

TILSWALL LE

Tilswall Metal Detector LE User Manual

Model: LE | Brand: TILSWALL

1. INTRODUCTION

This manual provides detailed instructions for the assembly, operation, maintenance, and troubleshooting of your Tilswall Metal Detector LE. Please read this manual thoroughly before using the equipment to ensure safe and efficient operation. Proper use will enhance your metal detecting experience and prolong the life of your device.

2. PRODUCT COMPONENTS

The Tilswall Metal Detector LE consists of several key components designed for optimal performance and user comfort. Familiarize yourself with each part before assembly.

LCD DISPLAY

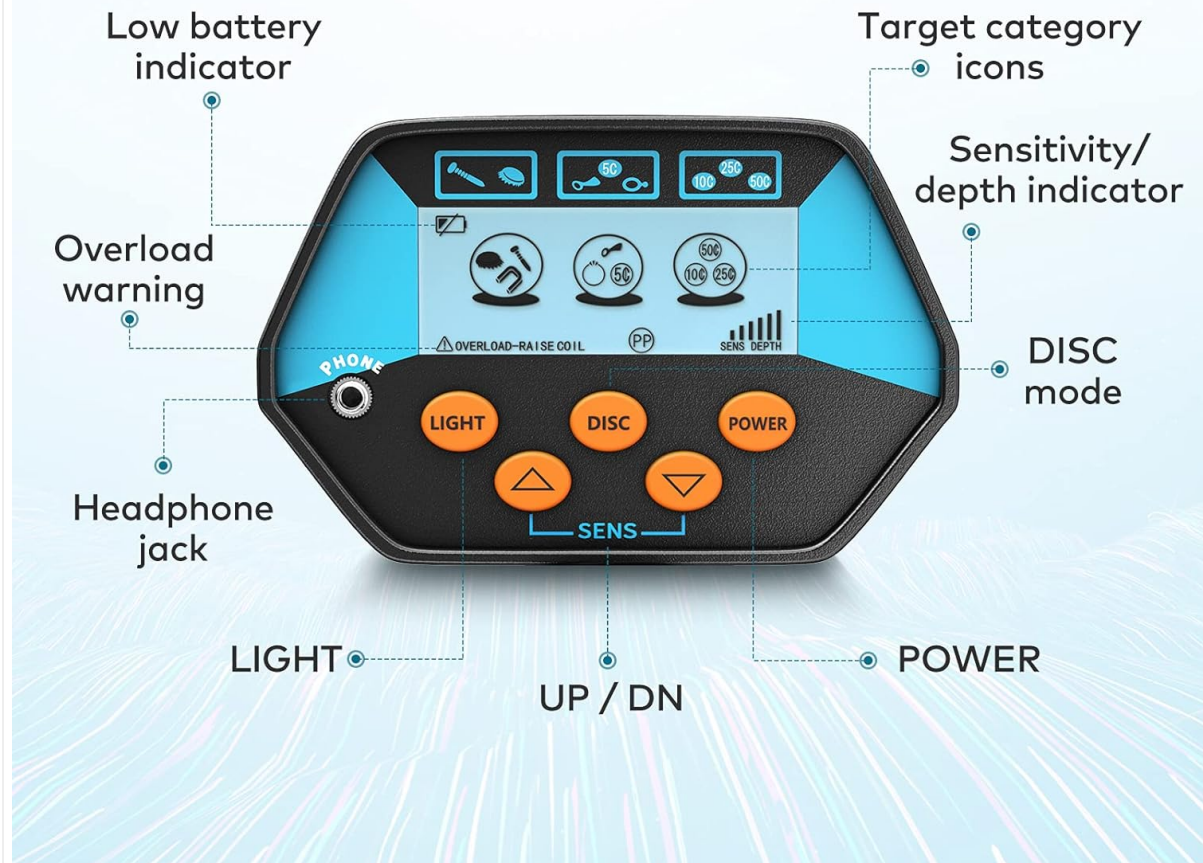


Figure 2.1: Overview of the Tilswall Metal Detector LE components. This diagram illustrates the waterproof search coil, lock nut, adjustable stem, control box, arm support, cable, battery holder, and the backlight LCD display.

- **Control Box:** Houses the LCD display, control buttons, and electronic circuitry.
- **Adjustable Stem:** Allows for length adjustment to suit users of various heights.
- **Arm Support:** Provides comfort and stability during prolonged use.
- **Waterproof Search Coil:** The primary detection component, designed to be submerged in water.
- **Lock Nut:** Secures the search coil to the stem.
- **Cable:** Connects the search coil to the control box.
- **Battery Holder:** Compartment for power source.
- **LCD Display:** Provides visual feedback on detection mode, sensitivity, battery status, and volume.
- **Headphone Jack:** For connecting headphones (3.5mm).

3. SETUP INSTRUCTIONS

Follow these steps to assemble your metal detector. Ensure all connections are secure before operation.

