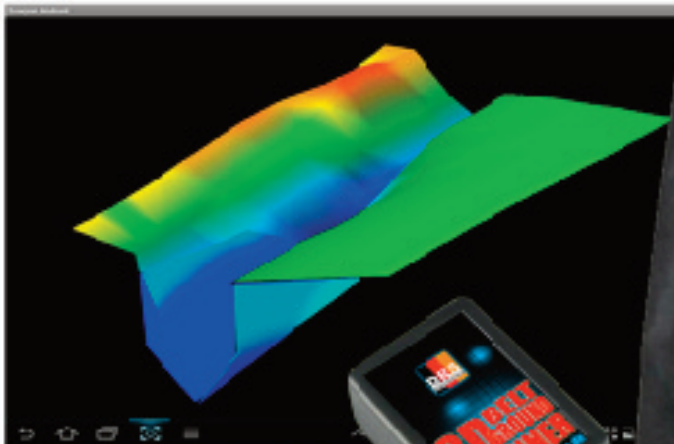


DRS

USER MANUAL

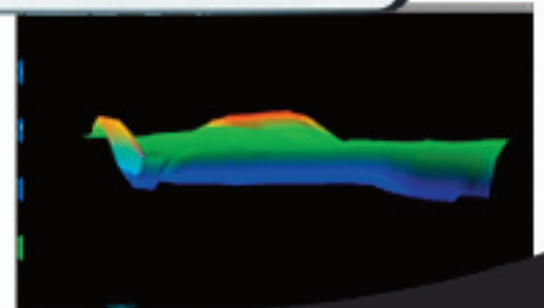
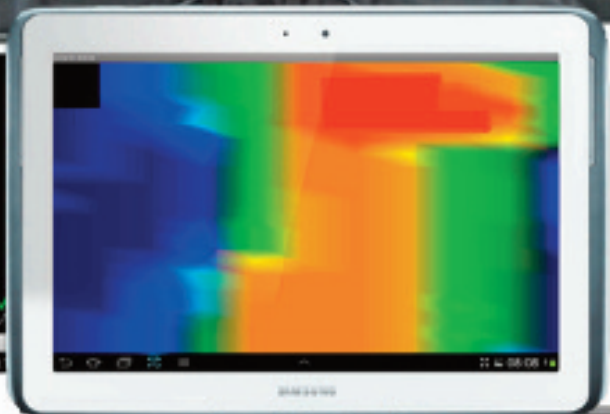
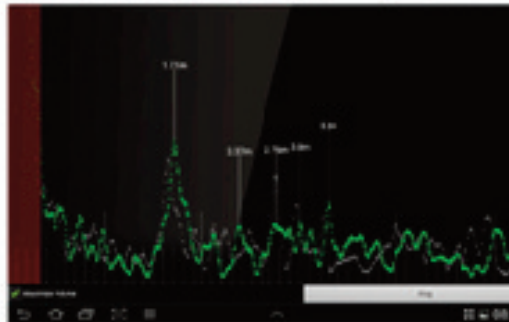
www.drselectronics.de

3D STEALTH SCANNER PRO



SGS-70

SUPER GEOPSYCAL SENSOR





For assembly notes please refer to section 1

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This system and its applications that can produce geophysical data were produced to search and explore the underground. Thanks to the receiver and transmitter sensors located on it, the STEALTH SCANNER operates with the principle of informing the user "REAL TIME" about the result, which is determined by assessing the signals received from the ground with the help of a special soft-

ware. It is an ideal device to find the metals or caves, vaults, tunnels, gaps or shelters located under the ground. The device immediately detects the magnetic changes caused by these targets on the ground and provides the most accurate information about the target real-time to the user. Do not forget that the battery is full in order to benefit better from 3D STEALTH SCANNER PRO system and perform deeper searches.

3D STEALTH SCANNER PRO operates by reading the electromagnetic traces of your targets under the ground. It is capable to detect layers of soil, different geological structures, gaps caused by human or nature, caves, vaults, tunnels, shelters and underground waters as well as lost wells. It can also easily detect metallic objects, treasures, embedded tools, precious metals and the metals within gaps. Excavation is a serious business. Therefore you need concrete data before starting to dig. Instead of excavating an area based on estimated data or unknown sources, you can collect all information about the area to be excavated and save a lot of time and energy by using this system. 3D STEALTH SCANNER PRO, which is introduced to the market after long tests, is warranted against electronic problems for two years.

