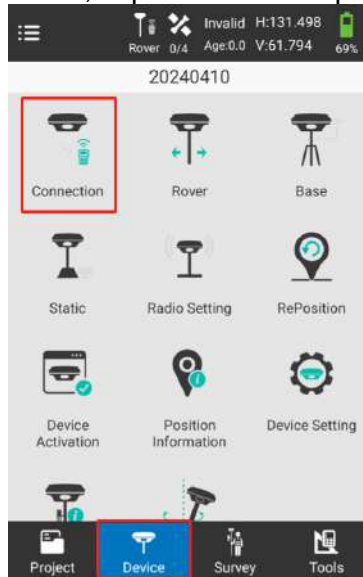




Quick guide to using PRECISE X

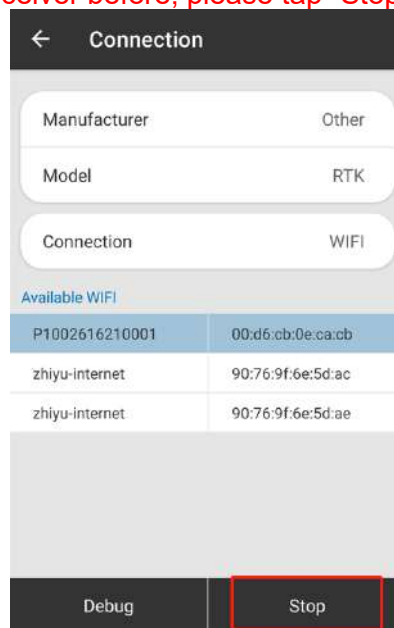
1. GNSS receiver connection

1.1 Open the XField on handheld controller, Tap Device and tap communication



It can be connected to WIFI or Bluetooth.

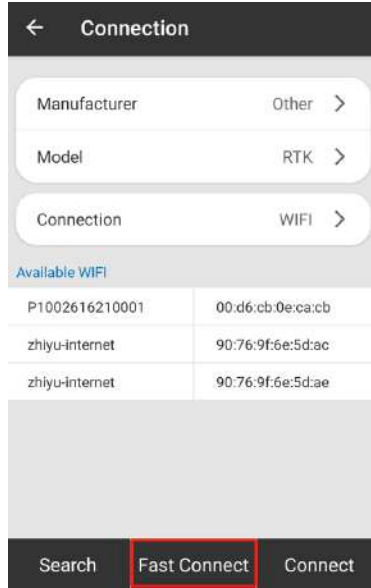
If you connected another GNSS receiver before, please tap “Stop” at first.



The name of “Available WIFI” is same as GNSS receiver code.