1. **Attach the Search Coil:** Align the search coil with the lower stem and secure it using the provided screw and lock nut. Ensure the cable is routed neatly along the stem.

2. **Assemble the Stem:** Connect the lower stem to the middle stem, and then the middle stem to the upper stem (which includes the control box and arm support). Secure each section by twisting or locking mechanisms.
3. **Adjust Stem Length:** The stem is adjustable from 35 inches to 45 inches. Loosen the locking collar, extend or retract the stem to a comfortable length, and then tighten the collar to secure it.



Figure 3.1: The adjustable stem allows for comfortable use by both adults and children, extending from 35 to 45 inches.

4. **Install Batteries:** Open the battery compartment on the control box and insert the required batteries (not specified in product data, assume standard 9V or AA based on common detectors, but the image shows 9V batteries). Ensure correct polarity. Close the compartment securely.
5. **Connect Cable:** Plug the search coil cable into the designated port on the control box.

4. OPERATING INSTRUCTIONS

Your Tilswall Metal Detector LE features an intuitive LCD display and multiple detection modes for efficient treasure hunting.



Figure 4.1: The LCD display provides real-time information on detection mode, sensitivity, battery status, and volume levels.

4.1 Power On/Off

Press the **POWER** button to turn the detector on or off. The LCD display will illuminate upon activation.

4.2 LCD Display Overview

The LCD screen provides visual indicators for:

- **Detection Mode:** Indicates the currently selected mode (e.g., All Metal, DISC).
- **Sensitivity Level:** Shows the current sensitivity setting. Adjust with UP/DOWN buttons.
- **Battery Condition:** Displays the remaining battery life.
- **Volume Level:** Indicates the audio output volume.
- **Target Category Icons:** Different icons represent various metal types (e.g., iron, gold, silver).
- **Overload Warning:** Alerts if the signal is too strong.

4.3 Detection Modes

The detector offers two primary modes:

- **All Metal Mode:** Detects all types of metals.

- **DISC Mode:** Allows you to discriminate against certain metal types, improving detection efficiency by filtering out unwanted targets. Use the **DISC** button to cycle through discrimination settings.



Figure 4.2: Comparison of Auto Tone (All Metal) and DISC Mode functionality.

4.4 Sensitivity Adjustment

Use the **UP** and **DOWN** arrow buttons (labeled SENS) to adjust the detector's sensitivity. Higher sensitivity increases detection depth but may also increase false signals in mineralized soil.

4.5 Audio Feedback

The detector provides distinctive audio tones for different metals: a low tone, a medium tone, and a high tone. This helps in identifying target types without constantly looking at the display. For private detection, connect 3.5mm headphones to the audio jack.

4.6 Search Coil Usage

The 8.5-inch waterproof search coil allows for detection in shallow water. When sweeping, keep the coil parallel to the ground and move it slowly from side to side. The detector is capable of detecting objects up to 18 cm deep.