Targets under the ground are detected according to various factors. Density of minerals on the ground, soil types, interfering signals and magnetic pollution as well as weather conditions and high humidity will affect the results that you will get with your device. The device offers two modes: long range locator that shows you strong magnetic field 50m around you and magnetic sensor to scan the ground with accuracy and analyse depth.



0 - IMPORTANT NOTES

Please read the user guide carefully before using your device. This will ensure you to use the produce more successfully and have good results.

1 – ASSEMBLY (see 8 pictures in page 1)

The 3D STEALTH SCANNER PRO consists of a jacket, 3 USB hubs, 8 sensors (picture 1), cables and a tablet PC. 4 of the sensors are transmitters, they send the signal therefore they need 2 batteries each (picture 2). The 4 other sensors collect the data, they are passive units that do not need batteries (picture 3). After you put the battery in the emitters (refer to section 3 Voltage) and charged tablet pc, you have to put the sensors in the eight pockets. Some of the sensors (4 white ones) have short cable they need to be on the lower row of pockets (picture 4). The 4 Black sensors have longer cable and need to be on the upper row of pockets so that in the end they all have the same length when their extremity reached the bottom of the jacket (picture 5 and 6). Then turn the jacket. On the back of the jacket you have to put 3 USB hubs at the bottom of the jacket in the designed pockets (picture 7). Then plug the 4 sensor cables in the left and right hubs as shown on picture 8. Then plug the two hubs in the center hub. Then link the cable of the center hub to the tablet Pc like described in section 5/how to start. Use the pocket in the back of the jacket to store your tablet when finished scanning.

2 – GENERAL NOTES

3D STEALTH SCANNER PRO system is not waterproof. Do not to use your system during heavy rain or under the water. If you wash your jacket please take of all wires and 8 sensors.

This system is an electronic device. Avoid any contact with fire, humidity and avoid shocks and severe impacts.

Do not expose your device to extreme temperature. Do not use under -10° or above $+60^{\circ}$ degrees celsius.

Stay at least 50 meters away from high magnetic fields.

Stay at least 25 meters away from detectors with large coils that can effect your system (other treasure detectors). Avoid areas that have high current, such as electricity transformers, power lines...



Your system will be negatively affected from these areas. Also do not keep metal objects and mobile phones on you during the search and exploration. Stay at least 15 m. far from the effects of metal objects especially large ones such as cars. Remember that your device is sensitive to magnetic field disruptions up to 50 meters.

We recommend you to read this user guide carefully to benefit from the full performance of your device. If any problem occurs, please contact your vendor immediately. If the stickers on the device are taken off by unauthorized persons, your product will no longer be covered by the warranty.

Use the main unit (tablet PC) only for scanning and display purposes. Internet searching may damage your scanning software. **Do not turn on tablet wireless feature during the scan.**

3D STEALTH SCANNER PRO is an electronic device. If any problem occurs, please contact your dealer immediately. If the stickers on the device are taken off by unauthorized persons, your product will no longer be covered by the warranty. We regretfully would like to mention that we cannot provide technical service under the warranty to the products that were opened by unauthorized persons. 3D STEALTH SCANNER PRO does not cause a threat to your health. It is not harmful to human body due to high frequency and low power. Please stay away from magnetic and electrical sources, as described in the 2 GENERAL NOTES section.

3 - VOLTAGE

Please recharge your tablet with approved chargers. Do not impose very low or very high voltages to your system. Battery and problems that might occur at the battery are not covered by the warranty. 4 of the 8 SGS70 sensor (the transmitters) have to be equipped with batteries (not included). The 4 other ones (receivers) do not require batteries. We recommend you use high quality alkaline batteries (no dry ones) rechargeable or not.

4 - DATA LOSSES

Insufficient power source and battery may cause data errors. Any problem that might occur in sensors or tablet PC may also cause data errors. Severe atmospheric conditions such as severe storms, heavy rain, flood and landslides may cause the data to be corrupted. Use of system at locations, where there is too much electricity current or electromagnetic pollution, may cause data loss. Please read the following items and apply them carefully in order to use your system longer and more effectively.



