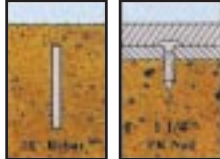


*All Purpose*

# Mac - 51Bx

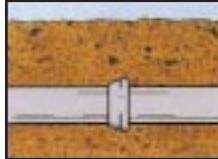
## Magnetic and Dual-Frequency Pipe and Cable Locator

Up to 9 Feet    Up to 12 Inches



Survey Markers

Up to 10 Feet (4" pipe)



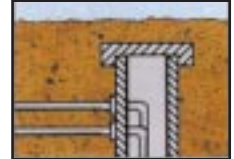
Cast-Iron Pipe

Up to 10 Feet



Iron Valve & Curb Boxes

Up to 18 Feet



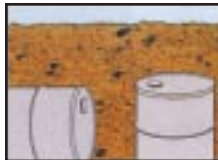
Well Casting

Up to 5 Feet



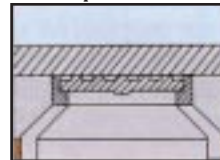
Ordnance

4 to 10 Feet



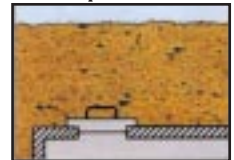
Steel Drum

Up to 10 Feet



Manhole Cover

Up to 4 Feet



Septic Tank Handles

Up to 12 Feet

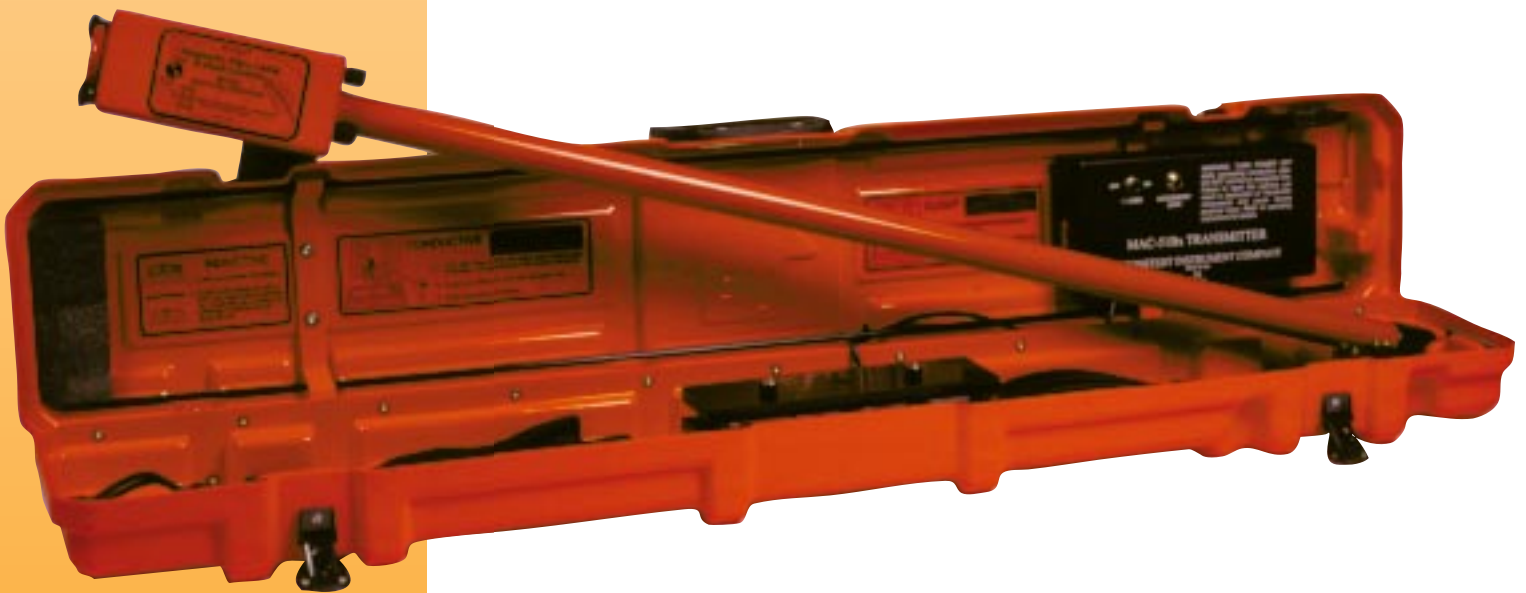


Telephone, Electric Power, and CATV Cables

Up to 12 Feet



Tracer Wire, Marker Magnet, and Metallic Pipe



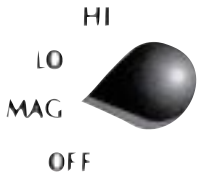
**SCHONSTEDT INSTRUMENT COMPANY**

4 Edmond Road • P.O. Box 309 • Kearneysville, WV 25430

800-999-8280 • 304-725-1050 • Fax: 304-725-1095

Internet: [www.schonstedt.com](http://www.schonstedt.com) • E-Mail: [info@schonstedt.com](mailto:info@schonstedt.com)

