PQWT-M100 & M200 & M400
Automatic Mapping Mobile Water Detector Operation Manual

Contents

First Edition, 2025

Instrument Parts

Front View of The Instrument

1.ON/OFF: Power switch button.
2.LED light: The left side is the line indicator light (the light is not on during standby, put the two copper electrodes together, press the "TEST" line detection button, if the green light is on indicates that the line is normal, the green light is off indicate the line is fault); On the right is the power indication light. When the power is turned on, the blue light flashes indicating that the system is running. The fast flashing light indicates that the survey data is being sampled. The steady light indicates the system is broken down.
3.RST: System Reset button
4.TEST: Line test
5. Antenna interface

Back View of The Instrument

Instrument Advantage

No need to register, it is ready to use
No network required, no traffic required
Automatically draw geological sections
Suitable for all terrain exploration
Expert remote assistance to fix the well position
Inexperienced person operate it by five minutes

Our institute promise

- Do not steal user's mobile phone privacy
- Do not read user WeChat content
- Do not read user communication information
- Do not read user bank account
- Do not track user usage locations

Precautions

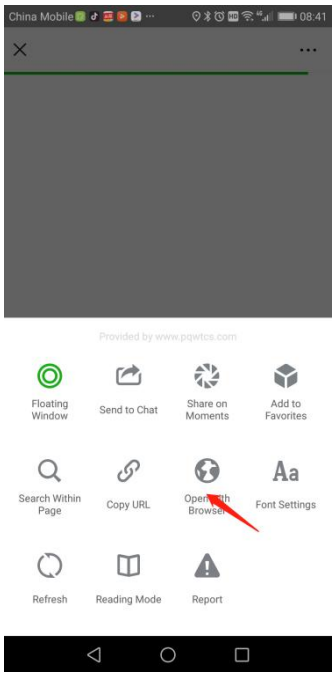
1. The electric rod cannot be shaken when the instrument is recording the data, and the copper electrode cannot touch the metal on the ground;
2. It is recommended to measure more than 15 points on one line;
3. It is strictly forbidden to use the instrument in thunderstorm days;
4. The wiring needs to avoid the high-voltage line and the area where the ground vertical distance is very large;
5. Point 1 on the profile map is 5 meters from the measuring tape on the measuring line, 6 meters is at the 2nd point, the rest can be done in the same manner.

Technical Parameters

Product model	PQWT-M100/200/400
Measuring depth	100/200/400 meters
Measurement data unit	electric field component of different frequencies of the earth electromagnetic field ΔVs (mV)
Measuring range:	0mV-1000mV, the instrument automatically converts the range. Measurement accuracy: 0.001mV
Measuring channel:	4 / 6/ 8channels
Channel gain	1~200,000 times
Measurement frequency	30/36/48 frequency
Weight	0.55kg (host)
Power	The instrument uses 18650*2 3000mAh rechargeable lithium battery
Display	LED indicator
A/D conversion	8-bit 1Msps
Input impedance	≥10MΩ
Relative humidity	≤85%
Power consumption	about 1W
Working environment temperature	-20°C ~ +50°C

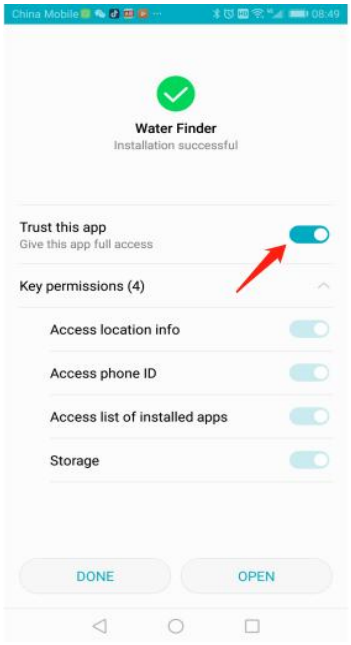
Mobile APP installation steps （The App apply for the Android system）

