LD-18 Digital Water Leak Detector

LD-18 **Quick Reference** Guide

How to Pinpoint Water Leaks with the LD-18

1 The loudness of a leak heard on an asphalt street or a concrete slab depends upon the size of the leak, water pressure, and depth of the pipe. Hard, dry materials like asphalt, concrete, rock, and compacted soil transmit sounds better than wet clay, sand, or loose soil. The sounds travel further on iron and steel pipes than on PVC pipes or Poly pipes.

Example 1: Iron Pipe, 75 Psi, 10 GPM Leak, 5 ft. Depth



Example 2: PVC Pipe, 50 Psi, 1 GPM Leak, 3 ft. Depth



4 At the spot no. 1, do you hear the leak? If "Yes," than the LD-18 hears the leak too. Hold the Mute Switch closed and let the LD-18 listen for **30 – 60** seconds or longer until the Minimum Noise Level becomes constant. Press the SAVE button while still holding the Mute Switch.



Repeat this exact same process for 5 – 10 spots directly over the pipe. Spots can be spaced 6 inches apart or 3 feet apart, but the LD-18 has to be able

2. Before listening on the asphalt or concrete over the pipe, always listen at hydrants, valves, and meters within 100 – 200 ft. of the suspected leak area:





Listening at a hydrant with the magnet base

Which hydrant, valve or meter is loudest? Leak is closest to the loudest.

3 Mark out the locations of the pipes and listen directly over them:



Adjust the sensitivity, change the filters, and use the Noise Reduction, if needed. Do you hear the leak?

6 With the Minimum Noise Levels saved at 5 – 10 spots directly over the pipe, examine the GRAPH by pressing FILE twice:



The Minimum Noise Level at each spot is the

to hear the leak.

5 Each time the SAVE button is pressed (while the Mute Switch is closed), the Minimum Noise Level is recorded in the LD-18's memory and a file number is assigned. Press FILE to see the File List, and press FILE again to see the GRAPH:



(spot on street)

actual leak sound, and where it reaches a peak is where the leak is pinpointed.

- **7** The Band Pass Filters (HI and LO Filters) and Notch Filters (Off, 50 Hz, 60 Hz) are used for removing extraneous continuous noises like AC hum (60 Hz in USA), motors, air conditioners, wind, and traffic. Extraneous noises can interfere with the LD-18's ability to hear the leak sounds.
- **8** The Noise Reduction function removes intermittent noises like footsteps, passing cars, and dogs barking. Choose Lv.3 (3.0 sec.) to remove the longest lasting intermittent noises, up to 3.0 seconds long. Intermittent noises longer than 3.0 seconds cannot be removed.