

Zircon 72299

Zircon MultiScanner A250 User Manual

All-In-One Stud Finder, Metal Detector, and Live AC Wire Scanner

INTRODUCTION

The Zircon MultiScanner A250 is an advanced electronic stud finder, metal detector, and live AC scanner designed for both home improvement enthusiasts and professional contractors. This versatile tool features a comfortable ergonomic grip, an ultra-bright LCD screen, and patented SpotLite Pointing System for accurate target indication. It incorporates Auto Correcting Technology (ACT) to minimize user errors and includes a WireWarning Detection feature for enhanced safety.





Figure 1: Zircon MultiScanner A250

SETUP

Battery Installation

The MultiScanner A250 requires one 9V alkaline battery (not included). For optimal performance, ensure the battery is fresh and fully charged.

1. Locate the battery compartment cover on the back of the unit.
2. Slide the cover open.
3. Insert a new 9V alkaline battery, matching the positive (+) and negative (-) terminals correctly.
4. Close the battery compartment cover securely.



Figure 2: Battery compartment and 9V battery

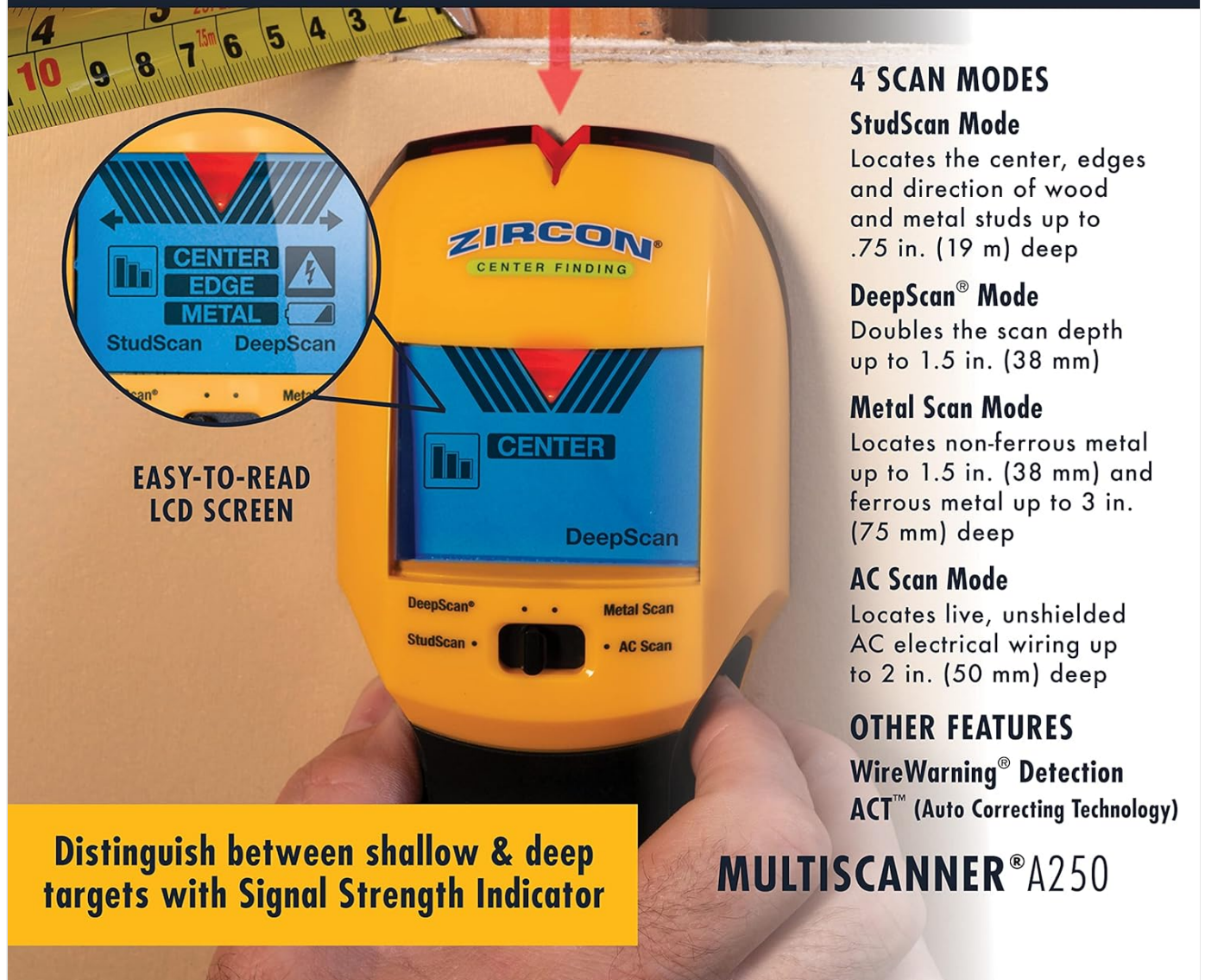
Initial Calibration

Before each scan, the tool must be calibrated. Place the MultiScanner A250 flat against the surface to be scanned, ensuring no hands are touching the surface. Press and hold the Power Button. Wait for the unit to complete calibration (indicated by a beep and full display segments) before moving the tool.

OPERATING MODES

The Zircon MultiScanner A250 features four distinct scanning modes, easily selectable via the mode switch.

CENTER FINDING STUD FINDER WITH WIREWARNING® DETECTION



4 SCAN MODES

StudScan Mode

Locates the center, edges and direction of wood and metal studs up to .75 in. (19 mm) deep

DeepScan® Mode

Doubles the scan depth up to 1.5 in. (38 mm)

Metal Scan Mode

Locates non-ferrous metal up to 1.5 in. (38 mm) and ferrous metal up to 3 in. (75 mm) deep

AC Scan Mode

Locates live, unshielded AC electrical wiring up to 2 in. (50 mm) deep

OTHER FEATURES

WireWarning® Detection