1. Scan the QR code on the side of the host use Wechat

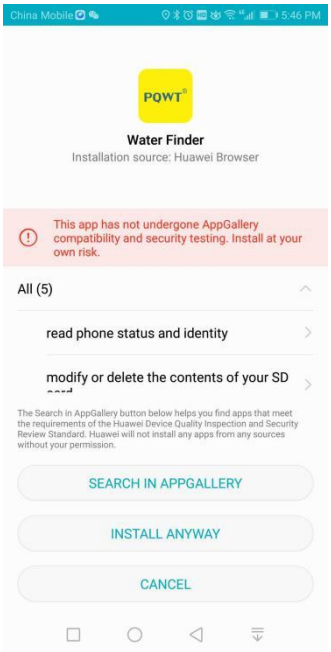


2. Click "..." to open with browser.

3. When appear the page of download, choose "Ok".



4. Open the downloaded installation package. Click “Trust this app”

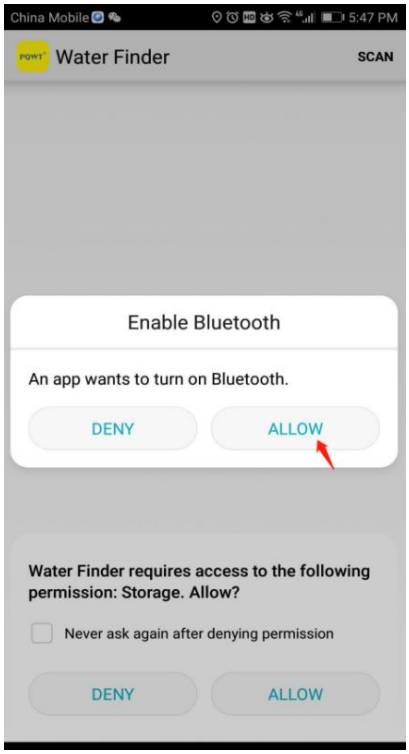


5. Choose Install Anyway, finish the installing.

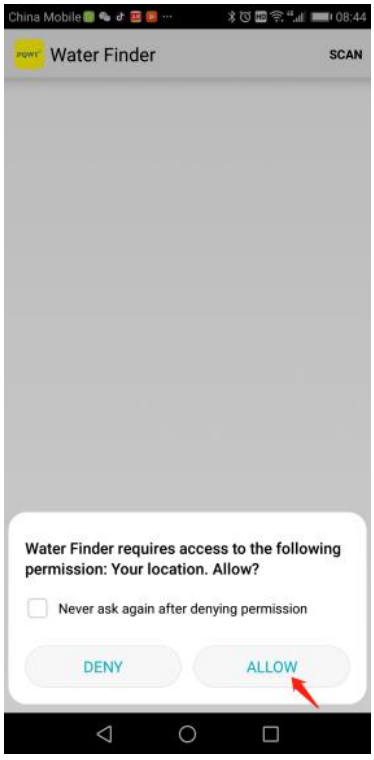
Measuring Steps(PQWT-M100 as the sample)

1. Connect the accessories and long press the white button to turn on the machine.

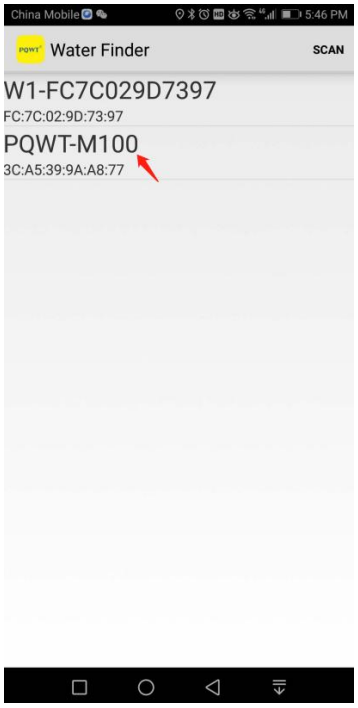
2. Open the App of PQWT water finder.



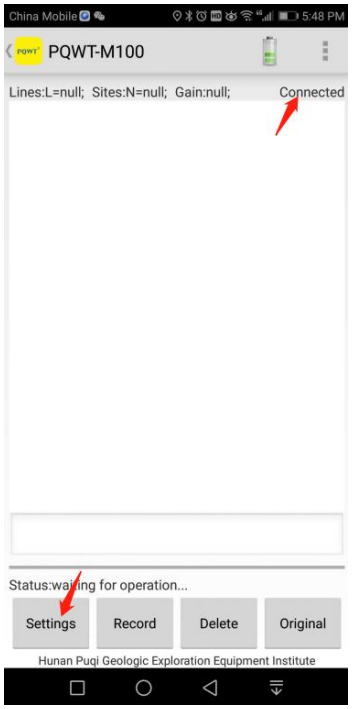
3.Click and allow Bluetooth to be turned on



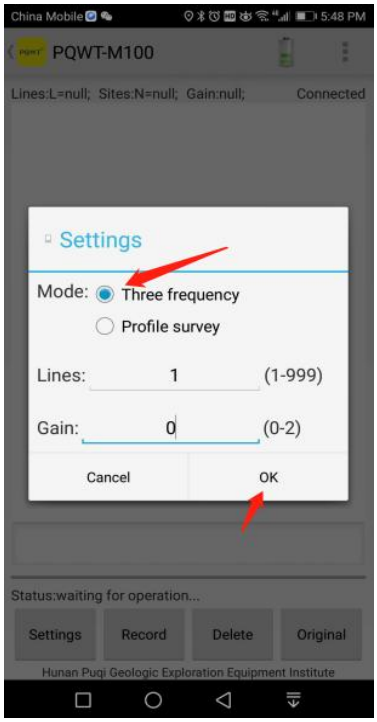
4.Click “ALLOW” to open the location permissions



