

# GNSS Quick Start

Reference Guide for FieldGenius Android GNSS Rover.

MicroSurvey  
FieldGenius  
Android

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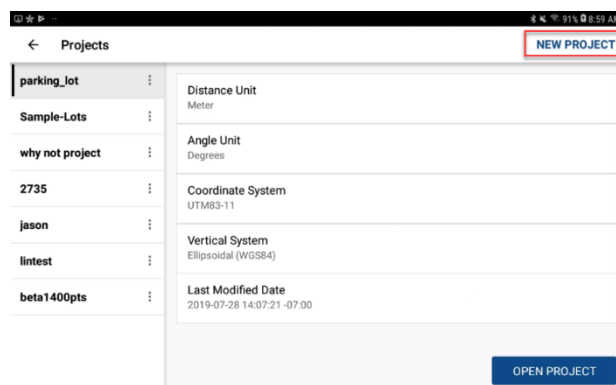
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## Part 1 - Create a New Project

The Project Manager in FieldGenius is used to open, create, and delete projects.

### Create a new project

- From the Projects screen select the New Project button.



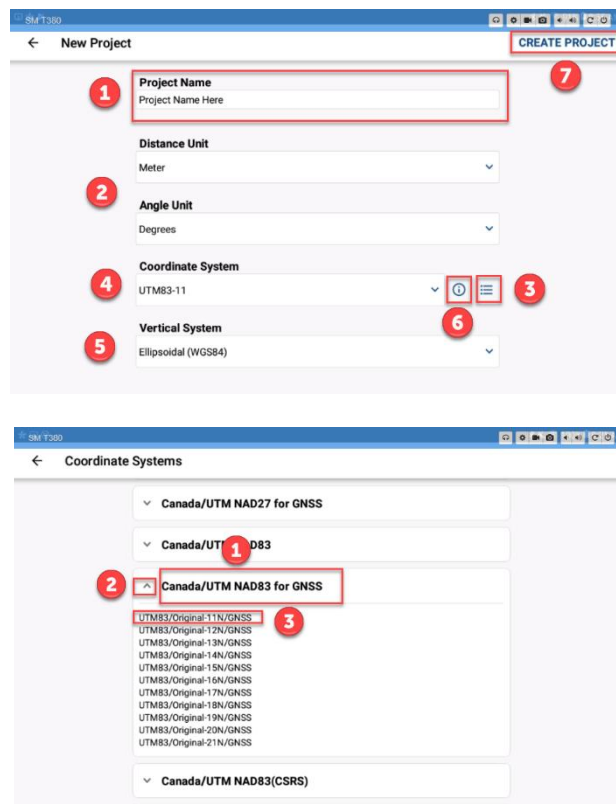
### Configure and Save a New Project

- Enter a name for your project.

*Note: No spaces are currently allowed in the project name.*

- Selected the Units, coordinate system and vertical system.
- Tap the list button and select the country the work is being conducted in.
  - 1. Select country.
  - 2. Select arrow to expand list.
  - 3. Select horizontal system.
- Tap the Horizontal system to select.
- Tap the vertical system to select.
- Tap Info button to review.
- Tap Create Project to Save new project to the Project List.

*Note: To cancel without setting up a new project tap the back button.*



## Project Settings

A FieldGenius project needs to have the units and the coordinate system defined during the New Project configuration. Use the drop down menus to select the appropriate units and coordinate system for your project.

### Units and Scale

The Distance Unit and Angle Unit must be set when a project is created and cannot be modified once created. To set the precision for the units go to settings units from the main menu once the project is open.

#### *Distance Unit*

Choose from Meters, International Feet, or US Survey Feet.

#### *Distance Format*

Default distance format is decimal for Meters, International Feet and US Survey Feet.

#### *Distance Precision*

Default precision is 3 decimal places. Go to the Settings button on the Main Menu page once the project is set up to change the distance precision.

#### *Angle Unit*

Angular units are set to in Degrees (only degrees are supported at this time).

#### *Angle Format*

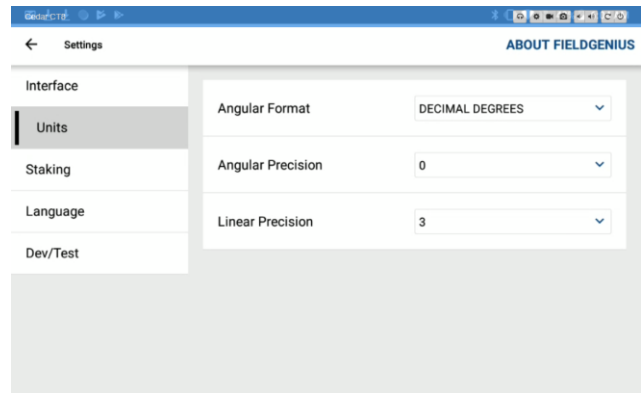
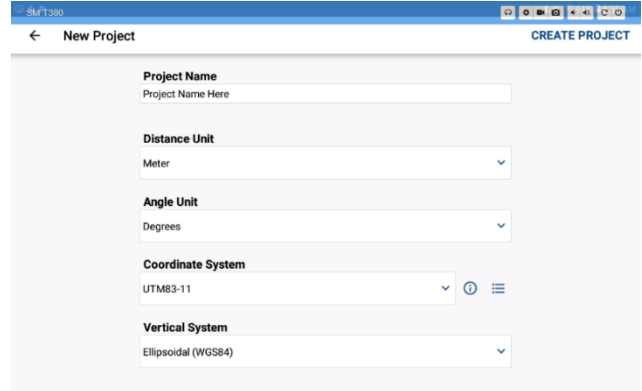
The default angle format is DDD°MM'SSs" Go to Settings button on the Main Menu page once the project is set up to change to decimal degree format.

#### *Angle Precision*

Default angle precision is 3 decimal places. Go to Settings button on the Main Menu page once the project is set up to change the angle precision.

#### *Direction Format*

Only the North azimuth is supported at this time.



## Coordinate System

The project Coordinate system is selected during project configure and cannot be modified after a project is created. The coordinate systems can only be selected from the Coordinate Systems available in the FieldGenius database.

*Note: If your coordinate system is not available contact MicroSurvey support with a request to add your coordinate system or Geoid model.*

### Country List

The available horizontal coordinate systems are grouped by country. Select the country you are working in from the country list icon to the right of the Coordinate system dropdown list. The coordinate systems available for the country are then displayed. Select the project horizontal coordinate system from the list.

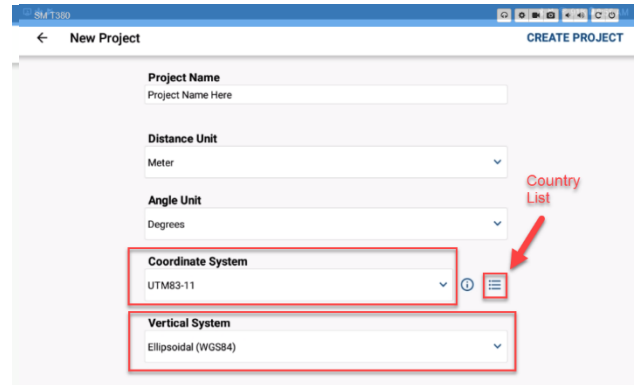
### Horizontal System

The horizontal projected coordinate system for your Project will be listed in the dropdown list of coordinate systems. TO change the coordinate system tap the dropdown list icon and then select the horizontal coordinate system. Tap the information button to see more details on the selected coordinate system.

### Vertical System

Select the vertical datum for your project from a list of available options. The list will always contain Ellipsoidal (WGS84) and all available geoid models. If a horizontal system requires a geoid file that is not in the mapping folder on the device an error message will advise you to download the geoid from the MicroSurvey website downloads page [World Geoid Models Download](#). Once the geoid model is downloaded use the Android OS file system manager to copy the file to the folder /Internal Storage/FieldGenius/Mapping/.

