ZIRCON SuperScan A1 Advanced Stud Finder Owner's Manual

SuperScan A1 Advanced Stud Finder
Owner's Manual

Contents

SuperScan A1 Advanced Stud Finder

BEFORE YOU BEGIN
ZIRCON® STUD FINDERS WORK BY SENSING DENSITY CHANGES BEHIND THE WALL. OTHER OBJECTS CAN BE DETECTED, ESPECIALLY IF THEY ARE VERY CLOSE TO THE WALL. DO NOT ASSUME THAT EVERYTHING DETECTED IS A STUD.

- Always use a new 9V alkaline battery with an extended expiration date at least 3 years beyond the current date. Match battery direction to the image inside of battery cavity.
- Do not rely exclusively on the tool to locate items behind a surface. Use other information to help locate such items before penetrating the surface, including construction plans, visible points of entry of pipes, wiring into walls such as in a basement, and standard stud-spacing practices.
- Always start your scan in Target Control® (TC™) mode, which scans through standard single layer drywall up to 3⁄4″ (19 mm) deep.

- Always scan for studs at several different heights on the wall and mark the location of every target indicated by the stud finder. This is called “mapping the wall.” Pipes and other objects will likely not give consistent readings from floor to ceiling, as a stud would.
- Studs normally run from floor to ceiling, except above and below windows and above doors.
- Readings should always be consistent and repeatable.
- Zircon® stud finders are recommended for interior use only.
- Other objects commonly contained in walls, floors, or ceilings are water pipes (plastic and metal), gas lines, firestops, and electrical wiring.
- Sensing depth and accuracy can vary depending on scanning environment conditions, such as mineral content, moisture, texture, and consistency of the wall materials.
- Depending on the proximity of electrical wiring or pipes to the wall surface, tool may detect them in the same manner as studs.

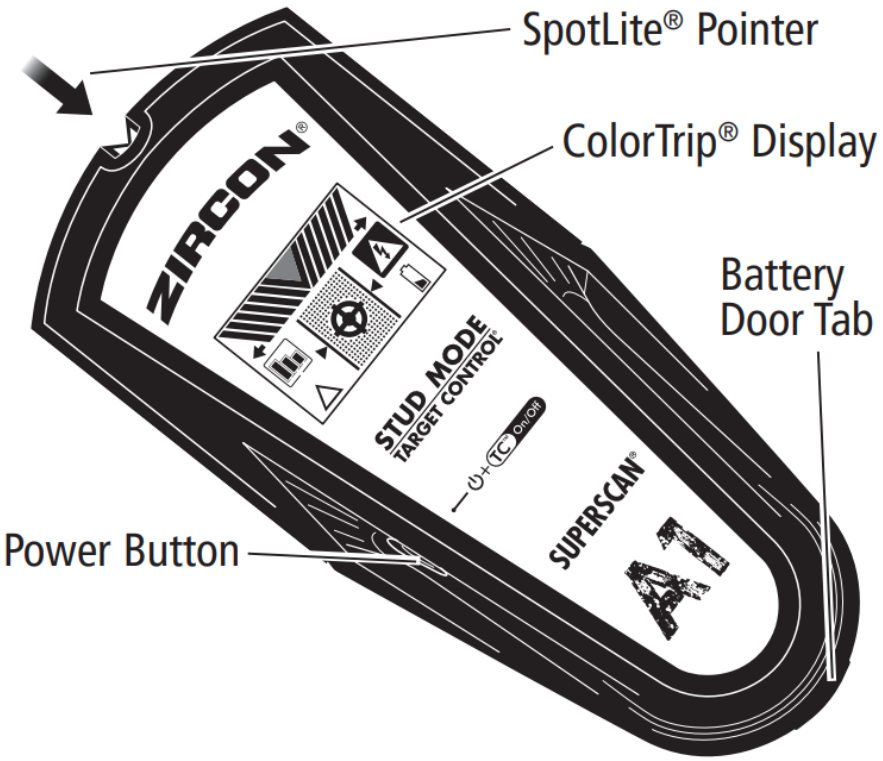
Caution should always be used when nailing, cutting, or drilling in walls, floors, and ceilings that could contain these items. Use extreme caution under these circumstances or whenever live AC wiring is present.