- A- Protect your device from water and do not cause water to contact with your device. Do not store your device at humid areas.
- B- Protect your device from mud and dusty conditions.
- C- Do not impose your device to serious impacts.
- D- Keep away from highly intensive magnetic fields and electricity transmitters.
- E- Use original chargers.
- F- In case of a problem, do not intervene to your device. Contact your authorized technical service for assistance.

5 - HOW TO START

Prepare the jacket as described in section 1/Assembly. Put the jacket on. Plug the USB cable adapters like shown on the picture below. Turn on each of the 4 emitters On (check that both LED are on each side of the red button). Plug jacket to the tablet. Turn your tablet on. Swipe your finger on the screen to start. Then 3 icons appear corresponding to 3 modes.

6 - 3D STEALTH SCANNER

The device has 3 modes that you can access with icons on your tablet.

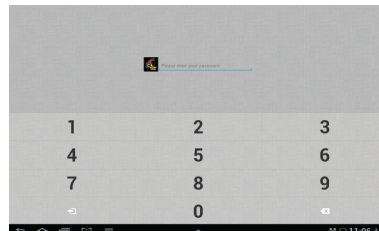
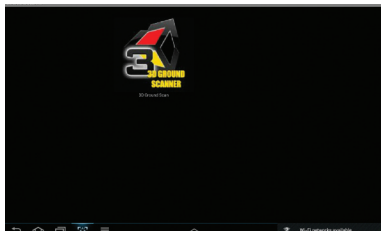
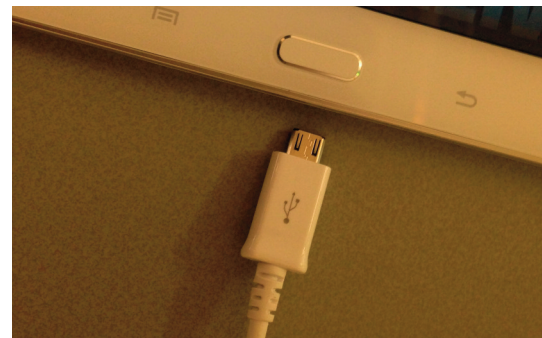
If you want to scan again after scanning an area of 5 m², you should exit from the software, close the software for 5 minutes and scan again.

1) 3D GROUND SCANNER

This mode is the conversion of signals, received by magnetic sensors, most important components of your device, from underground to 3D graphics. This mode allows to draw a signal map of the area being scanned. In order to activate this feature, you must press "3D Ground scanner" icon on the tablet PC. Click on the logo, then start scan. Put the tablet parallel to the soil 80cm above it, approximatively. Click YES when prompted if you want to scan a new line. You will have to scan bands of 5 meters (not less not more). For every band, you will hear 4 bips. We advise you to synchronise

your step to those bips. To cover 5 meter you need usually 5 steps.

When the start scan you will see color lines appearing on the tablet. Do not stop as you must cover 5 meters to end band scan. The machine will actually scan for 5 seconds / 4bips. When the first band is finished. make a 30cm step left or right lateraly. Then turn back. Start a new scan. Then you will see a new band coming next to the first one. If you start your scan next to a metallic target (car...) then you will



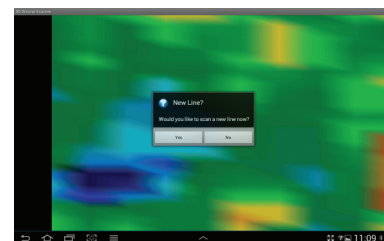
see a red band appearing. Please follow the graphic below otherwise,

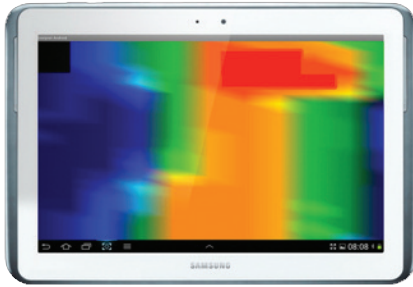
your scan will not be successful.