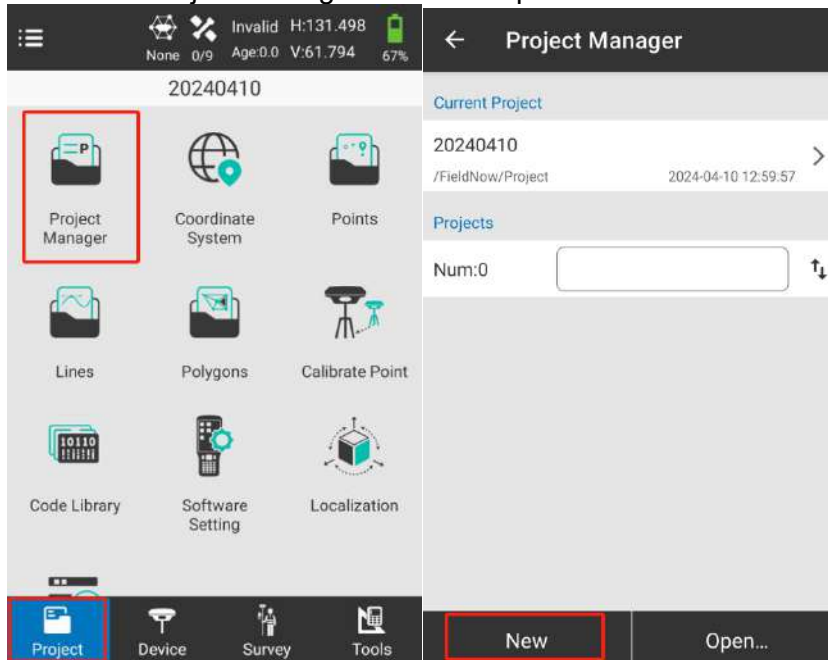
1.1.1 Fast connection with NFC



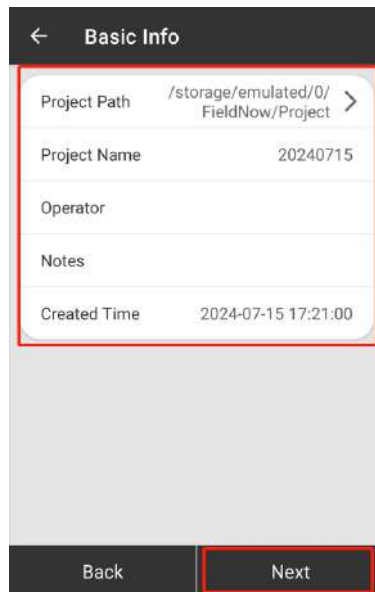
“Fast connect” means handheld controller could find your nearest GNSS receiver and connect fast by NFC. You do not need to choose any of receivers on screen.

2. Set a new project

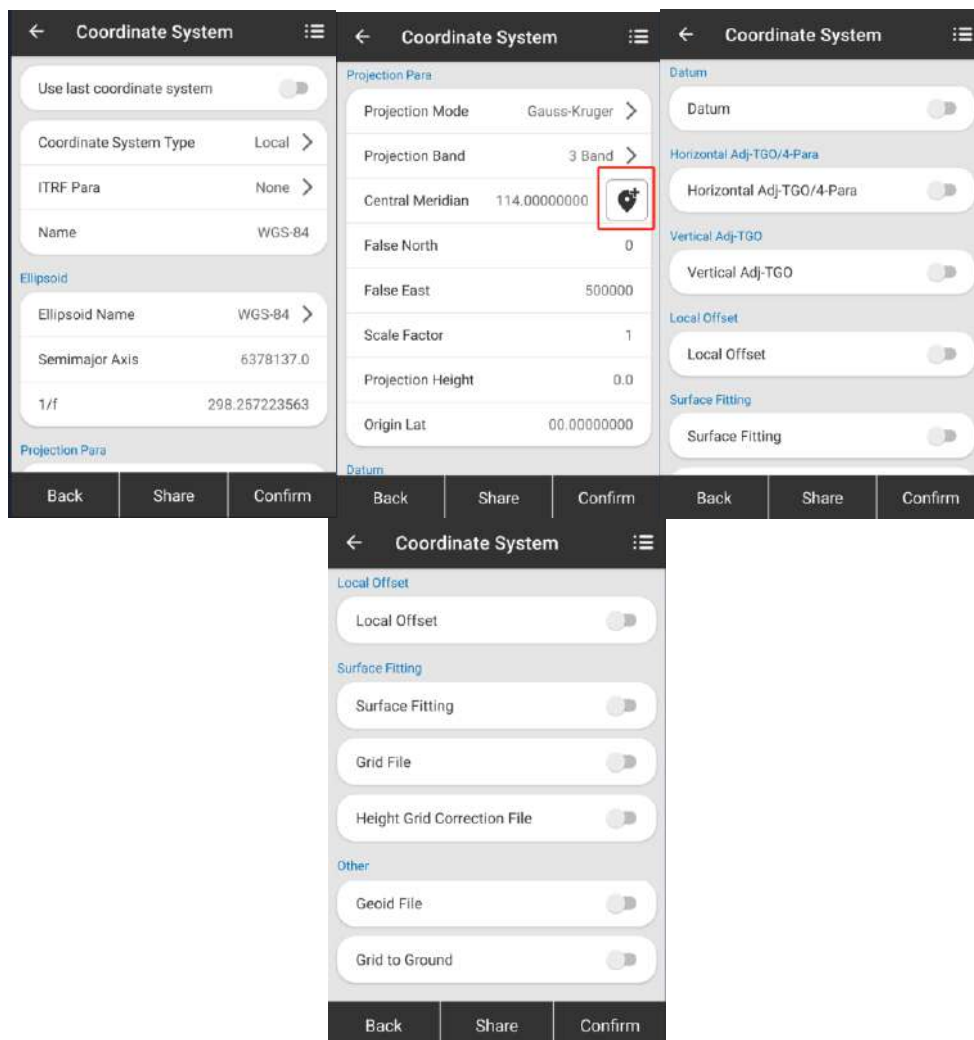
2.1 Tap “Project” and select “Project Management” and tap “New”