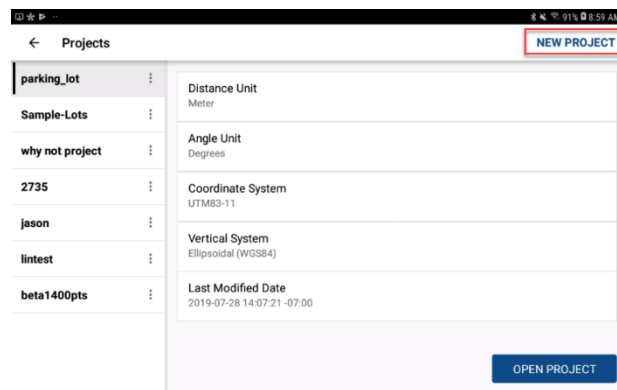
See the [Appendix](#) for more information about Geoid Models.



## Create New Project

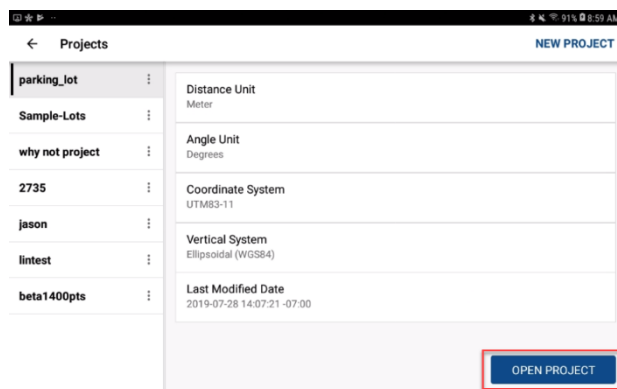
- Tap the NEW PROJECT button.
- The new project will be added to the project list on the Projects page.

*Note: To exit to the Project page without creating a new project tap the back arrow.*



## Open Listed Project & Delete a Project

- To open an project tap the project to select it. The selected project will be highlighted with a black bar to the left of the name. The configuration details are listed in the main screen area.
- To delete a project tap the three button icon and select delete and then OK.



## Project Files

Each FieldGenius project is made up of multiple files and database records saved in a FieldGenius project folder on the device. The project folder is located at /Internal Storage/FieldGenius/ProjectName/.

### Project Codes

The application has a default survey code list of common survey point description and line codes. The user can add new codes to the point or line list from the Codes full page >> Main Menu >> Project Data >> Codes >> Add. To add a line type code select the Line Code check box. If a customer imports points to the project that contains new codes they will be added to the code list on import.

*Project Files Descriptions*

FieldGenius projects are folders containing at least 7 files as described below.

ProjectName.sqlite	Project database records
Survey.xml	Point and line description
Project.settings	Project Settings and Information
InstrumentProfiles.json	GNSS instrument connection profile information
Tracexxx-xx-xx_xx-xx-xx.txt	Troubleshooting trace file
Map3_datum	Coordinate system datums
Map3_ellipsoids	Coordinate system ellipsoids
Map3_Systems	Coordinate systems



## Part 2 – First Time Rover Setup

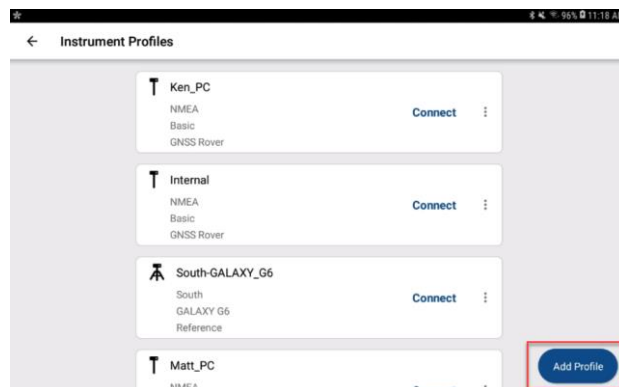
FieldGenius instrument profiles contain settings specific to each instrument. When selecting an instrument profile and connecting to the instrument, all these settings are automatically inherited.

### 2.1 Create Instrument Connection Profile (Rover)

To create a new GNSS Rover profile:

#### Connect to an existing Profile

1. From the Main Menu tap Select Instrument button.
2. Tap the connect button for the defined Instrument Profile (go to Part 2.3 Instrument Corrections).



#### Create a New Profile

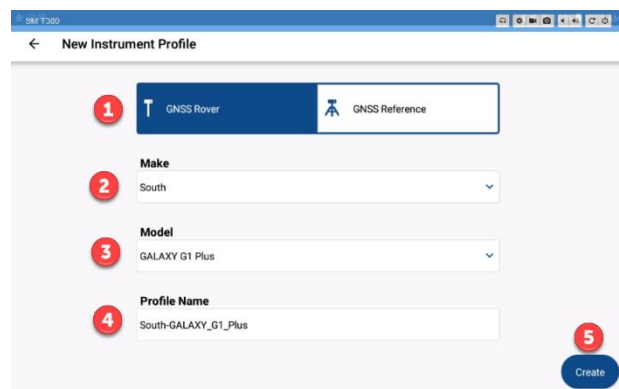
1. From the Main Menu tap Select Instrument button.
2. On Instrument Profile page tap Add Profile.

#### Enter Name and Save

1. Select GNSS Rover or GNSS Reference.
2. Select Make from dropdown.
3. Select Model from dropdown.
4. Accept or edit default Profile Name.

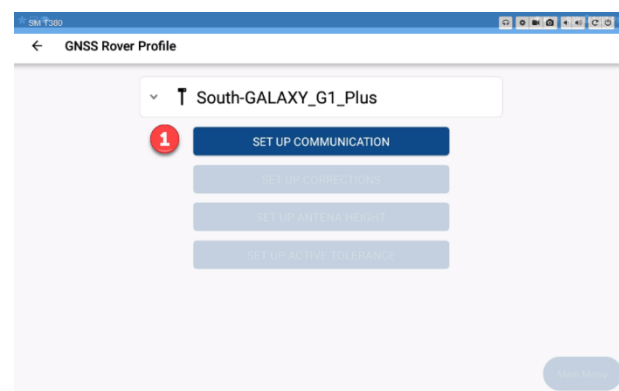
*Note: No spaces are allowed in the profile name.*

5. Tap Create.

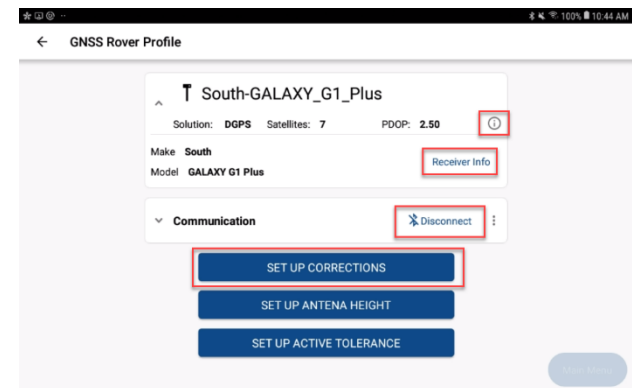
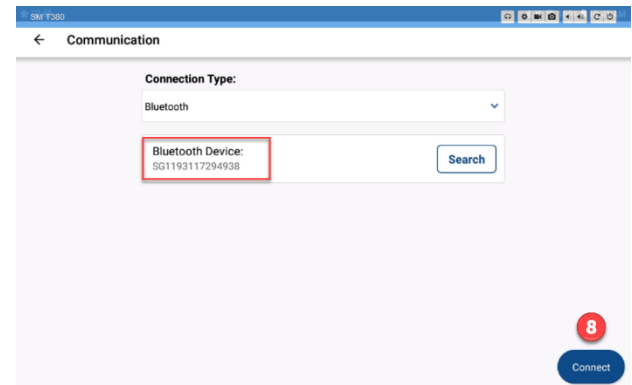
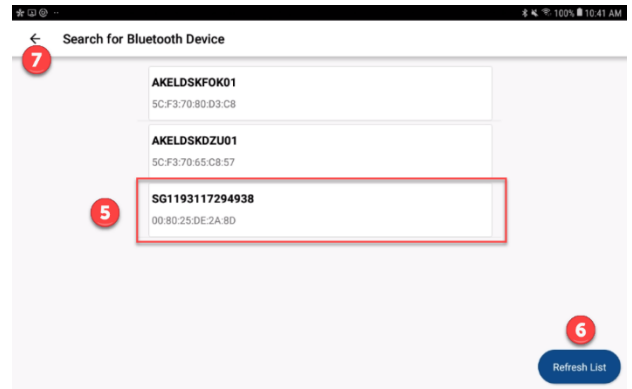


#### Set-up Communication

1. Tap SET UP COMMUNICATION.
2. Connection type = Bluetooth.
3. Tap search to list Bluetooth addresses.
4. Please wait spinner will appear while searching for available Bluetooth devices .
5. Select GNSS receiver Bluetooth address.
6. Tap refresh list if Bluetooth address does not appear.
7. Tap back arrow to return to communication screen.
8. Tap the connect button to enable the Bluetooth connection.