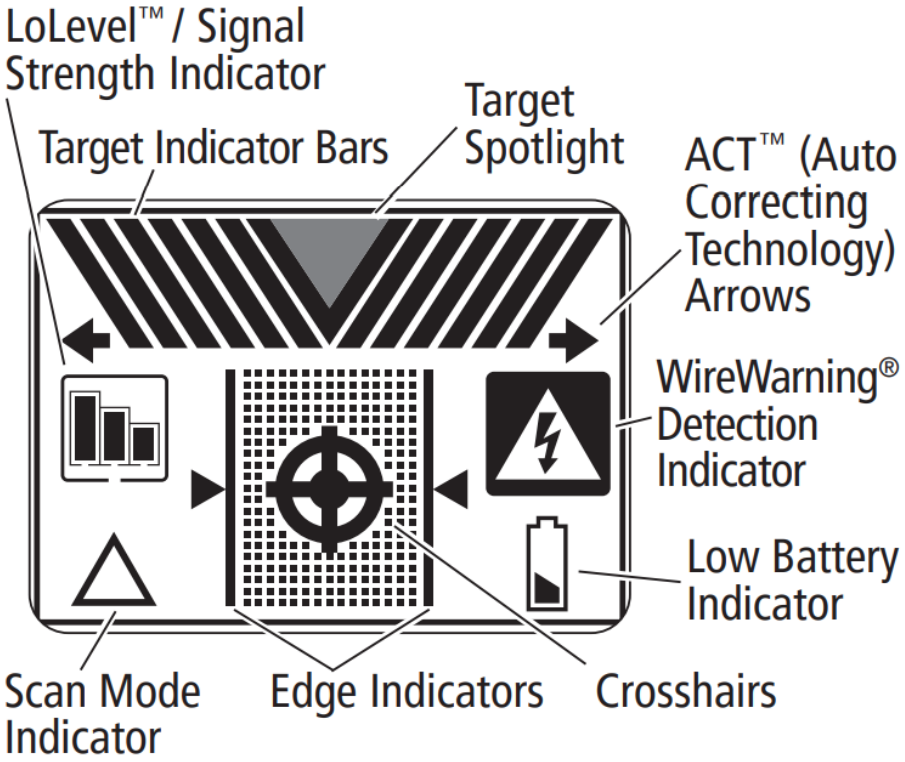
- Studs are normally spaced 16″ or 24″ (40 cm or 60 cm) apart on center, are normally 1 1⁄2″ (38 mm) wide, and may be separated by firestops. Anything closer together, or of a different width, may not be a stud.

IMPORTANT: Trust but Verify is a technique that can help indicate “safe-to-drill” zones to minimize hitting existing metals on a stud, such as nails, screws, and protector plates. When the Crosshairs show in TC™ mode, run tool vertically up and down the stud. The stud indicators (Crosshairs, Edge Indicators, Target Indicator Bars, Target Spotlight, and SpotLite® Pointer) will all turn off over screws and other metal, then turn on again when the stud is free from metal. The “safe-to-drill” zones are typically between adjacent drywall screws, nails, or protector plates, assuming the builder properly installed metal protector plates on the stud, and over plumbing and electrical. If stud indicators do not disappear when running vertically up and down the object in TC™ mode, the absence of drywall screws, nails, and protector plates indicates this could be a non-metallic object such as plastic plumbing or PEX tubing, and should not be mistaken for a stud.