2.2 In Basic Info, you could change the project path, project name, operator and notes as you want. After that go next.



2.3 In Coordinate System

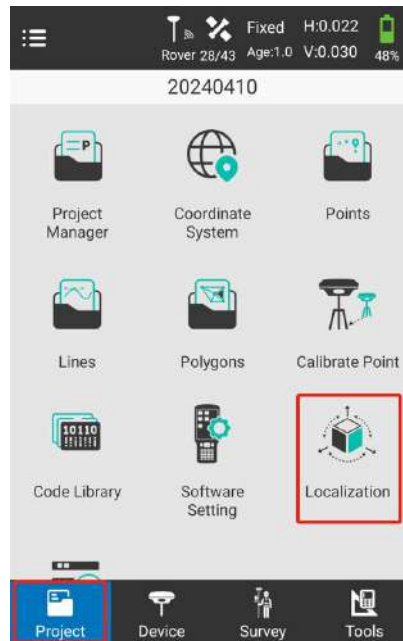


In this step. It is necessary to set “Central Meridian”, you could tap  to acquire your local central meridian automatically.

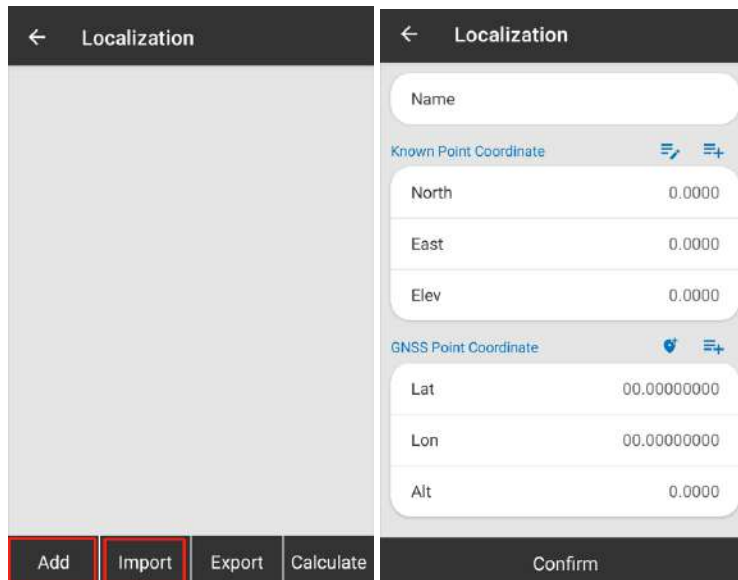
You also could change ellipsoid of coordinate system such as “WGS-84” and other options as your requirements.

3. Localization

Localization means calculating conversion parameters. You could calculate the conversion parameters to convert coordinate system from the global standard to your local standard.

