

AccuTrak® The Smart Choice!

Whether you're an active user of ultrasonic technology or just getting started, AccuTrak is worth a look and a listen! Offering truly advanced patented technology, innovative features, and all at exceptional values. Our diverse line offers something for every application, and any budget. Here are a few ways thousands of existing AccuTrak customers benefit everyday.



Find Air leaks Fast!

Did you know that compressed air often devours more electrical energy than any other equipment in the plant? Do your compressors run on weekends when the plant is unoccupied? Do you have difficulty maintaining optimum pressures? Have you come to rely on your backup compressor for routine demand? - **Still think Air is Free???** Save thousands (20 to 50%)* annually by locating and repairing air leaks! Do it with AccuTrak, the easiest way to find them, **Simply turn it on and go!!!** AccuTrak is also great for refrigerant leaks, vacuum leaks, heat exchangers, or any pressurized system.



Test Valves and Steam Traps!

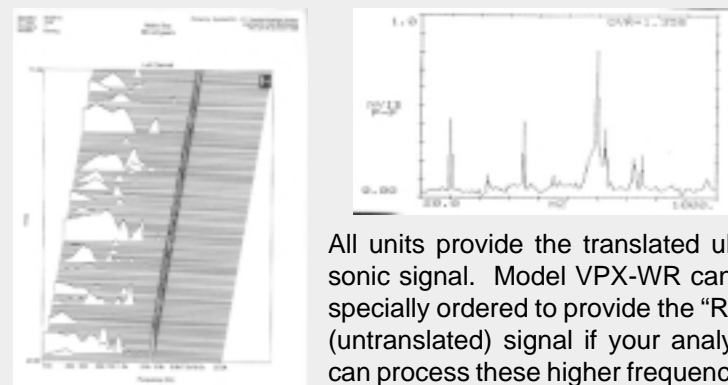
How would you like to save \$30,000/yr. or more!* That's what many companies can expect by initiating a simple steam trap testing and repair program. Leaking steam traps waste thousands of dollars in live steam, while traps failed closed won't remove damaging condensate. Identifying these problems with AccuTrak is simple!

The touchprobe sensor lets you **hear** the ultrasonic sound created by turbulence and flow inside the body of a valve or steam trap. When in the closed position a healthy valve or steam trap is silent, while a leaker screams for attention! Use AccuTrak to test all types of steam traps, control valves, expansion valves, check valves... *you name it!*



Detect bearing wear!

The surfaces of internal bearing components are constantly wearing down. Increased friction and impact creates changes in ultrasonic sound signatures as they progressively get worse. AccuTrak not only lets you hear the internal components but allows you to set baselines for both comparative and historical trending. Inconsistently high readings indicate wear or lubrication problems and provide you with advanced warning of failure on the horizon. **AccuTrak model VPE-2000 offers digital frequency selection, volume/sensitivity and meters with peak hold** to assure you of **repeatable and reliable results every time!**



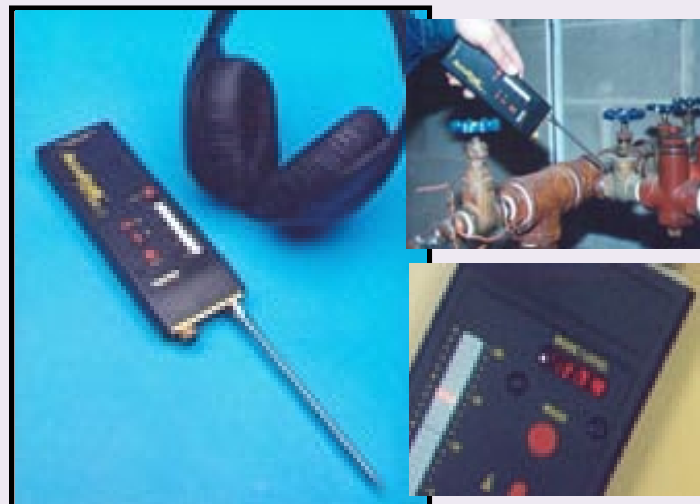
All units provide the translated ultrasonic signal. Model VPX-WR can be specially ordered to provide the "Raw" (untranslated) signal if your analyzer can process these higher frequencies.

Signal Analysis!

Trends in sound intensity can be noted using AccuTrak's LED meters, however if more detailed recording and comparison is what you're after, AccuTrak can be connected to your engine/valve analyzer, spectrum analyzer or to your PC using off the shelf PC based - dual channel, real time, FFT spectrum analysis software. Simply connect AccuTrak's output to your sound card, and view... Time series, Spectrum, Phase, Spectrogram, and 3D Surface.

* These figures have been presented by the US Department of Energy who has identified Air and Steam leaks as significant sources of energy loss. They have created the "Air Challenge" and "Steam Challenge" to help plants worldwide address these issues.

