

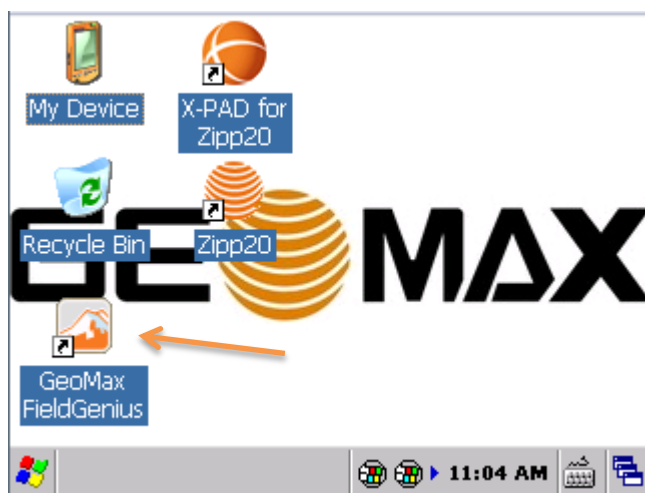
## GeoMax FieldGenius for Zipp20 Quick guide

This document describes the basic functions of **GeoMax FieldGenius** software for **Zipp20 total station**.

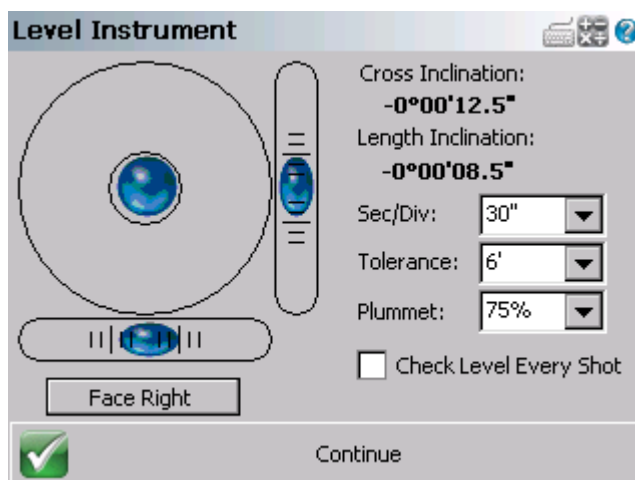
For GeoMax FieldGenius installation please check the dedicated guide.

### New job creation

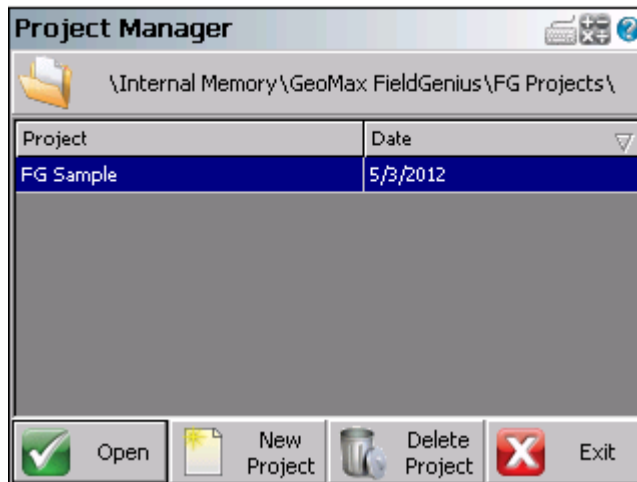
Start GeoMax FG from Zipp20 desktop double clicking on GeoMax FieldGenius icon.



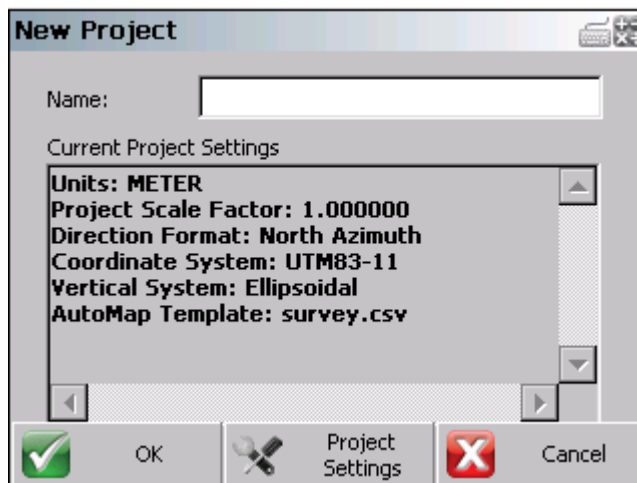
After you start GeoMax FG you are asked to **level the instrument**. In this screen you can define the level tolerance: during the operations if you exceed this value you will receive a warning message.