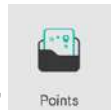


Tap “Project--Localization”



You could add known point coordinate and measure GNSS point coordinate and could import many

points from the “Points”

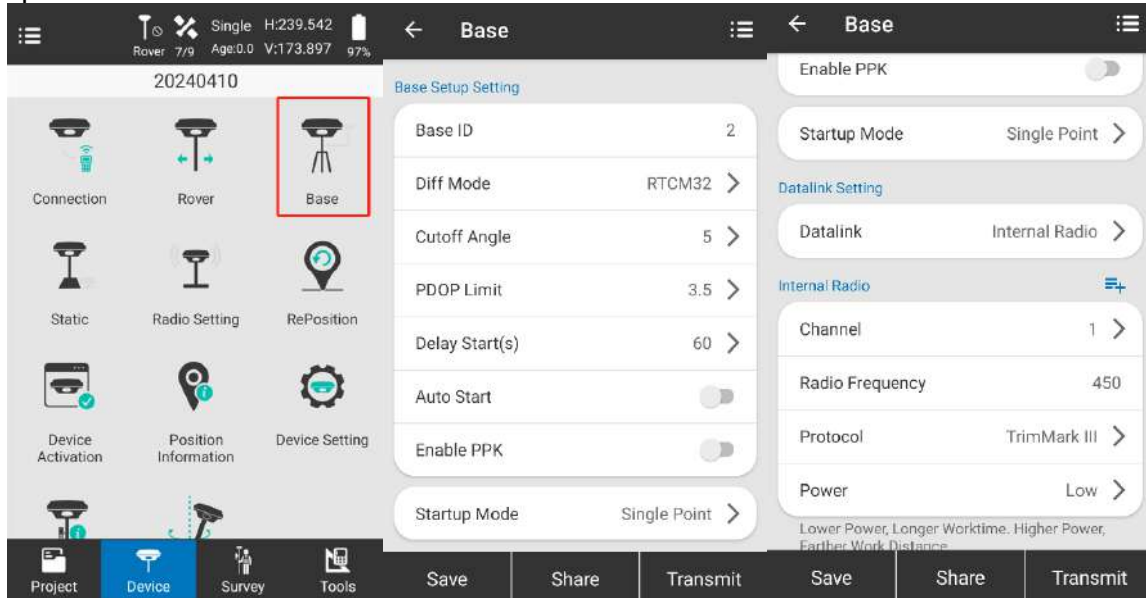


After that, you could calculate the conversion parameters and export them.

4. Set Base station

4.1 Making sure the GNSS receiver of Base is established, including tripod centered and leveled.

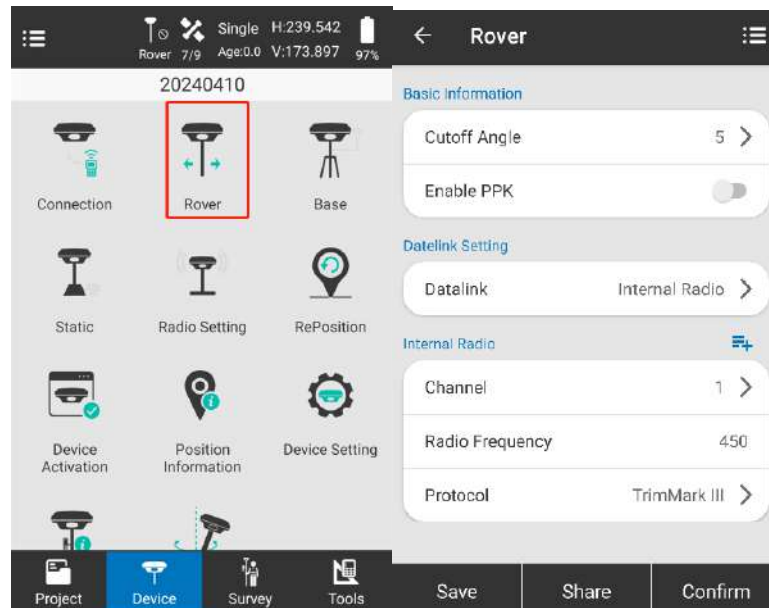
4.2 Tap Base on the software



The meaning of all detail parameters is indicated in User manual.

