

AccuTrak® Model SG-2
Ultrasonic Sound Generator

Instructions

The AccuTrak® Sound Generator and the AccuTrak® Detector form a non-invasive leak detection system capable of finding leaks in enclosures, such as buildings, vessels, automobiles, walk/reach in freezers, or any other container that needs to be leak-free.

The AccuTrak® Sound Generator is used to "pressurize" rooms and enclosures with it's sound. This sound is above the human hearing range, and cannot be heard. It can penetrate through minute cracks, even ones that are not directly behind the leak point, and exit through it. It can thus trace the path air, or water, will take to cause a leak.

The AccuTrak® Detector receives the ultrasonic sound that escapes from the leak point, processes it and displays it's strength. The bigger the leak is, the higher the volume in the headset.

OPERATION

To test an enclosure, turn the Sound Generator ON – **the Low Battery light will flash 3 times and then stay green indicating a good battery.** Place it on one side of the item to be tested. Close the door, window, etc., or seal the enclosure being tested. Using the AccuTrak® detector start from a low sensitivity and check if you can hear any sound. If you can, check the area of interest and note the points where the intensity is high. If you cannot hear any sound, increase the sensitivity and repeat the previous step. The points where the sound is the greatest are most likely leaks.

If the sound from the generator is too loud, and seems to be coming from everywhere, you should place the unit in a towel, or use another method to muffle the sound.

BURST MODE

Pressing the "Mode Select" button will change the output of the generator from continuous tone to "Burst Tone". If the background noise is extremely loud in a particular area, using Burst Tone will make the output of the sound generator much easier to identify.

BATTERY REPLACEMENT

The Low Battery light will flash red when it begins to fail. To replace the batteries in the sound generator, turn the unit over, with its sensor output front towards you. The battery door is on the far side. To open, press down in the center of the back panel, and slide it away from you. It does not need much force to open. Replace with one 9 volt battery.

APPLICATION SUGGESTIONS

Weatherizing buildings requires finding the points where the weather elements can enter the building. With this system, this task becomes very simple. Place the sound generator in the room to be leak-tested and turn it ON. Go outside with the AccuTrak® and start a systematic search to find the leaks.

Start around the perimeters of the doors and windows, using tape and a marker pen to register the volume levels at the locations they are discovered. After you have finished, read the numbers on your tape and try to determine the cause of the problem. Using tape saves you from repeating the checks.

This procedure can be used to find leaks in the sealing of logs in log homes, or to check roofing jobs as well.

AUTOMOTIVE / AIRCRAFT CABIN

Windows, trunk and door seals can be tested by placing the sound generator on the inside of the automobile or aircraft and testing on the outside. Be sure the area to be tested is dry as the capillary tension in the water may block the passage of sound.

REFRIGERATION

Freezer boxes and refrigerated truck bodies can be tested for tightness like any other enclosure. Depending on the size, it may be necessary to move the Sound Generator every ten feet inside the trailer to maximize its effectiveness.

CARE AND MAINTENANCE

The instrument can be cleaned with a towel using dish soap and water. Remove the batteries and close the door before applying the water and do not allow water to enter the unit, especially the front where the sensor is located. After cleaning, dry the unit with a paper towel. Any automotive vinyl cleaner (on a piece of cloth) will restore the luster. If you plan to store the instrument for an extended period of time, (1 year) remove the batteries.

For service and repairs contact...

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SPECIFICATIONS

Frequency Control	-	Precision Crystal Oscillator
Output Frequency	-	40 kHz (+/- 2.5 Hz)
Frequency Accuracy	-	+/- 50 parts per million
Precision Voltage Regulator	-	1% Regulation
Output Intensity	-	115 db at 30cm. (nominal)
Dual Mode Output	-	Continuous or Burst Tone
Power	-	9 Volt Cell
Battery Life (approx.)	-	70 hrs. Continuous, 90 hrs. Burst

WARRANTY

The AccuTrak[®] Sound Generator is warranted for 1 year to be free of manufacturing defects adversely affecting performance. If defective, return to the factory for repair and recalibration. Maximum liability of Superior Signal Company, Inc. shall be limited to replacement of unsatisfactory product.

Recommendations and product information are believed to be accurate, but the furnishing of it does not constitute the making of a good process warranty of Seller.

Superior Warrants that this product conforms to the Product Description contained in this literature.

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