After the instrument is levelled click *Continue* to enter in the **Project Manager** page. In this page you can open an existing job or create a new job. To create a new job click *New Project* button and enter the job name.



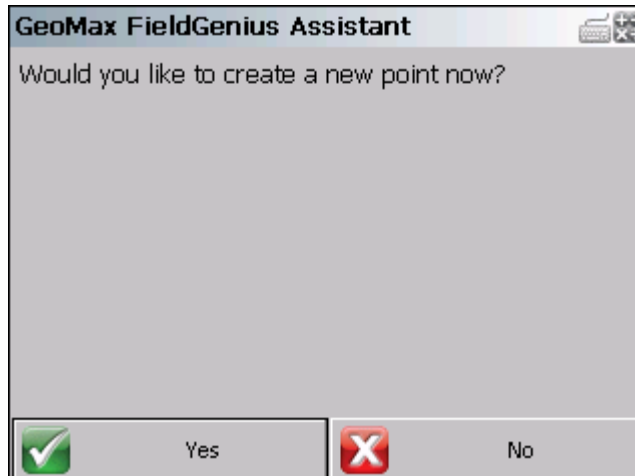
Clicking on *Project Settings* you can change some settings like the units used and the codelist. Some of these settings can be saved as default when a new project is created.



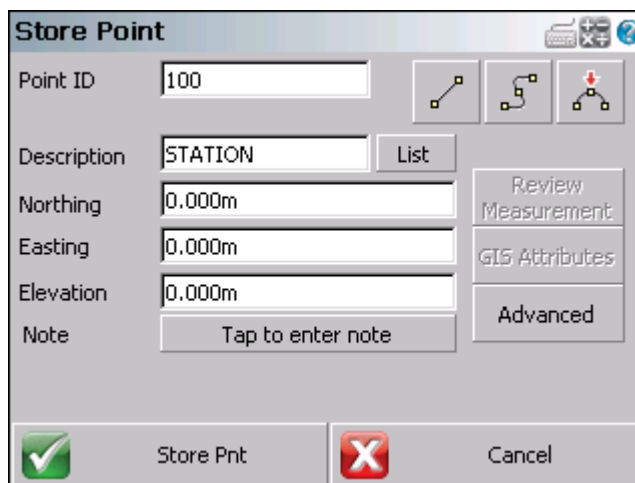
Click *OK* to save the job.

## Station setup

After you have created the job you are asked to create a new point. This procedure is done to guide you during the station orientation. You can decide to follow the station setup step-by-step or skip it clicking on *No* and make the orientation manually from *MapView* screen.



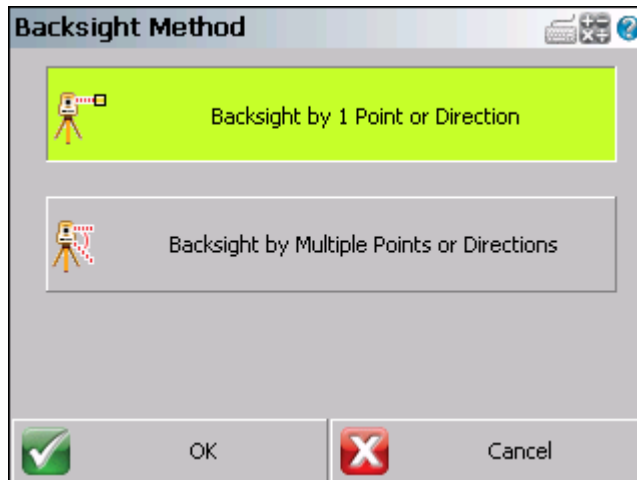
If you want to setup the station on a new point enter the *Point ID* and the station coordinates, then click *Store Pnt* to save the station point in the point database.