5. Set Rover station

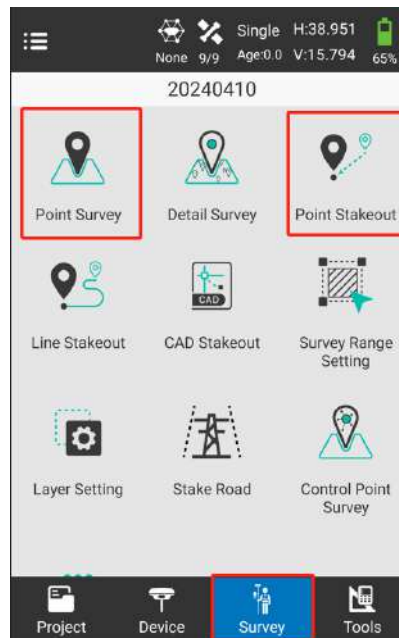
5.1 Tap Rover



The meaning of all detail parameters is indicated in User manual.

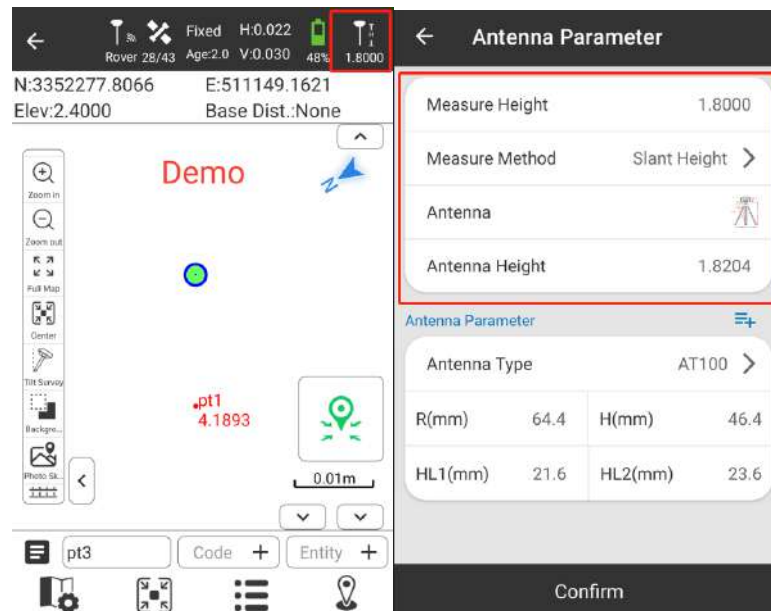
5. Survey and Stake out


5.1 Tap “Survey”

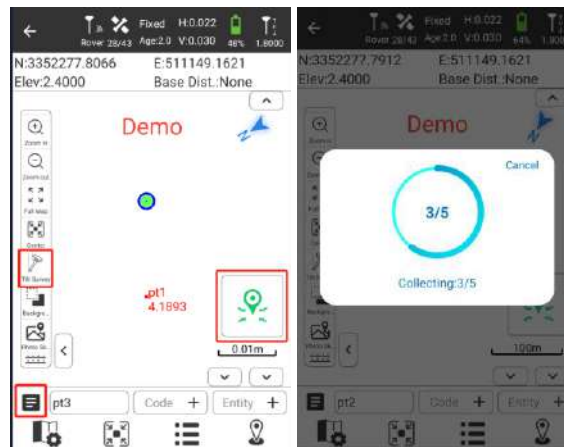
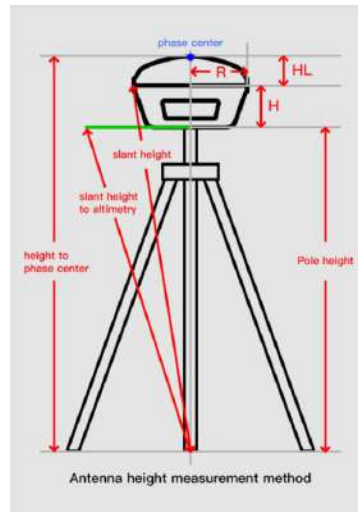




Currently, we have three surveys and three stakeouts. You could choose any of them to survey in your work according to your requirements. Now I take Point Survey and Point Stakeout for an example.

