PRODUCT GUIDE
SUBSURFACE INSTRUMENTS

SubSurface Instruments

www.ssilocators.com

Advanced Underground Locating and Detection Equipment

MAGNETIC LOCATORS

The Best Magnetic Locators in the Market

ML-3 *Magnetic Locator Offering Durable, One-Handed Operation that's 100% Waterproof*

The ML-3 is 40" to meet utility and surveyor personal preferences, providing ergonomic, rugged, one-handed operation. The ML-3 offers unparalleled durability and is housed inside aircraft-grade aluminum mono-tube. The ML-3 is digitally tuned and 100 percent waterproof. It's rating is IP68 certified up to 250 feet - a first for the industry - so it can be used in inclement weather and submerged conditions. Plus, its auto-zero feature allows the user to "cancel" ambient magnetics or magnetic gradient in the environment. One 9v alkaline battery holder included.

ML-3L *Magnetic Locator Offering Durable, One-Handed Operation that's 100% Waterproof*

Featuring the same technological advances as the ML-3. At 55" long, the ML-3L is the longest magnetic locator on the market. It allows the operator to make the biggest sweeps possible without compromising accuracy or functionality. It is used worldwide by many UXO operations to identify minefield ordnances or other potential dangers. The ML-3 is digitally tuned and 100 percent waterproof, IP68 certified up to 250 feet. One 9v alkaline battery holder included.

ML-1 *Magnetic Locator with Simple, One-Handed Operation*

The ML-1 is one of SSI's most popular magnetic detection products. Whether you're seeking corner markers (iron or steel), well casings, steel drums or septic tank handles, this is the "go-to" magnetic locator. The ML series offers simple, one-handed operation with an easy-to-learn keypad and audio confirmation. Unlike most of our competitors the ML-1 features strong mono-tube construction, providing structural integrity from top to bottom. Two 9v alkaline batteries included.

ML-1M *Magnetic Locator Technology with Digital Meter*

In addition to the features of the original ML-1, the ML-1M is metered, offering you added features without added complexity. The digital meter provides for visual signal strength, polarity indication, gain setting plus battery life display. Two 9v alkaline batteries included.

OPTIONAL ACCESSORIES

All You Need to Continue Locating With Confidence

ML-1 Hard Carrying Case

Hard polymer case for ML-1 and ML-1M
dimensions: 5.5" x 39
Color: Tan

9v Battery Holder

Battery Holder for ML-3 Magnetic Locator or for AML All Materials Locator. Available with Alkaline or Lithium 9v batteries.

ML-3 Hard Carrying Case

Aluminum Case with a shock proof inner shield for ML-3 Units
Color: Black
ML-3: 2" x 42.5"
ML-3L: 2" x 57"

ALL MATERIALS LOCATORS

Patented Underground PVC/PE Pipe Detection

AML+ SERIES

Includes impact resistant and IP68 rated case

The Proven & Trusted Way To Find PVC Pipes, PE Pipes & Nearly Any Other SubSurface Object

The new and Improved AML+™ is based on a proven and patented scientific technology that utilizes a modulated, ultra-high radio frequency. It locates nearly any subsurface material with an edge including plastic, metal, wood, cable and concrete. The AML is the trusted and most reliable all material locator in the industry.

- New Microprocessor Intelligence
- Patented Radio Wave Technology
- Durable ABS Housing (2 lbs)
- 9 Sensitivity Settings
- Headphones
- USB Powered Port
- Rechargeable Lithium Battery
- 3 Year Limited Warranty

Housing Color Options

Yellow | Black | Carbon Fiber

AML PRO SERIES

Includes impact resistant and IP68 rated case

Find Buried PVC/PE Pipes Using GPS & Advanced Digital Patented Technology

The all-new AML PRO™ is a feature-rich scientific instrument that utilizes a modulated, ultra-high radio frequency to find differences in subsurface densities. It offers the best method for locating PVC & PE pipes and nearly any other object that has an edge. Redesigned specifically for the utility, water, gas, cable and petroleum industries, the AML Pro allows professionals to locate objects faster, while maximizing job efficiencies.

