

# ULTRAPROBE® 550

Versatile analog ultrasonic leak detection & valve inspection system

*Versatile ultrasonic diagnostics for accurate and cost effective leak detection and mechanical inspection!*

## How it works:

The Ultraprobe® 550 is loaded with a selection of high tech accessories that will help meet the needs of practically any challenge faced by an inspection team. By combining enhanced sensitivity with advanced simplicity, the Ultraprobe® 550 can locate leaks and detect electrical and mechanical problems.

Designed for ease of use, it often takes no more than 15 minutes to become competent in testing with this instrument. The Ultraprobe® 550 heterodynes ultrasound to the audible range, providing accurate sound reproduction.

The Ultraprobe® 550 is ideally suited to work with virtually any plant program:

- **Predictive Maintenance**
- **Energy Conservation**
- **Safety**
- **Quality Assurance**
- **Total Productive Maintenance**
- **Process Safety Management**



## Inspection information is provided through 3 modes:

- 1) Auditory Channels (via an acoustically isolating headset)
- 2) Analog Meter
- 3) Demodulated Signal for vibration data collectors and other recording devices



Stethoscope module



Long range module



Close focus module



### Ultraprobe® 550 Kit Features:

- Metered Pistol Grip
- Ballistic Meter
- 10-Turn Potentiometer
- Numerically Calibrated Sensitivity Dial
- Battery
- Battery Indicator Light
- Battery Recharger Receptacle
- Head Set Receptacle
- Trisonic™ Scanning Module
- Rubber Focusing Probe
- Stethoscope (Contact) Probe
- Deluxe Headphones
- Extension Probe Kit
- Warble Tone Generator
- Battery Recharger (110V or 220V)
- Nylon Cordura Soft Carrying Case

### Ultraprobe® 550 Kit Features: Supported by Accessories

- Holster Set
- Magnetic Mount Probe
- Long Range Module
- Ultrasonic Wave Form Concentrator (Parabolic Dish)
- Wide selection of Ultrasonic Tone Generators
- Hard Hat Headphones
- Extension Cable
- Training CD's

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### Application Selection Chart

APPLICATION	KIT #	UP550KT	UP550SC	UP550C	UP550S
Pressure & Vacuum Leak Detection		•	•		•
Hydraulic Valve Bypass		•	•	•	
Exhaust System Leaks		•	•		•
Heat Exchangers, Boilers, Condensers		•	•		•
Valve & Steam Trap Inspection		•	•	•	
Bearing Testing		•	•	•	
Gear/Gear Box Inspection		•	•	•	
Cockpit Window/Hatch Leaks		•			
General Mechanical Inspection		•	•	•	
Tanks, Pipes, Leak Testing, etc.		•	•		•
Electrical Inspection		•	•		•

### Ultraprobe® 550 Specifications

<b>Construction</b>	Metered pistol housing; coated aluminum ABS plastic
<b>Circuitry</b>	Solid State heterodyne receiver with temperature compensation
<b>Frequency Response</b>	Peak response: 36-44 kHz (optimized for airborne leaks)
<b>Probes</b>	<b>Scanning Module</b> patented Trisonic plug-in type consisting of a phased array of multiple transducers for airborne ultrasound. <b>Rubber Focusing Probe</b> (flexible) slips over scanning module to concentrate conical directivity and to shield reception of stray ultrasound. Also fits over Stethoscope Module to shield against high ambient ultrasound while unit is at maximum sensitivity. <b>Stethoscope Module</b> – plug-in type, insulated probe with RF shielding; 11.4 cm (4 1/2") long stainless steel probe tip, conically shaped for uniform surface contact. Stethoscope Extension Kit: 3-piece, segmented metal rods to increase stethoscope contact range for 50.8 cm (20") and 76.2 cm (31").
<b>Headset</b>	Noise isolating type: Double headset wired monophonic. Impedance, 16 ohms. Over 23 dB of noise attenuation. Meets or exceeds ANSI specifications and OSHA standards. For hard hat use.
<b>Indicators</b>	Ballistic output meter. Low Level Battery LED indicator for main housing internal power supply.
<b>Battery</b>	Self contained nickel metal hydride (environmentally safe). Rechargeable.
<b>Pistol Unit Weight</b>	0.9 kg (2 lbs.)
<b>Carrying Case</b>	Nylon Cordura soft carrying case
<b>Sensitivity</b>	Detects 0.127 mm (0.005") diameter leak @ 0.34 bar (5 psi) at a distance of 15.24 m (50 ft.)
<b>Threshold*</b>	1 x 10 <sup>-2</sup> std. cc/sec to 1 x 10 <sup>-3</sup> std. cc/sec
<b>Warranty</b>	1-year parts/labor standard. 5 years with completed warranty registration card. <small>*depends on leak configuration</small>



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