



GER DETECT 
WWW.GERDETECT.DE



RIVER

UNDERGROUND WATER DETECTOR



GEOPHYSICAL SYSTEM

SCAN ALL LAYERS OF GROUND AND SHOW THE RESULTS ON THE SCREEN OF THE DEVICE.



LONG RANGE SYSTEM

THIS HIGH-ACCURATE SYSTEM AND EXCELLENCE DETERMINE WATER LOCATION FROM A DISTANCE.



3D IMAGING SCANNER

SCAN ALL LAYERS OF GROUND AND SHOW THE RESULTS AS 3D VIEW.



PRINT SEARCHING RESULT

PRINTING SEARCH RESULTS DIRECTLY USING A PRINTER CONNECTED TO THE DEVICE.

INDEX

- **Critical Warning**
- **Overview**
- **LONG RANGE SYSTEM**
 - Description of the main unit keys
 - Assembling the long-range system
 - The operating steps of the Long-Range System Device
- **GEOPHYSICAL & 3D IMAGING SYSTEM**
 - Description the main unit keys and inputs
 - The operating steps of the geophysical & 3D system
 - Explaining the search results system
- **HOW TO AVOID DEVICE MISHANDLING AND MISUSE:**
 - First case
 - *The solution of this case*
 - Second case
 - *The solution of this case*
 - Third case
 - *The solution of this case*
 - Explaining the result of the system on the 3D program
- **Printing report**
- **Important information and notes**
- **Warning**
- **Parts and accessories**



Critical Warning

1- THE GEOPHYSICAL SYSTEM:

- Please be sure that all precautions are taken against all risks.
- Do not use your device while it is raining or on extremely wet floor.
- Make sure that you are connecting properly the electric cables to the probes.
- You have to install it under the ground more than **65 CM**.
- Don't install the probes into rocks or in dirty places.
- Turn on your device after you make sure that all parts are in place and connected.
- Make sure that the device battery is fully charged before starting the search.
- If the battery starts to give a beep sound, turn off the device, and recharge the battery.
- It is recommended to read the user manual before using the device in order to understand how it works and also to avoid mistakes during the search.
- If the device starts to make a beep sound and turns off automatically, please put the battery on charge and do not try to start the device without charging fully the battery.

2- THE LONG-RANGE SYSTEM:

- When the green and the red light in the charger are on, while the battery is connected to the power that means that the battery is full charged.
- Be aware of high voltage sources, and do not use any charger other than the original one that comes with the device.

OVERVIEW

Dear customer,

“Thank you for choosing RIVER – G DEVICE”

- ✓ This product enables you to detect the presence of underground water.
- ✓ RIVER – G product is based on resistance principle and frequency detection system.
- ✓ The device measures the resistance between the surface and under the ground
- ✓ The device measures the resistance between the surface and underground
- ✓ The device compares the measured values with the highest background values and makes analysis and gives the results on screen.
- ✓ The main unit of the device is under warranty against all electronic breakdowns for **two (2) years**.
- ✓ Any damages caused by user errors (opening the main unit, hits, harms, damages, water lakes to the PCB etc.) are not within this warranty.
- ✓ Battery and antenna are also not within this warranty.
- ✓ You should strictly follow the instructions in this user manual to avoid errors and use your device correctly

“NOTE”:

- 1- The 2500 MA Battery to be used for long range system only.
- 2- The 5000 MA Battery to be used for long range system only.

1- THE LONG-RANGE SYSTEM

- Description of the main unit keys:



1- Settings Button:

to change the screen settings (light, sound).

2- Down Button:

to navigate down between the option of the system.

3- Ok Button:

to select the options and enter the next page.

4- Up Button:

to navigate up between the system options.

5- Back Button:

to return to the language page from any page.

- Assembling the long-range system:

1- Connect the Handle
Which holds the device.



2- Connect Signal transmitter
Which Send signals to
Water in the ground.



3- connect the Signal
Transmitter antennas
Which Sends signals to
The water in the ground.



4- connect the Signal recipient
Which receives signals from
The water in the ground.



5- Connect Recipient antenna
Which Receives signals from
water in the ground



6- Extend the length of the Recipient antenna to reach the required front range



7- Connect the battery of the Long range unit (2500 MAH) through the battery entrance



8- Connect the Data transfer cable to transfer data between the main unit and the display unit of the device.



9- Start the main unit of the device by pressing on the power button.



- The different functioning of the LONG-RANGE system

1-Inserting the long-range

Probe in the ground and
Connect its cable to the main
Unit's upper side through the
LONG RANGE PORT.



