

**SON OF  
A GUN!**

# **ULTRAPROBE® 100**

## **Ultrasonic Inspection System...**

**Know where Your Money is Going**  
**Compressed Air Leaks Cost,**  
**Steam Leaks Cost,**  
**Machinery Failure Costs...**  
**Ultraprobe 100 Saves !!!**



Sensing ultrasonic emissions produced by operating equipment, electric discharges and leaks, the amazing **Ultruprobe 100** finds potential problems long before they become major headaches.

### **How Ultrasonic Technology Works for You**

The Ultruprobe senses high frequency sounds produced by operating equipment, leaks and electrical discharges. It electronically translates these signals by heterodyning them down into the audible range so that a user can hear these sounds through a headset and see them as intensity increments on the meter. Heterodyning works the same as a radio in that it accurately transforms the sounds so that they are easily recognized and understood.

The advantage of Ultrasound technology is simple to understand. Ultrasound is a high frequency, short wave signal. When compared with the sounds we humans can hear, the size of the sound waves are extremely small. This property provides advantages:

- **Ultrasound is very directional**
- **Ultrasound can be easily blocked or shielded**
- **Ultrasound instruments can be used in noisy environments**
- **Ultrasound changes provide early warning of potential problems**
- **Ultrasound instruments are easy to use**



# ULTRAPROBE® 100

## Available Kits & Ordering Information

It's easy to find the right Ultraprobe 100 for your application

### UE Systems ULTRAPROBE 100 Series Application Selection Chart



#### UP100KT

#### Ultraprobe 100 Kit (Comprehensive)

Includes: UP100 pistol with LED bar graph meter, 8 position sensitivity selection, low battery indicator, scanning module, rubber focusing probe, stethoscope module, warble tone generator (WTG-1) with battery charger, lightweight "walkman" style headset, 9 volt alkaline battery (replaceable), nylon Cordura soft carrying case and comprehensive instruction manual.

#### UP100SC

#### Ultraprobe 100

#### Stethoscope/Scanner Kit

Includes: all of the UP100KT but does *not* include a Warble Tone Generator

#### UP100STG

#### Ultraprobe 100 Scanner / Tone

#### Generator Kit

Includes: UP100 pistol with LED bar graph meter, 8 position sensitivity selection, low battery indicator, scanning module, rubber focusing probe, warble tone generator (WTG-1) with battery charger, lightweight "walkman" style headset, 9 volt alkaline battery (replaceable), nylon Cordura soft carrying case and comprehensive instruction manual.

#### UP100S

#### Ultraprobe 100 Scanner Kit

Includes: all as described in the UP100STG but does *not* include a Warble Tone Generator.

#### UP100C

#### Ultraprobe 100 Stethoscope Kit

Includes: UP100 pistol housing with LED bar graph meter, 8 position sensitivity selection, low battery indicator, stethoscope module, lightweight "walkman" style headset, 9 volt alkaline battery (replaceable), nylon Cordura soft carrying case and comprehensive instruction manual.

| Application                                      | Kit # | UP100KT | UP100SC | UP100STG | UP100S | UP100C |
|--|-------|---------|---------|----------|--------|--------|
| Pressure & Vacuum Leak Detection                 |       | ✓       | ✓       | ✓        | ✓      |        |
| Valve Seat Leak Detection                        |       | ✓       | ✓       |          |        | ✓      |
| Exhaust System Leaks                             |       | ✓       | ✓       | ✓        | ✓      |        |
| Heat Exchangers, Boilers, Condensers             |       | ✓       | ✓       | ✓        | ✓      |        |
| Steam Trap Inspection                            |       | ✓       | ✓       |          |        |        |
| Bearing Testing                                  |       | ✓       | ✓       |          |        |        |
| Gear/Gear Box Inspection                         |       | ✓       | ✓       |          |        |        |
| Wind Noise/Water Leaks                           |       | ✓       |         |          | ✓      |        |
| General Mechanical Inspection & Trouble Shooting |       | ✓       |         |          |        |        |
| Tanks, Pipes, Leak Testing, etc.                 |       | ✓       |         | ✓        | ✓      |        |
| Electrical Inspection                            |       | ✓       | ✓       | ✓        | ✓      |        |

#### AVAILABLE ACCESSORIES

(Call, Fax or Email for information)

- Holster Set
- Liquid Leak Amplifier (ultrasonic bubble test for low level leaks)
- Stethoscope Extension Kit
- Speaker Amplifier

- Specialized Tone Generators (Used instead of pressure test, transmits ultrasound through a leak... Fast & Easy)
- Video Training Tapes
- DHC-2H Deluxe Noise Isolating Headset
- LRM-1 Long Range Module

### ULTRAPROBE 100 Specifications

|   |   |
|---|---|
| <b>Construction:</b>                        | Hand-held ABS pistol type ultrasonic processor, stainless steel sensor enclosures   |
| <b>Circuitry:</b>                           | SMD / Solid State hybrid heterodyne receiver  |
| <b>Frequency Response:</b>                  | Peak response: 36 - 44 KHz  |
| <b>Indicator:</b>                           | 10 segment LED Bar Graph (red)  |
| <b>Sensitivity Selection:</b>               | 8 position precision attenuation  |
| <b>Power:</b>                               | 9 Volt Alkaline Battery   |
| <b>Low Battery Voltage Indicator:</b>       | LED   |
| <b>Headset:</b>                             | Weight: 2.5 oz. Operating Temperature Range: -22 to 167°F (-30° to +75°C)<br>Cable: 48" shielded. Cable Pull: 20 lbs. Frequency Range: 300 to 3000 Hz.<br>Impedance: 150Ω. Molded connector.              |
| <b>Probes:</b>                              | Scanning Module (SCM-1) Stainless Steel Unisonic (single transducer)<br>piezo electric crystal type; Stethoscope/Contact Module (STM-1) Stainless Steel plug-in type with 5.5" Stainless Steel Waveguide. |
| <b>Rubber Focusing Probe:</b>               | Shields stray ultrasonic signals & focuses detected signals.  |
| <b>Transmitter:</b>                         | Patented warble tone transmission   |
| <b>Response Time:</b>                       | 300 msec.   |
| <b>Ambient Operating Temperature Range:</b> | 32° - 120°F (0°-50°C)   |
| <b>Relative Humidity:</b>                   | 10-95% non-condensing up to 86°F (30°C)   |
| <b>Storage Temperature:</b>                 | 0° - 130°F (18° - 54°C)   |
| <b>Warranty:</b>                            | 1 year parts/labor standard. (Details available on request)<br>5 years upon completed registration form   |
| <b>Dimensions:</b>                          | 5.25" x 2" x 8" (13.3 x 5 x 20.3 cm)  |
| <b>Weight:</b>                              | 11 oz (.3 kg)   |
| <b>Carrying Case:</b>                       | Nylon Cordura soft carrying case  |

Covered by one or more of the following patents: 4416145, EPO151115, 502674183 additional patents pending. UE Systems is committed to continual product improvement therefore specifications are subject to change without notice. Warranty details are available by request.



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