HOTBEST SH402

HOTBEST SH402 5-in-1 Stud Finder Sensor Instruction Manual

1. Introduction

The HOTBEST SH402 5-in-1 Stud Finder Sensor is a versatile electronic detector designed to locate various objects behind walls, floors, and ceilings. This device accurately identifies wooden studs, metal studs, joists, metal pipes, rebar, and live AC wires, enhancing safety and precision for your projects. It features an LED LCD green backlit screen for clear visibility in various lighting conditions and provides audio alarms for detected objects.

2. Safety Information

Please read and understand all safety instructions before using this device. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Do not use this device near individuals with pacemakers.
- Always exercise caution when working near electrical wiring. Disconnect power to the area if possible before drilling or cutting.
- This device is intended for indoor use only.
- Keep the device dry and clean. Do not expose it to moisture or extreme temperatures.

3. Package Contents

Upon opening the package, please verify that all items are present and in good condition:

- 1 x HOTBEST SH402 Stud Finder Sensor
- 1 x Instruction Manual

4. Product Overview

The HOTBEST SH402 features an intuitive design with a clear display and easy-to-use controls. Familiarize yourself with the components before operation.



Figure 4.1: Labeled components of the HOTBEST SH402 Stud Finder. Key features include the LED LCD screen, mode selection button, power button, stud center indicator, AC wire warning, metal detection mode, AC detection mode, wood fence detection mode, and stud edge indicators.

The device's display provides visual feedback on detected objects, signal strength, and selected mode. Audio alerts complement the visual indicators for precise localization.



Figure 4.2: The SH402 Stud Finder in use, demonstrating its ability to detect wood, electrical wires, metal pipes, and rebar behind a wall surface.

5. Setup

5.1 Battery Installation

The HOTBEST SH402 requires one 9V dry battery (not included). To install the battery:

1. Open the battery compartment cover located on the back of the device.
2. Insert a new 9V battery, ensuring correct polarity (+/-).
3. Close the battery compartment cover securely.

5.2 Initial Calibration

For accurate readings, the device must be calibrated before each use and when changing scanning locations. Calibration ensures the device adapts to the wall's density.

1. Place the stud finder flat against the wall in an area where you are certain there are no studs, metal, or AC wires.
2. Press and hold the power button. The device will emit a beep and the display will show a calibration sequence.
3. Keep the device still until calibration is complete (usually a few seconds). The display will then indicate it is ready for scanning.

Note: Calibrating over a stud or other object will result in inaccurate readings. Always calibrate in a clear area.

6. Operating Modes

The SH402 offers multiple detection modes to suit different scanning requirements:

- **Stud Scan (1/2", 1", 1 1/2" depth):** Detects the edges and center of wooden and metal studs up to 1.5 inches (38 mm) deep. The display will indicate the depth and proximity to the stud.
- **Metal Scan:** Locates non-ferrous metal (e.g., copper pipes) up to 2.36 inches (60 mm) deep and ferrous metal (e.g., rebar) up to 3.15 inches (80 mm) deep.
- **AC Wire Scan:** Detects live unshielded AC wires up to 2 inches (51 mm) deep. This mode is crucial for avoiding electrical hazards.

To switch between modes, press the 'MODE' button on the device. The selected mode will be indicated on the LCD screen.

7. Operation

Follow these steps for effective scanning:

1. **Power On and Calibrate:** Press and hold the power button. Calibrate the device as described in Section 5.2.
2. **Select Mode:** Press the 'MODE' button to choose the appropriate detection mode (Stud, Metal, or AC Wire).
3. **Scan the Surface:** Place the device flat against the wall and slowly slide it horizontally across the surface. Maintain firm contact with the wall.
4. **Interpret Display and Audio:**
    - As the device approaches an object, the signal strength bars on the LCD will increase.
    - An audio alarm will sound, and the 'CENTER' indicator will appear when the device is directly over the center of a stud or object.
    - In AC Wire Scan mode, a lightning bolt icon will illuminate, and an alarm will sound when live AC wires are detected.
5. **Mark and Verify:** Once an object is detected, mark its location. For critical applications, scan the area from multiple directions to confirm the object's position.



Figure 7.1: A user operating the SH402 Stud Finder to locate hidden objects within a wall before performing drilling tasks.

7.1 Video Demonstration

Watch this video for a visual guide on how to set up and operate your HOTBEST SH402 Stud Finder Sensor.

Video 7.1: A demonstration of the HOTBEST SH402 Stud Finder Sensor, including battery installation, power-on sequence, and basic scanning functionality.

8. Maintenance

Proper maintenance ensures the longevity and accuracy of your stud finder:

- **Cleaning:** Wipe the device with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the device in a dry, cool place away from direct sunlight and extreme temperatures.
- **Battery:** Remove the battery if the device will not be used for an extended period to prevent leakage.

9. Troubleshooting

If you encounter issues with your SH402 Stud Finder, refer to the following common problems and solutions:

- **Inaccurate Readings:**
  - Ensure the device is calibrated correctly on a clear section of the wall before scanning.
  - Check battery level; low battery can affect performance.
  - Ensure firm and consistent contact with the wall during scanning.
- **Device Does Not Power On:**
  - Verify the 9V battery is correctly installed and fully charged. Replace if necessary.
- **No Detection:**
  - Confirm the correct mode is selected for the material you are trying to detect.
  - Ensure the scanning surface is dry and free from excessive moisture, which can interfere with detection.

10. Specifications

Brand	HOTBEST
Model Number	SH402
Color	Silver
Power Source	Battery Powered (1 x 9V dry battery)
Product Dimensions	6.7"L x 2.76"W x 1.4"H (17.1 cm x 7 cm x 3.5 cm)
Item Weight	7 ounces (198 grams)
International Protection Rating	IP66
Material	PC/ABS



Figure 10.1: Detailed dimensions of the HOTBEST SH402 Stud Finder, measuring 17.1 cm (6.73 inches) in length, 7 cm (2.75 inches) in width, and 3.5 cm (1.37 inches) in depth.

11. Warranty Information

This product is covered by a standard manufacturer's warranty. For specific details regarding warranty coverage, duration, and claims process, please refer to the warranty card included with your purchase or contact the manufacturer directly.

12. Support

For technical assistance, troubleshooting, or any questions regarding your HOTBEST SH402 Stud Finder Sensor, please contact our customer support team. Contact information can typically be found on the product packaging or the manufacturer's official website.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question