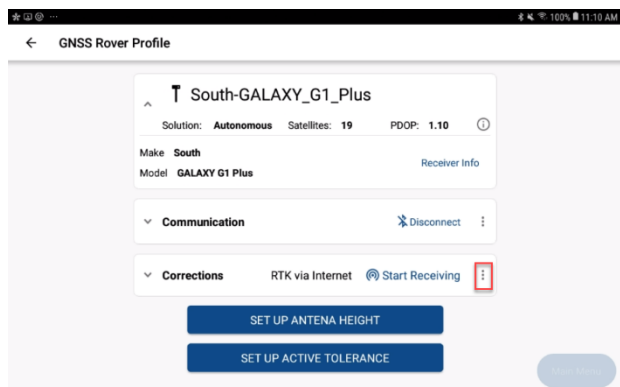
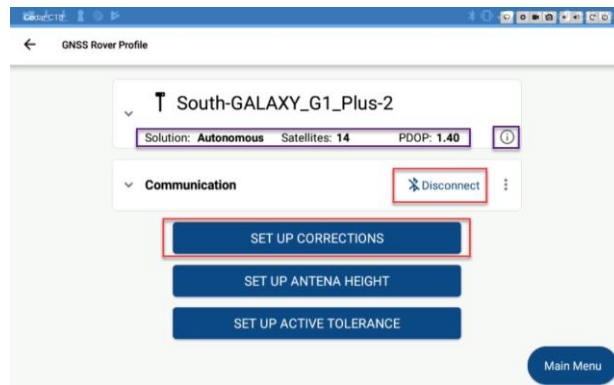
- While connecting status messages will be shown in the progress spinner.
- When Connected the communication will show a disconnect button associated with the profile, tap if you want to disconnect from the receiver.
- Tap the down chevron on the profile name to see the connection status information.
- For full connection information tap the “i” button.
- For information on the connected GNSS Receiver tap the Receiver Info button.
- To use the receiver without setting up corrections tap the main menu button.



## 2.2 Connect to Instrument

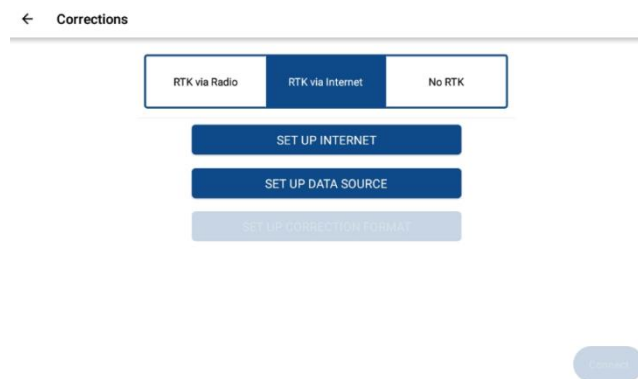
To connect to an instrument, pick the predefined profile and choose “Connect” or define a new profile as detailed above in part 2.1. Once connected to the instrument tap the SET UP CORRECTIONS button.

On an existing Profile to setup or change the correction information tap the three dot menu and select the edit option. Then on the corrections button tap the three dot menu.



## Configure Correction Link

When connecting to a GNSS Rover device, the Corrections page will be displayed select the corrections communication type RTK via Radio, RTK via Internet or No RTK corrections. Radio is configured for obtaining corrections from a reference base station. Internet is selected to obtain corrections from caster over an internet connection. No RTK is for receiving autonomous position locations with no corrections.



## Radio

Tap the SETUP COMMUNICATIONS button.

### Device Settings

Select the appropriate type of radio from the dropdown list.

### Radio settings

For radio corrections, choose the Device from the dropdown and the device Port from the options. Select the Radio settings to review or change the radio configuration to match the reference station radio broadcast settings. Refer to the Radio manufacture for the appropriate radio settings. make and model from the pull-down and set the channel or frequency, the radio will be programmed by FieldGenius to the channel or frequency selected (on some models). Edit and configure the radio settings if necessary following manufacture guidance.

- Configure the radio settings.
- Channel.
- Channel spacing.
- Protocol.

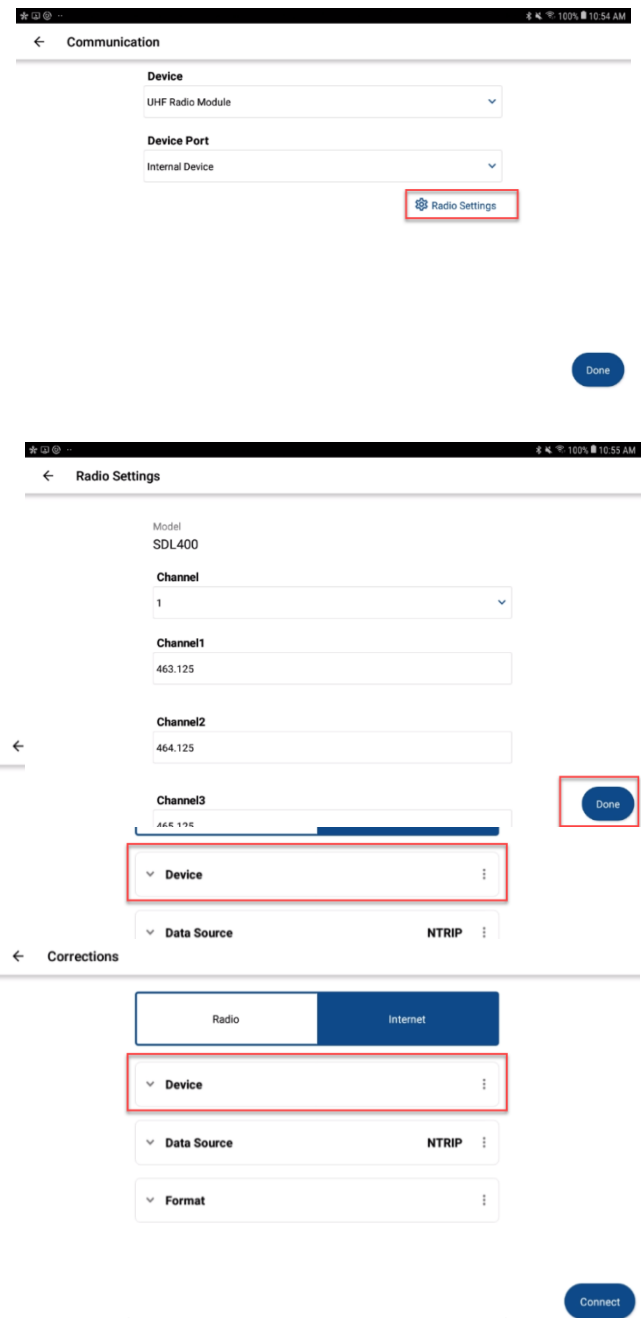
FEC. Transmission Power. Device Port Select the appropriate Port when multiple options exist.