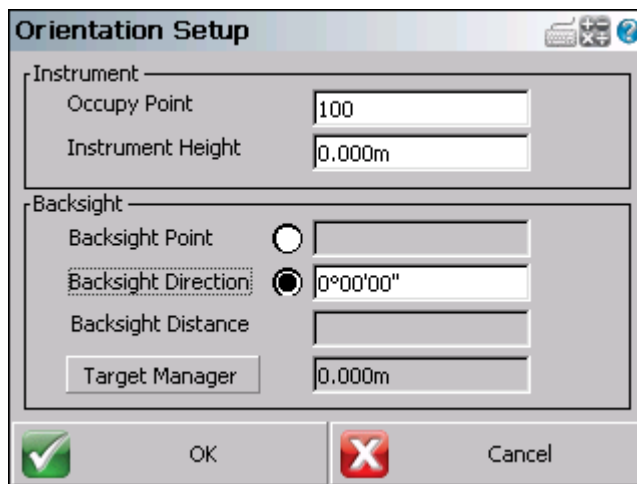
In the next step you are asked if you want to setup the instrument at the point you have created, click *Yes* to proceed. This means that the point you have created is the station position.

Now you must choose the **backsight method**: you can select if perform an orientation with *backsight to 1 point or direction* or to *multiple points or directions*.

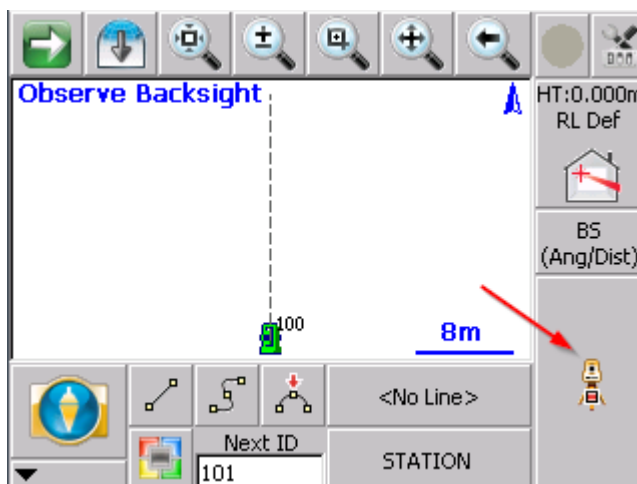
- Backsight by 1 point or direction: allows you to use 1 point or direction to set up the total station.
- Backsight by multiple points or difections: allows you to use multiple points or directions to calculate a more accurate backsight orientation.



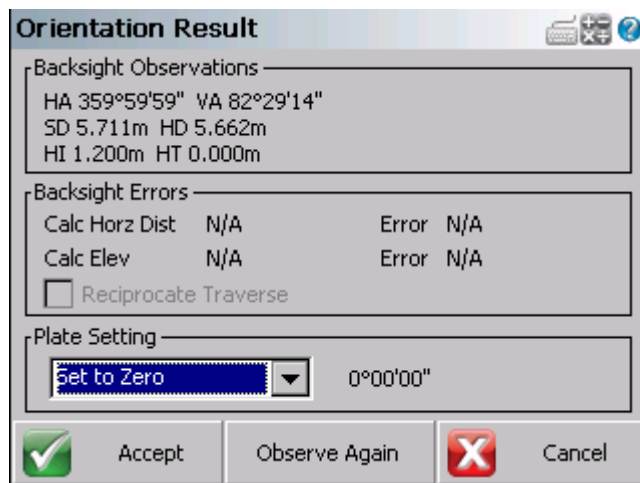
After you have selected the backsight method you can specify to setup the point with a **backsight direction** or with a **backsight point**. In case of direction you can enter the angle; in case of point you can create the backsight point, choose the point from the point database or from the map.



After you have selected the backsight, click on *OK*. You are redirected to the *Map View* page to proceed with the measure.



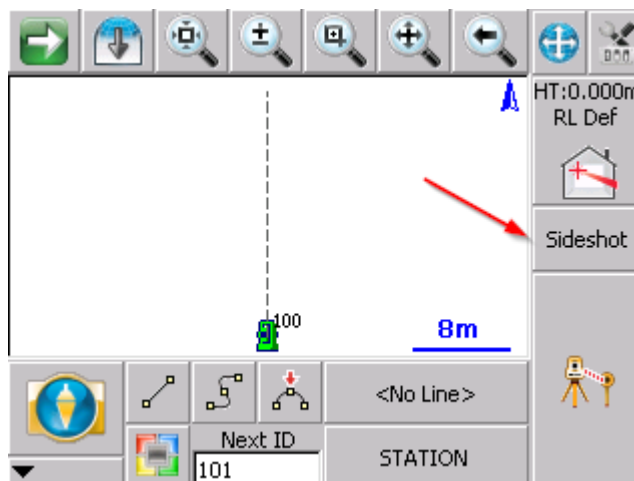
Aim to the backsight point or the backsight direction (to change the prism type refer to the next paragraph in this manual) and press the measure button as in the picture.



