

LEAK DETECTORS

**Aerial or
Burial: Over
or Under,
We've Got
You Covered!**



**GEORGIA
UNDERGROUND
SUPERSTORE**

version 02.06.2020



Georgia Underground Superstore has built a unique business around the special needs of utility contractors like you. We are committed to maintaining a unique product mix so we can be your “one-stop shop” for both your equipment and supply needs.

We look forward to earning your business by:

- Stocking the products we carry so they are available when you need them
- Offering quality products from leading manufacturers
- Repairing and servicing the products we sell
- Shipping your orders quickly—anywhere in the United States and beyond
- Maintaining a **knowledgeable staff** that understands the **utility construction business**

Our 31,000 sq. ft. Dallas, TX warehouse allows us to reach and serve our national clientele.

The GUS Superstore Staff knows the business and can show you the latest products available.

The GUS Superstores feature large show rooms. They're still growing!

Our 61,000 sq. ft. Atlanta warehouse stocks the product you need. A complete shop facility is designed to meet your service and repair needs.

LD-12 WATER LEAK DETECTOR



STANDARD ITEMS

- 1 3 Section Contact Rod
- 2 Amplifier
- 3 Ground Mic & Handswitch
- 4 Magnet Base
- 5 Stereo Headphones
- 6 Nut Driver

FEATURES

- ▷ Large meter display (with backlight) of sound loudness, allowing the user to pinpoint the exact leak location.
- ▷ Light weight amplifier, weighing only 31 ounces, with a padded carrying case and a strap.
- ▷ Six selectable filters, split into three "low side" filters (100Hz, 200Hz, or 400Hz) and three "high side" filters (600Hz, 800Hz, or 1200Hz).
- ▷ "Limiter" switch which cuts off all loud noises greater than 110dB. If you drop the sensor, you won't hurt your hearing.
- ▷ "Filter-Thru" switch, which turns OFF all of the amp's filters, allowing the user to hear all sounds from 50Hz to 15,000Hz.
- ▷ High-sensitivity ground microphone and low "electronic noise" amplifier combine to offer the very best quality sound for leak detection.
- ▷ Three accessories for attachment to the sensor:
 - ▷ Ground plate for pinpointing on streets/slabs
 - ▷ Magnet base for surveying at hydrants/valves
 - ▷ Contact rod for surveying at meters/fittings



AMPLIFIER WITH METER DISPLAY
AND FILTER CONTROLS

AMPLIFIER CONTROLS

- ▷ Power ON/OFF Switch
- ▷ Battery Indicator
- ▷ Adjustable Filter buttons
- ▷ Headphone Jack
- ▷ Sensor Jack
- ▷ Meter Display
- ▷ Volume Control
- ▷ Display Light Switch

SPECIFICATIONS

AMPLIFIER

- ▷ Input Impedance: 50k ohms
- ▷ Output Impedance: 15 ohms
- ▷ Amplification: 62 dB +/- 3dB
- ▷ Frequency Range:
 - 1) 100Hz to 1200Hz (13 dB) with Filter-Thru OFF
 - 2) 15Hz to 30,000Hz (13 dB) with Filter-Thru ON
- ▷ Power: 6 AA dry cell batteries
- ▷ Power Consumption:
 - 1) 70 mA or less with backlight ON
 - 2) 35 mA or less with backlight OFF
- ▷ Battery Life:
 - 1) 28 hours with backlight OFF (alkaline cells)
 - 2) 14 hours with backlight ON (alkaline cells)
- ▷ Weight : 31 ounces (885 g)
- ▷ Size : 6.7"w x 2.8"h x 4.1"d (170mm x 71mm x 103mm)

ABS CARRYING CASE

- ▷ Weight (full) : 16.4 lb. (7.43 Kg)
- ▷ Size : 18.5"w x 14.6"h x 7.5"d (470mm x 371mm x 190mm)



Includes:

- ▷ ABS custom carrying case
- ▷ Instruction manual

Rev. 01/11/2017

LD-15 WATER LEAK DETECTOR



KEY FEATURES

- 1 Amplifier w/meter display & filter controls
- 2 Aviation-grade stereo headphones
- 3 High sensitivity sensor & cable
- 4 Padded case & waist strap

FEATURES

- ▷ High sensitivity sensor with Neodymium magnet (extra strong). Sensor and cable connection completely sealed and water-proof (submersible).
- ▷ Amplifier with superior audio quality (very low distortion and superior signal-to-noise ratio) and large meter display. Press the Mute Switch to hear sounds when you are ready.
- ▷ "Survey" for water leaks by listening at hydrants and valves with the sensor and magnet. Survey at water meters with a Long Contact Rod (optional).
- ▷ "Pinpoint" water leaks in pipes under asphalt or concrete with the base plate attached to the sensor and magnet.
- ▷ Use the High filter range for water leak surveying. Use the Low filter range for water leak pinpointing. High frequency leak sounds travel on the pipes, but only low frequencies pass through the soil.



Soft Case

- ▷ Padded custom case
- ▷ Standard belt (40 inches)

SPECIFICATIONS

AMPLIFIER

- ▷ Amplification: 56 dB
- ▷ Filter Ranges:
 - 1) High Range: 30 Hz to 5000 Hz
 - 2) Low Range: 30 Hz to 800 Hz
 - 3) Notch Filter: 150 Hz, 180 Hz
- ▷ Power: 4 "C" dry cell batteries
- ▷ Battery Life: 80 hours with alkaline batteries at 68° F
- ▷ Weight: 31 ounces (including batteries)
- ▷ Size: 6.4" w x 3.0" h x 5.7" d (163mm x 76mm x 144mm)

SENSOR

- ▷ Sensitivity: 10 V/g
- ▷ Resonance Frequency: 950 Hz (±150 Hz)
- ▷ Weather Protection: IP68 or equivalent (3 ft under water for 3 hours)
- ▷ Cable Length: 9.75 ft



Includes:

- ▷ ABS custom case
- ▷ Instruction manual

Rev 01/11/2017

LD-18 WATER LEAK DETECTOR



KEY FEATURES

- 1 Amplifier w/LCD, & Control Panel
- 2 Padded case for amplifier
- 3 Magnetized sensor (optional)
- 4 Aviation-grade stereo headphones
- 5 Ground mic & hand switch

FEATURES

- ▷ All-digital amplifier, with automatic noise reduction of intermittent sounds, high and low filters, storage and graphing of sound levels at different locations on the pipe, bar graph and numeric display of sound loudness, USB connection, and back light.
- ▷ Automatic noise reduction capability for intermittent noises such as pedestrian footsteps, people talking, and passing vehicles.
- ▷ Storage and graphical display of the leak's loudness at multiple locations along the pipe.
- ▷ Large LCD Display, provides superior visibility in both direct sunlight and dark environments.
- ▷ 5 High Frequency filters, 3 Low Frequency filters (plus Low filter OFF), and 2 Notch filters (plus Notch filter OFF) to remove continuous interfering noises from A/C hum, motors, wind, etc.
- ▷ Hard ABS plastic carrying case included.
- ▷ Soft padded case and waist strap for the transmitter.



Includes:

- ▷ ABS custom case
- ▷ Screw driver
- ▷ Waist strap
- ▷ USB cable
- ▷ Instruction manual

SPECIFICATIONS

AMPLIFIER

- ▷ Combined Sensitivity: 900 V/G or higher (at 400 Hz) and Amplification
- ▷ Low Filters: Off, 100 Hz, 200 Hz, 400 Hz
- ▷ High Filters: 400 Hz, 600 Hz, 800 Hz, 1200 Hz, 2200 Hz
- ▷ Notch Filters: Off, 50 Hz, 60 Hz
- ▷ Maximum No. of Sound: 250 (by date and time) Levels Saved in File
- ▷ Power: 4 C dry cell batteries
- ▷ Battery Life: 24 hours minimum (continuous use)
- ▷ Frequency Range: 50 Hz to 2200 Hz
- ▷ Weight: 35 ounces (including 4 C batteries)
- ▷ Size: 6.4" w x 3.0" h x 5.7" d (163mm x 76mm x 145mm)
- ▷ Weather Resistance: IP52 equivalent
- ▷ Temperature Range: Minus 4 F to Positive 130 F (Working)