## RTK Internet

### Set up Internet

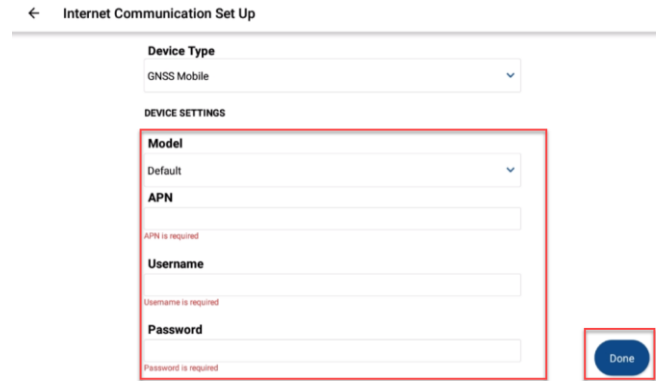
Select the appropriate correction link device Type option, Data collector or GSM Modem.

For the Type = data collector connect the data collector to the internet using the device manufacture instructions. The status of the connection connected / not connected will be displayed below Type selection field.



For Type = GSM Modem setup the carrier internet comment settings:

- Model.
- APN.
- UserName.
- Password.

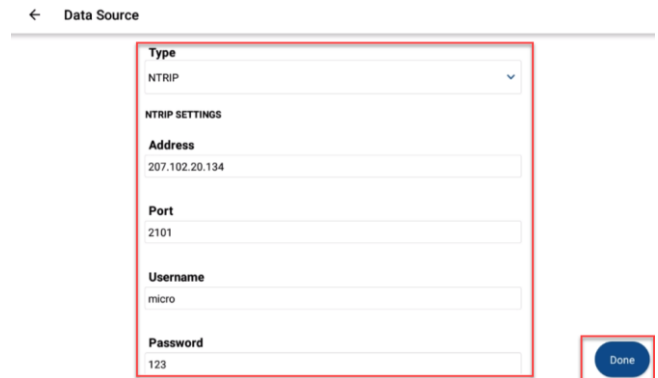


## Set up Data Source

Set the message type used in determining what data streams are sent from the reference station to the rover. They can be RTCM, CMR or a proprietary format.

Set the NTRIP Settings:

- Internet address.
- Port.
- Username.
- Password.

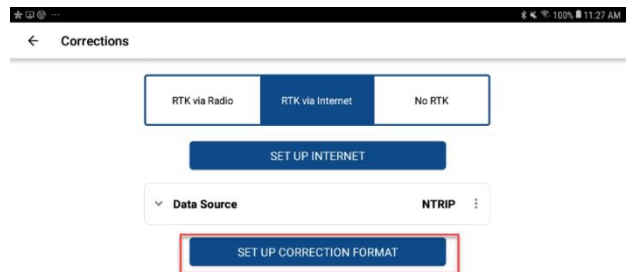


## Set up Corrections Format

Select set up corrections format

Select the message format for the corrections from the available options in the dropdown box.

Select the Base Station ID from the options in the dropdown box.

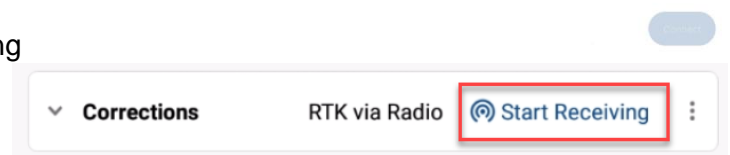


## RTCM Transformation Settings

To receive horizontal and vertical coordinate system information from your network, enable RTCM Transformation messages.

## Start / Stop Receiving Corrections

When the corrections are configured select the Start Receiving button to implement processing and applying corrections to the GNSS position. To terminate applying corrections select the and Stop Receiving button.



## 2.3 Antenna Height

The antenna height dialog allows the user to change the measured height of the receiver, and specifics about the receiver.

### Model

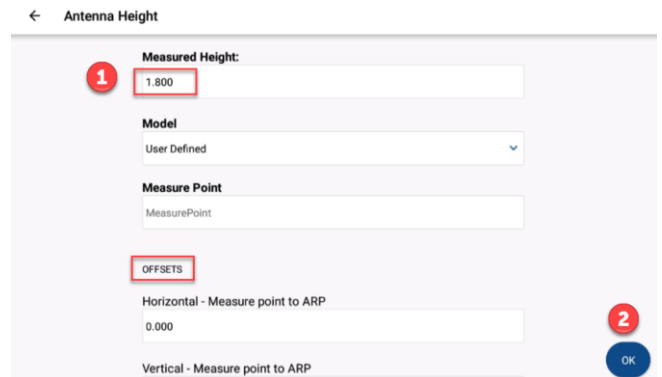
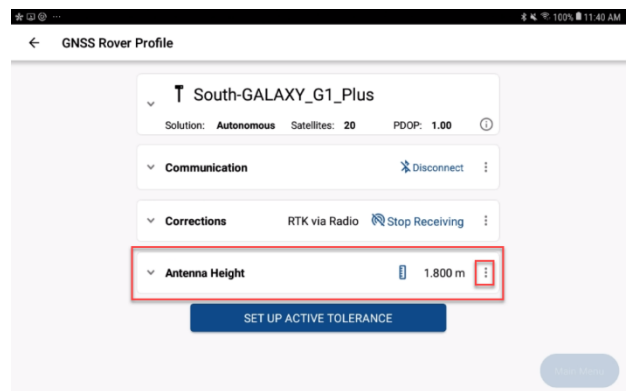
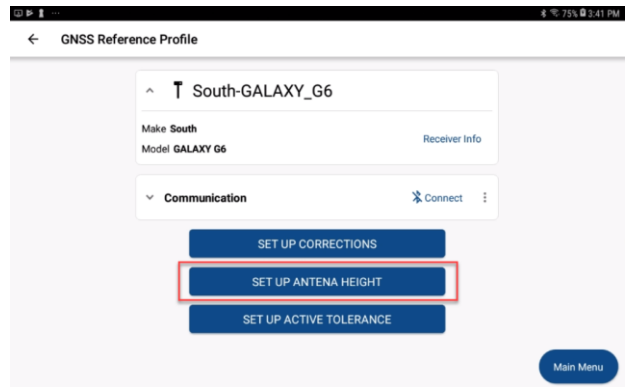
The preconfigured offsets information of the receiver is stored under the model name, pick “User Defined” to manually enter the offset values. Tap the three dot menu to set the antenna height and edit antenna settings.

### Measure Point

Available options vary between receivers.

### Offsets

Generally, the preconfigured or user-definable values are displayed, for some receivers this information is provided by the firmware once connected.



## 2.4 Tolerance Settings Concepts

FieldGenius can be configured with three tolerance settings that determine the minimum requirements that must be met for storing a position when the tolerance setting is active. The user can change the active tolerance setting to suit the conditions and/or actions.

