

MEASUREMENT FOUNDATION

Operating manual

Wire, metal and wood detector Model: Wall Scanner 120 Prof



Manufacturer: ADAINSTRUMENTS Address: WWW.ADAINSTRUMENTS.COM





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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. Illuminated ring
- 2. Marking line
- 3. Display
- 4. Operating mode indication
- 5. ON/OFF button
- 6. Illumination button
- 7. Sound On/Off button
- 8. Charged wire mode
- 9. Metal mode
- 10. Multi-functional wall detector mode



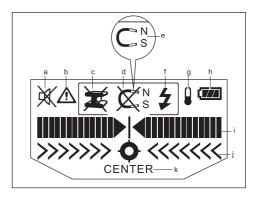




- 11. Contact pads
- 12. Sensor area
- 13. Type plate
- 14. Battery compartment lid
- 15. Hole for hand strip

DISPLAY ELEMENTS

- a) Switch Off audio signal
- b) Warning function
- c) Non-metal object
- d) Non-magnetic metal
- e) Magnetic metal
- f) Charged wire
- g) Temperature control
- h) Battery indication
- i) Measuring indicator
- j) Fine scale
- k) Indication "CENTER"





Technical data

Maximum scanning depth*:

Ferrous metals 120 mm
Non-ferrous metals (Copper) 80 mm
Copper conductors (live)** 50 mm
Wood 38 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. 5 h
Weight 270 g

^{*}Depends on material and size of objects as material and condition of structure.

^{**}Scanning depth will be smaller if wires/conductors are not "live".



Operation

INSERTING/REPLACING THE BATTERY

Use only 9Vbattery. Insert the battery into the battery compartment (13) 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 12 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.

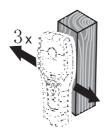
SCANNING

Put the tool on the surface of the object. Choose the correct operating mode and always move the tool in a straight line (as shown on the picture).



When the tool is on the surface of the object, the illuminated ring lights up green.

Measuring indicator i indicates maximum amplitude above the center of the object. Illuminated ring (1) lights up red and audio signal sounds. For small and deeply embeded objects ring (1) can continue to light up yellow while there is no audio signal. To localize the object more precise, move the measuring toolo repeatedly (3x) back and forth.





DETECTION OF OBJECTS

The detection of metal objects

Press button 9 to detect metal objects. Illuminated ring (1) and indication above the button (4) light up green. Symbol s (the metal detection indicator) or s is indicated on the display.

Note: Scale "i" will show all scale for reinforcement steel mesh and steel in the examined base material. Illuminated ring lights up green.

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 "j" 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 k is displayed on the display.

Indicator "i" (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 e/d shows whether metal is magnetic or not. Illuminated ring lights up yellow.

Note: If examined objects are small and deeply embedded, move the detector in horizontal and vertical direction. Pay attention to the indication "i" and "j" for accurate detection.

Multi-functional wall detector mode

Choose this mode for operation. The detector can indicate following items in the wall (except wooden beam):

- magnetic metal
- non-metal, e.g. beam, plastic pipes that are full of water.
- charged object, e.g. electric wire.

Press button 10. Illuminated ring and indicator above the button light up green. The detector can detect wooden beam as metallic object when scanning the metallic objects, nails, screws. In that case place the instrument on another place of the examined object and restart the measuring procedure.



In rear cases the detector can't detect examined object, because the sensor area and type plate are solid and dirty. Just clean the measuring tool with dry and soft cloth and restart the measuring procedure.

Scanning for "live" wires

This mode is suitable for detecting "live" conductors (110-230V). Press button 8 to activate Charged wire mode. Illuminated ring and indicator above button 8 light up green. When a live conductor is detected, indication f appears on the display. Move the detector above the measuring area several times to detect live wires. When the measuring tool is very close to the conductor, the illuminated ring flashes red and audio signal beeps swiftly.

Under certain condition (such as below metal surfaces or behind suefaces with high water content) "live" conductors cannot be securely detected.

Static electricity can lead to inaccurate indication of electric lines, e.g. over a large range. In that case place your free hand flat on the wall next to the measuring tool, in order to remove the static electricity.

Temperature control

The detector is equipped with a temperature control indicator \mathbb{Q} . When the temperature control inducator lights up, the measuring tool is out of the operating temperature range or there are significant variations oin temperature. Switch the tool off and allow it to adjust to the ambient temperature before switching it on again.

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 on the front or back side of the measuring tool. Do not remove contact pads (11) on the back side of the measuring tool.

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.



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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 than 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.

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 pure	chase.	
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).			
Fechnical examination of instruments for fault identification which is under the warranty, is made only in the authorized service center.			
n 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 quaranty service and I agree.			
ourchaser signature			
	Before operating you should read service inst	ruction!	

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.
- 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.