



# **PRECISE X** GNSS Receiver

Think PRECISE!

**QUICK GUIDE** 

Release Month 2025/03





## MENU

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#### **1 GNSS receiver connection**

#### 1.1 Connect with WIFI or Bluetooth



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

| ← Connectio    | n                 |
|----------------|-------------------|
| Manufacturer   | Other             |
| Model          | RTK               |
| Connection     | WIFI              |
| Available WIFI |                   |
| P1002616210001 | 00:d6:cb:0e:ca:cb |
| zhiyu-internet | 90:76:9f:6e:5d:ac |
| zhiyu-internet | 90:76:9f:6e:5d:ae |
| zhiyu-internet | 90:76:9f:6e:5d:ae |

It can be connected to WIFI or Bluetooth. If you connected another GNSS receiver before, please tap "Stop" at first.



Debug

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



#### 1.2 Fast Connect with NFC

| ← Connection   |                   |  |  |  |  |  |
|----------------|-------------------|--|--|--|--|--|
| Manufacturer   | Other >           |  |  |  |  |  |
| Model          | RTK >             |  |  |  |  |  |
| Connection     | WIFI >            |  |  |  |  |  |
| Available WIFI |                   |  |  |  |  |  |
| P1002616210001 | 00:d6:cb:0e:ca:cb |  |  |  |  |  |
| zhiyu-internet | 90:76:9f:6e:5d:ac |  |  |  |  |  |
| zhiyu-internet | 90:76:9f:6e:5d:ae |  |  |  |  |  |
|                |                   |  |  |  |  |  |
| Search Fast C  | onnect Connect    |  |  |  |  |  |

"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



#### Step1

Tap "Project" and select "Project Management" and tap "New"

| ← Basic Iı   | nfo                    |
|--------------|------------------------|
| Project Path | /storage/emulated/0/ > |
| Project Name | 20240715               |
| Operator     |                        |
| Notes        |                        |
| Created Time | 2024-07-15 17:21:00    |
|              |                        |
|              |                        |
|              |                        |
|              |                        |
| Back         | Next                   |

#### Step2

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



#### Step3

In Coordinate System

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

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

to acquire





#### 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.





#### 4. Set Base station

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



5. Set Rover station



Tap "Rover"

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



#### 6. Survey and Stake out



#### 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.

#### 6.1 Point Survey

| ←R                         | Fixed H:0.022              | 2 <b>[ T</b> ]<br>0 48% 1.8000           | ← Ant                       | enna Pa     | rameter  |             |              | phase          | center 1          |
|----------------------------|----------------------------|--|-----------------------------|-------------|----------|-------------|--------------|----------------|-------------------|
| N:3352277.8<br>Elev:2.4000 | B066 E:511149<br>Base Dist | .1621<br>.:None                          | Measure H                   | eight       |          | 1.8000      | 1            | $\in$          | ⊢ R → ↑ HL        |
| Ð                          | Demo                       |  | Measure N                   | lethod      | Slant He | ight >      | 1            | slaot beight   |                   |
| Zoom in<br>Zoom out        |                            |  | Antenna                     |             |          | Ň           | slant        | height         |                   |
| ार ज<br>भ्र<br>Full Map    | $\odot$                    |  | Antenna H                   | eight       |          | 1.8204      | to all       | $\overline{X}$ | $\langle \rangle$ |
| Center                     |                            |  | Antenna Param<br>Antenna Ty | eter<br>/pe | AT       | =+<br>100 > | phase center | XI             | Pole height       |
| Backgro                    | •pt1<br>4.1893             | <b>.</b>                                 | R(mm)                       | 64.4        | H(mm)    | 46.4        |              | // \           |                   |
| Photo Sk.                  |                            |  | HL1(mm)                     | 21.6        | HL2(mm)  | 23.6        |              | ′\             |                   |
| <b>pt3</b>                 | Code +                     | <b>v</b> [ <b>v</b> ]<br>Entity <b>+</b> |                             |             |          |             |              | <b>\</b>       |                   |
|                            |                            | 2  |                             | Со          | nfirm    |             | Anter        | nna height mea | asurement method  |

At first, it is necessary to set the height of antenna. Tap **1.8000** and change antenna parameters. the whole figure of measuring methods is as follow.



In addition, Tilt Survey is also supported. After initializing IMU you

ld tap 🎽 to capture your

point. Tapping **I** you could find "Points" which you have been collected.



#### 6.2 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.

P



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



#### 7. Export data



| ← Export           |   |    |
|--------------------|---|----|
| File Name          | 202404                                  | 10 |
| Export Path        | /storage/emulated/0/<br>FieldNow/Export | >  |
| Export File Format |   |    |
| AutoCAD file (dxf) |   | >  |
| Setting            |   |    |
| Line Name          | •                                       | •  |
| Point Name         | •                                       | •  |
| Elev               | •                                       | •  |
| Code               | •                                       | •  |
|                    | Export                                  |    |

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.

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.

#### 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) GEO Coordinates (dat) [N. E. Elev, Code, Point Name] [Point Name, Lat, Lon, Alt, Code] German-BW file (txt) NETCAD format (ncn) [Point Name, Code, empty, N, empty, E, empty, Elev] me, E, N, Elev, Code] GNSS format (dat) PXY file (pxy) Fonts Tominal (Cude, N. E., Elev, Lat, Lon, Alt, X. Y. Z., Ground North, Ground East, Ground Height, UTC Time, Solution, Age, Max Delay, Mino Delay, Used Sat, Tracked Sat, Access Point, Epoch, Starting Time, End Time, HRMS, VRMS, NRMS, ERMS, HDDP, VDOP, PDOP, Antenna Type, Antenna Measured Method, Antenna N, E, Elev, Code] GoogleEarth file format (kml) [Point Name, Lon, Lat, Alt]

### 7.1 Path of Handheld controller

File – xField – Export





#### 7.2 Path of PC

P3 – Internal shared storage – xField - Export





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