5.2 Point Survey

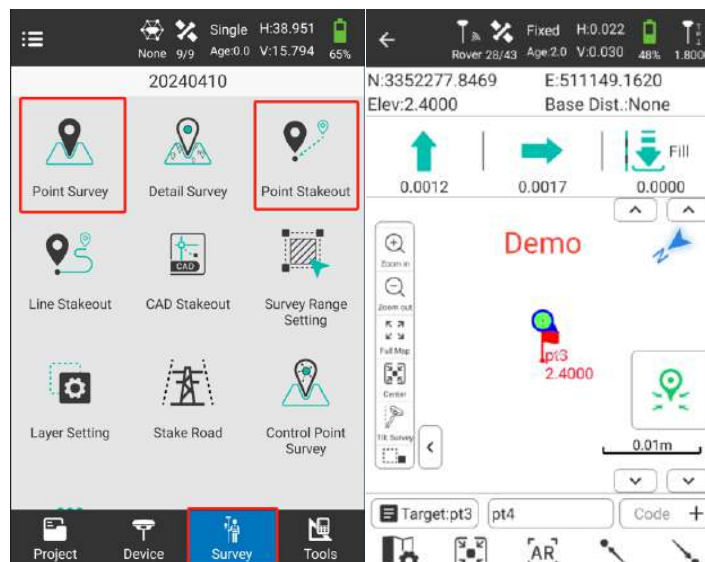


At first, it is necessary to set the height of antenna. Tap  and change antenna parameters. the whole figure of measuring methods is as follow.

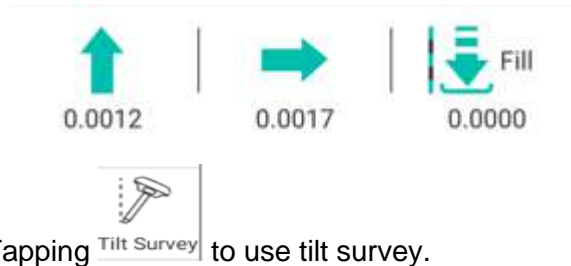


In addition, Tilt Survey is also supported. After initializing IMU you could tap  to capture your point. Tapping  you could find “Points” which you have been collected.

5.3 Point Stakeout



In Point Stakeout, you could see the direction clearly which you need to go forward or backward or ground filling.

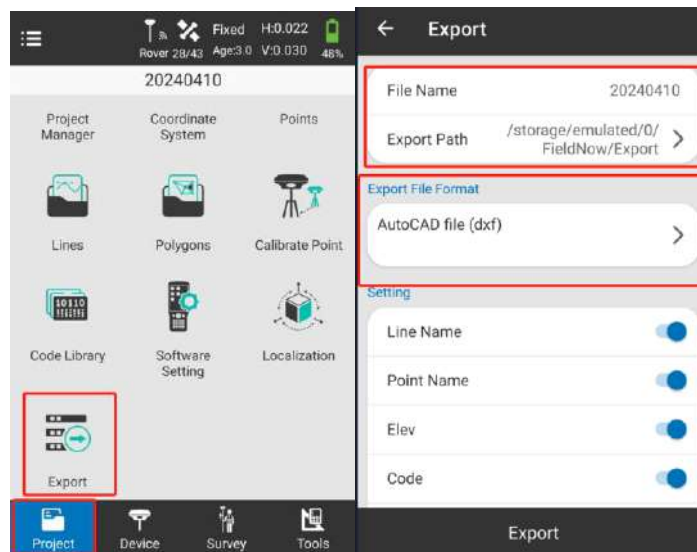


It supports tilt stakeout. Tapping **Tilt Survey** to use tilt survey.

It also supports AR stakeout. Tapping **AR** to use AR stakeout which means you could see the stake point directly with camera and follow the leading indicators to stake.



6.Export data



Tap “Project—Export”. You could export all points which you have been collected in different format.

In “Export”, you could change the file name, export path (In default, the path is P3/Internal shared storage/XField/Export) and Export file format.