SENSOR

- ▷ Type: Piezo electric ceramic
- ▷ Weather Resistance: IP67 equivalent (3 ft water depth for 30 minutes)
- ▷ Standard Base: 3 - Pronged Plate (removable with nutdriver)

Rev. 01/11/2017

LD-12 Professional's Plus Water Leak Detector

LD-12 Quick Reference Guide

Operating Instructions

- LD-12 Professional's Plus Water Leak Detector includes accessories for water leak "pinpointing" and water leak "surveying":



Ground Miking to pinpoint a leak in a hydrant line



Leak Surveying by listening at a hydrant with magnet base



Leak Surveying by listening at a meter with contact rod

- WARNING!** The LD-12 is very sensitive and can damage hearing if not used properly. Keep the sensor motionless when the Mute Switch is depressed, and keep the Volume below 25% when attaching to a hydrant, meter, or valve that may be very loud.

Standard Accessories for LD-12



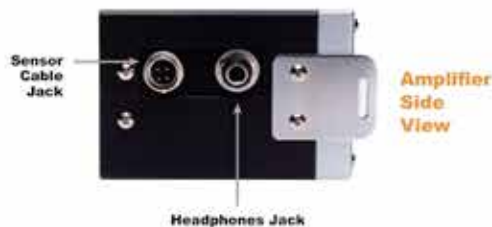
- 1 Amplifier with Meter Display and Filter Controls
- 2 Ground Microphone and Handswitch (Mute)
- 3 Aviation-Grade Stereo Headphones
- 4 Heavy-Duty ABS Plastic Carrying Case
- 5 Magnet Base
- 6 3-Section Contact Rod
- 7 Nut Driver (to remove base)
- 8 Instruction Manual (not shown)

- WARNING!** Do not drop the sensor hard on to asphalt, concrete, valves, or other surfaces from 2-3 feet or more. The sensor has a piezo electric ceramic element, and it can be broken by hard drops or harsh treatment.

- The amplifier has a large Meter Display, Volume Control, Adjustable Filters, ON/OFF Power Switch, Battery Power Switch, and a Light Switch:



- The headphones jack is "power switched". If the headphones are not plugged in, the amplifier's power does not go ON:



- There are 3 Low Filters and 3 High Filters. The LD-12 user hears all of the sounds between the two filters that are ON. All sounds that are in frequencies lower or higher are filtered out.



- The Limiter Switch cuts off all sounds greater than 110 dB in the ON position. The Filter-Thru Switch bypasses all of the filtering in the ON position.



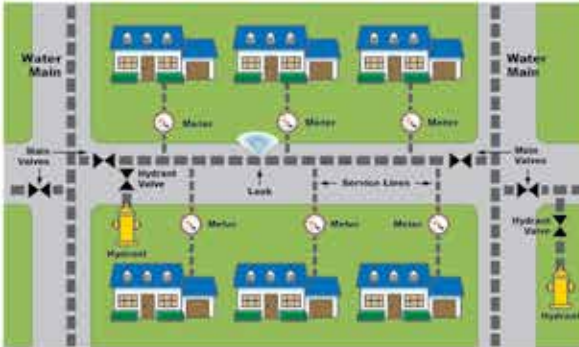
- The meter on the amplifier is used for comparing the loudness at different locations when the user's hearing can not tell which location is louder. Adjust the Volume Control to move the meter needle to a midrange position. Then compare meter readings at different locations.