- New Microprocessor Intelligence
- Patented Radio Wave Technology
- Lightweight Construction (2.5 lbs.)
- Noise Isolating Headphones
- Rechargeable Lithium Battery
- Customizable User Preferences
- USB Powered Port
- Durable ABS Housing
- Back-lit Display
- GPS Plotting & Tracking
- 32 Sensitivity Settings
- Digital Leveling Meter
- Digital Targeting Indicator
- 3 Year Limited Warranty

Housing Color Options

Yellow | Black | Carbon Fiber

OPTIONAL ACCESSORIES

Improve your productivity and take advantage of new technology

Wireless Inductive Clamp
Self-contained, stand-alone transmitting inductive coupler. 3 frequencies, High & Low Power Outputs, rechargeable batteries.
4.2" & 6.5" Diameter options

Inductive Coupler 4" & 6.5" I.D.
Apply signal to live cables.
4" & 6.5" I.D.- Operational Frequency Range 8kHz to 82 kHz.

A-Frame (Ground Fault Locator)
Works Independent from the receiver. Detects both core-to-ground faults & sheath-to-ground faults.

512 Hz & 33 Hz Sonde
3.5" long x 0.80" diameter sonde for PL-VF uses (1) AAA battery (included)
Depth: 10 feet in cast iron.

Padded Carrying Case
Soft carrying case for PL-2000 and PL-G Locators, color black with yellow logo.

Tracker 250
Apply current to the copper wire. 250' and 4.76mm diameter rod, coated with polypropylene to provide low friction and high abrasion resistance.

Tracker 600
Apply current to the copper wire. 600' and 7.94mm diameter rod, coated with polypropylene to provide low friction and high abrasion resistance.

PL-VF Clips, Direct Connect
Direct Connect Leads for PL-VF Series larger clips, sold as an accessory.

PL-VF Clips, Direct Connect
Direct Connect Leads for PL-VF Series included with the unit.

Ground Stakes
Metal conductive stake for Pipe and Cable Locators

PL-G & PL-2000 Direct Connect Leads
9' long cable with DIN connector for Pipe and Cable Locators

PL-G compatible

PL-2000 compatible

Inductive Clamp & Cable
4" opening Clamp with a 16' cable available in 2 types of connectors:

PL-G compatible

PL-2000 compatible

PIPE AND CABLE LOCATORS

Durable Utility, Pipe and Cable Locators

PL-TT *The dependable, Affordable and Rugged solution for the Locating Professional*

The PL-TT offers SSI's most sophisticated technology in an economical package. It has several operating modes including Digital Depth and Magnetic Locator. Users can rest assured that the PL-TT dependability is not only driven by the internal technology, but also by its rugged construction that is built to last with a carbon fiber housing and sealed against weather. Basic setup comes with 6 "AA" and 8 "C" alkaline batteries.

PL-VF3 Alkaline Batt. *Equipped with a wide variety of locating modes and a 3W power output*

Simple, accurate and affordable, the PL-VF3 Locating System will meet the demands of any locate task. This locator is designed for the locating professional, but it is simple enough to be used by anyone needing to find underground utilities. Our innovative technology creates a remote link between the transmitter and receiver. Users can control the transmitter's output power and frequency right from the hand-held receiver, eliminating the need to walk back and forth between devices.

Standard setup comes with 6 "C" batteries for the Receiver and 8 "C" batteries for the Transmitter.

PL-VF3R Li-Ion Batt. *Provides comprehensive functionality for a range of applications.*

The PL-VF3R Locating System is simple, accurate, and affordable, perfectly suited to meet the demands of any locating task. Designed with the locating professional in mind, it is also user-friendly enough for anyone needing to find underground utilities. Our innovative technology establishes a remote link between the transmitter and receiver, allowing users to control the transmitter's output power and frequency directly from the handheld receiver. This feature eliminates the need to walk back and forth between devices, enhancing both convenience and efficiency. Additionally, the unit is equipped with long-lasting lithium batteries, providing superior performance and reliability compared to traditional alkaline batteries.