The data gathered by the sensors from underground as you move will be converted to graphics in real time on your tablet PC. This graphic is created with certain color codes. Each color and shape has different meanings.

Color Codes

- Dark red:metal object
- Light red:mineral deposit
- Pale orange:high mineralization
- Green: ground
- Ice blue: stone
- Blue: Gap with air
- Navy blue: Gap without air
- Dark blue: Water





Shapes to be taken into consideration in the gaps:

1:Square / 2:Rectangle / 3:Pentagon / 4:Hexagon

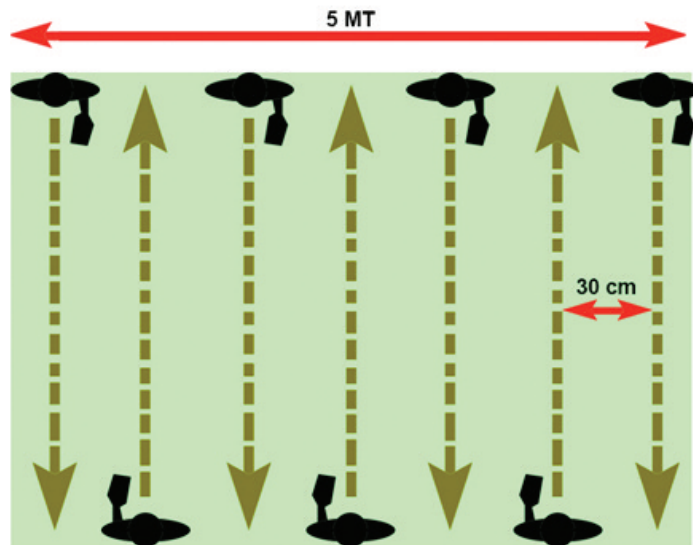
When the scan is completed, it will be enough to say “No” to the question, “Do you want to create a new path?” in order to stop exposure. The graphic will stop.

You can examine the target signals in 3D or 2D by editing the graphics through the buttons. The first button from left to right is used to move the target to the screen. Second button converts the graphic to 3D. Third button zooms in and out. Fourth button helps you to return back to the first view. We advise you to wait 2-5 minutes before you scan new zone because the machine needs to reset electromagnetic field.

After you located an electromagnetic interference you have to assess its depth. You can do it through the DRS SONAR.

2) DRS SONAR

This mode is meant to evaluate depth. This mode is different as it sends 2 signals and compares them. Keep the tablet PC parallel to the ground at a height 70-80 centimeters like shown on the picture on the right. Make sure maximum volume is marked and then press “PING” button to send the first signal. A graphic appears in white. Wait 5 seconds then press PING again to send second signal. This second curve appears in green. Take a look at peaks with heights displayed. Be careful only one of this displayed height is usually good. It's easy to find. The good one is the one where the two lines/curves (green and white) are stacked. We give an example in red on the graphic above. The device is set for 5 mt. depth as default (340 code). Your device can scan upto 18 mt. depth as maximum depth. Please find below how you can change the depth settings



If depth settings are increased, the surface will be lost when detecting the depth. For example, standard depth is 0-5 m. If this depth is set as 10 m., the device will lose the initial 2 m. depth from the surface and start scanning after 2 m. Or if the depth is set as 18 m., your device will not see the first 3 m. depth from the surface.