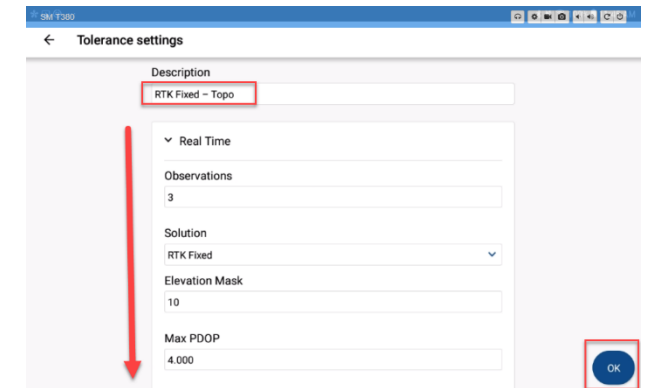
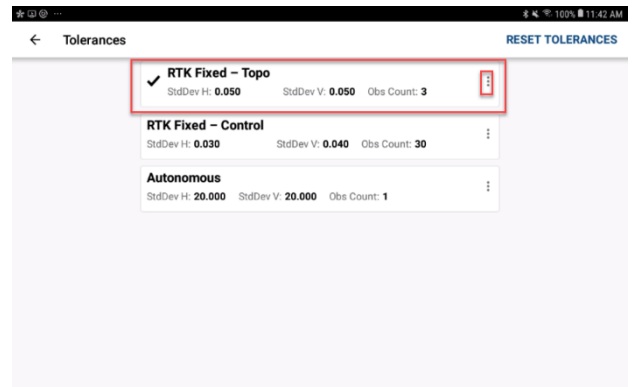
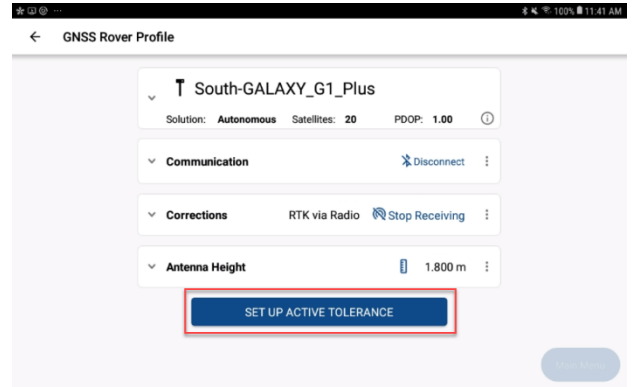
Default Tolerance Setting: [Autonomous] / [RTK Float] / [RTK Fixed] The three tolerance settings each have a default description and various options configured for specific conditions. The available options may vary between GNSS receivers. Tap the tolerance panel to select it as the active tolerance to be used in by the program. The selected tolerance has a checkmark next to the name.

### Active Tolerance

The active tolerance is used when measuring points to determine if minimum requirements are met and which actions will take place. It is a method of ensuring quality standards are met. If a measured point is out of tolerance a warning icon will be displayed on the point review screen. The user has the option to re-measure the point or to save the point even though it is out of tolerance.

Tap the three dot menu to edit the tolerance setting to set custom tolerance values for the tolerance tests. You can use the Description field to name the tolerance setting. Tap OK to save tolerance values.

On the map view Observation toolbar there is a view that displays the current GNSS solution horizontal standard deviation (SD H), vertical standard deviation (SD V) and PDOP values. The icon beside each value indicates if the current solution is within or out of tolerance. By using the this view on the observation toolbar the user can see if the GNSS solution is out of tolerance for these test items before taking a measurement.




## Part 4 – Program Options and Interface

### Configuring Program Options

Program options are designed to help the user get the most out of FieldGenius. Options relevant to GNSS workflows and map view display options are summarized below.

#### Map view options

The map view options are accessed from the bottom toolbar map setting icon  on the map view screens.

- The user can pan the map by using 1 finger to move the image on the main screen.
- The user can zoom the map by using 2 fingers to pinch or expand the map zoom level.

#### Map Interface Options

##### Point Names

To display the point names on the map view switch the toggle to ON.

##### Lines

To display the lines on the map view switch the toggle to ON.

##### Scale Bar

To display the map scale bar on the map view switch the toggle to ON.


##### Background Map Type

When the android devices is connected to the internet the user can select a background map to display on the map view screen. There are four map type view settings available street view, satellite image, terrain and no background map. Tap on the map icon to switch between views.

##### Map Opacity

The background map opacity can be adjusted using the + and – button on the opacity control so the user can make the map/image lighter to better see the project points and lines in the field in different lighting conditions.

##### Center to current location

Tap the center icon  to move the map view so that when you are connected to a GNSS receiver the current location is centered on the map. Turn the center toggle ON to update the map view so that your current location is always centered on the map when you move.

### Settings

FieldGenius application settings are access from the Main Menu by tapping the Settings button.

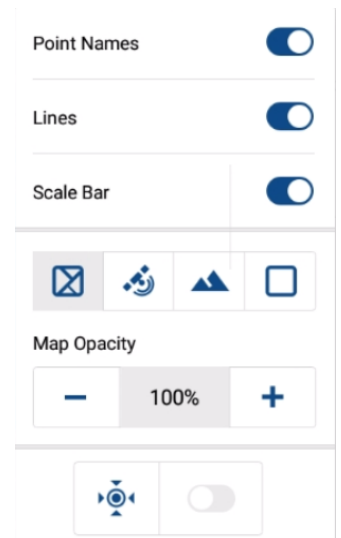
#### Interface

Switch map display modes between High Contrast and Dark Mode.

#### Units

##### Angular Format

Set the angular format for display in DEGREE MINUTES SECONDS (DMS) or DECIMAL DEGREES.





When manually entering DMS values in field use the format DDD.MMSSssss where the integers before the decimal point is the degrees (DDD) the first two integers after the decimal point are the minutes (MM) and the next two integers are the seconds (SS) and the remaining integers are the decimal seconds (ssss).

### Angular Precision

Set the number of integers to display after the decimal points to display for angular values.

### Linear Precision

Set the number of integers to display after the decimal points to display for angular values.

Set the

### Staking

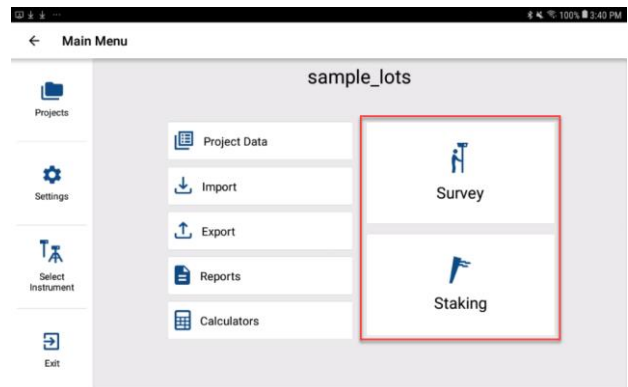
Set the number of integers to display after the decimal points to display for angular values.

### Language

Select the language for the application screens. When you change a language you will need to restart the application before the new selected language is displayed.

## Toolbars

On the Survey and Staking map view screens FieldGenius interface consists of multiple toolbars and data panels to display important information on one screen the surveyor needs to efficiently conduct field work. The goal of the toolbar and data panels is to provide necessary information at the point of work with the minimal number to taps or navigation between screens. In FieldGenius we have split the workflows between surveying points and staking points. The different map views allow for the display of more information and tools aligned to the work activity. On the main menu select the either the Survey or Staking button to navigate to the map view.

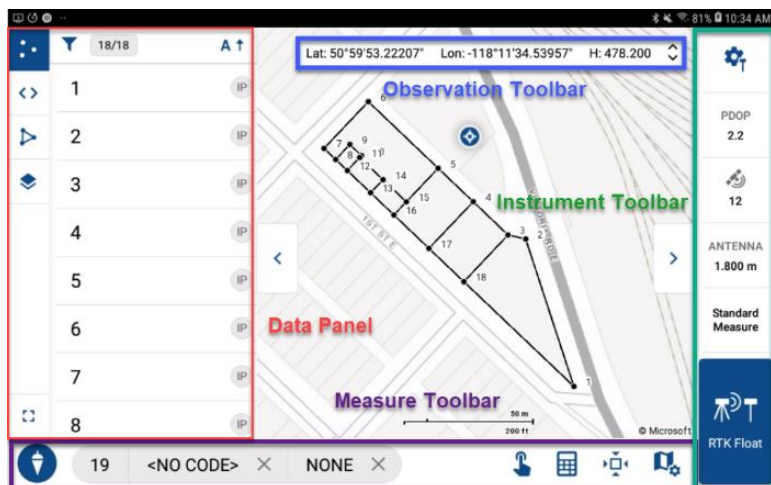


## SURVEY MAP VIEW

### *Survey Toolbars and Data Panels*

The Instrument Toolbar and the Data Panel can be opened or collapsed by tapping the Open and Close tabs beside each to show more of the map view when needed.





### GNSS Instrument Toolbar

The instrument toolbar displays position information and provides access to settings and measure modes.

