



GEOPRO FIELD

Version 4.1 Release Notes
July 22, 2021

GeoPro Field V 4.1 Release Notes

Please take time to read these Release Notes. They contain information about the following:

- New Features
- Improvements
- Bug Fixes

Note:

It is always recommended before upgrading your field software, users' backup their original job; and following any update to your field software, users should perform in-the-field checks to ensure data integrity.

General Functionality

New Features and Improvements

- **General:**
 - Improved photo resolution support on the FC-5000/FC-6000 to increase the maximum resolution option to 3264 x 2448 pixels.
 - Added support for custom date format (YYYY/MM/DD) to the Global Configuration Settings.
 - Increased the maximum decimal display on height precision to 4 digits.
 - Added support in Field Reports to show dimensions of lines.
 - Improved the calculator to support feet/inches in the edit controls.
 - Improved Edit > Planes to allow users the option to delete multiple planes at once.
 - Updated and extended Context Help.
- **Coordinate Systems/Geoids/Etc**
 - Added Geoid model RAF18b

- **Equipment**

- Added StarPoint and Skybridge support.
 - StarPoint is Topcon's stand-alone PPP subscription from Topnet Live. This service allows the user to survey using the PPP technique anywhere they can receive the corrections. Topcon offers two (2) options for receiving the PPP corrections. L-Band and NTRIP.
 - L-band is a satellite-based correction service. Corrections are transmitted in the L-Band frequency range. This method can be used anywhere in the world that the L-Band Satellites are visible
 - NTRIP is distributed via the internet. This method can be used where access to Topnet Live is available.
 - Skybridge uses PPP to maintain position accuracy when RTK is disconnected. Skybridge augments RTK when corrections to the corrections is lost. Topcon is offering 2 options for receiving the PPP corrections. L-Band and NTRIP
 - L-Band - A satellite-based correction service. Corrections are transmitted in the L-Band frequency range. This method can be used anywhere in the world that the L-Band Satellites are visible
 - NTRIP - A internet distributed correction service. This method can be used where access to Topnet Live is available
 - The Sokkia GNSS receivers that support the new services are:
 - GRX3
 - GNR5
 - Contact your local Sokkia reseller for additional details.
- In RTK settings, updated the default GNSS correction output period to 2s to handle more satellites.
- Added support for the HydroLite DFX Echo Sounder.
- Improved Correct Base to use point naming from Localization.
- Optical
 - Improved Resection to display the resection residuals as Hz and Vt error and not only as N,E,E.
 - Improved Backsight Adjustment and added 2D Transform mode as an

option.

- **Import/Export**

- Improved support for the 12D format. Linework will now import as lines and not as points.
- Improved the GPX file format (GPS Exchange Format) XML schema to include raw data.
- Added support for the New Zealand survey report. The report format is officially supported by the New Zealand Land Administration department.
- Added support for the *.GVX (GNSS Vector Exchange) file format as an option in the Raw Data export.
- Improved Topcon Custom GNSS format to include the Coordinate System information.
- Added support in the Resection results screen to directly export the Resection Solution Report from the results screen.
- Improved the export of stake reports to PDF by allowing the user to specify the file name for the export file.
- Improved the export of multiple Field Reports to a single PDF by allowing the user to change the order of the reports in the file.
- Improved the import of Inframodel LandXML files to support the import of supported Coordinate Systems.
- Improved the *.fbk export to support multi-point arcs and the Rectangle Control Code.

- **Calculate**

- Improved Calculate > Inverse routine to allow users the option to select a line instead of Start/End Points.
- Added support in the main map for Calculate > Line to Plane Intersection. The option 'Project to Plane' projects a line to intersect the selected plane.
- Added support in the main map for Calculate > Point to Plane.
- Improved Corner Angle Calculation: Distance values for both the horizontal distance and slope distance can now be displayed.
- Improved Enter Plan. When closing a line/figure, the object will now store as an Area.

- Added an option to show stored Calculate results in Edit Field Report.
- Improved the area calculation function for Known Area – Hinge and Line, to support increasing the Total Area.
- Added the option in Planes to create a best-fit plane from multiple points.
- **Map**
 - Added Persistence option for the Toolbar snaps. Users can now use the Persistence setting to keep a selected Toolbar snap active.
 - Updated WMTS and TMS map services support to include additional map services.
 - Added a setting to hide design points on the Map after they are staked. This setting will help users identify design points still to be staked.
 - Added display of angles dimensions for selected linework. The previous version only showed length.
 - Added the display of curve dimensions (Arc Length, Delta, Radius) for selected curves.
- **Stakeout**
 - Added High Precision Navigation mode to the Stake Map. High Precision mode zooms into the point when the user navigates close to the point being staked; and then switches the navigation compass to a precise mode to assist the user when staking points. The High Precision setting is optional and enabled in the Map Properties menu.
 - Added Tilt as an option to Stake Reports. If a point was staked with the pole tilted, the tilt value is recorded and shown on the stake report.
 - Improved Drape Mode to add a button to recheck the surface.
 - Improved Stake Curve and Stake Curve> Offsets. There is now an option to define the curve by 3 points.
 - Improved 3D Model stakeout to add an option via the right click menu to hide model elements. This option improves visibility of objects being staked.
 - Improved 3D Model stakeout with automatic element selection.

Resolved Issues

The following issues have been addressed in GeoPro Field V4.1

- Addressed an issue with the camera on the SCH6000 Field Controller. By default, the front facing camera was on, and could not be switched to the rear facing camera.
- Addressed an issue when exporting AutoCAD DXF files from V4. The point numbers in the exported file were not consistent with the point numbers in the original job file.
- Addressed an issue when importing points from a text (*.txt) file. If the imported text file had points with the same point number as points in the Job, the codes associated with the points in the text file were not imported.
- Addressed an issue when exporting a Job to a *.dwg. if the user did not check 'Use 3D coordinates' option, lines in the job were not written to the file.
- Addressed an issue when importing a Custom Code Library. When a Custom Code Library was importing in *.mxi format, GeoPro Field would crash.
- Addressed an issue with exported photos. When importing the photos into some 3rd party applications, it was not possible to geo-reference the photos
- Addressed an issue with the Sokkia iX Robotic Total Station. When setting the maximum turning speed of 128 Degrees, GeoPro Field would display 'Instrument Not Responding' error message.