YORK
Survey Supply

Nothing else measures up!

Follow us!

York Survey Supply Centre

@York_Survey

@York_Survey

Prospect House
George Cayley Drive
Clifton Moor
York
England
YO30 4XE

Tel: +44 (0) 1904 692723
Fax: +44 (0) 1904 690385

E-Mail: sales@yorksurvey.co.uk

www.YorkSurvey.co.uk
…for secure online ordering of all our products!

YORK
Survey Supply

MultiScanner i700

Code: 51248

Operating Instructions

MultiScanner i700
Multifunction Wall Scanner

Congratulations on purchasing the most technically advanced wall scanner ever created! Zircon introduced the StudSensor in 1980 and has put over 25 years of research into developing OneStep, the advanced technology at the core of the MultiScanner i700. OneStep technology senses, processes and adapts to wall surfaces to provide high-definition visibility into walls, floors and ceilings. MultiScanner i700 is the fastest, most accurate and easiest-to-use wall scanner on the market today.

Dual SpotLite® Pointing System
Signal Strength Indicator
Backlit LCD
Metal Sensor (back of unit)
AC Mode & WireWarning® Indication
Stud Scan Mode Indication
Stud Edge or Center Indication
Auto Recalibration Indication
Metal Mode Indication
Mode Selector Switch
Erasable Marker
Mark Button
Running Board
Battery (back of unit)
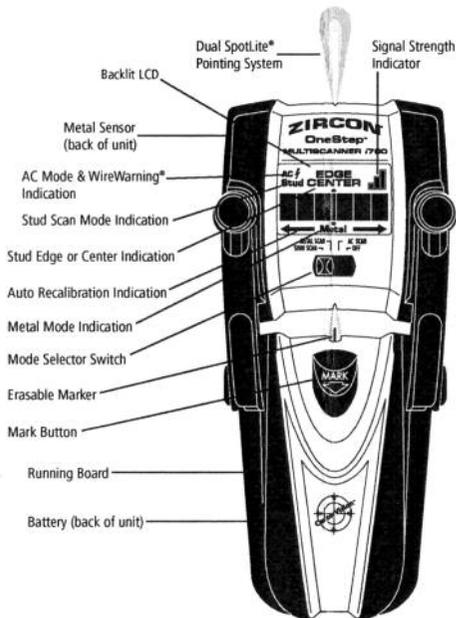
1. INSTALLING THE BATTERY
Press battery door release in with your finger or a coin and lift up to remove door.
Place 9V battery into the compartment and press into place. Replace battery door and snap shut. Battery will last approximately 2 years under normal conditions.

2. SELECTING THE MODE
Move selector switch to the desired mode: STUD SCAN for finding wood or metal studs; METAL SCAN for locating metal; or AC SCAN for locating hot AC wiring.
Move selector switch to the OFF position when not in use to prevent the tool from accidentally powering on and wearing down the battery.

3. FINDING A STUD
Always start with the scanner placed against the wall, then press the handle down. Wait for beep to confirm calibration has completed before moving tool.

Slowly slide tool across surface. EDGE display will illuminate, indicating location of the stud edge.

Continue sliding tool. When the centre of the stud is located with three bars on the Signal Strength Indicator, the buzzer will sound and the four middle bars, CENTRE display and SpotLite will illuminate.

In cases of deeper studs (or thicker walls) two bars will show on the Signal Strength Indicator and only the SpotLite and four middle bars will illuminate. If you still can't locate a stud, try the next step.

Quickly (within one second) release and re-press the handle down. The scanner will enter the **High Sensitivity Mode** and the Stud Scan Mode Indication will flash continuously. The centre of a very deep stud will be indicated by the four middle bars illuminating.

4. TIPS FOR PROPER OPERATION
For optimum scanning results it is important to properly hold MultiScanner i700 and move slowly when scanning. The following tips will ensure accurate scanning results:
• Grasp the handle with your thumb on one side and your fingers on the other side. Make sure your fingertips are resting on or above the running board and not touching the surface being scanned or the scanning head of the tool.
• Hold the tool straight up and down, parallel to the studs and do not rotate the tool.
• Keep tool flat against the wall and do not rock or tilt the tool when slowly sliding across the surface being scanned.
• Make sure your other hand or any other part of your body is not touching the surface being scanned. This could interfere with the tool's performance.

5. CALIBRATING THE TOOL
MultiScanner i700 is the world's first StudSensor that can be calibrated anywhere on the wall.
• Place MultiScanner i700 against the wall and press the handle until it lays flat against the wall. Pressing the tool to lay flat against the wall will automatically power on the tool via the internal on/off switch.
• Once powered on, tool will automatically perform all calibrations. The LCD will display all icons until calibration is complete. Upon completion of calibration, the SpotLites and buzzer will momentarily activate and the tool will begin continuous measurements. Continue to press the tool flat against the wall and begin scanning.
Note: It is important to wait for calibration to complete (1-2 seconds) before moving the scanner.
• One of the most important factors in ensuring scanning accuracy is calibrating the tool away from a stud, so the tool will sense increased density over the stud. During scanning, the tool will automatically recalibrate itself when needed. This recalibration is usually transparent and no indication is made.
If the tool is initially calibrated near a stud then moved away (it will detect the density of the wall decreasing) an arrow icon will be illuminated, indicating the direction of the missed stud.

6. SCANNING IN METAL MODE
Press the tool flat against the wall and slowly slide the scanner across the surface. MARK the spot where the display bars peak and the steady tone sounds. The SpotLites will also shine a beam of light. Continue in same direction until display bars reduce.
Reverse direction and MARK the spot where the display bars peak from the reversed direction. The midpoint of the two marks is the location of the centre of the metal object.

7. SCANNING IN AC MODE
Press the tool flat against the wall and slowly slide the scanner across the surface. MARK the spot where the display bars peak and the steady tone sounds. The SpotLites will also shine a beam of light. Continue in same direction until display bars reduce.
Reverse direction and MARK the spot where the display bars peak from the reversed direction. The midpoint of the two marks is the location of the centre of the electrical object.
Note: AC SCAN mode will only detect hot AC wiring.

AC WireWarning
Zircon's AC WireWarning feature works continuously in all modes. When AC voltage is detected, the AC Alert warning icon will appear in the display.
CAUTION: Wires deeper than 2 inches (51mm) from the surface, in conduit, or behind plywood shear wall may not be detected. Use extreme caution under these circumstances or whenever hot AC wiring is present. Always turn off power when working near electrical wires.

8. WORKING WITH DIFFERENT MATERIALS
Wallpaper: The MultiScanner i700 functions normally on walls covered with wallpaper or fabric, unless the materials are metallic foil, contain metallic fibres or are still wet after application.
Lath and Plaster: Due to irregularities in plaster thickness, it is difficult for the MultiScanner i700 to locate studs in STUD SCAN mode. Change to METAL SCAN mode to locate nail heads holding laths to stud. If plaster has internal mesh reinforcement, MultiScanner i700 will be unable to detect through that material.
Textured walls or acoustic ceilings: When scanning a ceiling or wall with an uneven surface, place thin cardboard on the surface to be scanned and scan over the cardboard. Calibrate with cardboard in place.
Wood flooring, subflooring or gypsum drywall over plywood sheathing: Use STUD SCAN mode and move the tool slowly. The signal strength indicator may only display 1 or 2 bars when the tool locates a stud through thick surfaces.

MultiScanner i700 cannot scan for wood studs and joists through carpeting and pad. In problematic situations, try using METAL SCAN to locate nails or drywall screws that line up vertically where stud is positioned.
Note: Sensing depth and accuracy can vary due to moisture content of materials, wall texture and paint.

9. MARKING THE LOCATION
Once an object is located, you can MARK the location by gently pulling down the MARK button with the tip of your finger. Pulling back the MARK button will cause a pencil point to extend from the front of the handle, placing a short erasable line on the wall.

10. CHANGING THE MARKER TIP
Pull and hold the MARK button to fully extend the marker tip. Grasp the marker and pull it off the marker post. To install a new marker tip, pull and hold the MARK button to fully extend the marker post. Push the new marker onto the marker post.
Note: MultiScanner i700 comes with three spare marker tips. These tips are stored in a compartment behind the battery.

11. REMOVING OR REPLACING THE SCANNING HEAD
MultiScanner i700's scanner head may be removed from the handle to facilitate cleaning or repair. Or the scanning head may also become separated from the handle if accidentally dropped or twisted. Follow the directions below to replace the scanning head:
To remove head: Place the back of the head in the palm of one hand and grasp the body of the unit in the other hand. Slowly and gently lift and turn the body, removing one arm from the socket at a time.
To replace the head: Align the end of the arms over the sockets and gently snap them back into their sockets, one arm at a time.

12. HELPFUL HINTS
(See also number 4, Tips for Proper Operation)

Situation	Probable Cause	Solution
Detects other objects besides studs in STUD SCAN mode. Finds more targets than there should be.	• Electrical wiring and metal/plastic pipes may be near or touching back surface of the wall.	• Scan the area in METAL and AC SCAN modes to determine if metal or hot AC is present. • Check for other studs equally spaced to either side (12, 16 or 24in [305, 406 or 610mm]) apart or the same stud at several places directly above or below the first. *Use CAUTION when nailing, sawing or drilling in walls, floors and ceilings where these items may exist*
Area of voltage appears much larger than actual wire (AC only)	• Static charge may develop on dry wall, spreading voltage detection as much as 12in (305mm) laterally from each side of an actual electrical wire.	• To narrow detection, turn unit off and on again at the edge of where the wire was first detected and scan again. • Place your free hand flat against the wall near the tool during the entire scan to drain static.
Difficulty detecting metal	• Tool calibrated over metal object. • Metal targets too deep.	• The scanner may have been calibrated over a metal object, reducing sensitivity. Try calibrating in another location. • Scan in both horizontal and vertical directions. Metal sensitivity is increased when metal object is parallel to sensor, located under Zircon logo.
Image of metal object appears wider than actual size	• Metal has greater density than wood	• To reduce sensitivity, recalibrate MultiScanner i700 over either of the first two marks.
Constant readings of studs near windows and doors	• Double and triple studs are usually found around doors and windows. Solid headers are above them.	• Detect outer edges so you know where to begin.
You suspect electrical wires but do not detect any.	• Wires may be shielded in metal conduit or behind metallic wall covering. • Wires deeper than 2in (51mm) from surface might not be detected. • Wires may not be hot.	• Try METAL SCAN to see if you can find metal, wire or metal conduit. • Always turn off the power when working near electrical wires. • Try turning on switches to outlet. • Try plugging a lamp into outlet and turning on switch.