ACT™ (Auto Correcting Technology)

Distinguish between shallow & deep targets with Signal Strength Indicator

MULTISCANNER® A250

Figure 3: MultiScanner A250 LCD display and mode selection

1. StudScan Mode

This mode locates the center, edges, and direction of wood and metal studs behind walls, floors, and ceilings. It scans up to 0.75 inches (19 mm) deep.

- Select "StudScan" on the mode switch.
- Calibrate the tool on the surface.
- Slowly slide the tool horizontally across the surface. The display will indicate when you are approaching a stud edge.
- The patented SpotLite Pointing System will illuminate, and an audio tone will sound when the center of a stud is detected.



Figure 4: Using StudScan mode to find a stud

2. DeepScan Mode

DeepScan Mode doubles the scanning depth to 1.5 inches (38 mm) for locating deeper studs.

- Select "DeepScan" on the mode switch.
- Follow the same scanning procedure as StudScan Mode.



Figure 5: Using DeepScan mode for deeper stud detection

3. Metal Scan Mode

This mode locates non-ferrous metal (e.g., copper pipes) up to 1.5 inches (38 mm) deep and ferrous metal (e.g., rebar) up to 3 inches (75 mm) deep. It is also useful for finding studs behind lath and plaster walls, tile, drywall, and stucco by identifying screw or nail heads.

- Select "Metal Scan" on the mode switch.
- Calibrate the tool on the surface.
- Slowly slide the tool horizontally. The signal strength indicator bars will increase as you approach metal.
- The SpotLite Pointing System will illuminate when the tool is directly over a metal object.



Figure 6: Using Metal Scan mode to detect pipes

4. AC Scan Mode

AC Scan Mode detects, locates, maps, and traces live, unshielded electrical wires up to 2 inches (50 mm) deep. This mode is crucial for avoiding electrical hazards.

- Select "AC Scan" on the mode switch.
- Calibrate the tool on the surface.
- Slowly slide the tool horizontally. The signal strength indicator bars will increase as you approach live AC wiring.
- The SpotLite Pointing System will illuminate when the tool is directly over a live wire.



