

LT-Sonic®

Plastic Water Pipe Locator + Water Leak Detector

The LT-Sonic® is a smart and effective instrument for locating and tracing water-buried pipes, especially for PE, PVC, concrete, and/or even metallic pipes. Also, the LT-Sonic® is a smart water leak detector that pinpoints the exact point of water leakage. Save your time, locate, and trace subsurface water pipes and detect leakage on them, fast and easily with one device.

Based on Acoustic Technology

The LT-Sonic® is equipped with Professional Android app.



High Sense Solutions Inc.

Manufacturer of Subsurface Detection System and Utility Instrument.

www.highsensesolutions.ca

sales@highsensesolutions.ca

@high_sense_solutions

Tel: +1 905 597 2341

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The LT-Sonic is equipped with two main parts. A pulse generator as a Transmitter which is fitting to a fire hydrant, water meter base, or tap, and the hand-held receiver as a geophone to trace buried pipe away from the pulse generator.

The pulse generator is activated with external 12VDC. The pulse generator applies an adjustable wave signal along the pipe that is locatable by the sensitive piezo-electric sensor in the receiver.

The Generated acoustic signal is heard in the headphones. Also, if you use LT-Sonic APP, then the location is shown on the map which is adjustable.



The LT-Sonic® receiver has two modes for operation.

Mode A: (Water Pipe Locating Mode)

In special frequency bandwidth, the receiver detects pipe vibration when the pulse generator is working. The loudest sound would be detected on the pipe's center. So, the operator can identify the location of the buried water pipe and trace its route. In this mode, operator can use the tracing mode ground plate for asphalt, paving, or concrete.

Mode B: (Water Leak Detection Mode)

In wide range frequency bandwidth, the receiver can detect water leakage sound, amplify, and filter it. The operator can use bandpass filters to reduce or block the environmental noises and find the leakage, or ALJ (Automatic Leak Judgement) Mode and AI (Artificial Intelligence) technology to identify and pinpoint the water leakage.

The LT-Sonic® is equipped with aviation headphone for reducing environmental noises to make the best water pipe tracing and water leak detection experience.



NOTE: The LT-Sonic® pulse generator can be used on the main pipe and can be used on short service pipes from properties to the water main. Any ANTI VAC or NON-RETURN VALVE will inhibit the signal and the LT-Sonic receiver couldn't detect the pulse sound.

CAUTION: The LT-Sonic® pulse generator produces a pulsed pressure wave along the pipe. This pressure wave does not exceed the rated pressure of most water supply systems. To avoid the risk of damage, do not use the LT-Sonic® for prolonged periods exceeding 30 minutes or on substandard or old water supply systems. Always use the hose damper when applying the LT-Sonic to a tap within 15m of a building.

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Specification		
Transmitter (Pulse Generator)		
Operation Mode	Mode A: Water Pipe Locating Mode	
Technology	Pulsed pressure wave (Magnetic) Acoustic	
Frequency Range	Up to 4 pulses per Second (Adjustable)	
Input Thread Size	½" Nominal NPS	
Pipe Connection	20 Cm hose damper. ½" Ball Valve, Brass Y Strainer Filter Hexagon nipple ½", Hose pipe connector, 1/2" female elbow 45°	
Operation Pressure	Up to 145 PSI (10 bar)	
Power Supply	External 6 to 12 VDC (3A) Car Adapter Lighter Socket with 3m Cable	
Pulse Generator lifetime	50 million cycles Continuous Operation, Max-FRQ: Up to 2 Years and Min-FRQ: Up to 6 Years	
Dimension	L: 5.3" x W: 2.7" x H: 1.2" (136mm x 60mm x 30mm)	
Weight	~ 950	
Receiver		
Operation Mode	Mode A: Water Pipe Locating Mode	Mode B: Water Leak Detection Mode
Technology	Acoustic	
Sensor	Pick-Up Sensor, Highly Sensitive Piezoelectric Type, Sensitivity 1.1 V/g	
Operation Frequency	1 to 200 Hz	100 to 4000 Hz
Filter	Low Pass 200Hz	4 Selectable Filter HP: 100, 400Hz / LP: 1200, 4000Hz filterROT™ (Filter Rotation mode)* is as a smart solution to select the best filter)
A L J™ Mode	None	Automatic Leak Judgment Mode* Judgment the leakage possibility in 10 sec sound analysis.
Communication	BLE (Bluetooth Low Energy) LT-Sonic APP (Android)	
Battery	3.7 V/ 1100mA Li-Pol Rechargeable Battery USB A for Battery Charging	
Certification and Compliance	Certification and Compliance (FCC, CE, ICES) (In Process) European Telecommunications Standards Institute (ETSI) ETSI EN301 489-1 V2.2.3 (2019-01) & ETSI EN 301 489-17 V3.2.4 (2020-09) INTERNATIONAL ELECTROTECHNICAL COMMISSION (International Special Committee on Radio Interference) IEC 61000-6-3 / EN 61000-6-3 Generic standards – Emission standard for residential, commercial, and light industrial environments Innovation, Science and Economic Development, (ISED) Canada, ICES-003, ISSUE 7, CLASS B Verification Authorization – Information Technology Equipment (Including Digital Apparatus)	

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	Federal Communications Commission (FCC) CFR 47, Part 15, Subpart B Class B – Unintentional Radiators
Dimension	L: 5.3" x W: 2.7" x H: 1.2" (136 mm x 60 mm x 30 mm)
Weight	~ 730 gr
Warranty	1 Years Limited Warranty 5 Years after-sales service
Made in Canada	With domestic and foreign components.
High Sense Solutions Inc.	

The contents are subject to change without prior notice.

*: is available when using the LT-Sonic™ APP.



HIGH SENSE SOLUTIONS Inc.

Manufacturer of Subsurface Detection Systems and Utility Instrument

Head-Office:

Unit 23, 35 West Pearce St., Richmond Hill, ON, L4B 3A9, Canada

www.highsensesolutions.ca

sales@highsensesolutions.ca

@high_sense_solutions

Tel: (+1) 905 597 23 41