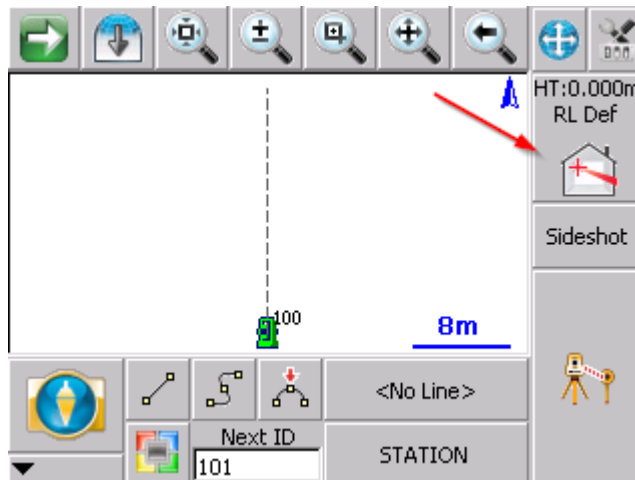
You can review the orientation data and accept the orientation if you are satisfied. After the station orientation is accepted, the measure mode is automatically switched to *Sideshot*, which is the default measure mode for surveying points.

### Survey Points

The measuring mode to survey points is called *Sideshot*. You can change to this mode clicking on *Measure Mode* button on the right toolbar and select *Sideshot* as measure mode in the next screen.



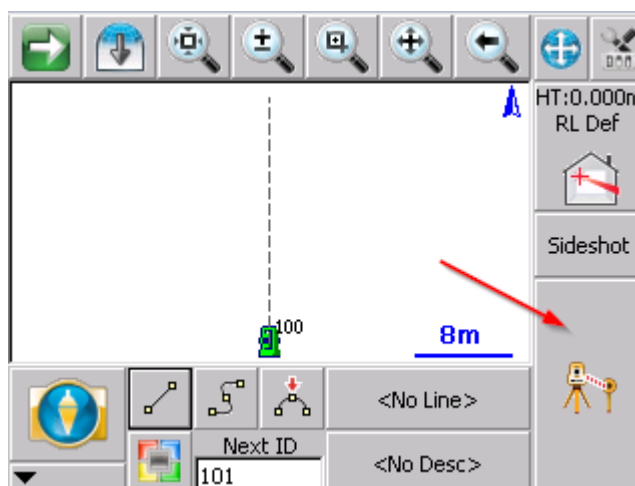
To change the prism type you must click on prism mode icon on the right menu panel.



In this page you can select the prism to use and the target elevation



To survey a point, from map menu, just click on Measure button in the bottom right of the screen.



After you measure the point, you can edit and review the data: you can change the point ID, the code and other information. In order to change the point code click on List to select or create the code.

To save the point just click on Store SS.

**Store Point**

Point ID: 101

Description: [ ] List

Northing: 5.264m

Easting: 0.000m

Elevation: 1.500m

Note: Tap to enter note

Prism Hgt: 0.000m

Review Measurement

GIS Attributes

Advanced

Store SS (checked) Store TR (checked) Cancel

To save points without edit the data, you must select Sideshot (Auto) from Measure Mode page.

**Select Measure Mode**

Temporary (No Store) Occupy Point

Sideshot Sideshot (Auto Store)

Multi-Set Resection

Check Point Check Backsight

Horizontal Angle Offset Vertical Angle Offset

Go Back

To use more advance measuring modes, please refer to GeoMax Fieldgenius user manual.

## Point Stakeout

To enter in the point stakeout, exit from Map View page and select Staking.

