# FieldGenius 2008 – 3.2.0 Release Notes

Released on: January 3, 2008

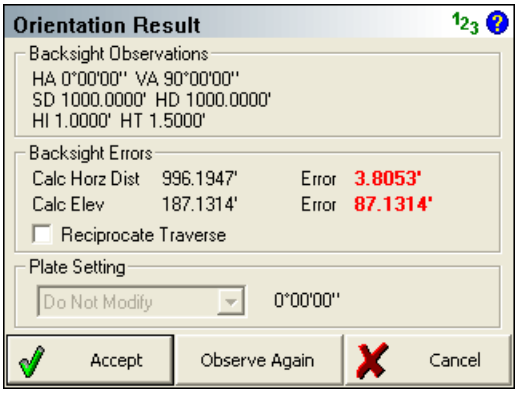
## *New Features*

**Sokkia GSR2700 ISX** – Added support for the Novatel OEM V board, and a new driver is available for the newer Sokkia GPS receivers.

**Reciprocal Traversing** – Added support for reciprocal traversing. This will now allow you to average the elevation of your setup based on the foresight and backsight observations to the point you're currently setup on. Only traverse stations (TR Shots) can be used for reciprocal calculations.

On the Orientation Results screen, there is a new check box that can be turned on to average the elevation of your current setup.

Note: By default this feature is not enabled. You must enable it in the Program Settings screen.




**GPS Tolerance** – When tolerances are changed by the user, a record will be saved to the raw file indicating the new tolerance settings when a point is saved. Example, in the raw file you will see a note similar to the following:

--GPS Tolerance: Sol=2,Elev=10,PDOP=4,SVs=6,RefID=0,HRMS=0.030,VRMS=0.050,Obs=3,Time=3

**New Keypad** – All versions of FieldGenius now have a new Key Pad. The new keypad has larger keys for easier data entry.

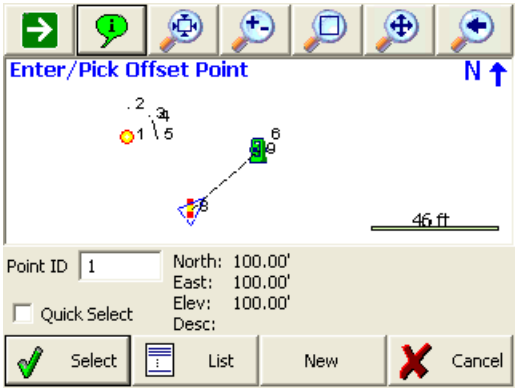

New options are available in the Program settings that allow you to:

1) You can define what event triggers the key pad. Settings can be either None, Single Click or Double Click.
2) You can also define the key pad that FieldGenius uses, such as the default Windows key pad, or the new MicroSurvey version.
3) The key pad will be used primarily with non keyboard devices. However, if you want to, the new key pad can be used on devices with a keyboard such as the Tracker or Allegro.

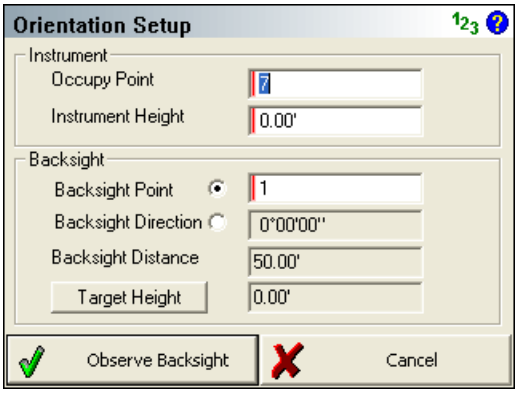
## *Improved / Updated Features*

**Inverse** – Small improvements to the inverse toolbar interface.

**Point Chooser** – Improved the point chooser toolbar so it now displays the coordinates of the point you selected on screen. You can also now control the behavior of the toolbar and set it to automatically close or stay open after a point is selected.



