

## Digital Ultrasonic inspection system



Expand your inspection capabilities with the ultrasound digital technology.

All the advantages of Digital with the feel of Analog.

The Ultraprobe 9000 Kit Complete is a digital ultrasonic inspection, information storage and retrieval system that is so versatile, so easy (most operators are able to use the Ultraprobe 9000 within 15 minutes of purchase) and so much fun to operate, you'll be looking for opportunities to use it every day.

From the very instant you hold the Ultraprobe 9000 Ultrasonic Inspection System in your hand, the feel of the well balanced pistol grip, the elegance of simplicity, and the clarity of signal will convince you that this is truly a remarkable feat of engineering. This Ultraprobe is ready to unleash the potential of any inspection program.

- Open Platform Software
- Interchangeable Modules
- Frequency Tuning
- Spin and Click™ Technology
- 120 dB Dynamic Range
- 400 Memory Locations Record: dB, Frequency, Time, Date, Text, Operation Mode & More
- Acoustic Isolating Headphones
- Environmentally Friendly Rechargeable Batteries
- Superior Application Support
- Easy Interface for Most Vibration Analyzers
- Upload and Download Data via USB

**For your safety, there are now two models available: Ultraprobe 9000 IS/ATEX EX and Ultraprobe 9000 Mb Ex ib I (for underground mining)**

### SPIN AND CLICK™ TECHNOLOGY

UE Systems' unique Spin and Click™ Technology makes sophisticated inspection processes so simple, so quick, that you will be amazed at how much you can accomplish with only two controls. By just "spinning" and "clicking" you can:

- Locate and Identify Potential Problems
- Store Data
- Change Frequency Quickly
- Change Sensitivity Quickly
- Download via USB Output
- Select "Snap Shot", "Peak Hold", "Real Time" ...and More!

Your first glance at the easy to read display panel shows you something special. You can see the calibrated decibel readout and a 16 segment bar graph which instantly registers sound intensity changes and simultaneously registers peak hold as you scan.



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### Technical Specifications

- Construction: Hand-held pistol type made with coated aluminum and ABS plastic
- Circuitry: Solid State Analog and SMD Digital Circuitry with temperature compensation
- Frequency Range: 20 kHz to 100 kHz (tunable in 1 kHz increments)
- Response Time: <10 milliseconds Display: 16 x 2 LCD with LED Backlight
- Memory: 400 storage locations
- Battery: NiMH Rechargeable
- Operating Temperature: 32° Fahrenheit to 122° Fahrenheit (0° Celcius to 50° Celcius)
- Output(s): Calibrated heterodyned output, decibel (dB) frequency, USB data output
- Probes: Trisonic Scanning Module and Stethoscope Module
- Headset: Deluxe noise attenuating headphones. Over 23 dB of noise attenuation. Meets or exceeds ANSI specifications and OSHA standards.
- Indicators: dB, Frequency, Battery Status, and 16 Segment Bar Graph
- Sensitivity: Detects .005" (.127 mm) diameter leak @ 5 psi (.34 bar) at a distance of 50 feet (15.24m)
- Threshold: 1 x 10<sup>-2</sup> std. cc/sec to 1 x 10<sup>-3</sup> std. cc/sec
- Dimensions: Complete kit in zero halliburton aluminum carrying case 15" x 22" x 7" (38.1 x 55.9 x 17.8 cm)
- Weight: Pistol Unit: 2 lbs. (.9 kg) Complete carrying case: 14 lbs. (6.4 kg)
- Warranty: 1 year parts/labor standard, 5 years with returned completed warranty registration
- Display Modes: Real Time, Peak Hold, and Snap Shot
- dB Measurement: Relative or Offset
- Covered by one or more of the following patents: 4416145, EPO151115, 502674183

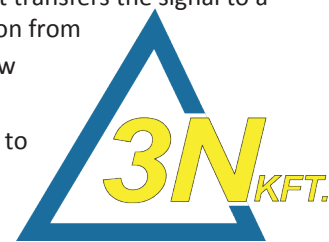
UE Systems is committed to continual product improvement therefore specifications are subject to change without notice. Warranty details are available by request. The Ultraprobe 9000 and Ultratrend Software is Y2K compliant.

### Ultraprobe® 9000 Complete Detection Kit

Complete with everything you will ever need for ultrasonic digital inspection.