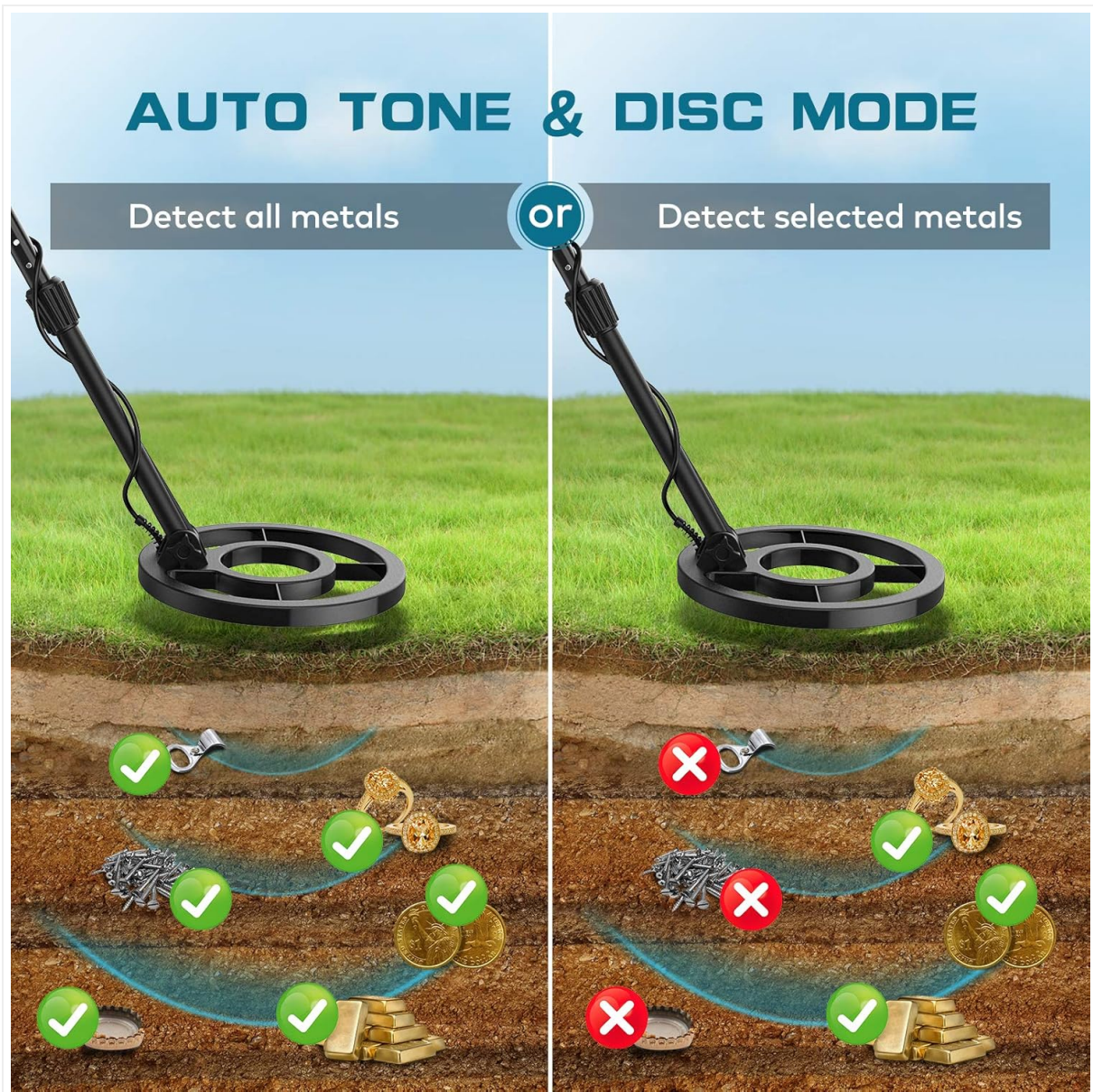


Figure 4.3: The 8.5-inch search coil provides a detection depth of up to 18 cm.

5. USAGE TIPS AND BEST PRACTICES

To ensure accurate detection and prevent interference, consider the following:

- **Avoid Indoor Use:** Do not use the device on building floors, as many contain embedded metal that can cause false readings. Large appliances indoors can also interfere with metal detectors.
- **Outdoor Environment:** When using outdoors, avoid highly mineralized soil and areas with significant metal waste.
- **Digging Tools:** If carrying a digging tool, keep it a short distance away from the metal detector during operation to prevent interference.
- **Control Box:** The control box is *not* waterproof. Protect it from moisture and submersion.

6. SPECIFICATIONS

| Feature | Specification |
|---------|---------------|
| Brand | TILSWALL |

| Feature | Specification |
|---------------------------------|--|
| Model Number | LE |
| Color | Black |
| Material | Metal |
| Power Source | Manual (Battery Operated) |
| Batteries Required? | No (Batteries are included, but the device requires them to operate) |
| Adjustable Length | Yes (35" to 45") |
| Display Type | LCD |
| Item Weight | 2.35 Pounds |
| Item Dimensions (L x W x H) | 8.5"L x 8.5"W x 45"H |
| Recommended Uses | Metal Detection |
| International Protection Rating | IP54 (Search coil is waterproof, control box is not) |

7. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your metal detector.

- **Cleaning:** After each use, wipe down the search coil and stem with a damp cloth to remove dirt and debris. Ensure the control box remains dry.
- **Storage:** Store the detector in a dry, cool place away from direct sunlight and extreme temperatures. If storing for extended periods, remove the batteries to prevent leakage.
- **Battery Care:** Replace batteries when the low battery indicator appears on the LCD. Always use fresh, high-quality batteries.
- **Cable Inspection:** Periodically check the search coil cable for any signs of wear or damage.

8. TROUBLESHOOTING

If you encounter issues with your metal detector, refer to the following common problems and solutions:

- **No Power:**
 - Check if batteries are correctly installed with proper polarity.
 - Replace old or depleted batteries with new ones.
- **False Signals/Erratic Behavior:**
 - Reduce sensitivity using the SENS DOWN button.
 - Move to a different location, away from highly mineralized soil, large metal objects, or electrical interference.
 - Ensure the search coil cable is securely connected and not damaged.
 - Check if any personal metal items (jewelry, cell phone) are too close to the search coil.
- **No Detection:**

- Increase sensitivity using the SENS UP button.
- Ensure the correct detection mode is selected (e.g., All Metal mode for general detection).
- Verify the search coil is properly connected.
- **Weak Audio Signal:**
 - Increase the volume level.
 - Check headphone connection if in use.

9. WARRANTY AND SUPPORT

Your Tilswall Metal Detector LE is covered by a manufacturer's warranty against defects in materials and workmanship. For specific warranty details, please refer to the warranty card included with your product or contact Tilswall customer support.

For technical assistance, troubleshooting, or any questions regarding your product, please visit the official Tilswall website or contact their customer service department. Contact information can typically be found on the product packaging or the brand's official website.