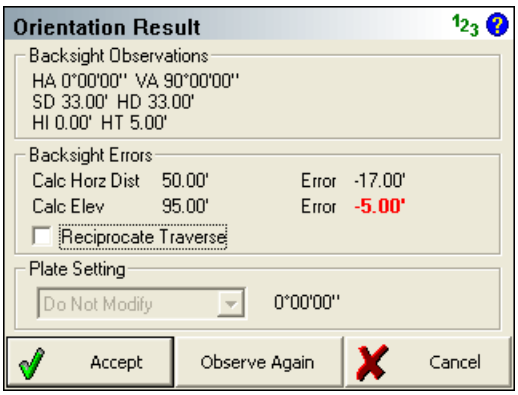

**Occupy Point** – Improved the interface on the Orientation Setup screen.




**Occupy Point** – Added target height field to the Orientation Setup screen.

**Occupy Point** – Removed extra screen between accepting setup information and map screen.

**Occupy Point** – Improved the interface on the Orientation Results screen.



**Occupy Point** – Removed the check box for “Store Backsight” point. Instead, when you decide to Accept the orientation, and if no backsight point was defined, you will be asked if you want to store a new point for the backsight.

**Multi-Set** – Made improvements to the startup. If an existing setup is found, you will be asked to “Apply the current orientation observation to the Multi-Set data set?”.

**Multi-Set** – Made improvements to the interface. Added an **ADD** button which will allow you to add points to the list, plus added a **Next** button that will help you find the next available point.

**Multi-Set** – Added the ability to reciprocate the backsight observations if the point you are currently setup on is a traverse station (TR shot).

**Multi-Sets** – You will now see the standard deviations written to the MultiSet header note.

```
--MultiSet (StdDev HA:0°00'00" VA:0°00'00" SD:0.000m)
OC,OP1,N -0.3403,E -0.1262,EL0.0000,--
BK,OP1,BP2,BS0.00000,BC0.00000
BR,OP1,BP2,AR0.00000,ZE90.00000,SD100.0000
RB,OP1,BP2,AR0.00000,ZE90.00000,SD100.0000,HR1.685,--
RF,OP1,FP3,AR45.00000,ZE90.00000,SD100.0000,HR1.685,--
SS,OP1,FP3,AR45.00000,ZE90.00000,SD100.0000,--
```

**Multi-Sets** – If the tolerance is exceeded, we will now write this to the raw file. You will now see the standard deviations, plus a “Tolerance Exceeded” note.

```
--MultiSet (StdDev HA:0°00'28" VA:0°00'00" SD:0.110m Tolerance Exceeded)
OC,OP1,N -0.3403,E -0.1262,EL0.0000,--
BK,OP1,BP2,BS0.00000,BC0.00000
BR,OP1,BP2,AR0.00000,ZE90.00000,SD100.0000
RB,OP1,BP2,AR0.00000,ZE90.00000,SD100.0000,HR1.685,--
RF,OP1,FP4,AR90.00000,ZE90.00000,SD100.0000,HR1.685,--
RF,OP1,FP4,AR270.00550,ZE270.00000,SD100.2200,HR1.685,--
SS,OP1,FP4,AR90.00275,ZE90.00000,SD100.1100,--
```

**Backsight Reference** - Improved backsight reference line in map view. If you establish an angles only backsight shot, the reference line will now appear.

**Scale Bar and North Arrow** – Improved these so they are more consistent and refresh correctly.

**Trimble Antennas** – Micro-Centered and Compact antennas added.

**GPS AH Raw Record** – This has been updated to the MA (Measured Height) is recorded as well as the RA (Reduced Height) record.

**SRX Robot** – Driver updated so the search is started faster and is more responsive.

**SRX Robot** – Driver updated so the IR Measurements are now much faster and responsive. Note that if you have cursor tracking on, and the EDM mode set to a IR Fine, it will be slower compared to having the cursor tracking off.