LD-12 Professional's Plus Water Leak Detector

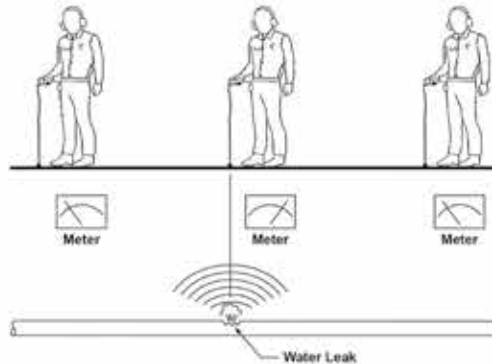
LD-12 Quick Reference Guide

How to Pinpoint Water Leaks

1. The sounds of leaks in pressurized water pipes can travel for hundreds (even thousands) of feet in every direction down the mains and services. If there is no evidence of the leak, then compare the loudness of the leak sounds at the meters, valves, and hydrants:
2. Listen directly over the pipe between these two loudest locations. Use your hearing and the meter to determine exactly where the leak sound is loudest:



When you have found the two meters, valves, or hydrants with the loudest leak sounds, you are ready to begin the final "pinpointing". First, mark the exact location of the pipe between the two loudest valves, meters, hydrants, etc. with a pipe locator. Then listen every 2-3 feet directly over the pipe.



Use the 3-pronged base plate to listen directly over the pipe beneath asphalt streets or concrete slabs.

3. If the pipe is under soft ground or loose fill and if it is not too deep (only 3-5 feet), then using boring bars or push rods may be effective. Touch the pipe if possible, but if the pipe is deep or the soil is rocky, try to get the bars in firmly at least 2-3 ft deep.

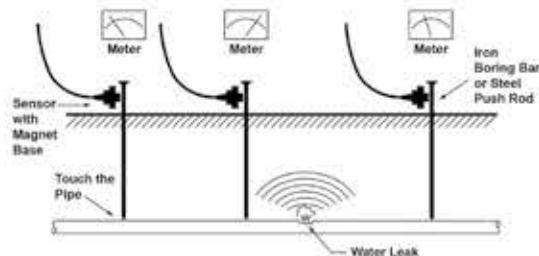


Always check for other underground utilities like gas lines or cables before pushing bars or rods into the ground over the pipe.



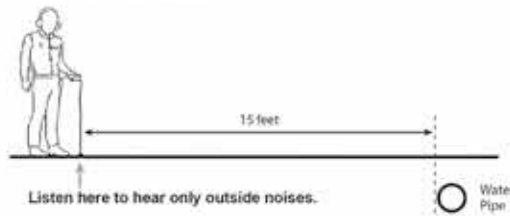
Use the magnet base on the sensor. Listen on the bar close to the ground (less wind). Compare the loudness at all the bars with your hearing and with the Meter Display.

4. With the boring bars (or push rods) touching the pipe at 2 or 3 locations, compare the loudness of the leak:



If one bar is louder, then it is closer to the leak. Move the other bars closer to the loudest bar and listen again. Keep moving the bars until they are only 5-10 ft apart and center bar is loudest. Dig.

5. The Low and High Filters are used to filter out outside noises of wind, traffic, A/C hum, etc. If you encounter these interferences, try the 200 Hz filter or 400 Hz filter while listening on the same surface but 15 feet away from the water lines:



If the filter removes the outside noise, then listen over the pipe again and re-adjust the Volume.

GUS



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Underground Conduit Systems
DUCT AND Trencher Parts
OSP MATERIALS
Fiber Optic Cable Working Reel
Installation Hand Tools Trailers
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WAREHOUSE LOCATIONS

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1515 Monetary Lane | Carrollton, TX 75006 |
Suite 200 | **469-248-1164**

124 N Jim Thorpe Blvd | Prague, OK 74864 |
405-349-6767

1918 Gessner Drive | Unit 512 | Houston, TX 77080 |
713-299-2098 | Stocking Location Only