2-After starting the device
The language menu will
Appear, select the search
Language from the screen
Which works by touch



3-Select the continent where
you are using the device in.
After selecting the continent
The countries list will Appear
Select the country where you
are using the device in.



4-After choosing the country
The systems menu will appear
Select LONG RANGE System
By using your finger on the
Touch screen.



5-The front range options will
Appear on the next screen
Select the range you want
To reach in your search
This system can reach
3000 square meters.



6-After entering all the settings
On the main unit.
The device will start
Sending signal to the
ground through the Long
range probe.



7-Start the main unit of the
Long range system by pushing
The ON / OF button on the
Battery, then the ON / OFF
Button on the back of the
Long range main unit.



8-After starting the main unit
Of the Long range system
The language menu will appear
Select the language you want
use by touching the
Screen or by using the buttons.



09-After starting the main unit
Of the Long range system
The language menu will appear
Select the language you want
use by touching the
Screen or by using the buttons.



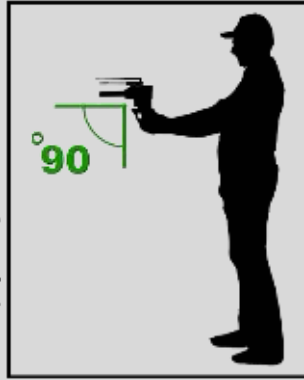
10-After selecting the language
The soil type options will popup
Select the type of soil according
To the ground which you are
Working on.



11-The front range options
you can chose any range you
would like to reach in the area
NOTE : The chosen front range In
The long range system should be the
Same in the main unit of the devcie.



12-After entering all the Settings the compass Page will open up the User must hold the device Up to 90 degrees & Facing The south direction.



After you confirm the directions press on the arrow button To skip to the search page.

13-After connecting all parts and Entering all the search settings , the device will direct you to The search page and start sending And receiving signals, the antenna will guide you towards the water.



- 1- When the water source is on the right side of the device , the antennas and the indicator will move to the right direction and a beep sound will start Accelerates alerting the user to follow the water source.



- 2- When the water source is on the left side of the device , the antennas and the indicator will move to the left direction and a beep sound will start accelerating, alerting the user to follow the water source.



3- After following the signal when you get to the water source, the antenna will turn to the back , the devcie will turn to the back from the right or the left side .



1- THE GEOPHYSICAL SYSTEM

- Description the main unit keys:



1- DATA CABLE ENTRANCE:

to connect the main, unit to the display screen.

2- POWER BUTTON:

The power button is to start the device.

3- BATTERY ENTRANCE:

to connect the battery to the main unit

4- PROBES ENTRANCE:

to connect the 4 probes through the cables.

5- PRINTER:

To print the search report with the result details.

6- FUSE:

Do not touch (it's to protect the main unit from power surge).

- Assembling the GEOPHYSICAL & 3D IMAGING SYSTEMS:

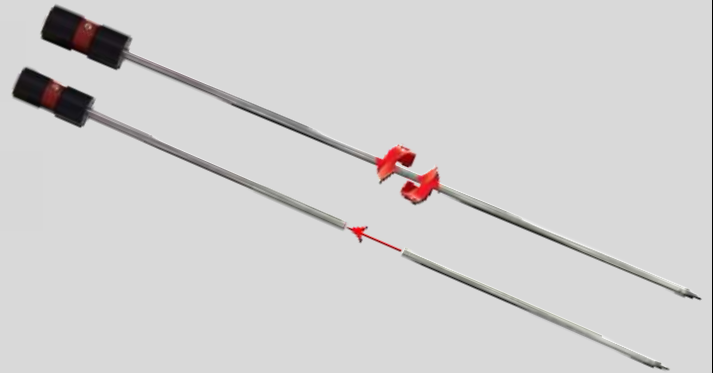
1- Connect the 5000 MAH battery to the main unit through the battery entrance And start the device through **POWER** button.



2- Connect the Data transfer Cable to transfer data between The main unit and the display unit of the device.



3- Connect the 2 parts of each Probe to each other. Use a rubber hammer to insert the probes into the ground



4- Implant the 4 probes into The ground in square shape around the Device.



- The functioning steps of the GEOPHYSICAL & 3D system

1-After starting the device
The language menu will
Appear, select the search
Language from the screen
Which works by touch



2-Select the continent where
You are using the device
After selecting the continent
The countries list will appear
Select the country where you
are using the device in.



