Pin-Point Underground Leaks with Industry’s Most Accurate and Proven Leak Detector.

Plumbers, contractors, water works personnel, and plant maintenance people have continually sought specialized equipment and improved techniques for detecting and pinpointing underground water leaks. The Model 777-A leak detector meets this requirement in a simple and efficient manner, utilizing the proven theory that leaks in water systems under pressure create mechanical vibrations that travel along the pipe and at right angles to it (to the surface). The operator simply touches the microphone probe to the pipe being tested and to all exposed fittings, such as hydrants, shut-offs, valve stems, water meters, faucets, etc. The microphone converts these mechanical vibrations to electrical impulses that are then amplified and displayed on the meter as the “sounds” of the leak can be heard in the headphones. The water leak is then localized by comparing readings and sounds from a series of detection points on the water system. Pinpointing is accomplished by reading through the pavement or floor using the ultra sensitive microphone.

RATED #1 FOR RESIDENTIAL AND COMMERCIAL SLAB LEAKS

OUTSTANDING FEATURES

- Aluminum instrument housing contains circuitry, controls and meter. Weight: 2.5 lbs
  Dimensions: 3” x 6” x 10”, Batteries: 6 “AA”
- Ultra sensitive microphone to detect a wide range of water leak sounds and convert them into electrical impulses which are then amplified and displayed
- Large sensitive meter to display leak “sounds” and indicate battery condition
- Padded stereo headphones to reproduce leak sounds and effectively shut out external noises.
- Wide-range controls to adjust amplifier gain, meter sensitivity and filter frequency (filter range: 20 Hz - 500 Hz on “Lo”, 20 Hz - 3.5 KHz on “Hi”)
- Hi-impact foam lined plastic carrying case (20” x 16” x 8”)

PIN-POINT LEAK DETECTION
The Model 777-A leak detector is a light, durable, sensitive instrument which will quickly provide accurate leak locations and eliminate false indications and “dry” holes. In the design of the Model 777-A careful consideration has been given to the sounds, frequencies, and critical characteristics of underground water leaks. The frequency filter control on the instrument control panel enables the operator to properly match the instrument to the specific frequency of the water leak being detected. By designing a sensitive audio circuit the sounds of the water leak are accurately reconstructed to further assist the operator in quickly pinpointing subsurface water leaks.

**LEAK DETECTION PROCEDURE EXAMPLE**

1. Start by taking direct contact readings at all available fittings. Observe the meter and listen for leak sounds in the headphones.

2. Work toward maximum readings. For example, the direct contact reading at point 3 shows a leak intensity of 22 on the meter. Point 4 indicates 43, suggesting that point 4 is closer to the leak.

3. From the direct contact readings it can be concluded that the leak lies somewhere between point 5 (meter reading 47) and point 6 (meter reading 54).

4. To pinpoint the leak it is necessary to take a series of surface readings. For more accurate results the surface reading points should be directly over the leaking pipe. It is recommended that the pipe be traced and marked using either the Model 5600-SI or the Model 4400 pipe locator. The surface readings can be taken with the microphone placed directly on the surface or with the microphone bell accessory attached. Again, work along the pipe toward maximum readings.

5. The peak meter reading and the highest leak sound will occur directly over the water leak regardless of where the water might be showing on the surface.

**LEAK DETECTION PROCEDURE EXAMPLE**

<table>
<thead>
<tr>
<th>LEGEND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buried water pipe</td>
</tr>
<tr>
<td>Above ground or accessible</td>
</tr>
<tr>
<td>direct contact points (angle stops, hosebibbs, valves etc.)</td>
</tr>
<tr>
<td>Leak intensity (Meter readings)</td>
</tr>
<tr>
<td>Surface readings</td>
</tr>
</tbody>
</table>

**DIMENSIONS**
L 6” x H 10” x W 3”

**OPERATING WEIGHT**
2.5 lbs.

**SHIPPING WEIGHT**
16 lbs.

**FREQUENCY FILTER RANGE**
20 Hz - 500 Hz on “Lo”
20 Hz - 3.5 KHz on “Hi”

**BATTERIES**
6 “AA” Alkaline Batteries

**STANDARD ACCESSORIES**
Stereo Headphones
Ultra Sensitive Microphone
Mic Probe
Bell Housing
Carrying Case
Operating Manual

**WARRANTY**
One year on manufacturing defects and workmanship