Figure 7: MultiScanner A250 detecting live AC electrical wires

Compatible Materials

The MultiScanner A250 is designed to work effectively on a variety of common building materials, including:

- Drywall
- Wood Flooring
- Subflooring

- Gypsum Drywall
- Over Plywood Sheathing

WORKS ON A VARIETY OF MATERIALS

Materials Include:

- Drywall
- Wood Flooring
- Subflooring
- Gypsum Drywall Over Plywood Sheathing



MULTISCANNER® A250

Figure 8: Materials compatible with MultiScanner A250

Additional Features

- **WireWarning Detection:** This feature is active in StudScan, DeepScan, and Metal Scan modes and alerts you to the presence of live, unshielded electrical wires up to 2 inches (50 mm) deep.
- **ACT (Auto Correcting Technology):** Automatically corrects common user errors, such as when scanning begins over a stud, ensuring accurate results.
- **Signal Strength Indicator:** Helps distinguish between shallow and deep targets.
- **Low Battery Indicator:** Alerts you when the battery needs replacement for optimal performance.

MAINTENANCE

Cleaning

Wipe the tool with a clean, dry cloth. Do not use abrasive cleaners or solvents, as they may damage the unit.

Battery Replacement

When the Low Battery Indicator appears on the display, replace the 9V alkaline battery promptly to ensure continued accurate operation.

Storage

Store the MultiScanner A250 in a dry, dust-free environment away from extreme temperatures. Remove the battery if the tool will not be used for an extended period.

TROUBLESHOOTING

If you encounter issues with your Zircon MultiScanner A250, consider the following common solutions:

- **Inaccurate Readings:** Ensure the tool is properly calibrated on the wall surface before scanning. Avoid placing hands on the scanned surface during operation.
- **No Detection:** Check the battery level. A low battery can affect performance. Ensure you are using the correct scan mode for the target (e.g., StudScan for studs, Metal Scan for pipes).
- **False Positives (AC Scan):** Electrical field locators may not detect live AC wires if the wires are more than 2 inches (51 mm) from the scanned surface, in concrete, or encased in conduit, present behind a plywood shear wall or metallic wall covering, or if moisture is present in the environment or scanned surface.
- **General Performance:** The MultiScanner A250 constantly scans its surroundings and recalibrates itself if necessary. If issues persist, try re-calibrating the tool in a different spot on the wall.

WARNING: DO NOT ASSUME THERE ARE NO LIVE ELECTRICAL WIRES IN THE WALL. DO NOT TAKE ACTIONS THAT COULD BE DANGEROUS IF THE WALL CONTAINS A LIVE ELECTRICAL WIRE. ALWAYS TURN OFF THE ELECTRICAL POWER, GAS, AND WATER SUPPLIES BEFORE PENETRATING A SURFACE. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN ELECTRIC SHOCK, FIRE, AND/OR SERIOUS INJURY OR PROPERTY DAMAGE.

For more detailed troubleshooting or specific issues, please refer to the official user guide [Zircon MultiScanner A250 User Manual \(PDF\)](#).

SPECIFICATIONS

Feature	Detail
Brand	Zircon
Model	A250 (Item model number: 72299)
Color	Yellow
Power Source	Battery Powered (9V alkaline battery required, not included)
Material	Plastic
Item Weight	8 ounces
Product Dimensions	7.72"L x 1.8"W x 3.23"H
International Protection Rating	IP54
Display Type	LCD

StudScan Depth	Up to 0.75 inches (19 mm)
DeepScan Depth	Up to 1.5 inches (38 mm)
Metal Scan Depth (Non-ferrous)	Up to 1.5 inches (38 mm)
Metal Scan Depth (Ferrous)	Up to 3 inches (75 mm)
AC Scan Depth	Up to 2 inches (50 mm)

MULTISCANNER® A250 DIMENSIONS



Figure 9: MultiScanner A250 dimensions

WARRANTY

The Zircon MultiScanner A250 comes with a**Limited Lifetime Warranty**. Please retain your proof of purchase for warranty claims. For full warranty details, refer to the official Zircon website or contact customer support.

