# **ML-3 SERIES Magnetic Locators**

The ML-3 series of magnetic locators provide lightweight, durable, one-handed operation to find nearly any subsurface metallic object. It offers unparalleled durability housed in aircraft-grade aluminum monotube and is digitally tuned so it offers unparalleled accuracy in detecting ferromagnetic objects.

# **MODEL VERSIONS**

Model	Lenght	
ML-3S	40"	
ML-3L	55″	

# **ML SERIES KEY FUNCTIONS**







# USING THE ML-3 KEYPAD

#### LCD meter:

Fills with the strength of the detected signal and indicates "polarity" by a "+" or "-" sign display in the top of the LCD. Also indicates low battery when flashing.

#### Speaker:

Loud & Clear. Reports the change in detected signal, from low to high frequency as the target is approached.

All switches are touch pad.

## Zero:

Used to adjust the unit to allow for magnetic anomalies sucha as a magnetic gradient in the soil. Be sure you are not detecting a target when hitting the "zero" button. Unit returns to normal tuning after being turned OFF.

# ON/OFF:

Turn the unit "ON" or turn the unit "OFF".

# Gain Up:

Increase the "sensitivity." 8 positions.

#### **Gain Down**:

Decrease the "sensitivity." 8 positions.

#### Micro-Processor:

Gain settings are stored in memory for next use.

#### LOCATOR OPERATION

Turn the power on or off by pressing the ON/OFF button on the keypad. There is no volume control. To change the Gain (sensitivity) settings, repeatedly press the gain up button to increase the sensitivity, and the gain down button to decrease the sensitivity.

Each push of the gain button changes the sensitivity up or down ONE increment at a time, out of 8 possible settings. A microprocessor remembers the gain settings, and when turned back on, the locator returns to the last used setting before it was turned off. Don't know what gain setting you're on? Press the gain down button several times (more than 7), to ensure that you are on the lowest setting. Then press the gain up button and count up to 7 (or vice versa down from the highest setting.) If starting from the lowest setting, 3 or 4 clicks up is a good setting to begin locating. (All of our "ML" series locators have sensitivity settings that are more 'linear'. Beware of competitor models which take larger non-linear 'jumps' between settings, which give the impression that their unit is more sensitive on lower settings.)



Rugged Construction, IP68 Certified. Waterproof tested to water depths up to 250 ft. (76) and a complete protection against dust, dirt, and sand.

#### **SEARCH OR SURVEY WITH THE ML-3**

Walk slowly, sweeping the locator back & forth in front of you. If your target is small or very deep, use a higher Gain setting and walk slow, with a slower sweeping motion. Normally a medium setting on the GAIN and a little less than normal walking pace will do fine.

NOTE: Any 'ferrous' metal objects on your person, such as watches, pocket knives, large belt buckles, cell phones and steel-toed shoes will interfere if the locator is brought to close to them, or is operated on the higher setting.

#### **"PIN-POINTING" THE TARGET**

Upon locating the target using the "Search or Survey" method, you can detect the exact location of a target such as a "PK", "MAGNail", or other steel or iron target by following these steps:

- 1. Change the GAIN setting to the lowest setting that will still define the target, by using the "GAIN UP" or "Gain Down" button.
- 2. Bring the locator to a vertical position by simply allowing it to swing vertical, while you hold the unit loosely.
- 3. Move the locator back & forth in such a fashion as to create an imaginary "X" pattern over the target.
- 4. Move the center of the imaginary "X" directly over the target by positioning the crossing position of the "X" at the "Peak" of the signal response.

### **REPLACING THE BATTERIES**

3(three) 9V Alkaline Batteries

- 1. Unscrew the cap on top of the ML-3 to expose holder end.
- 2. Pull the battery holder out by the tab so you can service it.
- 3. Replace all three 9V batteries with new ones.
- 4. Replace wires into housing.
- 5. Slide the battery holder back into the tube, tab end out.
- 6. Replace the cap to the ML-3 & properly discard old batteries.
- 7. Verify unit turns on.

# 7-YEAR WARRANTY

The ML-3L and ML-3S are guaranteed to be free of defect in materials and workmanship for 7 years to the original end user/purchaser.

Only authorized SSI repair personnel can repair units. Abuse, battery acid and water damage are explicitly excluded from warranty.

SubSurface Instruments, it's owners, employees and assigns shall not be liable for any action, inaction, injury, property or consequential damage sustained or expenses incurred from the use or misuse of this product.

Liability under this warranty is absolutely limited to repair, service or replacement of the instrument, at the sole discretion of SubSurface Instruments. No other warranty is expressed or implied.

SubSurface Instruments, Inc. 1230 Flightway Drive

De Pere, WI 54115 USA 855.422.6346 toll free 920.347.1791 fax info@ssilocators.com

www.ssilocators.com



#### **INSTRUCTION MANUAL**





0000

SubSurface Instruments





Instruments

SubSurface