TROUBLESHOOTING & CONSTRUCTION TIPS

SITUATION	LIKELY CAUSE	SOLUTION
Tool detects objects other than studs in StudS can mode or finds more o bjects that look like studs than should be there.	Electrical wiring an d metal or plastic p ipes may be near, or touching, the ba ck of the wall surfa ce.	•Check for other studs equally spaced to either side at 16″ or 24″ (40 cm or 60 cm) and check for the same stud at spots dir ectly above or below the first scan area. •Standard studs measure approximately 11/2″ (38 mm) betwe en edges. Anything smaller or larger is likely not a stud (unles s near a door or window).
Studs are continuously d etected near windows an d doors.	Multiple studs are i n use.	Double and triple studs are sometimes used around doors and windows. Headers are used above them. Detect outer ed ges so you know where to begin.
Electrical wires suspected but WireWarni ne Detection does not ale rt	Wires deeper than 2″ (50 mm) from th e surface might no t be detected.	If there is an outlet switch, turn it to ON position while scanning, but turn OFF when working near the wires. Us e extra caution if the area has plywood, thick wood backing be hind drywall, or walls that are thicker than normal.
	Wires may not be l ive.	Plug a lamp into the outlet and turn it on to test whether wires are live.
Low Battery Indicator on.	Low battery.	Install a new 9V alkaline battery with an extended expiration d ate.
Low Battery Indicator flas hes and tool does not operate .	Dead battery.	





Featuring Revolutionary Target Control® (TC™) Technology
TC™ technology is tuned to find wood studs while filtering out (rejecting) metallic or low signal false positive objects such as plumbing, conduit, straps, brackets, or plastic water pipes. With TC™ mode, users can utilize Trust but Verify technique to help identify “safe-to-drill” zones between adjacent drywall screws, nails, and protector plates.
Two scanning modes:

- Target Control® (TC™) locates center, edges, and direction of wood studs (while ignoring metal) up to 3⁄4″ (19 mm) deep. LCD will be backlit with a blue light. In TC™ mode, LoLevel™ Indicator indicates low (weak) signal objects, such as plastic water pipes, plastic sewer drains, or studs deeper than 3⁄4″ (19 mm). When compared to stud signals, the LoLevel™ Indicator may help differentiate studs from false positives.
- StudScan locates center, edges, and direction of both wood and metal studs up to 3⁄4″ (19 mm) deep.LCD will not be backlit in this mode. In StudScan mode, the Signal Strength Indicator uses the same icon as the LoLevel™ Indicator. When TC™ is off, a strong signal is indicated by full signal strength bars.

WIREWARNING® DETECTION The Zircon®
WireWarning® Detection continuously detects and alerts for live, unshielded AC (alternating current) wires in both modes. When live AC voltage is etected,warning indicator appears until tool is moved sufficiently away from the live wire. When calibration begins over an AC wire, AC icon will flash. Use extreme caution under these circumstances or whenever live AC wiring is present.

WARNING Tool may not detect AC activity if wires are more than 2″ (50 mm) behind the scanned surface, in concrete, encased in conduit, behind a plywood shear wall or metallic wall covering, or if moisture is present in the environment or scanned surface.

INSTALL 9-VOLT BATTERY
Always use a new 9V alkaline battery with an extended expiration date at least 3 years beyond current date. Match battery direction to image inside battery cavity.

WARNING Do not rely exclusively on tool to locate items behind a surface Use other information to help locate items before penetrating the surface, including construction plans, visible points of entry of pipes and wiring into walls, such as in a basement, and standard stud-spacing practices.

POWER UP

To activate tool, press and hold Power Button. The default mode at power up is TC™. Device shuts off 1–2 seconds after Power Button is released.

FIND A CLEAN WOOD STUD IN TARGET CONTROL® (TC™) MODE

TC™ is designed to detect wood studs during scanning. For best results, hold tool as shown and move slowly when scanning. Do not touch surface during calibration or scan.

1. Hold tool flat against wallthen press and hold Power Button. (Figure A) Device will calibrate in 1–2 seconds. Proper calibration is confirmed by a short beep, a flicker of SpotLite® Pointer, and a flash of icons. If a calibration error occurs, all icons will flash continuously.

Figure A

NOTE: Screen will have a blue backlight in TC™ mode.

DO NOT MOVE TOOL DURING CALIBRATION.

