

## NEW FEATURES

**Alphanumeric Point IDs** – Improvements made to how alphanumeric Point IDs are handled [F3038, F3080].

Includes:

- Sorting points within lists and tables by Point ID now makes use of a natural order sort.
- Specifying an alphanumeric Point ID range now produces a more predictable and reliable result.
- Point ID Range Minimum and Maximum values can now use alphanumeric Point IDs.

**Point Averaging Report** – Export a report of all your averaged points in a project. Includes averaged coordinates and standard deviations, as well as individual observations and their residuals from the averaged position. *Import / Export – Points / Observations - Point Averaging Report.* [F3124]

**Disto specific workflows** – A new Disto/Laser instrument type has been created with customized instrument toolbar and Measure Modes menu. Designed for Leica Disto S910 and 3D Disto. [F3041, F3159, F3160]

**RAW file notes** – When entering a text note for a point record, the note can now be inserted into the raw file as a comment. A new setting controls this behaviour from *Settings – Options – Point Attributes – Write Notes to Raw File.* [F3112]

## NEW AND UPDATED INSTRUMENT DRIVERS

Various instrument drivers have been added and improved.

### GNSS

- **Champion Pro** – Added support for Champion Pro receivers [F3025]
- **Champion TK0** – Fixed issue with UHF radio communication [D8300]
- **DT Research DT391GS** – Fixed delay issue with devices using Trimble GNSS module [D8262]
- **FOIF A30 Pro** – New Driver [F3155]
- **GeoMax Zenith 10/20** – Fixed issue with incorrect sign of BL records in raw file [D8215]
- **Hi-Target V100** – New Driver [F3189]
- **Kolida K5 PLUS+** – New Driver [F3184]
- **Kolida K9 Mini** – New Driver [F3192]
- **Kolida S680/S680P** – New Drivers [F3179]
- **Pentax G5** – New Driver [F3113]
- **Pentax G6** – New Driver [F3137]
- **Pentax G2100** – Added support for Pentax G2100N and G2100T receivers [F3023, D8221]
- **Ruide S680/S680P** – New Drivers [F3179]
- **Sanding S680/S680P** – New Drivers [F3179]
- **SatLab SL600** – Improved Satlab SL600 driver [F3043]
- **SatLab SLC** – New Driver [F3132]
- **SLAGEN R9s** – New Driver [F3242]
- **South Galaxy G1/G1 Plus** – Added support for raw data logging [F3095]

NOTE: All previously supported Trimble GNSS drivers have been retired in this version.

### Total Station

- **FOIF RTS Onboard** – Improved FOIF RTS Onboard Total Station driver [D7985]
- **Pentax** – Fixed error with reading Angles formatted as Gons with Basic driver [D8355]
- **Sanding STS** – New Driver [F3044]
- **South NTS-370R10** – Improved South NTS-370R10 Onboard Total Station driver.
- **Stonex R2W+ Onboard** – Added support for Windows EC 7 OS [F3114]

NOTE: All previously supported Geodimeter and Trimble Total Station drivers have been retired in this version.

### Disto/Laser

- **Leica Disto S910** – New Driver with WiFi connectivity to Windows Tablet/PC [F3041]
- **Leica 3D Disto** – Updated driver to use new SDK for WiFi/USB connectivity to Windows Tablet/PC without requirement for Leica DISTO software [F3041]

## COORDINATE SYSTEMS

NOTE: Installer Packages no longer include all regional transformation files for coordinate systems. Separate downloads can be obtained through the [Grid Shift Files](#) download page. The MRT transformation files are still included, however GDC and GSB files must be downloaded separately.

NOTE: New geoid models are posted on the [Geoid Models](#) download page when available. If you require a geoid model not currently available, please contact MicroSurvey.

## LANGUAGES

The following program interface language translations have been updated:

- French
- German
- Spanish

## DEFECTS FIXED

**GNSS Local Transformation** – Fixed crash that could occur under rare circumstances during an *Adjust Points* procedure. [D8469]

**Nautiz X8** – Improved performance on Handheld Nautiz X8. [D8417]

**Target Manager** – Shortcut keys to change targets could cause an error with some Total Stations. [D8389]

**EDM Mode & Target Height** – For some Total Station instruments, these settings were not read after exiting and re-opening the program. [D8417]

**DXF/DWG/DGN Import** – Now copies imported files to project folder, previously the files would not be copied and only the path would be stored in the project files, which could create problems when importing from external storage devices. [D8275, D8255]

**SDR Export** – SDR Export did not export Gons angle units correctly. [D7254]

## KNOWN ISSUES

**Shapefile Export** – FieldGenius DBF files are not supported by ESRI products. A workaround is available until this issue is resolved, please contact MicroSurvey Support for more information.