PL-VF10 Alkaline Batt. *Multi-Frequency Locator with a wide variety of locating modes and a 10W power output*

The PL-VF10 Locating System will meet the demands of any locate task. Frequencies and operational modes may be added or deleted on demand to suit the user's locating needs. It is equipped with a powerful 10W transmitter and optional 1/2 and 1/4 power outputs. Our advanced technology creates a remote link between the Transmitter and Receiver. This is the only tool you need in a variety of locate scenarios.

Standard setup comes with 6 "C" batteries for the Receiver and 12 "D" batteries for the Transmitter.

PL-VF10R Li-Ion Batt. *Multi-Frequency Locator with a wide variety of locating modes and a 10W power output*

The PL-VF10 Locating System will meet the demands of any locate task. Frequencies and operational modes may be added or deleted on demand to suit the user's locating needs. It is equipped with a powerful 10W transmitter and optional 1/2 and 1/4 power outputs. Our advanced technology creates a remote link between the Transmitter and Receiver. This is the only tool you need in a variety of locate scenarios with the advantage of lower weight due to a **convenient set of Li-Ion Battery packs for the receiver and transmitter this will allow you to work for over 40 hours (depending on load, frequency and power settings) without having to replace batteries.*

WATER LEAK DETECTORS

Easy-To-Use Water Leak Detectors Effectively Screen Outside Noise.

LD-7 *Economical Water Leak Detection*

Designed for all water leak detection applications, including leak surveys and leak pinpointing. Use the magnetic base or contact rod for leak surveys at hydrants, valves or meters.

- Compact amplifier with mute switch, fits inside the user's hand.
- Designed for all water leak detection applications, including leak surveys and leak pinpointing.
- Extremely compact and lightweight. Easily fits inside the cab of a truck.

LD-8 *Simple, yet Sensitive Water Leak Detection*

Designed specifically for "water leak surveys" done by water departments, districts, local governments and private agencies concerned about "Non-revenue water losses."

- Amplifier with push button ON/OFF switch, volume control, two digit display of loudness, and three-range sensitivity switch.
- Notch filters reduce A/C hum from transformers, power lines, etc.
- Simple and compact, great for leak surveys.

LD-12 *The Professionals Water Leak Detector*

An industry standard for the Water Utility industry. The LD-12 water leak detector is easy-to-use, featuring six filters that screen outside noise and zero in on water leaks.

- Considered a top choice leak detection locator.
- Large meter display, allows the user to pinpoint the exact location.
- Six selectable filters, split into three "low side" filters and three "high side" filters.
- High-sensitivity ground microphone and low "electronic noise" amplifier combine to offer the best quality sound leak detection.
- Ground plate, magnetic base and contact rods as accessories for pinpointing leaks.
- David Clark headphones, rated #1 in the industry.

LD-15 *Highly Sensitive Leak Survey Technology*

The LD-15 Professionals Leak Survey Instrument offers the highest sensitivity and the best audio quality ever offered in an acoustic listening device by SSI.

- Simple and quick way of surveying for water leaks.
- High-sensitivity sensor, extra strong and water proof (submersible).
- Survey for leaks at hydrants, valves and meters.
- Use the high filter range for water leak surveying. Use the low filter range for water leak pinpointing.
- David Clark headphones, rated #1 in the industry.

Water/ shock proof Carrying Case included with every LD unit.

WATER LEAK DETECTORS

Easy-To-Use Water Leak Detectors Effectively Screen Outside Noise.

LD-18 *Advanced Digital Leak Survey Technology*

The LD-18 Digital Water Leak Detector is the first water leak detecting instrument to offer automatic noise reduction from intermittent interfering noises, such as passing vehicles, people talking, and pedestrian footsteps.

- All-digital amplifier with automatic noise reduction of environmental sounds, high and low filters, storage and graphing of leak noises at different locations on pipe.
- Uses bar graph and numeric display of sound loudness, USB connection, and back light.
- Five high frequency filters, three low frequency filters (plus low filter OFF), and 2 notch filters (plus notch filter OFF) to remove continuous interfering noises.
- David Clark headphones, rated #1 in the industry.

Water/ shock proof Carrying Case included with every LD-18 unit.

LD-20 *The most advanced acoustic detection technology available in the market.*

The LD-20 features an exceptionally sensitive sensor and an advanced amplifier unit, enabling it to detect water leaks in various pipe materials, under many different conditions, and even in the case of low-pressure water leaks. Its operation is straightforward, and it can interface with additional features via a dedicated Android application. Collectively, these attributes position the LD-20 as the optimal choice for professional water leak detection.