2. While holding down Power Button, slide tool slowly along wall. When tool finds edgeof a stud, Edge Indicator shows. (Figure B)

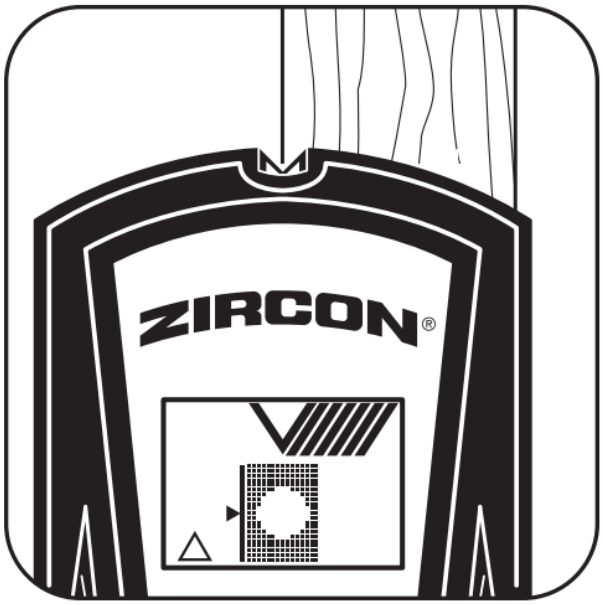


Figure B

3. Continue sliding. When tool finds center of a stud, Crosshairs show and SpotLite® illuminates. Mark spot where stud was found. (Figure C)

Figure C

4. Tool automatically recalibrates when in use. If the two ACT™ arrows appear on LCD, tool was calibrated over a stud, then moved away. This is ACT™ (Auto Correcting Technology) in action.
   NOTE: LoLevel™ Indicator will display rapidly cascading bars when device senses a sustained weak signal, indicating a false positive object may be present.
5. Use the Trust but Verify technique for finding drywall screws or nails up and down stud to confirm that you have located a wood stud. Other objects, such as plastic plumbing pipes, do not contain nails or drywall screws. (See important note under BEFORE YOU BEGIN for more information on this procedure.)

FIND A STUD IN STUDSCAN MODE (TC™ OFF)

1. Hold tool flat against wall, press Power Button, release it, then press it again, holding it down the second time. Device will calibrate in 1–2 seconds. A short beep confirms that calibration is complete. If a calibration error occurs,all icons will flash continuously.
   NOTE: Tool is in StudScan mode (TC™ off) when LCD backlight is off. When TC™ mode is off, metal objects may be indicated as a stud and Signal Strength Indicator will have steady strength bars.
   DO NOT MOVE TOOL DURING CALIBRATION.
2. While holding down Power Button, slide tool slowly along wall. When tool finds edge of a stud, Edge Indicator shows.
3. Continue sliding. When tool finds center of a stud, Crosshairs turn on, SpotLite® illuminates, and a beep sounds. (Figure D) Mark spot where stud was found.

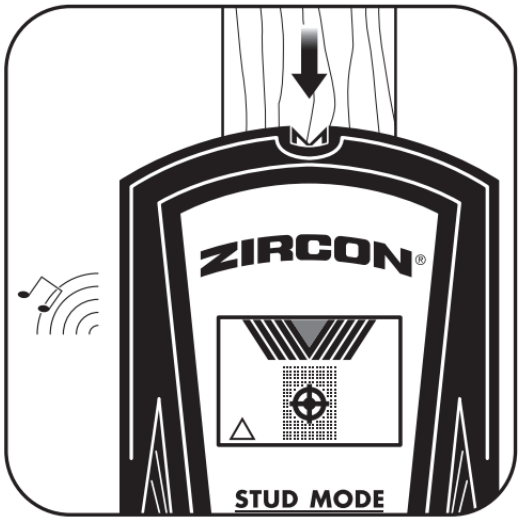


Figure D

4. Tool automatically recalibrates when in use. If the two ACT™ arrows appear on LCD, tool was calibrated too close to a stud, then moved away. This is ACT™ (Auto Correcting Technology) in action. (Figure E)

Figure E

To return to TC ™ mode, release and press Power Button again. When the display is backlit blue, you are back in TC™ mode.

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, 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.

WORKING WITH DIFFERENT MATERIALS

Wallpaper Tool functions normally on walls covered with wallpaper or fabric, unless the materials are metallic foil, contain metallic fibers, or are still wet after application. Wallpaper may need to dry for several weeks after application.

Freshly painted walls It may take a week or longer to dry after application.

Lath and plaster This tool is not designed to scan over lath and plaster.

Highly textured walls or acoustic ceilings This tool is not designed to scan over highly textured walls or acoustic ceilings.

Wood flooring, subflooring, or gypsum drywall over plywood sheathing Tool cannot scan for wood studs and joists through these materials, or through carpet and padding.

NOTE: Sensing depth and accuracy can vary depending on scanning environment conditions such as mineral content, moisture, texture, and consistency of the wall materials.

Electrical wiring and pipes Depending on the proximity of electrical wiring or pipes to the wall surface, tool may detect them in the same manner as studs.

Caution should always be used when nailing, cutting, or drilling in walls, floors, and ceilings that may contain these items.

Studs Studs are normally spaced 16″ or 24″ (40 cm or 60 cm) apart on center and are 1½″ (38 mm) wide. Anything closer together, or of a different width, may not be a stud.

LIMITED LIFETIME WARRANTY

Zircon Corporation (“Zircon”) warrants to the original purchaser (or original user by gift) that this product will be free from defects in materials and workmanship for its useful life (not to exceed twenty years from date of purchase).This warranty is limited to the electronic circuitry of the product, and specifically excludes consumable parts, including batteries, and software, even if packaged with the product. Defects caused by abuse, modification, handling contrary to these instructions, other unreasonable use, or neglect are not covered under this warranty. No liability is accepted for normal wear and tear and minor defects which do not detract from the function of the product.

THIS LIMITED LIFETIME WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL ZIRCON BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM POSSESSION, USE, OR MALFUNCTION OF THIS PRODUCT. NO OTHER REPRESENTATIONS OR CLAIMS OF A SIMILAR NATURE WILL BIND OR OBLIGATE ZIRCON.

Some states do not allow limitations on certain implied warranties and/or the limitation on incidental or consequential damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. This Limited Lifetime Warranty applies only to products purchased within the United States of America (USA) and Canada.For warranty applicable to products purchased in all other geographical areas, see **www.zircon.com/warranty**.

Any in-warranty defective product returned to Zircon, freight prepaid, along with dated purchase receipt and $10.00 to cover shipping and handling, will be repaired or replaced, at Zircon’s option. If the returned product is no longer available, Zircon may replace the product with a similar product of similar function. This is your sole and exclusive remedy for breach of this Limited Lifetime Warranty. To return product, call the Zircon Customer Service number below to request an RMA number and return product with shipment tracking to:

Zircon Corporation
Attn: Returns Department
1580 Dell Avenue
Campbell, CA 95008-6992 USA

Include your name, return address, RMA number, and package tracking number. Allow 4–6 weeks for delivery.

If you do not agree to the terms of this Limited Lifetime Warranty, you may not use this product and must promptly return it to the retailer, along with a dated purchase receipt within 30 days of purchase for a refund of the purchase price.

Customer Service: 1-800-245-9265 or 1-408-963-4550 Monday–Friday, 8:00 a.m.–5:00 p.m. PST **www.zircon.com**

info@zircon.com • P/N 72099 • Rev A 07/21

Scan QR code for more information.
http://qr.zircon.com/superscan-a1
Visit www.zircon.com for the
most current instructions.

FCC Part 15 Class B Registration Warning: This device complies
with Part 15 of FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference,and (2) this device must accept any interference received,
including interference that may cause undesired operation.

Documents / Resources

	ZIRCON SuperScan A1 Advanced Stud Finder [pdf] Owner's Manual SuperScan A1 Advanced Stud Finder, SuperScan A1, Advanced Stud Finder, Stud Finder, Advanced Finder, SuperScan A1

References

- Welcome to Zircon Tools – Zircon Corporation
- Warranty & Registration – Zircon Corporation