SCHONSTEDT INSTRUMENT COMPANY

MAC-51Bx Magnetic Locator

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.

The MAC-51Bx by simultaneously transmiting 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.

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.

Options

Mini-Transmitter
The MT-2 (Mole) is a miniature transmitter designed to be used in conjunction with the MAC-51Bx Receiver. It is just what you need to trace non-metallic pipes, pinpoint obstructions in pipes, 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.

The MT-2 is very easy to attach to a plumber's snake with the use of electrical tape, due to it's one concave surface side.

The MT-2 provides years of trouble-free operation and uses one AAA penlight battery to provide 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.

Conductive Cable Assembly
The 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.

Accessory

Inductive Signal Clamp
The 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.

Specifications & Features

Features

- Three Year Warranty
- 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
- Five discrete sensitivity settings
- Receiver supplied with two environmentally friendly 9-volt lithium batteries
- Piezoelectric speaker
- 45º Depth Measurement
- Patented HeliFlux® Sensors

Specifications

Receiver

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

Transmitter

Operating	12 V (8 alkaline C-Cell batteries)

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

(We reserve the right to change specifications)