


FieldGenius 2008 – 4.1.0 Release Notes

Released on: June 16, 2009

FieldGenius 2008 4.1.0 is a free update for existing FieldGenius 2007 and FieldGenius 2008 users.

Licensing Changes

This release has had one big change and that is a new licensing system that gives us more flexibility to add different (future) modules, plus address a few problems related to generating machine ids on certain hardware platforms. As soon as you run the new version you will see the licensing screen which is where you will find your device id.



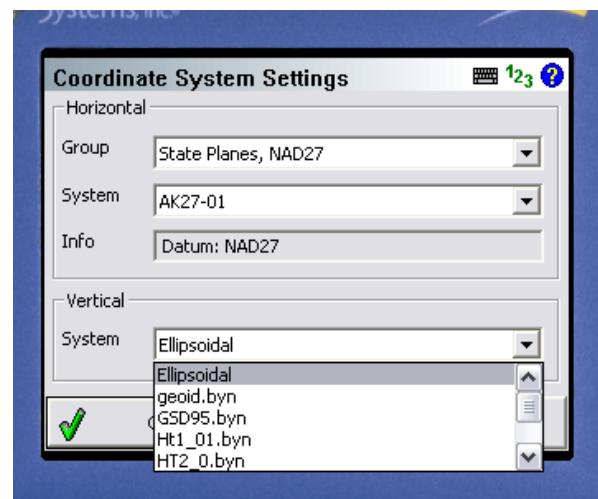
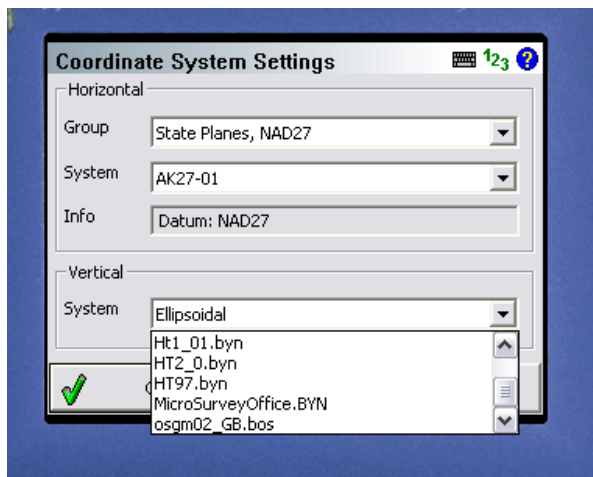
A New Key (Activation) is Required to run this version.

Call MicroSurvey with your device id and we will issue you a new key for your data collector.

Coordinate Systems (Geoid) Changes

Another important change is related to geoid support for GPS. In this version of FieldGenius we've made some changes to the coordinate system vertical configuration. Attached are two screen shot that show the new functionality. You will now see that when you open the Vertical Systems section, you now see a list of all geoid files loaded into the FieldGenius mapping directory.

We now have support for all geoid models available through Natural Resources Canada including HT2.0, HT1.01, HT97, and GSD95.



- Your current extracted geoid files are still functional with this version.
- **United States Users:** the name of the geoid file extracted in the United States with the Datum Grid Editor is **GEOIDa.bin**. In previous versions this was displayed as **NAVD88**.
- **Canadian Users:** the name of the geoid file extracted in Canada with the Datum Grid Editor is called **geoid.byn**. In previous versions this file was displayed **CGVD28**.
- **UK Users:** The geoid file for the UK will show up as **osgm02_GB.bos**.
- The name of the geoid file doesn't matter so you can name the geoid files using "friendly names". You just need to make sure that the extension is valid. For example we named the geoid file we use here at our office as "MicroSurveyOffice.BYN".

Equipment and General Comments

Topcon GR3 – Topcon users using the Topcon GR3 will want to wait for the next release of FieldGenius. Some of the changes in this release have caused issues with the radios used in the Topcon GR3. We are arranging to get equipment sent to us so we can address these issues.

GPS Workflow – The workflow for GPS connections has changed. You can no longer get to the radio settings from the GPS Profile screen. You first have to connect to the receiver and immediately upon connecting, you will see the Link Configuration screen. From here you can choose your connection method and radio/modem settings. The settings you define are still saved in your GPS profile so the next time you connect you won't need to re-enter them.

New

Glonass Control – You can now enable or disable Glonass satellite tracking from FieldGenius. You can access this from the Satellite Plot screen. This functionality is available for Leica, Sokkia, Javad Triumph, PM500, and Altus.

Altus APS-3 – The Altus APS-3 receiver is now supported.

Javad Triumph – The Javad Triumph receiver is now supported.

Magellan PM500 - The Magellan PM500 receiver is now supported.

Leica GPS900 – Support for the Leica GPS900 is now available.

HT1_01 & GSD95 Geoids – The HT1_01 and GSD95 Canadian geoids can now be used with FieldGenius.

Flexline – A new driver is available for the new Leica Flexline Total Station

Projections – Changes were made so that custom projections created with MicroSurvey CAD can now be used in FieldGenius.

Improved/Updated Features

RX1250 Monochrome – Updates have been made to FieldGenius so that it is usable with non color RX1250 devices. The user needs to turn on the "Monochrome Optimized" setting in the Options Menu.

GPS Toolbar – Bolded some of the text displayed on the toolbar so it is more visible outside.

GPS Control Menu – Organized the menu to be more intuitive.

NTRIP Mount Point Recall – FieldGenius will now save the last selected mount point in the GPS profile. This allows the user to reconnect quicker the next time through.

Progress / Wait Dialogs – New status dialogs that help indicate to the user what state the Receiver is in while FieldGenius is trying to retrieve or send settings to the receiver.

GPS Reference Messages – Simplified and generalized the message types available for selection when setting up the reference.

Import DXF, LandXML and Images – Import commands for these file types were added to the Import / Export menu.

Sokkia SRX – Added a warning message that will appear when the user is in reflectorless mode and tries to search for a prism.

Sokkia SRX – When locked on a prism, if the user selected reflectorless mode the lock was turned off, but reflectorless mode wasn't enabled on the instrument.

LandXML – LandXML files from GeoPak would not always import correctly.

Licensing – Licensing system updates to eliminate situations where duplicate machine ids could be generated from devices.

Fixed

RX1250 GPRS – Fixed some issues that would prevent the receiver from fixing to a RTK Fixed position if a GPRS connection was established using the "Nearest" option.

Bluetooth – Fixed an issue that could cause issues with Bluetooth connections to total stations and GNSS receivers. Common symptoms were inconsistent connections, or "Could not communicate with instrument" errors during connection.

Help Links – Some of the new screen added over the last year didn't have help topics linked to them, this is now fixed.

Staking Undefined Elevation – Points stored manually in FieldGenius with no elevation are stored in the point database with an elevation of -99999999.0000 to define the elevation as "undefined". Staking points with undefined elevations would cause the staking VA and SD to be computed to the undefined elevation. An elevation of zero is now used instead when a point has an undefined elevation.

RTS Negative Angles – The Rotate/Translate/Scale routine could not rotate a set of points by a negative angle of less than 1 degree.

Opening FieldGenius Projects – Built some functionality that allows projects that have corrupt figures names, or line data to be ignored upon opening so that the project can be opened anyways.

Coordinate Calculator – Projects in feet would cause the coordinate calculator to convert to meters upon entry.

GPS Staking – Negative coordinates would cause the staking offsets to display reversed making it difficult to stake the point.

Line and Arc Staking – Orientation set to "line" would not display the staking offsets correctly.