- Graphic LCD display
- 7.5 higher sensitivity sensor & customizable noise filters
- The Display flips horizontally to accommodate left or right hand operation
- Android connectivity with dedicated app

LC-5000 *Powerful Leak Noise Correlator/Logger*

This advanced equipment employs sophisticated algorithms and acoustic technology to analyze and compare the sound signatures of water leaks in pipelines. By precisely correlating the acoustic signals captured at different points along the pipe network, the correlator pinpoints the exact location of the leak with remarkable accuracy.

- Simultaneous correlation of up to 6 routes is possible using 4 sensors.
- Capable of survey in a condition with putting a lid on, installed in a fire hydrant or a valve housing.
- An extension antenna can be connected near the ground when installing the Pre-Amp in a deep place
- Stable radio communication
- Capable for long distance survey by radio relay function.
- Logger function is installed and record water leakage sound by a timer at a place where there are many cars on the day and survey at midnight etc. and possible of correlation calculation later on.

The AquaTrac™300 *Advanced technology and remarkable straightforward design*

Meticulously engineered for the purpose of detecting water leaks in buried pipes and conduits. This state-of-the-art device utilizes a highly sensitive microphone and cutting-edge amplifier box technology to effectively identify water leaks. Its prominent features include a sizable, color touchscreen display and the capability to tailor filters within the range of 0Hz to 5120Hz. Operation of the device involves positioning the microphone/sensor over the ground surface or directly above the pipe, detecting the sound frequency produced by the water leak, and presenting the interpretation on the screen for the operator's informed decision-making.

- Customizable filters
- Piezzo professional microphone
- Li-Ion Rechargeable Battery
- High Quality Headphones

Includes impact resistant and waterproof carrying case

4 YEAR LIMITED WARRANTY

PIPE INSPECTION CAMERA SYSTEMS

Fast Setup and High-Quality Output Inspection Camera Systems

IC-6 *Excellent Solution for Small Spaces Inspections*

The IC-6 Pipe Inspection Camera System features a 0.24" (6 mm) camera, mounted in a rugged stainless steel IP66 certified enclosure. 4 LED lights mounted on the front of a camera with a viewing angle of 60º, the IC-6 Inspection Camera System is perfect for small pipes, ducts, tanks, etc. It is used in a variety of professional fields, municipalities, electricity, communications, as well as in disaster assessments and recovery rescues.
The camera is permanently attached to a fiberglass rod with 131' (40m) of length and 0.2" (5mm) of diameter.

IC-12 *Lightweight, High-Quality Video, Pipe Inspection Camera System*

The IC-12 Pipe Inspection Camera System features a 0.47" (12mm) camera, mounted on a rugged stainless steel IP68 certified enclosure and displays a 65º viewing angle with excellent quality video and sharp images. Six LED lights mounted on the front of the camera provide great illumination for inspection or for creating the perfect conditions to snap a photo or create a video to show the results to your clients. Designed to follow the corners of pipes and conduits, the camera head enclosure has a coil that bends accordingly, giving it the flexibility to move smoothly inside of the pipe. Install the skid on the head of the camera to improve visibility as well as to protect the camera from sharp corners and other objects inside of the pipes you are inspecting.

IC-23 *Quick and Easy Camera Inspection System*

The IC-23 Pipe Inspection Camera System features a 0.90" (23 mm) camera, mounted in a rugged stainless steel IP68 certified enclosure. With 12 LED lights mounted on the front of the camera and equipped with a 512 Hz sonde, it can be easily picked up with a Pipe and Cable Receiver (not included). It's 9" monitor displays a very crisp and clear video image. All the settings are accessible through the control box and you can store data by inserting an SD Card in the memory card slot. The system runs with a rechargeable battery installed in the control box. A water and shock resistant case is included that allows you to store a fiberglass rod wheel of 164' (50m) or less.