For 5 m.: 340

For 10 m.: 660

For 15 m.: 990

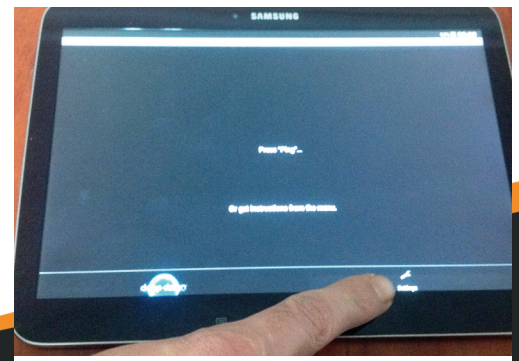
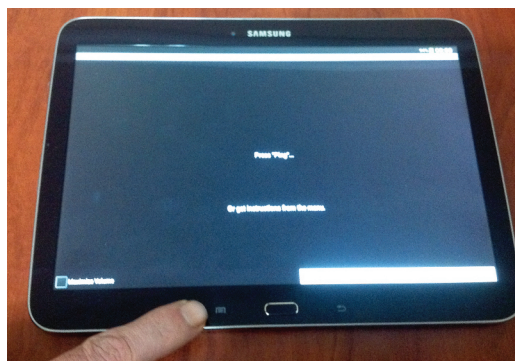
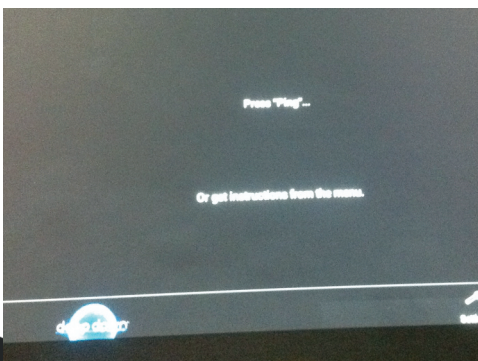
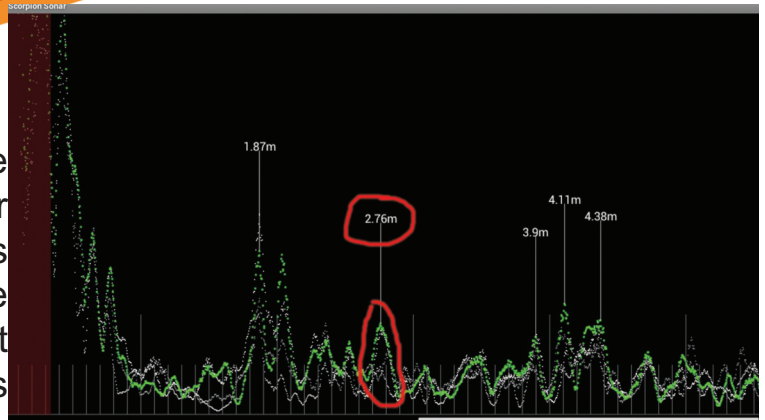
For 18 m.: 1200 can be written to set the depth of sensor. If any other code is written, the sensors will generate errors and actual depths will not be detected.

Following 9 pictures are provided as examples and will show you how to change depth.:

3) DRS GPS Long Range Locator (field screening)

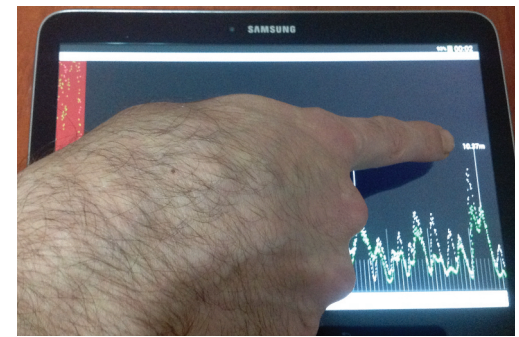
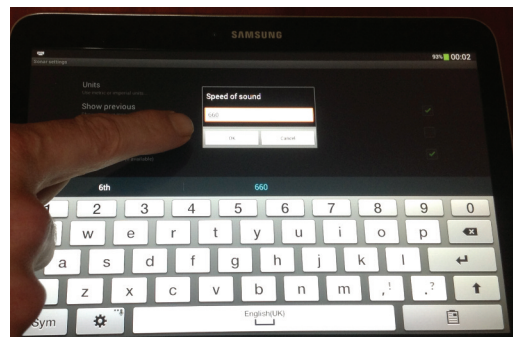
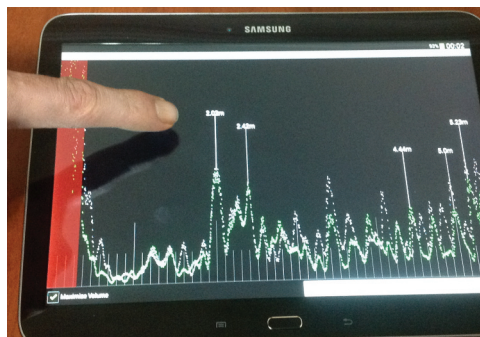
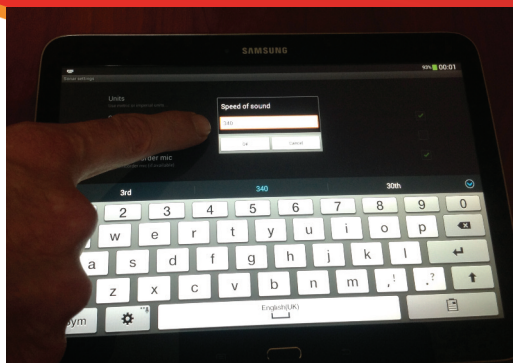
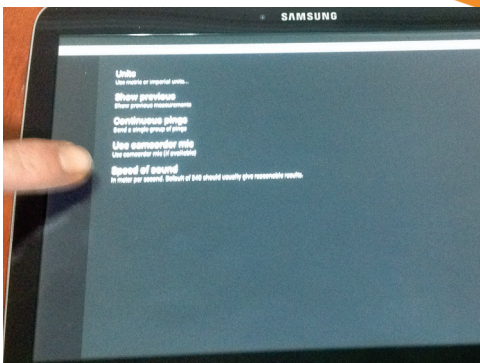
This mode is capable of measuring changes in the magnetic field up to a distance of 50 meters. Put your tablet parallel to the soil 80cm above it like shown on the right picture. Then take a look at the figures. You need to refer to MAG FIELD line.