	- Instrument Settings Button – Opens the GNSS Rover Profile screen which provides access to change instrument specific settings.
PDOP 2.2	- PDOP Button – Displays the position DOP values. Tap to cycle through PDOP, HDOP, VDOP, and position Standard Deviation values.
 12	- Satellite Plot Button – Displays the number of satellites used for the current position solution. Tap to open the sky plot or to access the satellite list.
ANTENNA 1.800 m	- Antenna Height Button – Displays the current antenna height set and provides access to the Antenna Height dialog.
Standard Measure	- Measure Mode Button – Displays the current measurement mode and provides access to the Measure Modes screen to select a measure mode. <i>Note: Current application only supports standard measure mode.</i>
 RTK Float	- Measure Button – Displays the current solution type and is used to begin a position measurement.

### Observation Toolbar

The observation toolbar shows information about the current position. The observation toolbar is linked to the Instrument toolbar and will only display when the Instrument Toolbar is open. Tap the observation toolbar to cycle through the different display modes:

- Latitude Longitude Height.
- Northing Easting Height.
- Horizontal SD, Vertical SD, PDOP.
- SOG COG Time (GPS).

Lat: 49°50'17.54594" Lon: -119°36'35.60802" H: 395.858 ↕  
 N: 5,523,909.480 E: 312,340.609 H: 395.818 ↕  
 ✓ SD H: 1.045 m ✓ SD V: 1.707 m ✓ PDOP: 2.1 ↕  
 SOG: 0.003 m/s COG: 274°39'51" Time: 21:50:01 (GPS) ↕


### Measure Toolbar






The measure toolbar provides information on the point and line settings plus quick access to highly used features and map view options.



Plumb bob icon provides navigation to the Main Menu screen.

Next Point Measurement Information.

- Number of next point measured.
- Point code of next point measured. Tap the No Code area to open the code list and select a code for the next point to be measured. If the code has a line symbol  both the point code and line segment will be set for the next point measured. If the line segment icon is missing on the code list name then only the Code will be set to the selected name. The line segment will be the next unused number in the Line segment sequence. When you take a observation the point will be a start of the line and subsequent points will be appended as vertices to the line segment. Line segment name, the next point measured will be attached as a new vertices to this line segment. To end a line segment tap the X in the line segment field. To start a new line tap the <No Line> field and the next line in the sequence

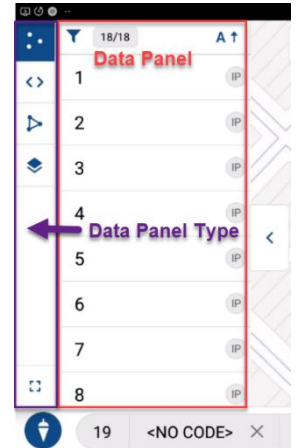
	- Help button - Brings up the help page that details the functionality of the elements on the page.
	- Manual Measure Button – Brings up the manual measure page that allows a user to navigate a target to a location and save a point as a manual measurement in the points database.
	- COGO Button – Displays the list of available COGO options and allows the user to tap on an option and open the COGO data panel.
	- Zoom Extent Button – Resizes the map view to include all project points, lines and the current GNSS location.
	- Map Options Button – Opens the map options panel that allows the user to customize the display of points, lines, background maps and set map center features.
	-

### Survey Data Panel


Use the arrow tabs to open and collapse the data panel on the survey map view.

The left data panel type selection bar allow the user to switch between different data panels. Tap the icon to switch between the following data panels:

- Points list.
- Codes list.
- Lines segment list.
- Xref – External reference list.



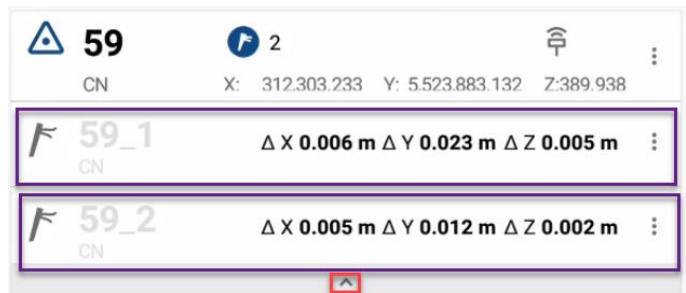
The data panel provides key lists of items a user may want to select or change quickly when taking measurements in the field.

Full Screen View - Tap to full page icon  at the bottom to open the full page details for a selected data panel.

Points List – Lists the project points. To filter the list by point code tap the funnel icon. A filtered list will display the number of points listed of the total points in the project 11/89. To sort the points tap the sort icon and select the sort option.

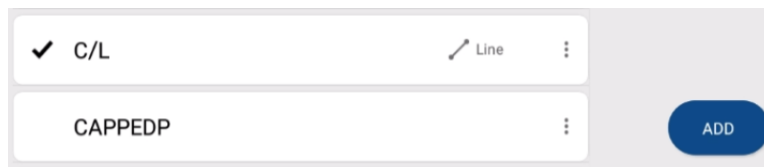
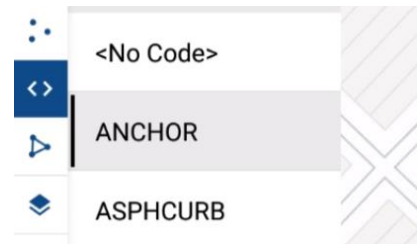


The full screen mode will display all the information on a point. To edit or delete a point you need to open the full screen mode and select the three dot menu. The Icon on the left indicates a point is a control point, you can designate a point as control when storing it. If a point is staked out the Staking icon will be shown with the number of times a point has been staked. Use the expand chevron to show a summary of the staked points.



Code List – List the codes that can be assigned to a point when it is measured. Tap a code to select it. It will Then be shown in the next code field on the measure toolbar.

Full Screen View - To add a new code tap the full screen icon and then the Add button. A code can be assigned as a point code or both a point code and line type code.



Lines Codes – List of line segment codes that can be selected and then edited or set active. If set active it is listed in the next line field and the next measurement will be appended to the line segment. If the user selects edit the data panel displays the list of point vertices that are included in the line segment and the user can delete or add vertices to the line segment. To delete a vertices tap the X next to the point number in the data panel. To add a point to the end of the line segment tap the map and select a point. Tap the Done button on the top information toolbar with complete to exit the edit mode.

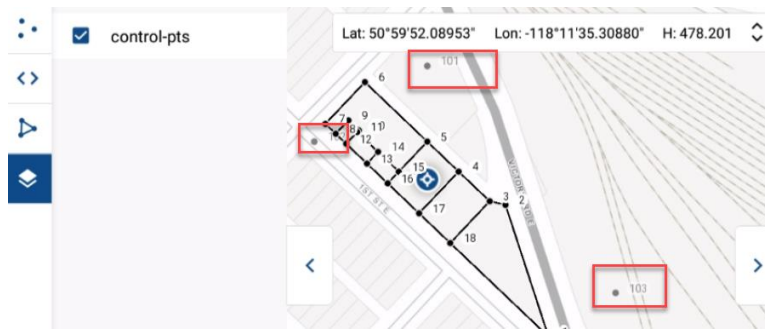


Full Screen View - To the full screen icon to add new line segments to a line type. On the full screen tap the Line type and then on the right side tap the plus button to create a new line segment(s). Each line segment shows the number of point vertices that are included in the line segment. Tap a line segment to select it and then you can make it active or edit the segment.

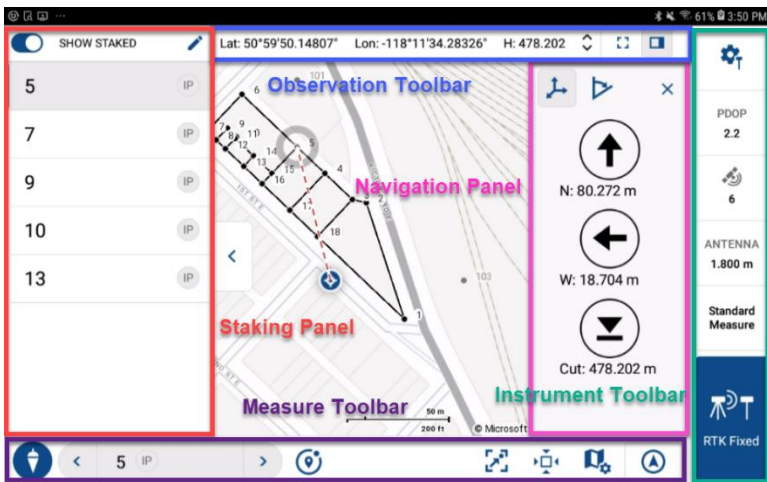


Xref Layers – The list of external references allow a user to select a different project on the android tablet and import the project points as a background layer to the current project. The xref project is shown as a background layer. The Xref points have an opacity or 60% of the project points so that the user can differentiate between current project points and the Xref layer points.