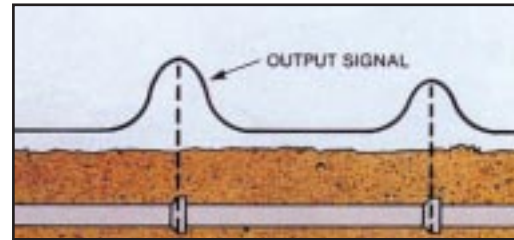
# Magnetic Locating Mode



Only the MAC-51Bx receiver is required when operating in the magnetic mode. Just set the Mode switch to MAG, the Gain control to mid-range, and you're ready to locate underground ferrous pipes, water meters, water valves, and property markers—or anything that has a magnetic field including the 50/60Hz electro-magnetic field generated by energized power lines.



*Raising Locator Eliminates Unwanted Signals*



*Signal Pattern Provided by Cast-Iron Pipes*

# Dual-Frequency Cable and Line Tracing Modes



The MAC-51Bx simultaneously transmits 82.5 kHz (HF) and 571 Hz (LF) signals. This feature lets you select and compare received audio signals

from both frequencies along with magnetic information without having to return to the transmitter.

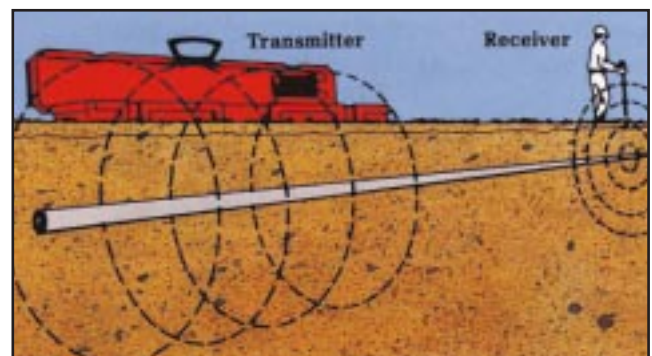
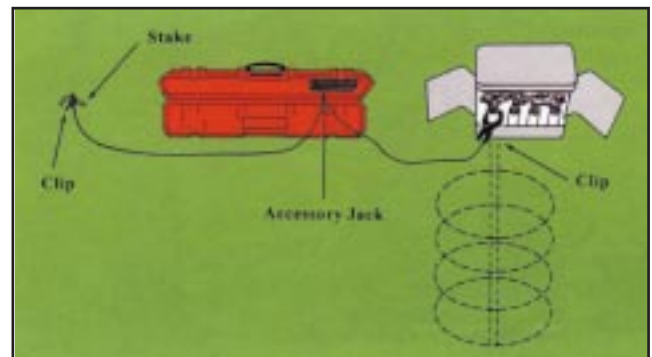
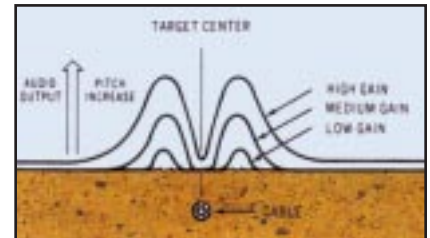
## Transmitter Inductive Mode (HF only)

Induction is achieved by placing the transmitter over the target cable/pipe or by using the optional Inductive Signal Clamp. It's the easiest and quickest way to applying a trace signal that is strong enough for tracing most lines. The trace signal generates an alternating magnetic field around the cable which induces a signal into the receiver's cable sensor. A sharp null in the audio signal between the two peaks occurs when the receiver's tip is directly over the cable.

## Transmitter Conductive Mode

If an exposed section of a target gas or water pipe is accessible, conductive coupling is the most reliable method for applying the trace signal. This mode has to be used to apply both HF and LF frequencies so that you can use all three features on-the-fly. Providing a good electrical contact between the clip and the conductive portion of the target line by removing rust or paint before attaching the clip is very important.

As illustrated, the width of the null is the key to tracing a cable. The width of the null will cover too large an area when the gain is set too low, making it difficult to trace the line. If you set the gain too high, the null will be too narrow to be easily identified.



## Features

- Two active frequencies for pipe, cable and line tracing
- Passive operation for locating iron and steel targets and energized 50/60Hz power lines
- Inductive and conductive signal coupling
- Extra Heavy Duty Clips and Cable
- Discrete sensitivity settings
- Receiver supplied with two environmentally friendly 9-volt lithium batteries
- Piezoelectric speaker
- 45° Depth Measurement
- Patented HeliFlux® Sensors
- Modular construction
- 3-Year warranty

## System Description

The MAC-51Bx (the most cost-effective, all-purpose locating system on the market) consists of a receiver and a transmitter that simultaneously transmits on two frequencies—571 Hz (LF) and 82.5 KHz (HF). The receiver has a three position switch



that lets you change modes, “on-the-fly”, between **LO**, **HI**, and **MAG**, for cable and line tracing with break locating, pinpointing a ferrous metal target, or identifying and pinpointing an energized 50/60 Hz power line. In the **LO** and **HI** modes, the receiver’s audio signal provides a sharp null when its tip is directly over the target. In the **MAG** mode (no transmitter required) the audio signal peaks when the receiver’s tip is over the target. You can trace the 571 Hz LF signal conductively applied to any continuous metal conductor up to 4000 feet. The receiver’s on-the-fly mode-changing feature lets you locate a complete break

using the **LO** mode, and then continue on to trace beyond the break in the **HI** mode, or trace a metal pipe joined with non-conductive gaskets.

