

# **FISHER** RESEARCH LABS

## **SONDE**

### **Self Contained Signal Transmitter**



## **Operating Manual**

Test Equipment Depot - 800.517.8431 - 99 Washington Street Melrose, MA 02176

TestEquipmentDepot.com

# General Instructions for Using Sondes with Line Locators

## Introduction:

Fisher Sondes are manufactured with the highest quality and durability and will deliver accurate locates with any line locator set to detect at their frequencies. There are currently 4 models available: SR-82, SR-81, SR-8.2, and SR-51 that operate at 82.175 KHz, 81.92 KHz, 8.2175 KHz, and 512 Hz respectively. These frequencies were selected for their peak underground performance when working in many types of soils and pipe compositions. All sondes feature a size 3/8 x 16 bolt.

## Power:

Fisher Sondes operate with a single AA battery. It is recommended that Alkaline type batteries be used for longer operation life.

Fisher Sondes are protected against accidental battery reversal. In addition, a battery can be inserted backwards into the Sonde when not in use or is left for storage.

## To Activate:

- 1) Insert the AA battery in the direction indicated by the polarity symbol on the housing.
- 2) Position the battery clip to make contact with the battery.
- 3) Screw the studded endcap securely onto the Sonde housing.
- 4) Verify on-status of Sonde. Shake the Sonde to make sure endcap is secured - tighten further if noise is heard. Turn locating unit on and make sure it responds to the Sonde.

## Operating with Line Locators:

- 1) Use a non-metallic flex push-rod to slide the Sonde into the desired pipe.
- 2) Turn on your locator and select the correct operating frequency if necessary.

## Operating with Line Locators

- 3) Holding your locator perpendicular to the ground, rotate it 90 degrees and begin tracing. The "blade" of the locator will run parallel to the direction of the pipe.
- 4) As you approach the location of the Sonde you will notice an increase in audio and signal levels.
- 5) The LEFT/RIGHT and OVER TARGET signals will indicate the direction you need to move and when you are directly over your Sonde.

When operating Fisher TW-7700 or TW-8800 line locators with a Sonde, you will notice a peak signal reading at three different locations in line with the Sonde direction. The strongest peak signal being the center of the Sonde, accompanied with two weaker signals set at equal distances on each side, and in line with the Sonde. The presence of three peak signals is normal and is a natural occurrence with all Sondes.

### Operating with Two-Box Locators:

Fisher's 81.92kHz Sonde is designed to be used with our industry leading TW-6, two-box locator. Used properly this Sonde can be accurately located to depths of approximately 10 feet. When operating a TW-6 with your Sonde:

- 1) Switch on your TW-6 receiver.
- 2) Set your mode selector switch to NORMAL.
- 3) Set your sensitivity to 7.
- 4) Carry your receiver perpendicular to the ground facing the direction of the pipe.
- 5) As you get closer to the location of the Sonde, you will notice an increase in audio level and meter movement. Reduce your sensitivity as needed to maintain a scale reading of 50. A maximum scale reading is observed when you are directly over the Sonde.

Test Equipment Depot - 800.517.8431 - 99 Washington Street Melrose, MA 02176  
TestEquipmentDepot.com

***FISHER*** **RESEARCH  
LABS**