3-After choosing the country
The systems menu will appear
Select GEOPHYSICAL System
By using your finger on the
Touch screen.



4-The settings options will
appear on the next screen
Enter the soil type according
To the ground where you are
Using the device on.

For example (CLAY)



5- Enter the probes distance
it should be equal to the
distance on the ground.

The distance between the
4 probes should be the same
Example, 10 M



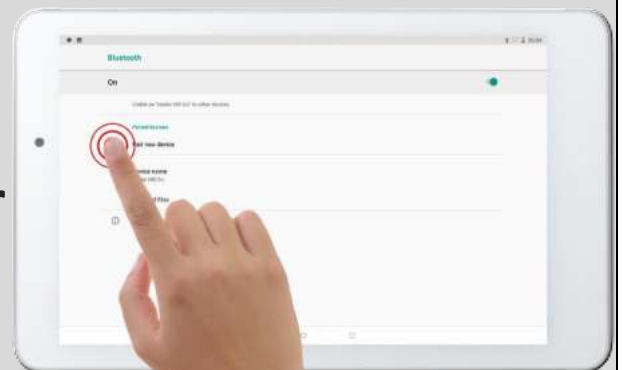
6- After entering all the settings
And before we press **OK**.
Start the tablet of the device
To allow the device to display
The result on the 3D program.



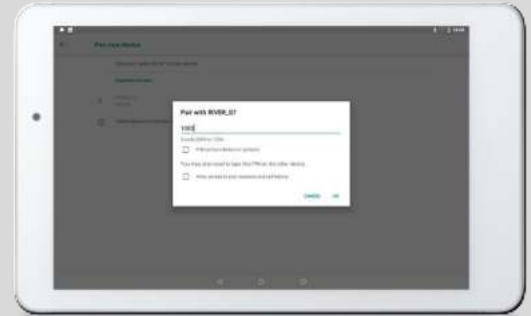
7- Establish Bluetooth connection
From the device to the tablet,
Swipe the upper side of the
Screen to show the Bluetooth
Icon press on the Bluetooth
icon to start connection.



8- Settings page will open up
Press on (**pair new devcie**).
The tablet will start searching
For any bluetooth devices near
The tablet including the device
The toblet should be in **5 M**
Range ner the main unit of the device



9- The RIVER G device will be Detect it on the tablet screen
Press on the device name.
A window will pup up
Enter the Bluetooth password
The passowrd is : **1000**



10- Open the 3D program (RIVER G) On the main Desktop of the tablet ,



11- Press on **NEW** to start new Search



12- When you press on NEW The Device will automatically Connect To the tablet this step will take 5 seconds and it will display Device is Ready / Connected



When the connection is done the Bluetooth light on the main unit will stop blanking,
to proceed press on OK button On the main unit
(soil type / probes distance page)
Then press on the start button on the tablet



13- After finishing all the steps

The device will start scanning the Ground between the 4 probs and Sending the data to the display screen And to the 3D program
The results includes :

(Water Type – Salinity – Rate - Rocks Persantage – Depth)

As you can get more details by Pressing on the read more button In the main unit Screen and more Details button on the 3D program.



14- When press read more button on

The main unit the screen will Display the type of water under Each probe separately.

On the 3D program will apper More details regarding the depth & rocks rate & salinity & density . As you can view the water shape In 3D view by pressing **(3D view)**.



To display the water from A difreent angle use your Finger to move the 3D Image in all directions.

- When the search process ends the device will show you the results as photo next side
- In the event of water under all probes you will see report on the device will appear from which you can learn the where about of water and the type of water as shown in the picture



The shown lines (A-B-C-D-E-F) in the final screen are the results of the search process between the strings.

“Note”

When the water percentage is less than **50%** that means small amount of water, and when the percentage is between **50-70%** is a good amount of water, and when the percentage is between **80-100%** that means the water amount be huge.

When the device gives, the salty water is salty and when it gives you fresh water with simple percentage salinity, this is the normal situation. All kinds of water containing salinity.