**Photo Notes** – Camera rotation is not supported.

**LandXML** – LandXML alignments containing a sequence of Spiral-Curve-Spiral-Curve-Spiral are not properly displayed.

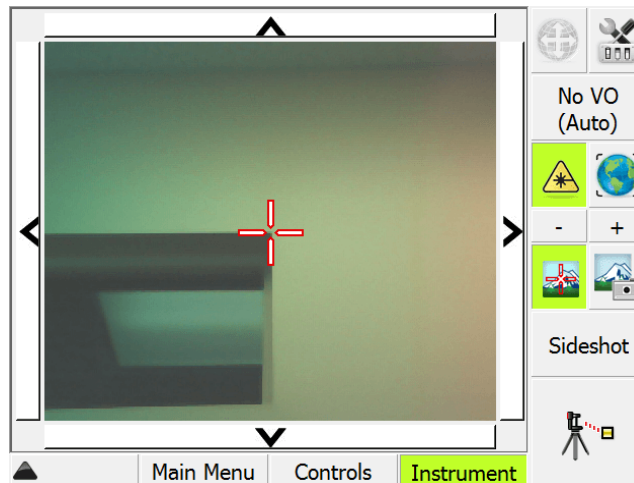
## DISTO/LASER REFERENCE

### 3D Disto

To use a 3D Disto:

- Having a serial number starting with **175** or **177** requires the 3D Disto Software for Windows installed on your computer to make the initial USB or WiFi connection. These devices also are recommended to be used with a USB WiFi stick for WiFi connectivity.
- Having a serial number starting with **176** will connect automatically without the 3D Disto Software for Windows, and does not require a USB WiFi stick.

FieldGenius supports live video streaming from the 3D Disto camera into the MapView area. Use the controls at the edges of the video image to turn the 3D Disto, or tap on the image to turn to the point.



### Measuring

To measure a location simply press the measure button in FieldGenius.

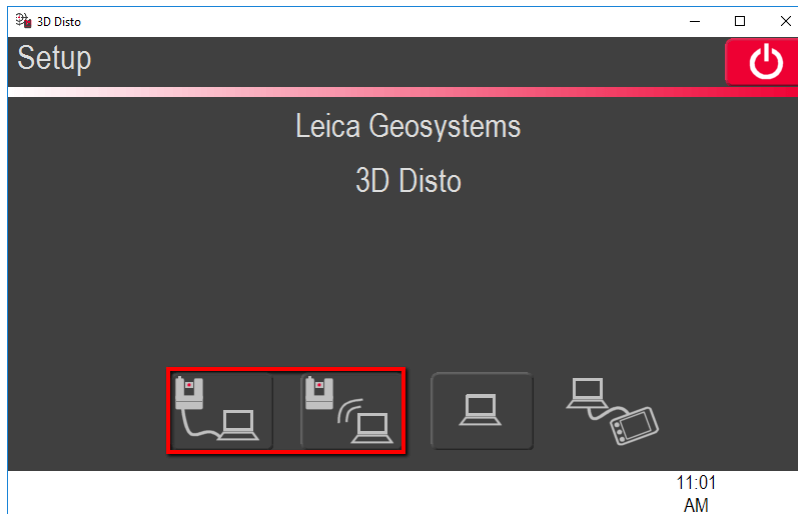
### Staking

To stakeout a location simply start any of the Staking routines. The 3D Disto will automatically turn to the point you are trying to locate. Press the measure button to calculate a position.

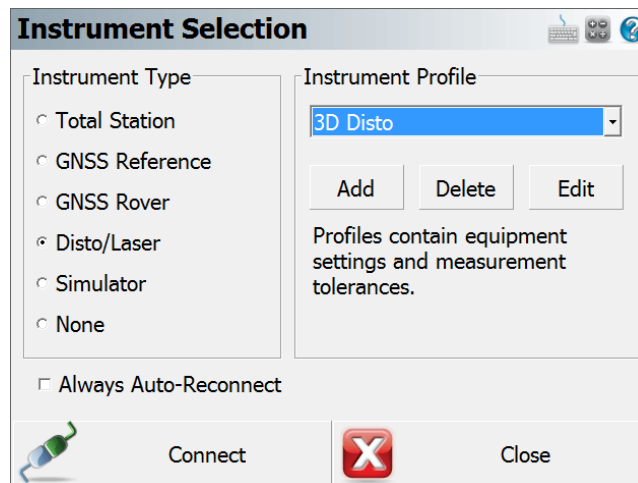
### 3D Disto Connection Guide

The general connection procedure for Leica 3D Disto:

1. Only required for devices having serial numbers starting with **175** or **177**:
  - Download the latest 3D Disto software for Windows from [Leica myWorld](http://Leica.myWorld).
  - Install the 3D Disto software and run it.
  - In the 3D Disto software, select the **Connect USB** or **Connect WiFi** button to connect