Model VPE-2000 Advanced Digital!



AccuTrak VPE-2000 is the **first digitally controlled** ultrasonic detector. Like two instruments in one it uses two independent sensors supported by separate electronic circuits configured specifically to their own sensor. This assures optimum sound clarity and frequency response. When switching between the airborne and contact sensors all settings are retained in memory!

Digital LED meters let you establish baselines, perform trending, and accurately repeat these tests better than older more expensive analog instruments.

Other applications... Detect electrical arcing, worn fan belts, confirm and locate increased noise from fans, compressors, and ductwork. Use the sound generator to find leaks in door gaskets, welds, rivets, windows, and even roofing.

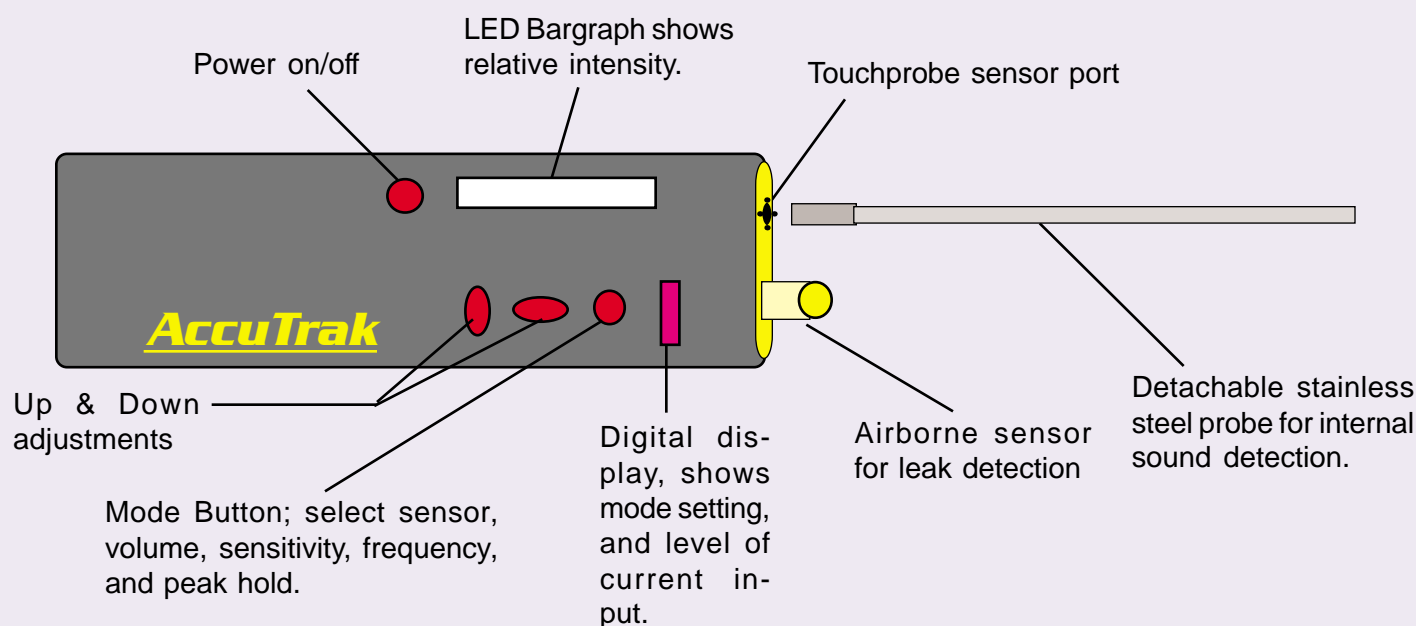
Construction... The AccuTrak VPE-2000 is constructed of durable ABS, with solid anodized aluminum to house and protect both sensors. The circuit boards are **bolted** to the case for optimum strength and support. All the displays are high intensity for easy readability, and the buttons are sealed to keep out foreign substances. The VPE-2000 is **made in the USA**, and built to last!

Includes everything needed to do the job; instrument, headset, contact probe extension kit, hard carrying case and protective canvas pouch with vinyl window, ultrasonic sound generator, batteries, manual and video overview.

AccuTrak First in Digital Ultrasonics!

1. Digital LED Indicators (Alphanumeric and bargraph)
2. Digital Frequency Selection (With SONIC Probe Mode)
3. Digital PEAK HOLD Feature
4. Separate Volume and Sensitivity
5. Digital Mode Selection
6. Stores all Settings in Memory
7. Wide Dynamic Range (256 Steps)
8. Field Calibratable (With purchase of Calibrator)

Other features and controls



Model VPX-WR Ultimate Air Leak Detector!