About the salinity percentage:

- Fresh water: the salinity is less than 1000 ppm
- A low salinity water: between 1000 - 3000 ppm
- A medium salinity water: between 3000 - 10000 ppm
- A high salinity water: between 10000 - 35000 ppm

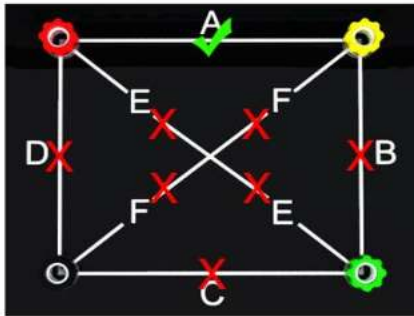




✖ NO RESULT

➤ Dear customer,
When a "No result" message appears on the final search screen
Please read this information carefully

First case



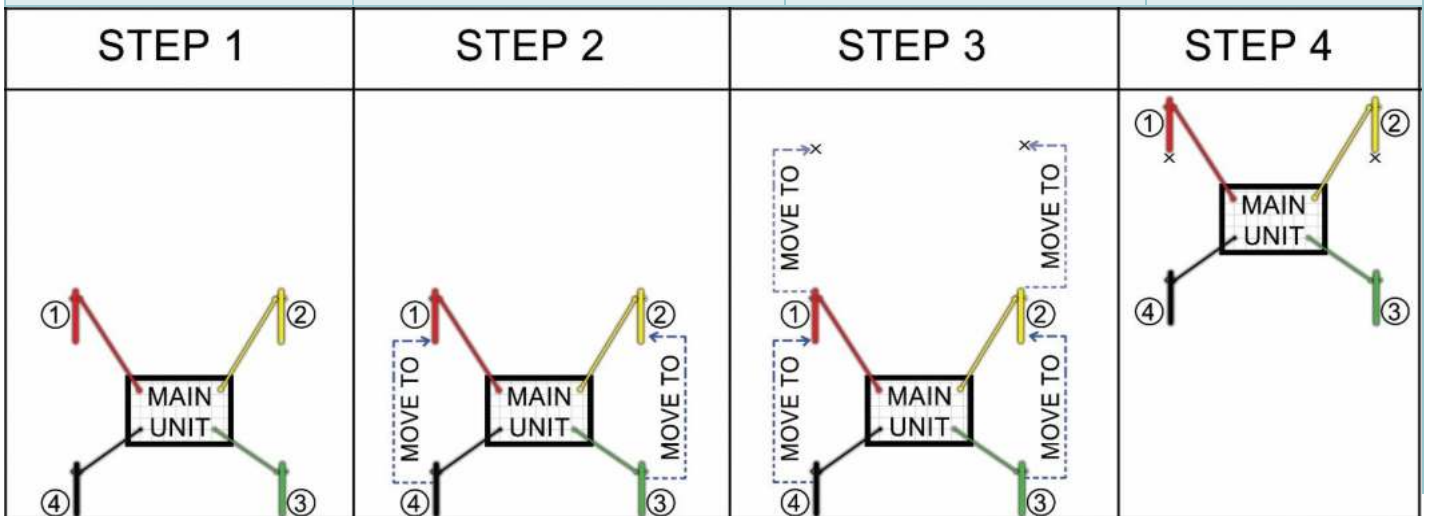
The solution of this case

That means the device found water just on line "A"

- 1- Move the probe "3" From its current location To the location of the probe "2"
- 2- Move the probe "4" From its current location To the location of the probe "1"

- 3- Redistribute probes "1", "2" Depending on the new location for probes "3", "4"

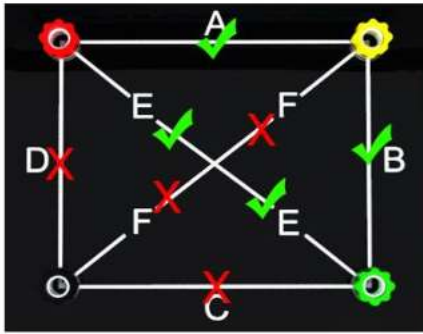
- 4- Re-search again





NO RESULT

Second case



Result Of Search	
LINE A	Fresh Water
LINE B	Fresh Water
LINE C	No Water
LINE D	No Water
LINE E	Fresh Water
LINE F	No Water
<input type="button" value="PRINT REPORT"/> <input type="button" value="BACK"/> <input type="button" value="Main Menu"/>	