For additional information, frequently asked questions, or customer support, please visit the official Zircon resources:

- Official Zircon Store on Amazon: [Visit the Zircon Store](#)
- Product Information Page: [Zircon MultiScanner A250](#)
- Contact Zircon: 408-963-4500

ZIRCON®

CENTER FINDING

MultiScanner® A250

4-Mode Multifunctional Wall Scanner with Backlit Display



MultiScanner® A250 is an all-in-one tool complete with stud finding, metal detecting, and live AC scanning capabilities. Equipped with a 4-mode switch, the A250 is able to smoothly transition between scanning modes. This tool's dedicated AC Scan Mode uses the backlit LCD screen to display bars indicating when the tool is moving towards the source of live AC voltage or away. The SpotLite® Pointer, ultra-bright LCD screen, and audio tone indicate the location of the specified target.

- **StudScan Mode** locates the center, edges, and direction of wood and metal studs up to ¾ in. (19 mm) deep
- **DeepScan® Mode** doubles the scanning depth to locate the center, edges, and direction of wood and metal studs up to 1½ in. (38 mm)
- **Metal Scan Mode** locates non-ferrous metal, such as copper pipe, up to 1½ in. (38 mm) deep, and ferrous metal, such as rebar, up to 3 in. (75 mm) deep
- **AC Scan Mode** locates live, unshielded AC electrical wiring up to 2 in. (50 mm) deep
- **WireWarning® Detection** indicates the presence of live, unshielded AC electrical wiring up to 2 in. (50 mm) deep in stud and metal scanning modes
- **ACT™ (Auto Correcting Technology)** automatically recalibrates the MultiScanner® when needed. ACT™ also corrects common errors, such as when scanning begins over a stud
- **Low Battery Indicator** alerts the user to replace the battery with a brand new battery with an extended expiration date for optimum performance
- **Signal Strength Indicator** helps to distinguish between shallow and deep targets
- **SpotLite® Pointer** shines an arrow-shaped light on the scanned surface to clearly indicate the location of the target
- **Translucent base and illuminated "V" marker groove** provides more accurate marking of target location
- **Ergonomically designed grip** allows a comfortable hold on the tool for any size hand, at any angle

SPECIFICATIONS

Dimensions	7.72 in. H x 3.23 in. W x 1.80 in. D (196 mm x 82 mm x 46 mm)		
Weight	Weight 8.13 oz. (230 g) without battery		
Battery Type	9V alkaline, required		
Position Accuracy*	Up to a depth of ¾ in. (19 mm): Typically within ½ in. (3 mm) Up to a depth of 1½ in. (38 mm): Typically within ¾ in. (5 mm) In Metal Scan Mode: Typically within ½ in. (13 mm) using the dual scan and mark procedure		
Depth*	StudScan Mode: Up to ¾ in. (19 mm) DeepScan® Mode: Up to 1½ in. (38 mm) Metal Scan Mode: Up to 1½ in. (38 mm) for copper, up to 3 in. (75 mm) for rebar		
AC & WireWarning® Position Accuracy*	Typically 90-250 V at 50-60 Hz within 6 in. (152 mm) of a hot unshielded wire in drywall		
AC & WireWarning® Depth*	In typical wall with Romex® wiring, wire can be detected up to 2 in. (50 mm) deep		
Operating Temperature	20° to 105°F (-7° to 41°C)		
Storage Temperature	-20° to 150°F (-29° to 66°C)		
Humidity	5-90% RH (non-condensing)		
Water Resistance	Splash and water resistant, not waterproof		

*NOTE: USE ONLY IN ACCORDANCE WITH A250 INSTRUCTIONS. Sensing depth and accuracy can vary depending on scanning environment conditions such as mineral contents, moisture, texture and consistency of the wall materials. Indoor use only.

 Find Stud Center
  Find Wood or Metal Studs
  Scan Thick Walls for Studs
  WireWarning® Detection
  Scan for Metal
  Scan for Electrical
 

 ZirconCorporation
  ZirconTV
  ZirconTools
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  ZirconToolsPro
  ZirconTools

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Figure 10: Additional product information and contact details

no relevant documents