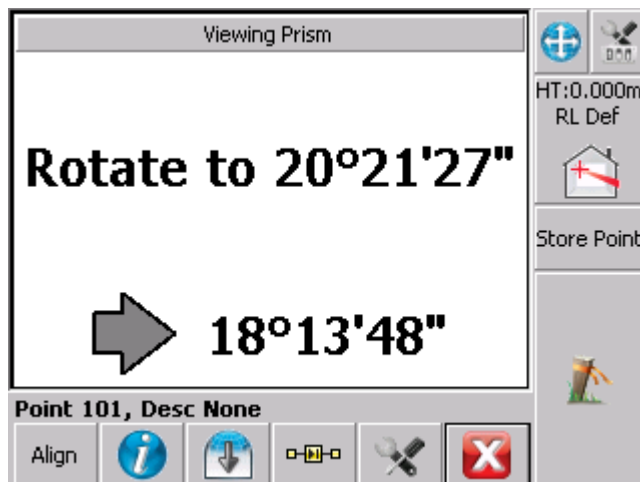


Here you have different staking options. To stake one single point click on Stake Points and select the point you want to stake out. You can also define a list of the points to stakeout.

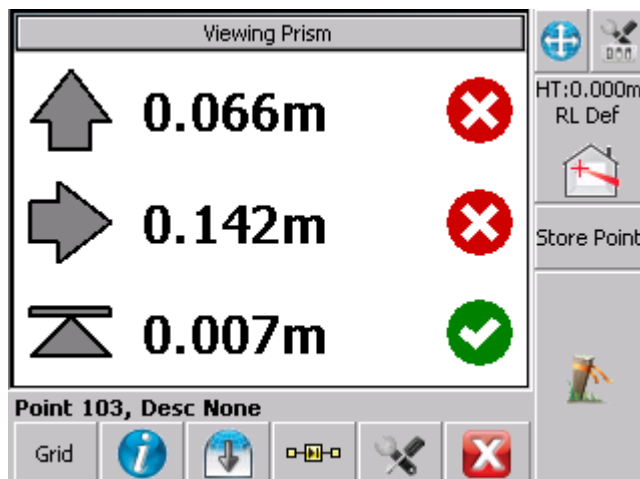


After you click on stake point button, in the next screen you see what angle you need to turn your instrument to stake the point.





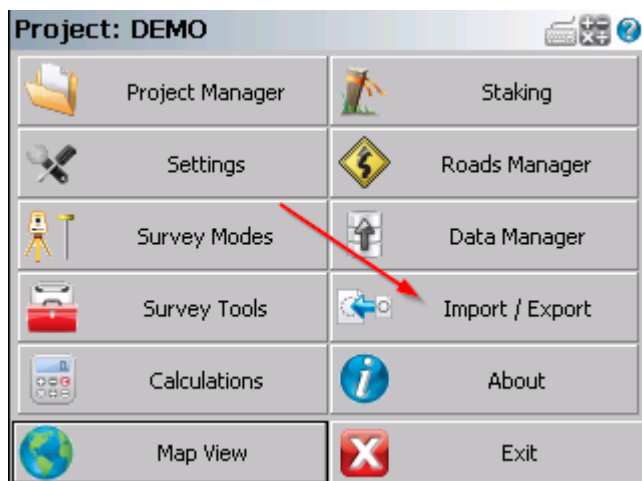
You need to press the measure button on the instrument toolbar before the navigate distances are displayed



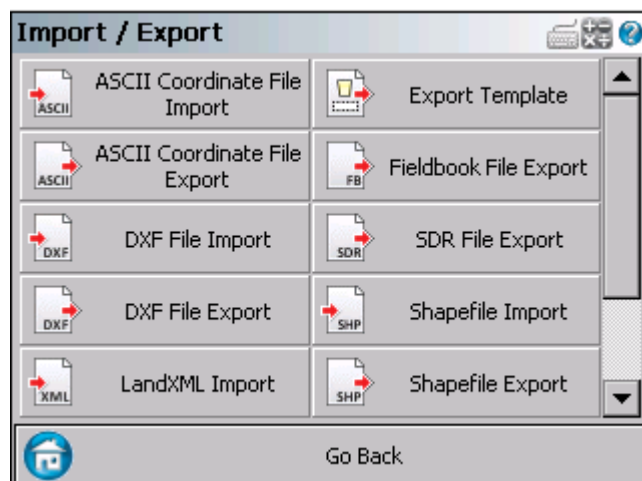
When you are inside the tolerance, click on Store Point to save the measure.

## Data export

You can export the data stored in different formats, like DXF, ASCII, LandXML, etc. To export your job from main menu click on Import/Export



From the *Import/Export* page select the export format



As default the output is saved into the FG folder inside the Zipp20. If you want to save directly on the USB Stick select the Hard Disk folder from the left menu, and click Save File. In this way the output is saved directly on the USB Stick.