## Options

**MT-2 Mini-Transmitter (Mole)** is used to trace non-metallic pipes, pinpoint obstructions and locate concrete septic tanks. When attached to a plumber’s snake, the Mole emits a signal detectable at depths of 18 feet using the MAC-51Bx Receiver.



### Inductive Signal Clamp

Increases the versatility of the MAC-51Bx by providing a convenient method of selectively applying the trace signal to conductors covered with non-metallic insulation.

## Provides Years of Trouble-Free Operation

One AAA penlight battery provides up to 30 hours of operation. The battery cap also serves as the On/Off switch. You turn the power off by rotating the battery cap counterclockwise.

## Accessory

Conductive Cable Assembly is used for applying the tracing signal directly to an exposed section of a cable, line or metal conduit for maximum tracing distance.



# Optional Mini-Transmitter for Tracing Non-Metallic Pipes

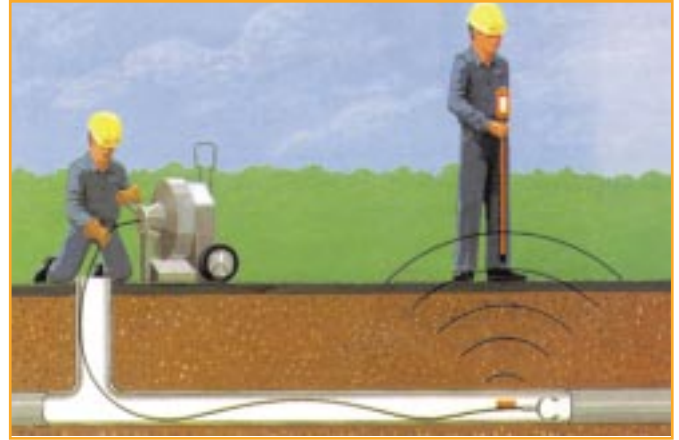
## Expands Locating/Tracing Capability

The MT-2 (Mole) is a miniature transmitter designed to be used in conjunction with the MAC-51Bx Receiver. It's just what you need to trace non-metallic pipes, pinpoint obstructions, locate concrete septic tanks, and monitor the course of utility tunneling under highways.

As the Mole, attached to the end of a sewer/drain cleaning snake, is pushed through a non-metallic pipe, it emits a strong signal that you can detect and trace at depths up to 18 feet using the MAC-51Bx receiver set to the HI mode.

**Premier Manufacturer of Flux-Gate magnetometers for over 43 years; and the first to use *environmentally friendly and safe lithium batteries* in a locator product.**

Authorized Dealer



## Very easy to Attach

The Mole has one concave surface so it can be secured to a plumber's snake with electrical tape.

## MAC-51Bx Specifications

### Receiver

<b>Operating Voltage</b>	9 V (2 alkaline or 2 lithium batteries)
<b>Battery Life</b>	60hrs, alkaline (on & off usage @ 70°F) 120 hrs, lithium (on & off usage @ 70°F)
<b>Audio Output</b>	Approx. 40 Hz idling tone from speaker Frequency of pulsing tone (increases or decreases) with signal intensity
<b>Weight</b>	2.64 lb. (1.20 kg.)
<b>Operating Temp.</b>	-13°F to 140°F (-25°C to 60°C)
<b>Overall Length</b>	42.3 in. (107.4 cm.)
<b>Waterproof Length</b>	34.5 in. (87.6 cm.)
<b>Nominal Sensor Spacing</b>	20 in. (50.8 cm.)

### Transmitter

<b>Operating Voltage</b>	12 V (8 alkaline C-Cell batteries)
<b>Battery Life</b>	60 hours (on & off usage @ 70°F)
<b>RF Output</b>	82.5 kHz modulated at 382 Hz, pulsed at 4.4Hz 571 Hz Pulsed at 4.4 Hz
<b>Audio Indicator</b>	2.58 kHz pulsed at 4.4 Hz
<b>Weight</b>	Approx. 5.5 lb. (2.5 kg.)
<b>Operating Temp</b>	-13°F to 140°F (-25°C to 60°C)
<b>Overall Size</b>	43.5 in. x 7 in. x 5 in. (110.5 cm x 17.8 cm. x 12.7 cm.)

*(Specifications subject to change without notice)*



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