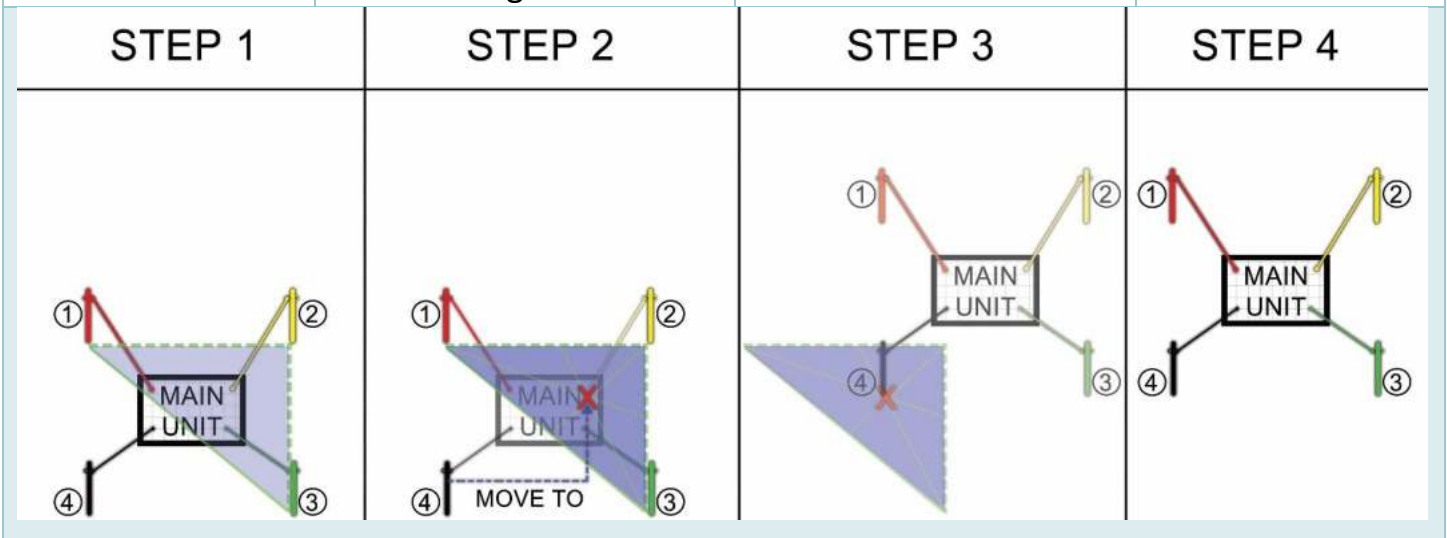
The solution of this case

That means the device found water just on line "A", line "B" and line "E"

- 1- Determine the center of triangle which consist of lines "A", "B" and "E"
- 2- Move the
- 3- probe "4" From its current location To the triangle's center.

- 4- Redistribute probes "1", "2" and "3" Depending on the new location for probes "4"

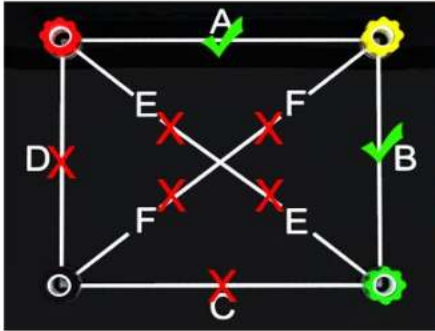
- 5- Re-search again





✖ NO RESULT

Third case



The solution of this case

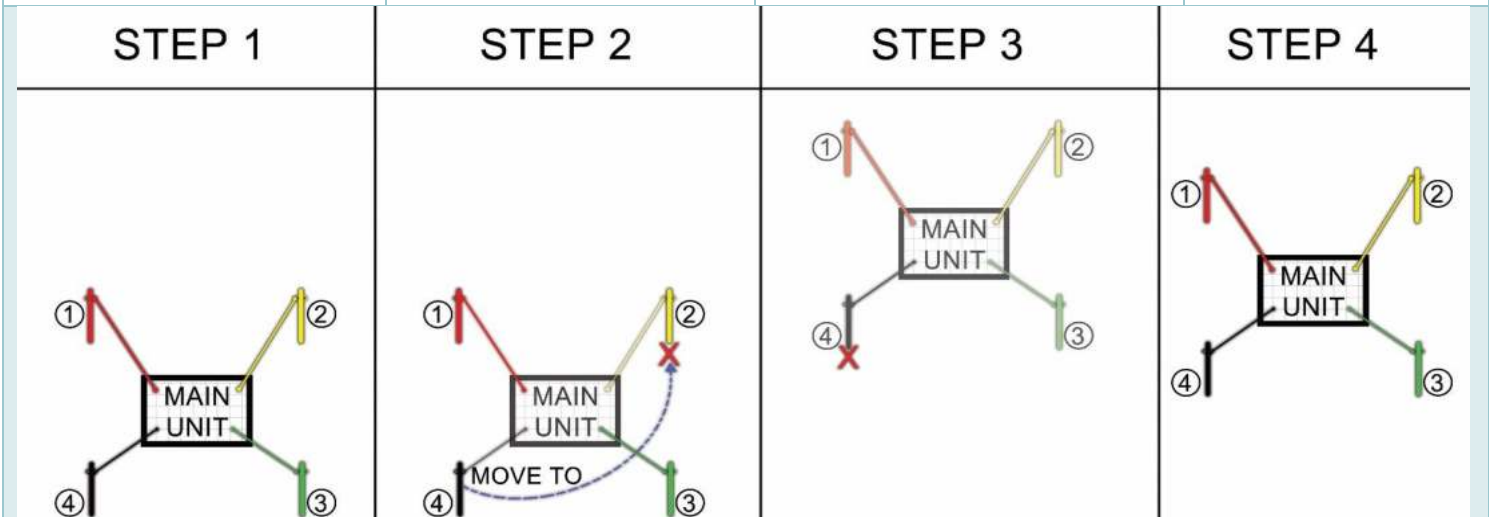
That mean the device found water just on line "A" and line "E"