IC-28 *Self-Leveling Camera Inspection System*

The IC-28 Pipe Inspection Camera System features a 1.1" (28 mm) self-leveling camera, mounted on a rugged stainless steel IP68 certified enclosure, with 12 LED lights mounted on the front of the camera and equipped with a 512 Hz sonde giving the user the capability of finding the location of the camera with a Pipe and Cable Receiver (not included). Its 9" monitor displays a very crisp and clear video image. All the settings are accessible through the control box and you can store data by inserting an SD Card in the memory card slot. The system runs with a rechargeable battery installed in the control box. A water and shock resistant carrying case is included with it. You can use the included keyboard to record notes along your videos for farther review.

IC-38 *Self-Leveling Camera Inspection System*

The IC-38 Pipe Inspection Camera System features a 1.5" (38 mm) self-leveling camera, mounted on a rugged stainless steel IP68 certified enclosure, including 12 LED lights mounted on the front of the camera enclosure. Equipped with a 512 Hz sonde it gives the user the capability of finding the location of the camera with a Pipe and Cable Receiver (not included). Its 9" monitor displays a very crisp and clear video image. All the settings are accessible through the control box and you can store data by inserting an SD Card in the memory card slot. The system runs with a rechargeable battery installed in the control box. A water and shock resistant carrying case is included with the system. A variety of skids are available to protect the camera head and to allow it to navigate easily inside of the pipe giving you a better viewing angle as well.

OPTIONAL ACCESSORIES

Variety of Accessories and Replacement Parts

6 mm Camera (0.24")
Video resolution of 720 x 480 dpi with 4 LED lights mounted on the camera head with 60° viewing angle, inside of a rugged stainless steel enclosure.

12 mm Camera (0.47")
Video resolution of 720 x 480 dpi with a 512 Hz sonde and 6 LED lights mounted on the camera head with 65° viewing angle, inside of a stainless steel enclosure.

17 mm Camera (0.67")
Video resolution of 720 x 480 dpi with a 512 Hz sonde and 6 LED lights mounted on the camera head with 120° viewing angle, inside of a stainless steel enclosure.

23 mm Camera (0.90")
Video resolution of 720 x 480 dpi with a 512 Hz sonde and 12 LED lights mounted on the camera head with 120° viewing angle, inside of a stainless steel enclosure.

28 mm Camera *Self-Leveling (1.1")
Video resolution of 720 x 480 dpi with a 512 Hz sonde and 12 LED lights mounted on the self-leveling camera head with 120° viewing angle, inside of a rugged stainless steel enclosure.

38 mm Camera *Self-Leveling (1.5")
Video resolution of 720 x 480 dpi with a 512 Hz sonde and 12 LED lights mounted on the self-leveling camera head with 90° viewing angle, inside of a rugged stainless steel enclosure.

30m - 40m - 50m Wheels
98.3'-131'-164' wheels. Metal frame enclosure with a fiberglass rod of 0.19" (5 mm) diameter.

60m - 80m Wheels
197'-263' wheels. Metal frame enclosure with carrying handle. Fiberglass rod of 0.27" (7 mm) diameter. Meter counter and handle brake.

60m Wheel
197' wheel. Metal frame enclosure with carrying handle, big rolling wheels for extra mobility and easy transport. Featuring a 0.35" (9 mm) diameter fiberglass rod.

512 Hz Sondes
Standard sewer sondes attach to any SSI cable wheel. Require (2) A76 batteries (included).
Regular: 2.125" x 0.875"
Mini: 1.875" x 0.625"

Camera Skids
Variety of sizes for the different camera heads. Attach to the camera for added protection and to center the video image on the screen.

Universal Skid
Spring loaded, adjustable legs for different pipe sizes from 5.5" to 15.7". Rolling wheels provide easier mobility inside of the inspected pipes.

LED light
Convenient LED rim powered with a rechargeable waterproof battery, to be used with the Universal Skid. It provides an extra illumination option for increased visibility.

1 YEAR LIMITED WARRANTY

SPECIALTY LOCATORS

Advanced Technology for Specific Needs

MUL *(Magnetic Underwater Locator)*

Durable Magnetic Detector Finds Ferrous Metal Immersed in over a 1,000' of Water

Find ferrous metal immersed in depths as shallow as 10' of water to depths over 1,000'. The 2 sensor core system is housed inside a corrosion proof, machined titanium tube for superior durability and strength.

