a short distance. Recommended for small leaks.

SOLID PROBE SET

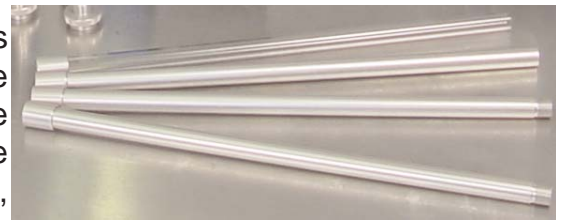
Set of selectable length probes for contact mode for inspections of mechanical components including bearings, gears, motors, and hydraulics. Each length is designed for reach in different situations, while maintaining integrity of sound reception. Provides increased clarity and reduction of competing noise.



Components Included in SOUNDSCAN 101 Kit

ACOUSTIC EXTENSION PROBE SET

Designed for difficult plant conditions, such as hard to reach areas or working around electrical components. Each probe can be connected together to provide additional reach up to 3 feet. The set includes 2 probes with double threaded ends, 1 single threaded probe, 1 polycarbonate probe for electrical inspection, and one adapter.



OPERATOR'S MANUAL

A comprehensive Operating manual is provided with the SoundScan System.

1-INCH ACOUSTIC PROBE

The 1-inch acoustic probe can be used with the SoundScan 101 to localize the sensitivity field, for precise location of leaks. It can also be used with the UT2000 Transmitter for injection of ultrasound into confined spaces, such as piping.



SOUNDSCAN 101

Components Included in SOUNDSCAN 101 Kit

ULTRASONIC TECHNOLOGY/SOUNDSCAN 101 TRAINING

A training CD is provided with the system which provides a comprehensive introduction to the principles and practice of ultrasonic condition monitoring.

In addition each kit purchase includes a bookable place at one of our 1 1/2 day training courses.



The Training programme includes an introduction to the principals and benefits of ultrasonic technology, hands-on demonstrations, techniques for determining the condition of critical bearings, for Pinpointing gas leaks, and more.

A free training session for one attendee is included with the purchase of a complete SOUNDSCAN 101 Kit. These are currently held in Westminster, MD, USA. It is planned to add additional locations in future. On-site training is also available, contact Sonatest Ltd for a quotation.

CARRYING CASE

The SoundScan 101 system is provided in a robust, Waterproof, shippable carry case which meets the majority of Airline Carry-on requirements.

SOUNDSCAN 101 Air Audit Kit

A lower cost 'Air Audit Kit' is also available. This does not include the longer Solid probes or the UT2000 Transmitter. It is suitable where the primary requirement is pressure leak or electric discharge detection. If bearing monitoring or leak detection without a pressure differential is required the full kit is recommended

Both the full kit and the Air Audit Kit are also available in intrinsically safe versions

SOUNDSCAN 101 Accessories

RECEIVER JACKET

Protects the SOUNDSCAN 101 Receiver without restricting use of all controls. Prevents accidental scratching or damage during normal inspection activities. (Jacket shown at right with SOUNDSCAN 101 Receiver and Headset.)



SOUNDSCAN 101



BELT POUCH

Allows the user to keep hands free and the SOUNDSCAN 101 available for regularly scheduled or emergency inspection and diagnosis. Can hold the Receiver, Headset, Transmitter, and some attachments.

GEL EAR SEALS

Partially filled with silicon gel, seals conform to facial contours to increase comfort and help block competing audible sounds, increasing attenuation from 2 to 3 dB.

DEFECT TAGS

Fluorescent color-coded tags identify components that need repair or require special attention. 2-part tag design with carbon copy for easy processing and job tracking. 100 per pack.

- Priority 1 (Yellow) - Pack of 100 Tags
- Priority 2 (Orange) - Pack of 100 Tags
- Priority 3 (Red) - Pack of 100 Tags



SOUNDSCAN 101 Y-SPLITTER

This allows two audio accessories (normally headphones and the SoundCTRL system) to be connected to the SoundScan 101 simultaneously.

POWERBEAM 300

The PowerBeam 300 attachment extends the range of the SOUNDSCAN 101 Receiver to 90 meters. Used for detection of malfunctions in electrical components, compressed air systems, steam traps, hydraulic systems, and bearings that cannot be tested in contact mode. A laser pointer zeros in on the component being tested and is powered by two AAA batteries.

(PowerBeam 300 shown with the SOUNDSCAN 101 receiver. The SOUNDSCAN 101 is required for operation.*)

* The SOUNDSCAN 101 is sold separately.

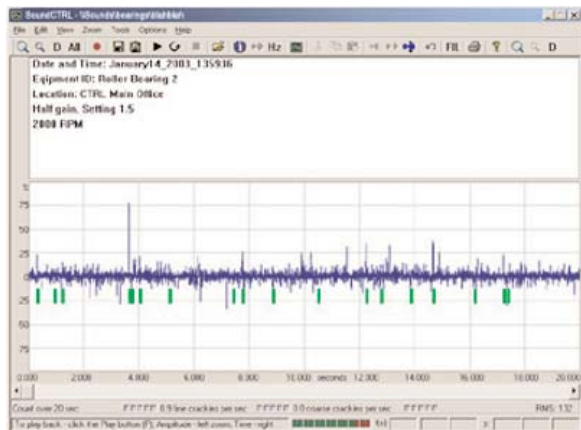


SOUNDCTRL VERSION 1.0

Equipment Condition Analysis System

The handheld SoundCTRL System connects directly to the SOUNDSCAN 101 Receiver for an easy one-step inspection-collection process. SoundCTRL recognizes the ultrasound signals received by the SOUNDSCAN 101 and immediately allows the user to record, play back, compare, and analyze audio and visual ultrasonic wave files of these signals for condition analysis.

(Pocket PC is shown at the right with the SoundCTRL Pocket PC Software below*)



System Includes:

- State-of-the-Art Full Function Pocket PC
- SoundCTRL Software, Desktop PC Version
- SoundCTRL Software, Pocket PC Version
- SOUNDSCAN 101-Pocket PC Connector Cable
- 1-Year Support, Online Support and Product Upgrades

* SoundCTRL software is developed by Stethographics, Inc. The SOUNDSCAN 101 is sold separately.

Standard Warranty

The Standard Warranty on the Soundscan 101 and accessories is 1 year from date of shipment. This does not cover damage due to neglect or abuse, Batteries or other consumable items are not covered.

Shipment of the Product to our designated repair station, expedited return shipment, and any duties or taxes are the responsibility of the customer.

Extended Warranties to two or five years are available. Please contact us for details.

**For further information contact:
Sonatest Ltd**

**Tel: +44(0)1908 316345
Fax: +44(0)1908 321323**

**Email: sales@sonatest.com
www.sonatest.com**



Distributed by: