

MEASUREMENT FOUNDATION

Operating manual Wire, metal and wood detector Model: Wall Scanner 80



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Appendix 1. Certificate of acceptance and sale Appendix 2. Warranty card

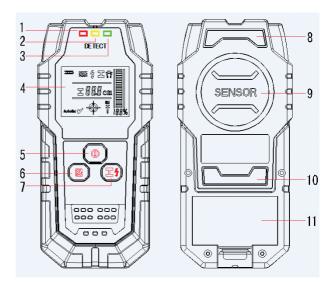


Intended Use

The measuring tool is intended for the detection of metals (ferrous and non-ferrous metals, e.g., rebar), joists and 'live' wires/conductors in walls, ceilings and floors.

Product Features

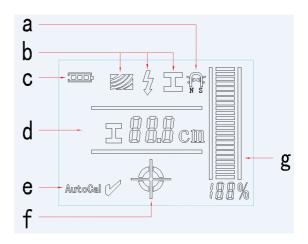
- 1. Red light indicator
- 2. Yellow light indicator
- 3. Green light indicator
- 4. Display
- 5. ON/OFF button
- 6. Wood detection button
- 7. Metal/live wire detection button
- 8. Felt pad
- 9. Sensor area
- 10. Felt pad
- 11. Battery compartment





DISPLAY ELEMENTS

- a) Indicator for magnetic/non-magnetic metals
- b) Indicator for the current detection mode (wood, live wire, metal)
- c) Battery indicator
- d) Indicator of metal depth detection
- e) Indicator of "Autocal" calibration
- f) Indicator of the detected object regarding the area center (sensor area)
- center (sensor area
- g) Signal strength





Technical data

Maximum scanning depth*:	
Ferrous metals	80 mm
Non-ferrous metals (Copper)	60 mm
Copper conductors(live)**	50 mm
Wood	20 mm
Automatic switch off after approx.	5 min
Operating temperature	-10 °C+50°C
Storage temperature	-20°C+70°C
Battery	1x9 V
Operating lifetime approx.	6 h
Weight	0.12 kg

*Depends on material and size of objects as material and condition of structure. **Scanning depth will be smaller if wires/conductors are not "live".



Detection performance

The object to be measured		Depth of detection	Accuracy of detection
Rebar/copper tube	ø 20	8 cm/6 cm	
	ø 16	7 cm/6 cm	
	ø 12	6 cm/5 cm	
	ø 6	5 cm/5 cm	$\pm 1 \text{ cm}$
Live wire and cable		5 cm	
Wood	Wooden beam	2 cm	
	Wooden batten	2 cm	

Operation

INSERTING/REPLACING THE BATTERY

Use only 9Vbattery. Insert the battery into the battery compartment (12) in accordance with the symbols in the battery compartment. Remove the batteries if the unit will not be used for a long period. The battery can be corroded or discharged over long periods.

SWITCHING ON AND OFF

Protect the measuring tool against moisture and direct sun irradiation. Before switching the measuring tool on, make sure that the sensor area 8 is dry. If required, wipe the measuring tool dry using a cloth.



If the measuring tool was subject to an extreme temperature change, allow it to the adjust to the ambient temperature before switching on. Press ON/OFF button to switch on the instrument. After a short test the detector is ready for operation. The measuring tool automatically enter the function mode of metal detection. It is necessary to calibrate the instrument if you hear sound alarm and see the red light indicator.

The calibration method is: place the instrument on nonmetallic surface or hold it in the hand away from any materials. Press the metal button 7 until you hear sound alarm and green light is lit. Sound alarm and green light indicator show that the calibration has been finished. Release button 7 to detect metal objects.

DETECTION OF OBJECTS

The detection of metal objects

Press button 7 to detect metal objects. Symbol b (the metal detection indicator) is indicated on the display and the green light is lit. Place the measuring tool onto the surface to be scanned and move it sidewards, when the measuring tool comes close to a metal object, the amplitude of the measuring indicator g increases. When it moves away from the object, the amplitude decreases, at the position of maximum amplitude, the metal object is located below the center of the sensor. Indicator f is displayed on the display and a steady tone sounds.

Indicator d (detection depth value) is displayed on the display when scanning metal objects. The accuracy of depth value is a relation of shape and position of scanning metal objects. Symbol a shows whether metal is magnetic or not.

The detection of wooden objects

When scanning for wooden objects, the detector must come close to the wall. Then press the wood detection button 6. Don't move the instrument. Wait for the completion of calibration. When the calibration will be finished, you will see green light detector and there will be icon b (wood) on the display.

Place the measuring tool onto the surface and move around. When the detector come close to the wooden objects, the display scale of g in the display will gradually increase. When the detector slowly moves away from object, the display scale will gradu-



ally decrease. A loud tone sounds when the instrument detects the object. If the object is located in the center of sensor area, the icon f will appear on the display. The instrument makes a steady sound and the green light is lit.

Scanning for "live" wires

Press button 7 two times to activate "live" wires mode. The icon b appears on the display. Make the calibration if there is a sound alarm, red light indicator and the instrument can't detect the "live" wires.

Calibration: Place the instrument on nonmetallic surface or keep it in the hand far away from any materials. Press the metal button 7 until you hear sound alarm and green light is lit. Sound alarm and green light indicator show that the calibration has been finished. Release button 7 to detect metal objects.

The detector can detect 50 or 60 Hz (HZ) AC live power cables, other wires can only be indicated as metal objects.

Move the measuring tool over the surface repeatedly in order to determine the specific location of the live cables. After moving the measuring tool over the surface several times, the detector is able to pinpoint the hiding place of "live" wires/conductor. There is a red light indicator when the measuring tool is very close to the live wire. Signal tone sound with a rapid tone sequence. "Live" wires/conductors can be detected easier when power consumers (e.g., lamps, appliances) are connected to the wire/conductor being sought and switched on. Wires/conductors with 110 V, 240V and 380 V (three-phase current) are detected with about the same scan capacity.

Operating Instructions

In accordance with the principles of tool operation, the measuring values can be impaired through certain ambient conditions. These include, e.g. the proximity of other equipment that produce strong magnetic or electromagnetic fields, moisture, metallic building materials. Foil-laminated insulation materials or conductive wallpaper. Therefore, please also observe other information sources (e.g. construction plans) before drilling, sawing or routing into walls, ceilings or floors.



Maintenance and service

Wipe away debris or contamination with a dry, soft cloth. Do not use cleaning agents or solvents. In order not to affect the measuring function, decals/stickers or name plates, especially metal ones, may not be attached in the sensor area 8 on the front or back side of the measuring tool. Do not remove the felt pads 7 on the back side of the measuring tool. Replace the felt pads when then are damaged or used. For this, completely remove the felt pads and glue the new felt pads onto the same spots. Store and transport the measuring tool only in the protective case.

Disposal

Measuring tools, accessories and packaging should be sorted for environmental-friendly recycling.

Only for EC countries:

Do not dispose of measuring tools into household waste! According the European Guideline 2002/96/EC for Waste Electrical and Electronic Equipment and its implementation into national right, measuring tools that are no longer usable must be collected separately and disposed of in an environmentally correct manner.

Battery packs/batteries: Do not dispose of battery pack/ batteries into household waste, fire or water. Battery packs/ batteries should be collected, recycled or disposed of in an environmental-friendly manner.

Only for EC countries:

Defective or dead out battery packs/batteries must be recycled according the guideline 91/157/EEC.



WARRANTY

This product is warranted by the manufacturer to the original purchaser to be free from defects in material and workmanship under normal use for a period of two (2) years from the date of purchase.

During the warranty period, and upon proof of purchase, the product will be repaired or replaced (with the same or similar model at manufactures option), without charge for either parts of labour.

In case of a defect please contact the dealer where you originally purchased this product. The warranty will not apply to this product if it has been misused, abused or altered. Withiut limiting the foregoing, leakage of the battery, bending or dropping the unit are presumed to be defects resulting from misuse or abuse.

EXCEPTIONS FROM RESPONSIBILITY

The user of this product is expected to follow the instructions given in operators' manual.

Although all instruments left our warehouse in perfect condition and adjustment the user is expected to carry out periodic checks of the product's accuracy and general performance.

The manufacturer, or its representatives, assumes no responsibility of results of a faulty or intentional usage or misuse including any direct, indirect, consequential damage, and loss of profits.

The manufacturer, or its representatives, assumes no responsibility for consequential damage, and loss of profits by any disaster (earthquake, storm, flood ...), fire, accident, or an act of a third party and/or a usage in other than usual conditions.

The manufacturer, or its representatives, assumes no responsibility for any damage, and loss of profits due to a change of data, loss of data and interruption of business etc., caused by using the product or an unusable product.

The manufacturer, or its representatives, assumes no responsibility for any damage, and loss of profits caused by usage other thsn explained in the users' manual.

The manufacturer, or its representatives, assumes no responsibility for damage caused by wrong movement or action due to connecting with other products.

Certificate of acceptance and sale

	Nº
name and model of the instrument	
Corresponds to	designation of standard and technical requirements
Data of issue	
Stamp of quality control department	
Price	
Sold	Date of sale
name of commercial estab	plishment

WARRANTY CARD

 Name and model of the product

 Serial number

 date of sale

 Name of commercial organization

 stamp of commercial organization

 Warranty period for the instrument explotation is 24 months after the date of original retail purchase.

During this warranty period the owner of the product has the right for free repair of his instrument in case of manufacturing defects.

Warranty is valid only with original warranty card, fully and clear filled (stamp or mark of thr seller is obligatory).

Technical examination of instruments for fault identification which is under the warranty, is made only in the authorized service center.

In no event shall manufacturer be liable before the client for direct or consewuential damages, loss of profit or any other damage which occur in the result of the instrument outage.

The product is received in the state of operability, without any visible damages, in full completeness. It is tested in my presence. I have no complaints to the product quality. I am familiar with the conditions of qarranty service and I agree.

purchaser signature

Before operating you should read service instruction!

If you have any questions about the warranty service and technical support contact seller of this product

WARRANTY DOESN'T EXTEND TO FOLLOWING CASES:

1. If the standard or serial product number will be changed, erased, removed or wil be unreadable.

2. Periodic maintenance, repair or changing parts as a result of their normal runout.

3. All adaptations and modifications with the purpose of improvement and expansion of normal sphere of product application, mentioned in the service instruction, without tentative written agreement of the expert provider.

4. Service by anyone other than an authorized service center.

5. Damage to products or parts caused by misuse, including, without limitation, misapplication or nrgligence of the terms of service instruction.

6. Power supply units, chargers, accessories, wearing parts.

7. Products, damaged from mishandling, faulty adjustment, maintenance with low-quality and non-standard materials, presence of any liquids and foreign objects inside the product.

8. Acts of God and/or actions of third persons.

9. In case of unwarranted repair till the end of warranty period because of damages during the operation of the product, it's transportation and storing, warranty doesn't resume.