#### Kit includes:

- **DHC-2 DELUXE NOISE ISOLATING HEADSET:** This heavy duty headset is designed to block out intense sounds (over 23 dB of noise attenuation) often found in industrial environments so that the user may easily hear the sounds received by the ULTRAPROBE 9000.
- **WTG-1 WARBLE TONE GENERATOR:** The Warble Tone Generator is used to provide a sensitivity validation (Calibration) test. It is also used as an ultrasonic transmitter designed to flood an area with ultrasound as part of a leak test. When placed in an empty container, it will flood that area with an intense ultrasound that will flow through a leak hole.
- **RFE-9 RUBBER FOCUSING PROBE:** The Rubber Focusing Probe is a cone shaped rubber shield. It is used to block out stray ultrasound and to assist in narrowing the field of reception of the "Trisonic" Scanning Module.
- **USB DATA OUTPUT/INPUT CABLE**
- **BCH-9 BATTERY CHARGER:** This is the standard battery charger for the Ultraprobe 9000 with a line input of 120 Volts AC @ 60 Hz. The charging time is about 8 hours. (For countries with 220 Volts @ 50 Hz, the BCH-92 is considered a standard accessory)
- **BCH-WTG BATTERY CHARGER:** This is the standard battery charger for all Warble Tone Generators that are used with the Ultraprobe 9000. The line input is 120 Volts AC @ 60 Hz and the charging time is about 8 hours. (For countries with 220 Volts @ 60 Hz, the BCH-WTG2 is considered a standard accessory)
- **SCM-9 TRISONICTM SCANNING MODULE:** This module receives air-borne ultrasounds such as those emitted by pressure/vacuum leaks and electrical discharges. The Trisonic Scanning Module has a phased array of three piezoelectric transducers which focuses the ultrasound on one "hot spot" for directionality and effectively intensifies the signal so that minute ultrasonic emissions can be detected.
- **STM-9 STETHOSCOPE (CONTACT) MODULE:** This module has a metal rod that acts as a "waveguide". It is sensitive to ultrasound that is generated internally such as within a pipe, bearing housing or steam trap. Once stimulated by ultrasound, it transfers the signal to a piezoelectric transducer located directly in the module housing. It is "module shielded" to provide protection from stray RF waves that have a tendency to effect electronic receiving and measurement. It is equipped with low noise amplification to allow for a clear, intelligible signal.
- **SLP-EXT STETHOSCOPE EXTENSION KIT:** This consists of three metal rods that will enable a user to reach up to 31 additional inches (78.7 cm) with the Stethoscope Probe.
- **PISTOL-GRIP HOUSING:** The Pistol Grip Housing is the main control unit. It consists of the display panel, the "Spin & Click" controls for volume/frequency adjustment, data entry and data storage, the headphone jack, battery, I/O port, trigger on/off switch and module receptacle.
- **HALLIBURTON CARRYING CASE**



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### Accessories:



#### DHC-2BT: BLUETOOTH HEADPHONES

Deluxe noise attenuating headphones – for hard hat use.

The DHC-2BT-TR Bluetooth transmitter must be ordered to pair with the headphones.

#### LRM-9/10: LONG RANGE MODULE

Advanced technology from UE Systems and National Aeronautics and Space Administration brings distant leaks and electrical transmissions close-up. (like an ultrasonic telescope)



#### LRM-9/10: ULTRASONIC WAVE FORM CONCENTRATOR (PARABOLIC DISH)

The UWC doubles the detection range of standard scanning modules and pinpoints ultrasonic leaks & electric emissions at great distances.

#### LRM-9/10: REMOTE ACCESS SENSOR

Magnetically mounted contact probe with cable for testing consistency and for hard to reach test poi. Must be used with remote access module (RAM) shown below.



#### UE-RAM

Adaptor Enabling Ultraprobe 9000 To Read RAS Sensor.

#### UE-RAS

Permanent Mounted Sensor With 25' Cable Readable by the Ultraprobe 9000 (requires RAM)



#### HTS-9: HOLSTER SET

One for the Ultraprobe pistol, module and headphones, the other for accessories. Keeps hands free for walking routes and climbing up and down ladders

#### TFSM-9/10: TELESCOPING & FLEXIBLE SCANNING MODULE with RAM (Remote Access Module)

Extend and Bend this probe to odd angles to locate sound sources in hard to reach areas. (up to 84 in / 2.1 m)



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### Accessories:



**FSM-9/10: FLEXIBLE SCANNING MODULE**

Bend this probe to odd angles to locate sound sources in hard to reach areas.

**EXC-9/10: MODULE INTERCONNECTION CABLE**

Shielded cable, works with either module for hard to reach areas. Standard length: 8' (2.4M). Lengths up to 50 ft. are available.



**CFM-9/10: CLOSE FOCUS MODULE**

A specialized module to help locate LOW LEVEL pressure and vacuum leaks

**WTG-2SP: WARBLE PIPE TONE GENERATOR**

For leak detection without pressure or vacuum. Heat exchangers, tanks with small openings or pipe sections can be quickly flooded with ultrasound for leak testing.



**UFMTG 1991: MULTI-DIRECTIONAL TONE GENERATOR**

This extremely powerful ultrasonic transmitter contains a multiple array of four transducers that produce UE SYSTEMS patented warble tone to cover a circular pattern of 360°.