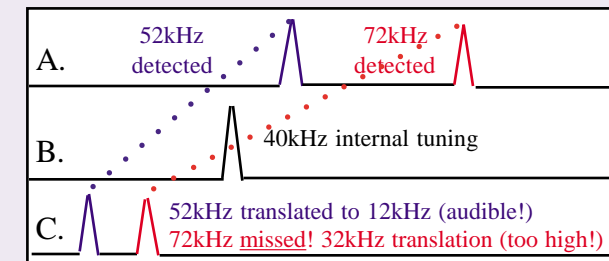
You might be impressed with the fact that AccuTrak can actually hear the blink of a human eye, but what will *really* impress you is AccuTrak's ability to identify the hiss of a compressed air leak, even in the noisiest facility.

AccuTrak **Model VPX-WR** represents *THE* state-of-the-art technology for ultrasonic air leak detection! This *ultra-durable and waterproof* instrument incorporates our *patented and trademarked* circuitry we call "DND" (Dynamic Noise Discrimination). Older detectors using only the heterodyne technique, simply cannot offer the same leak detection abilities, especially in loud plant environments.

How DND works...

Superior Signal engineers have devoted thousands of man hours to the development of DND. This truly advanced technology allows AccuTrak to detect and translate a broad band of ultrasound (20kHz to 100kHz) without the guesswork associated with manual tuning!

Heterodyne type detectors compare the *incoming signal* (A) with an *internally generated frequency* (B), in most cases around 40 kHz.



The **difference** between these two signals is what gets heard in the headset (C). One problem (as seen here) is that if the *incoming* sound is too far from the *internally generated* frequency the **difference** is too large (high in frequency) to ever be heard by the user. "Fixed band" systems do not widen the frequency detection range of the instrument, only lock in on one *internally* generated one.

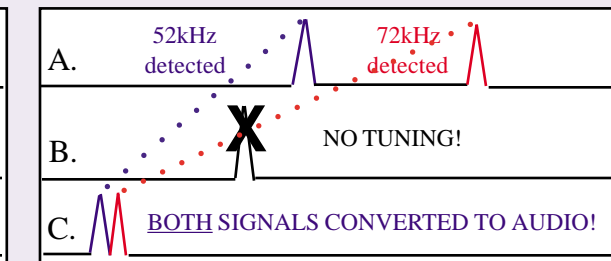
Sophisticated inside, Simple outside!

Leaks come in all sizes, shapes, frequencies and intensities. You don't care what frequency a leak sound is, you just want to know where the leak is! Since the intensity of the leak sound is not directly proportional to the size of the leak, you can't use a meter to quantify CFM or volume of air lost, but you CAN find it! - THAT is what the VPX-WR does and does well... Finds leaks fast!

Ultra-Durable Construction, Designed for Harsh Environments.

AccuTrak VPX-WR has the only sensor in the world that combines high sensitivity and hermeticity. Its resistance to water, steam, oils, fumes, dust, etc. allows the instrument to be used in hostile environments where other detectors fail. Totally sealed controls, indicators, and plugs make the unit 100% water tight. The internal circuitry is housed in hard anodized aluminum for durability and longevity. The aluminum housing is surrounded with a padded grip for comfort and easy handling. It is the most durable instrument of its kind.

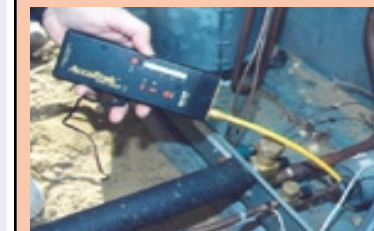
DND constantly "scans" the complete range of detection from 20 to 100kHz and automatically tracks both frequency and intensity of



incoming signals (A). When a sound is detected which is above the previous intensity baseline, it uses a sophisticated mapping process rather than simple subtraction to translate the sound to the audible range (C). The result is a leak detector able to find leaks faster than any other; **no tuning!** You can see from the example above that DND captures both incoming signals while standard heterodyning could hear only one.

Also Available...

When powerful performance is needed and budgets are limited, choose the versatile VPE. This low cost heterodyned detector fits in your shirt pocket! The VPE-1000 offers many of the extraordinary features available on the VPE-2000 with the exception of frequency tuning, and is the only digital ultrasonic instrument available for less than \$1000.



Model VPE-1000



Model VPE

Best for: A variety of leak detection and plant maintenance applications in areas of low to moderate background noise. Perfect for schools, hospitals, hotels, and other large institutional and industrial environments. Great for Steam traps, bearings, specialty gas leaks, HVAC/R, vacuum bag/mold leak testing and more!

Waterproof Sensor!



Single Control!



Warranty

AccuTrak is warranted for one year to be free of manufacturing defects, with the first 30 days unconditional! If you don't think AccuTrak is the most accurate, and effective ultrasonic instrument available, simply return it (in good condition of course) for a full credit or refund!

AccuTrak detectors are covered by numerous patents, and patents pending.

Superior Signal Company, Inc.

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