No other underwater locator can go deeper, and its longer sensor length allows for convenient boat towing, when it is mounted into a custom made carrying sled (not included).

BHG *(Bore Hole Gradiometer)*

Locates Large Ferrous Metal Objects by being Lowered into Drilled Boring Holes

The Bore Hole Gradiometer (BHG) finds the presence of any ferrous metal in a radius of 10 feet in the ground. Featuring two sensors, it works similarly to the magnetic locator and can also be used in water, making it ideal for construction, utility companies and bridge builders.

OPTIONAL ACCESSORIES

High quality materials and precision built accessories

MUL Titanium Sensor

Tapered nose titanium sensor, longer dimension (1.625" D x 34.875" L (4.13cm x 88.58cm)) for diving or boat towing.

BHG Titanium Sensor

Durable and strong, Bull-nosed titanium sensor, dimension: 1.625" D x 17.5" L (4.13cm x 44.45cm).

30', 50', 100', 300' Sensor Cables

High quality, water resistant Carolprene® 4 conductor, 18 AWG, 600 volt coated cable. With Amphenol® circular mil spec connectors. Custom lengths available.

SUBSURFACE INSTRUMENTS, INC.

Leader manufacturer of quality underground locators

SubSurface Instruments Inc.

Founded in 1996, SSI has grown to become a premier manufacturer and distributor of locating equipment with sales to over 91 countries and 6 continents worldwide.

The Product Showroom section of our website www.ssilocators.com contains a wide range of product demonstration videos, as well as spec sheets and features for each product listed in this guide.

Feel free to contact us if you are interested in any of our products. We will provide you with all the information you need and connect you with one of our Authorized Dealers. They can assist you in purchasing our products or any new accessories to enhance your equipment.

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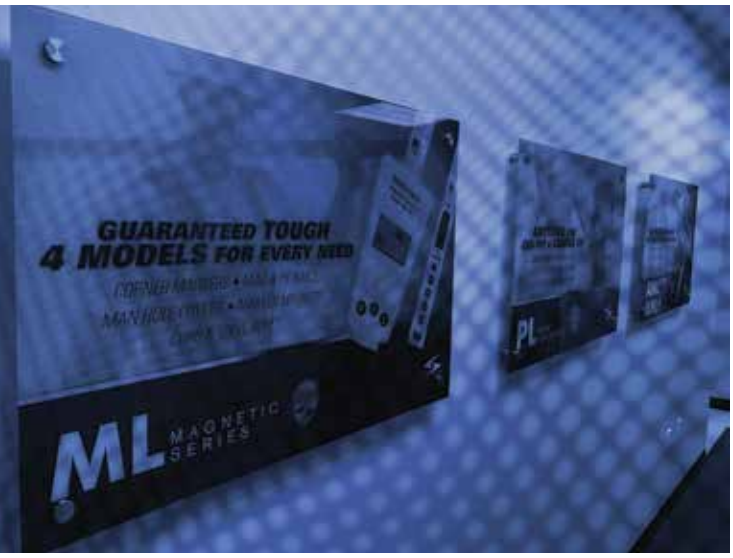

AN INNOVATIVE DESIGN FORCE IN SUBSURFACE DETECTION & LOCATION

SubSurface Instruments, Inc. is an innovating force that engineers, manufactures and distributes high-frequency and magnetic locators, pipe and cable locators, leak detectors, leak correlators, bore hole gradiometers, pipe inspection camera systems and specialty locators.

SSI's most recent innovation, the AML or All Materials Locator, locates buried PVC pipes, PE Pipes, plastic or nearly any other subsurface object more efficiently than ever before. Using patent-protected technology re-engineered by SSI, the AML detects buried PVC pipes and almost every object that other locators can't find.

SSI features a vast line of professional underground and underwater locator products for every need including surveying, construction, ordnance removal, excavation and exploration. Our customers from the petroleum, water, sewer, power, telecom, cable and gas industries trust on SSI's reliability and dependability to make crucial measurements in the world's most challenging conditions. SubSurface Instruments, Inc's products are proudly made in the U.S.A. and offer an industry-leading warranty.

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