- 1- you can Follow the steps described in the "First case"
- 2- Or you can Follow the steps described in the "Second case"

3- Or move the probe "4" From its current location To the location of the probe "2"

4- Redistribute probes "1", "2" and "3" Depending on the new location for probes "4"

5- Re-search again





- ✓ If the device gives you “no water” in the search this means two things
 - 1- It could be that the cable is not connected correctly.
 - 2- It could be that the device had detected very salty water
- ✓ The difference that appears in the depth of the water (such as 80 > > 154) represents the depth underground water.
- ✓ If using another battery charger, preferably 12 to 15 v no more and no less, that the value of amps (2) and if you use a charger amp more will be the battery faster but will have less battery life.
- ✓ If the distance between the probes is 20 m you must adjust the distance from the settings
- ✓ If the device gives you on the screen few data about the depth
- ✓ You must research in the same place to get the depth
- ✓ If the density of the water from 0% to 50 % that means the water might be in small quantity in this area / 50 to 60 % = medium quantity / 70 to 80 % = good quantity / 80 to 100 % = huge quantity.
- ✓ When you see the depth in the results, for example: (110-130 meters) and you re-experience and the depth appearing again, for example, (120-160 meters) or (40-170 meters) that means there is more than a water channel underground (there are several Water channels with different depths at the same place
- ✓ if you made several experiments in the same place and the depth was similar in all the experiments that means there is a water basin and not stream water
- ✓ If you want to confirm the target once again in the same place, you must take off the floor probes and change their places to another location at least one-meter difference
- ✓ To remove accumulation of charge because of the passage of the stream
- ✓ To decompose water into oxygen and atomic+ hydrogen through the search process.
- ✓ If this screen appears as in the next figure, do not enter random numbers, just press on (OK) button for 5 seconds and the device will pass this screen and continue working normally.
- ✓ You should avoid using the machine during rain and wait at least 15 days at least till rain stops and until the soil dries out then you can use the device again.

- ✓ Suppose the existence of drilled water wells in your area and existing pre-prepared wells, starting at depths of 10,50, 100,120, 140, 160, or 170 meters etc. This is not a conclusive evidence of water existence only on these depths, it could be at great depths, that means the result of depth on the device screen is the real depth of huge amount of water.
- ✓ Example: If it has been proving you through the search process device that the depth of this places from 200 to 240 meters this indicates the existence of water is truly at these depths.
- ✓ As for the drilled wells and pre constructed ones, depths less than 200 meters with very short life, so must they must be re-restored and drilled to the depth that the device showed.



Warning

If you want the device work well without errors you have to follow next steps

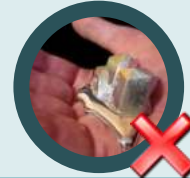
When using the device please do not wear the watch



When using the device please do not wear the jewelry



When using the device please get away from metal, lighter and mobile phone



Please take off the belt



The shoes should not contain any metal



Stay away from the car



Stay away from electrical ground power lines or any surfacing electric



Parts and accessories



Device box



Geophysical system
(main unit)



Long rang system (complete)



Two years guarantee



3D imaging system Tablet



Charger



Mobile battery charger designed for cars



Four cables of Geophysical system



Probes (65 cm)



Probe for the Long-range system



External battery (Long range system)



External battery (Geophysical system)



Data transfer cable



Long range probe cable