**Leica 1200** – Driver updated so the search is started faster and is more responsive.

**Leica 700** – Added support for the newer “Power” models in the Leica 700 series.

**Measurement Errors** – This has been updated so that when a measurement error is triggered we display a dialog message. Previous version turned the Information button red and displayed the error in the Information toolbar.

**Tool Tips** – These are now disabled when the "Enable Tip of the Day" is turned off.

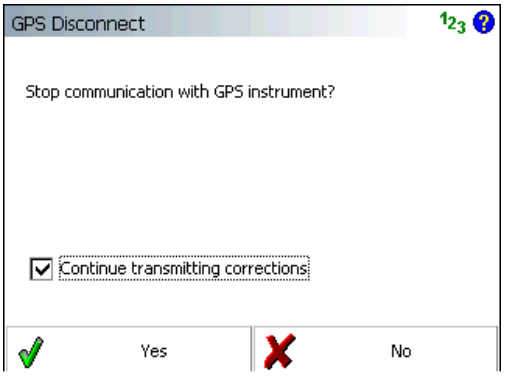
**Calculator** – Improved the load time of the calculator.

**Edit Fields** – All edit fields in FieldGenius are now key pad ready meaning that you can define in the program settings what should happen when you click an edit field. By default all edit fields will open the new key pad, and if you want to access the calculator you simply press the new calculator button on the key pad screen.

## *Fixed*

**GPS Bluetooth Connection (BASE)** – When a user connected to a base using the Bluetooth connection on a Tracker, upon disconnection the base would stop transmitting corrections.

With the latest version, after programming the base, when you use the Disconnect command from the GPS Task menu, a new option is available on the disconnect screen:




The default is "Continue transmitting corrections". Press Yes to disconnect from the base.

**Add DXF File (Pocket PC build)** - With "Enable Full Screen" turned on, after you Add a DXF file through the map data layers screen, you would get stuck in the Layer Manager screen with no buttons to get out of it.

**LandXML Surfaces** – Some names such as "Rev.PondB-C Area Propd JC ctrs7-18-07" would cause FieldGenius to crash when the surface was displayed.

**EDM Modes** – When connecting from the "Model and Communication" screen, not all EDM modes would show up for the current instrument connected to FieldGenius.

**Pocket PC Build** – Fixed a problem that would occur on certain hardware platforms running the PPC version of FieldGenius, where the following error would occur, "Unable to create project directory".

**Max EDM Distance** – In some situations this would change to 1312' and we added a fix in the 3.1.2 build. However, we found another way that this could get reset to 1312' and we've included another fix in this release.

**Stake Settings** – The stake settings were not being saved to the msurvey.ini file.

**EDM Modes** – Switching the EDM mode would turn off the “auto-center” feature.

**Auto Center** – The stakeout routine will now use this feature if it is enabled.

**Zoom Extents** – The zoom extents will now get re-calculated when you unload a DXF file.

**Scale Bar** – The scale bar would not always get refreshed correctly after a zoom extents.

**RTS** – When using this command the linework wasn’t always re-drawn requiring the user to exit the project and open it again to see the refreshed linework.

**Import Raw** – When creating a new project from an existing TDS RW5 file, FieldGenius would crash when processing GPS records.

**Pocket PC** – Fixed the SIP problem when entering a description via the AutoMap screen. The SIP will now appear when the field has focus.

**Point ID** – When changing the next point id on the main interface, if you press enter it will no longer trigger a shot.

**Robot TRK** – Fixed the problem that would cause the “Auto Search For Prism” to stop working if the instrument was in a TRK EDM mode.

**Robot Shoot Backsight** – Fixed a issue when setting the backsight plate reading if the “Auto Search for Prism” was enabled.

**Distance Recall** – If a scale is specified in the units screen, recalled distances will be scaled by the inverse of the scale factor defined.