Full screen view – Tap the full screen button to get a list of all the Xref files available on the data collector. Select the check box to have the Xref file displayed as a layer on the current project.



## Staking MAP VIEW



*Staking Toolbars and Data Panels*

The Instrument Toolbar and the Data Panel can be opened or collapsed by tapping the Open and Close tabs beside each to show more of the map view when needed.



### GNSS Instrument Toolbar

The instrument toolbar displays position information and provides access to settings and measure modes. The instrument toolbar has the same features and functionality as the Survey Instrument Toolbar (see the Instrument Toolbar description in the Survey section).

### Staking Toolbar





The Staking provides information on the next point to be staked with quick navigation buttons.



Plumb bob icon provides navigation to the Main Menu screen.

Next stake point features:

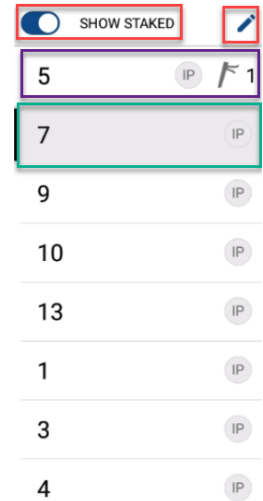
- Tap the < icon go to the previous point on the stake list.
- The stake number filed displays the next point to be staked and the point code.

- Tap the > go to the next point on the stake list.
- Tap the  icon to find the closest point on the stake list to your location.
- Tap the  icon to zoom the screen to include your current location and the next stake point.
- Tap the center  icon to center the map on your current location.
- Tap the  icon to display the map control panel.

### Staking Data Panel


The staking data panel provides a list of the points on the staking list.

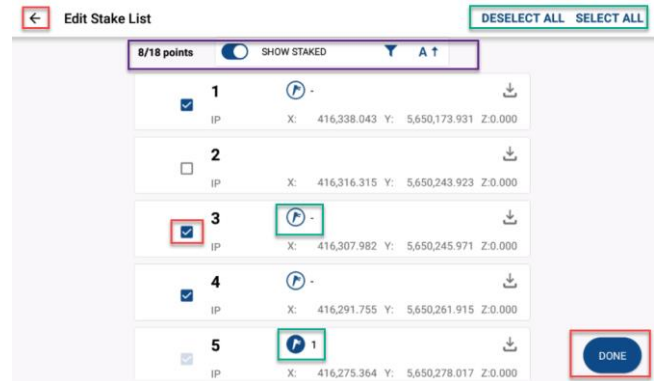
Turn ON the toggle if you want to see the points that on the staking list that have already been staked. If the toggle is OFF then only the points remaining on the staking list will be shown. When you stake a point in this mode it will be removed from the displayed list in the data panel and only the points remaining to e staked will be shown.





Tap the edit pencil icon to open the full screen view which allows the user to add and remove points from the staking list.


On the full screen view of the staking list the user can select point or remove from the staking list by taping the checkbox next to the point number.

To assist in selecting point to be added to the staking list the user can filter or sort the points list. If the points list has been filtered the number of points in the points list is displayed e.g. 8/18. To open the filter option tap the funnel icon  and then select the codes you want to add to the filtered list, select APPLY when done.



To sort the points list tap the sort icon  .

The points selected an on the staking list are indicated by the checkmark and the status of the staked points on the list are shown by the icons to be staked  and the icon for already staked  1 . For points that have already been staked the number of times the point has been staked is indicated on next to the icon.

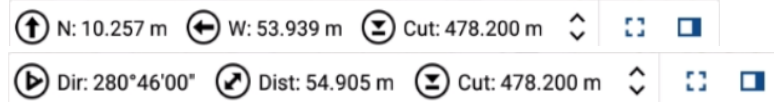
When you have added or removed all the points from the staking list tap DONE to update the staking list and return to the staking map view. If you want to return to the map view without updating the staking list select the back icon  .

### Navigation to Stake point

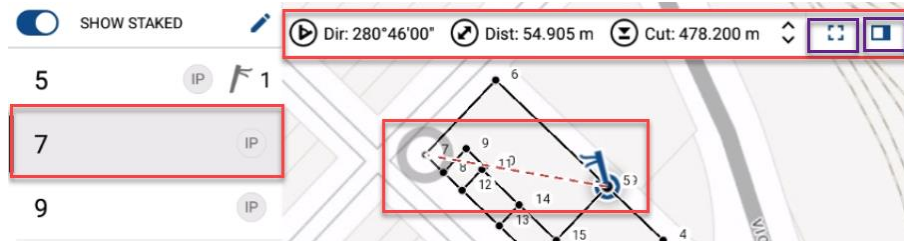
The staking screen provides a number of different features and views to help the user navigate to the next point to be staked. If the staking data panel is open the next point to be staked is highlighted on the list.



## Quick Start Guide

The observation toolbar has two new view options to show the Cartesian northing, easting and cut/fill distances from the current location or direction, distance, cut/fill to the selected stake point.



On the map view the current location of the GNSS receiver is shown and the next point to be staked is also shown with a red dashed rubber band line connecting the two. As the user moves the GNSS receiver and the rubber band line and observation toolbar values are updated in real time on the screen.



If the user wants the user can open a partial of full screen data panel to display the navigation information by tapping the data panel  icon or full page  icon on the observation toolbar.

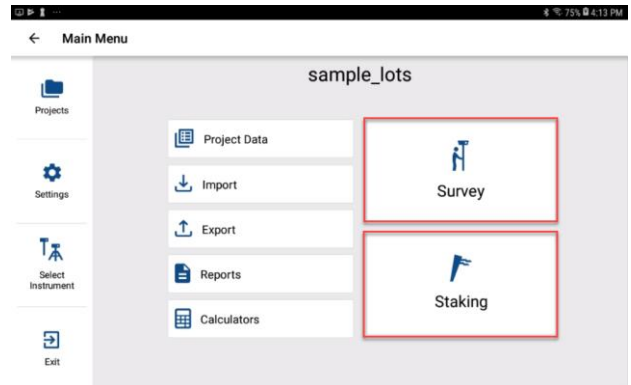
On the data panel of full page view the user can toggle between the cartesian and direction views by tapping the appropriate icon. To close the data panel or full screen view and return to the map view tap the X button.





# Part 5 - Measure Modes and Workflows

FieldGenius Android has separate survey and staking workflows and map view screens that are accessed from the main menu.



## Survey Map View

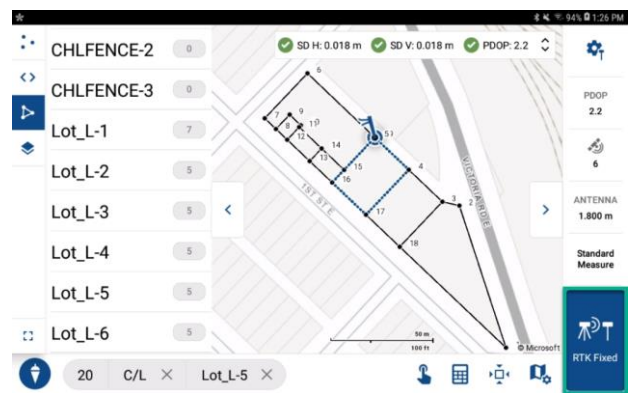
On the survey map view select the measure button to store a location. The measure button will display the receivers current GNSS Solution.