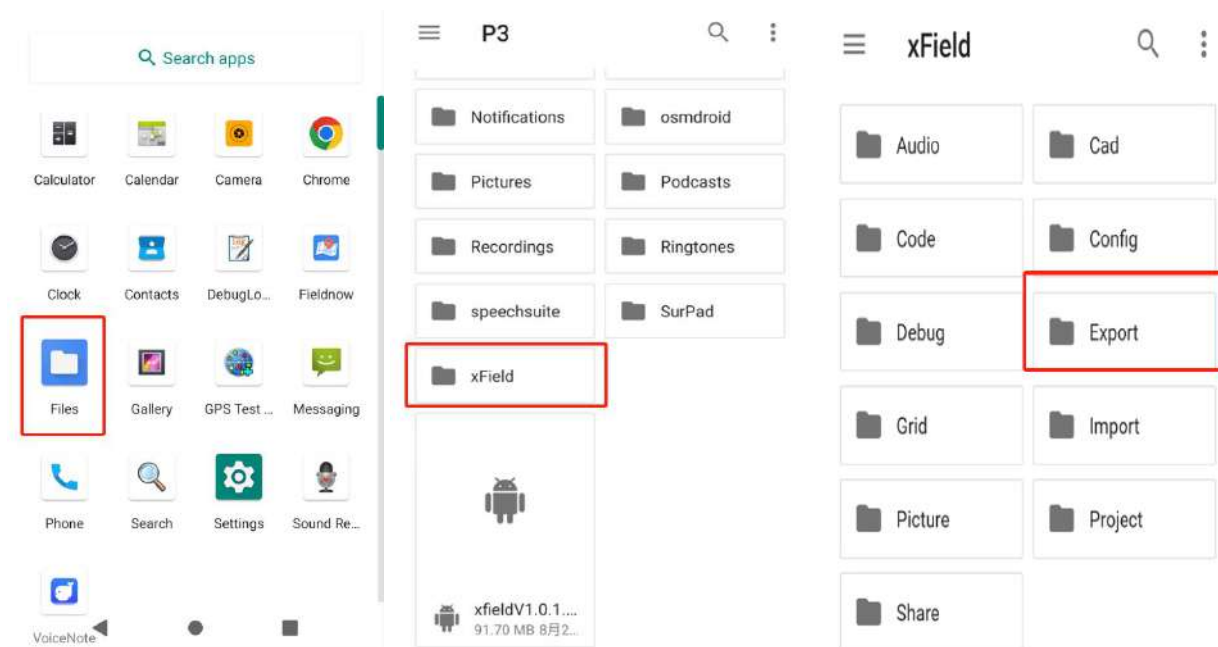
For export file format. The supported file formats are as follows.

← Format Select	← Format Select
Formats	Formats
AutoCAD file (dxf)	GoogleEarth file format (kml) [Point Name, Lon, Lat, Alt]
Cass Format (dat) [Point Name, Code, E, N, Elev]	GoogleEarth file format (kmz) [Point Name, Lon, Lat, Alt]
Plane Coordinates (dat) [Point Name, N, E, Elev, Code]	Carlson file format (crd) [N, E, Elev, Code, Point Name]
GEO Coordinates (dat) [Point Name, Lat, Lon, Alt, Code]	German-BW file (txt) [Point Name, Code, empty, N, empty, E, empty, Elev]
NETCAD format (ncn) [Point Name, E, N, Elev, Code]	GNSS format (dat) [Point Name, Code, N, E, Elev, Lat, Lon, Alt, X, Y, Z, Ground North, Ground East, Ground Height, UTC Time, Solution, Age, Max Delay, Min Delay, Used Sat, Tracked Sat, Access Point, Epoch, Starting Time, End Time, HRMS, VRMS, NRMS, ERMS, HDOP, VDOP, PDOP, Antenna Type, Antenna Measured Method, Antenna
PXY file (pxy) [Point Name, N, E, Elev, Code]	
GoogleEarth file format (kml) [Point Name, Lon, Lat, Alt]	

You could select any of file format as your requirements.

After that, you could find your export files both in the handheld controller and the PC with USB cable. The detail of export file paths are as follows.

6.1 Path of Handheld controller



6.2 Path of PC