You can see 3 figures. Read the first one. for the example, on the left graph it is 47. Then put the tablet in front of your eyes like on the picture on the right. You will notice that the figures change. Turn around and do not stop until the second figure matches the first figure. Stop when both figures are the same (we can admit 1 or 2 unit gap, meaning 45/46 is acceptable if first figure is 47). Then walk in this direction to reach target. Target here is a source of magnetic interference (metal object, cavity...)





DRS



Precision about Long range GPS mode:

There is not any METAL distinction in GPS field scan... If metals are high in alluvium mines, it might be effective. It is capable to detect old and new metals. It might be effected from electromagnetic pollution and high electrical current.

We run DRS GPS system on the desktop of the device's main unit. We hold the tablet straight (in parallel with the ground) and wait it to be detected by the satellites while keeping the north direction in front of us. Connection duration may vary, depending on the weather and environmental factors.

After the satellite connection is completed, the numeric figures will be displayed. Here, we must pay attention to the section, in which it is written MAGNETIC.

The area between the long line on the left and the second long line, available under the word Magnetic, is the section that we must pay attention.





The first thing that we must pay attention: if there is a green line over the word MAGNETIC and this line does not disappear, it means that there is a new metal (new metal means the metals of our age) within the area you are currently in. If these lines appear in gray and disappear after 3 seconds, this means that there are old metals in the area (old metal means precious metals).

We must then check the magnetic number; the magnetic number must be 30, 40, 50, 60 under good weather conditions, clean and noiseless environment. (These numbers may vary between 0 and 100, depending on the regions) When the satellite connection is completed, if the magnetic number is higher, this means that there is a base station or high voltage line in the area.

If magnetic number is within normal ranges, hold the unit vertically and turn around yourself slowly and clockwise. If magnetic number was 40 but increases to 50 or higher levels, this means that there are new metals in the area.

If magnetic number is 40 and lower, this means that there are old metals in the area. The level of increase or decrease of this number indicates the size of metal. The magnetic number also shows you the direction of metal during such increase or decrease.

The "Magnetic Number" also shows you the direction of metal during such increase or decrease. When the metal's direction is detected and when we put our tablet at a position in parallel with the ground, if the "magnetic number" is same with the original value we read, this means that we are walking towards the target and, when we arrive to the center of target, if the magnetic number increases or decreases, this means that we have reached the target location. During GPS field scan, please pay attention not to wear any metal object.

Figures, stated as "error code" on bottom left screen of GPS field scan system, must be between 0 and 10 in accordance with the coordinates used for data exchange with the satellites. If GPS connection is higher than 0-10, the unit must be held flat for 3 minutes.