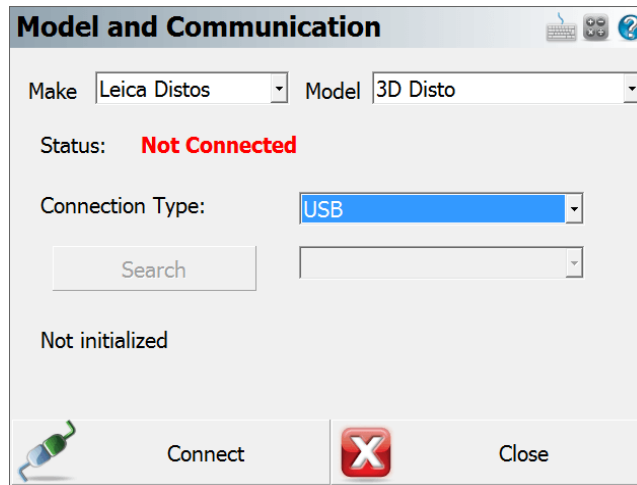
- Once connected, the main screen of the 3D Disto software will be displayed. The communication ports are now configured on the PC/Tablet.
  - Close the 3D Disto software.
2. Launch FieldGenius and open a Project.
  3. At the Instrument Selection screen, pick the **Disto/Laser** type and choose the pre-configured **3D Disto** profile, then pick **Edit**:



4. Choose Model and Communication.

5. Pick the Connection Type:

- If choosing **USB** you are ready to Connect, pick **Connect**
- If choosing **WiFi** you will need to perform a WiFi search first, pick **Search** to search for 3D Disto devices. If successfully found, pick **Connect**



**Model and Communication**

Make  Model

Status: **Not Connected**

Connection Type:

Not initialized

6. Complete.

## S910 Disto

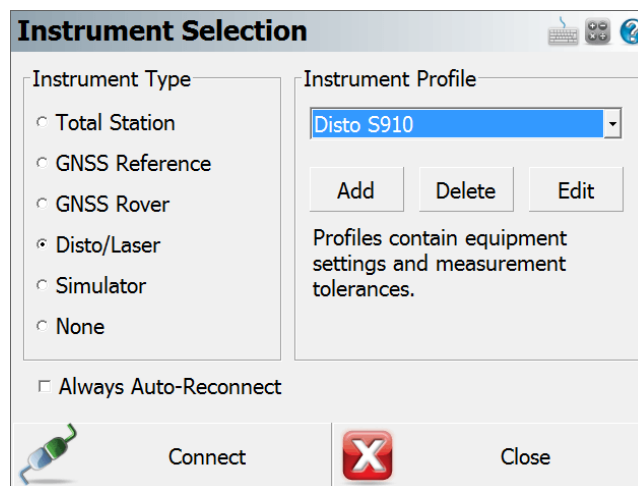
The Leica S910 Disto is fully supported using a WiFi connection. It can be operated using workflows very similar to a Total Station when combined with a tripod or stand. Without a tripod or stand, the S910 can be used to capture distances for various applications, including:

- The Drawing Tool
- Traverse / Intersection calculations
- Trilateration calculations

## Disto S910 Connection Guide

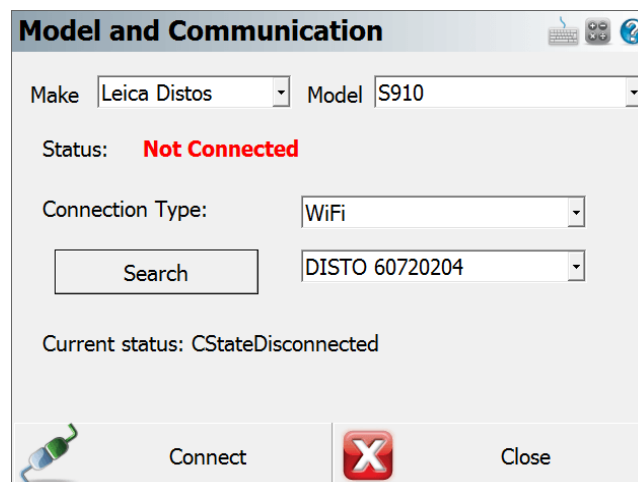
The general connection procedure for Leica Disto S910:

1. Launch FieldGenius and open a Project.
2. At the Instrument Selection screen, pick the **Disto/Laser** type and choose the pre-configured **Disto S910** profile, then pick **Edit**:



The **Instrument Selection** dialog box shows the **Disto/Laser** instrument type selected. The **Instrument Profile** dropdown is set to **Disto S910**. The **Edit** button is highlighted. Below the profile list, there is a checkbox for **Always Auto-Reconnect**. At the bottom, there are **Connect** and **Close** buttons.

3. Choose Model and Communication.
4. **WiFi** is the only supported Connection Type, pick **Search** to search for Disto S910 devices. If successfully found, pick **Connect**.



The **Model and Communication** dialog box shows the **Make** dropdown set to **Leica Distos** and the **Model** dropdown set to **S910**. The **Status** is **Not Connected**. The **Connection Type** dropdown is set to **WiFi**. There is a **Search** button and a dropdown menu showing **DISTO 60720204**. Below, the **Current status** is **CStateDisconnected**. At the bottom, there are **Connect** and **Close** buttons.

5. Complete.



## Bluetooth Disto

FieldGenius supports handheld Leica Distos with Bluetooth connectivity. Supported models include Disto A6 and D330i. Bluetooth LE is not currently supported (E7100i, E7500i, etc.). Supported models are able to capture distances for various applications, including:

- The Drawing Tool
- Traverse / Intersection calculations
- Trilateration calculations