## Standard Measurement

General Procedure is as shown in the table below.

### Start Measurement

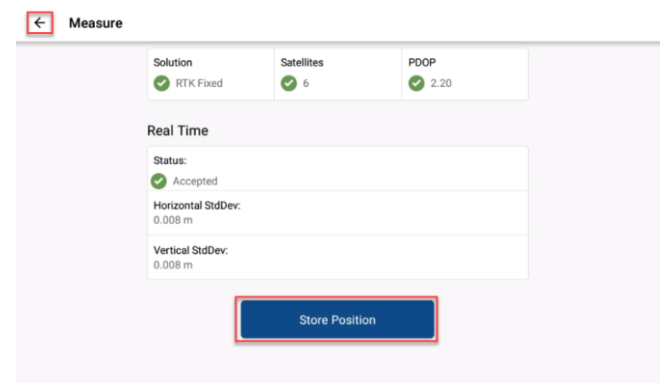
1. With “Standard Measure” mode set, pick the Measure button to start measuring the current position
2. The measure button will display the receivers current GNSS Solution.
3. The observation toolbar can show if the current solution is within the measurement the selected horizontal and vertical tolerances.



### Confirm Measurement

4. Active Tolerance mode determines number of observations.
5. RMS values are shown.
6. “Store Position” button is available once tolerance criteria are met.
7. Use the Tolerance Override option if you want to store out of tolerance observations.

*Note: Out of tolerance observations are shown with a warning icon in the observations table.*



### Store Position

8. Accept or change the point name.
9. Accept or change the point code.
10. Check the control point box if the point is a control point.
11. Review the Cartesian coordinates.
12. Tap SAVE to store the point and add it to the points database.
13. Tap X to return to the previous screen without saving the point.

## Measurement Procedure Overview

The measurement process works like this:

FieldGenius will only begin collecting measurement data if all your tolerances are met. During the measurement process, you might see that certain tolerances are not being satisfied, which is normal. FieldGenius will continue monitoring the measurement data and will accept measurements that pass the mask criteria. The user does have the option to select the tolerance override button and the point will be saved to the points database with a warning flag that the tolerances were exceeded.

Once the tolerances have been met, the user can tap the store position button. Prior to accepting the position, the user can look at the RMS values for the computed position and determine if they wish to accept or reject the measurement. Transformation parameters are applied to the GNSS position prior to storing the point. The Cartesian coordinates in the project coordinate system are displayed for review. Picking the **Back arrow icon** will return to the previous screen and exit the measure function without storing any data. Picking **Store button** will accept the position and store it in the database.

*NOTE: The tolerance settings for the measurement can be accessed from the Setting button on the instrument toolbar >> active profile >> active tolerance >> tolerance edit button and the tolerances can be changed and updated. The current position can then be stored if the new tolerance requirements are met without having to take a new measurement.*

## Staking Map View

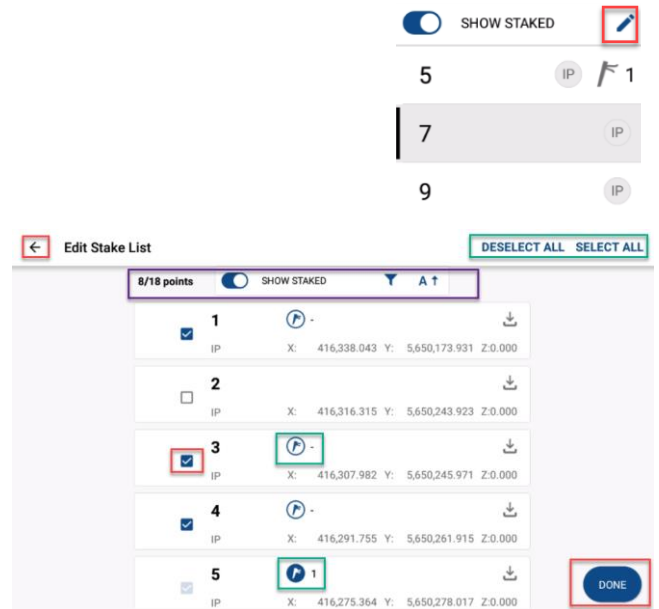
Select Staking from the Main Menu.

### Point Staking

General Procedure is as shown in the table below.

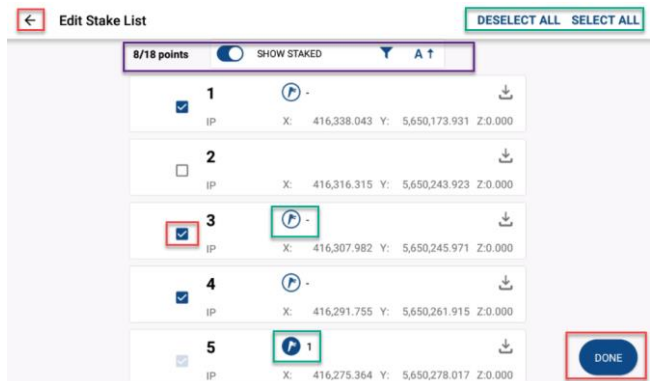
#### Add points to the staking list

1. Select edit from the staking list data panel.
2. On the edit staking list screen add point to the staking list.
3. Select done.



#### Select next point to be staked

4. Select the Point on the staking list or tap the point on the Map Screen.  
*Note the point needs to be on the staking list to be selected on the map screen.*
5. Use the measure toolbar to select previous, next or closes point to be staked.



#### Stake Point when ready

6. Select the Point on the staking list or tap the point on the Map Screen.
7. Navigate to the stake point.
8. The staking vamp view provides a number of different map views and tools to assist you in locating the stake point:
  - a. Map view with rubber band line between current location and stake point.

- b. Observation toolbar with cartesian or direction navigation distances.
  - c. Navigation panel with cartesian and directional distances
  - d. Full screen view of cartesian and directional distances.
9. When at the stake point tap the Measure Button starts a measurement.

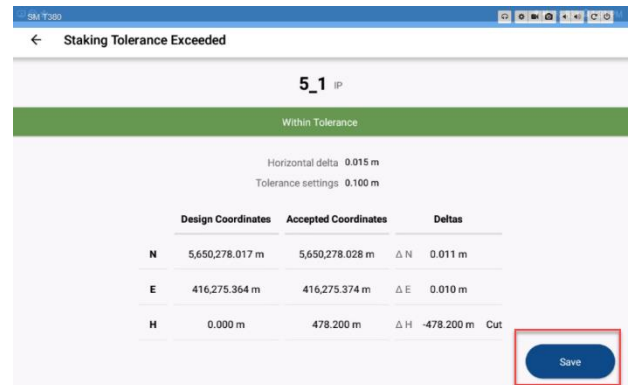


Store staked point

- 10. Review the staked point information
- 11. Select save to add the point to the points database
- 12. Select the back arrow to return to the previous page without saving the point.

*Note: To stake a point more than once (e.g. pt 5) turn on show staked points toggle on the staking data panel, tap staked point and then take measurement the new staked point will be 5-2.*

*Note: you can open the stake list full page view from the staking data panel to review a staked point details at any time during staking.*



## Appendix

Additional Resources for FieldGenius.

### Online Manual

A version of the complete FieldGenius manual is available online at:

[Online Help Manual](#)

### Movies

A selection of instructional videos for FieldGenius are available online at:

[FieldGenius for Android How to Videos](#)

### Helpdesk

Contact MicroSurvey Support through the MicroSurvey Helpdesk at:

[http://helpdesk.microsurvey.com/ UPDATE](http://helpdesk.microsurvey.com/)

### Geoid Models

MicroSurvey provides a collection of geoid models for FieldGenius, files and instructions are available at:

<http://helpdesk.microsurvey.com/index.php?/Knowledgebase/Article/View/479>

### Grid Shift Files

MicroSurvey provides a collection of grid shift files for FieldGenius, files and instructions are available at:

<http://helpdesk.microsurvey.com/index.php?/Knowledgebase/Article/View/499>