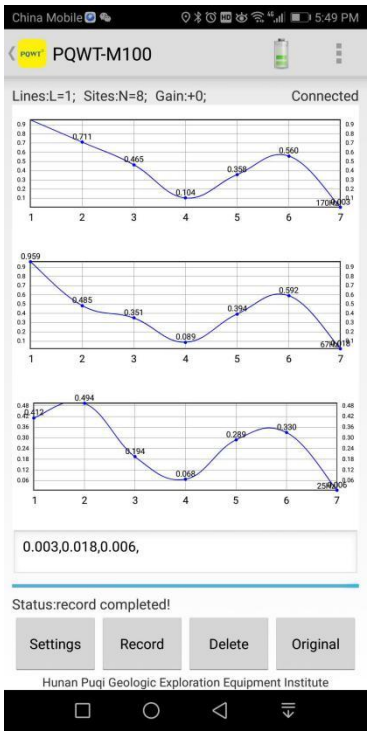
5. Click on PQWT-M100 in the scan list to enter the software operation interface.



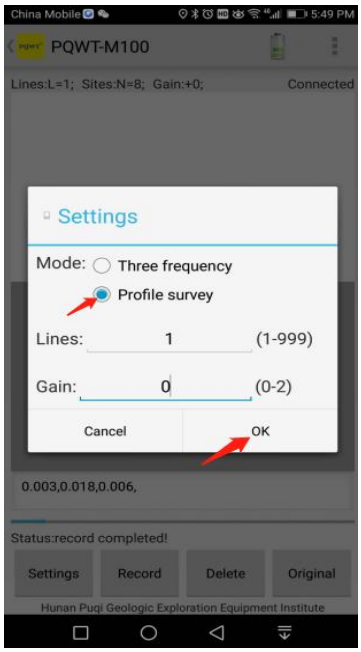
6.After viewing the "Connected" on the upper right of the software, click on the “Settings”



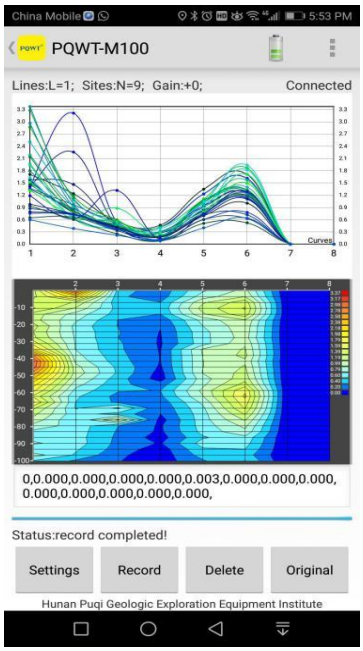
7. Choose mode: Three frequency(this is for rough test for large area, and choose good point which is low value like point 4 below, then take the profile survey), Click the line"1", Gain is "0" by default, and click "OK".



8. Click "Record" to start first point measuring, The mobile interface prompts "record completed" after the data is measured, Click "record" to start second point, repeat the above measurement operation process.

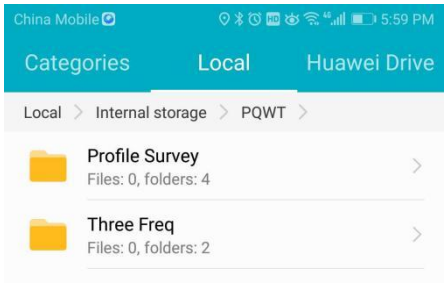


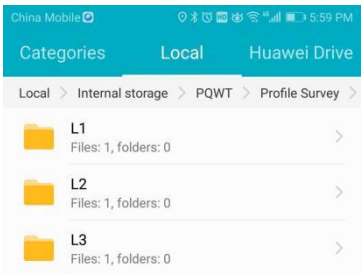
9. The measuring method for Three frequency and Profile survey is same. Choose the profile survey, Click “Record” to start the measuring, The mobile interface prompts “record completed” after the data is measured, repeat the above measurement operation process



10. The mobile interface will have a graph and curve in real time

File storage





The PQWT water finder software will create a PQWT folder in the root directory of the phone storage. The measuring data is stored in this folder. To find the data, enter the PQWT folder and click the data file to open the data. , Note (L1, L2 are two line data folders).

Wiring Method

The data collected by the instrument each time is the midpoint data between the two electrodes. The electrode distance is generally 10m, and the distance between points is generally 1-5m (the standard is 1m). Electrode spacing and dot spacing must keep the same distance for one measuring line. As the picture shows below.