

## NEW FEATURES

**Menu Updates** – The main menus have been revised and updated to provide a more consistent user experience. [F3079, F3085, F3098]

**Project Manager** – The Project Manager was modified to allow quicker loading. [F3077, F3100]

**RAW file encryption** – The encryption setting for the project RAW file is now automatically retained and saved to program defaults when the user toggles the setting. Once encryption is set as an option it will remain on for all subsequent Projects recorded until disabled. [F3094]

**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]

**Disto specific workflows** – A new *Disto/Laser* instrument type has been created with customized instrument toolbar and Mapping Methods menu. Layout supports the Leica Disto S910 and 3D Disto. [F3041, F3159, F3160]

**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.

**Multilingual Support** – Layout now supports various different languages.

## 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]
- **ComNav T300** – Added Point to Point mode, and support for 5Hz update rate [F3048, F3167]
- **DT Research DT391GS** – Fixed delay issue with devices using Trimble GNSS module [D8262]
- **FOIF A30 Pro** – New Driver [F3155]
- **GENEQ SXPro GPS/GNSS and SXPad** – Removed automatic Link Configure [F3058]
- **GeoMax Zenith10** – Fixed issue with Satellite Plot and List display [D8183]
- **GeoMax Zenith 10/20** – Fixed issue with incorrect sign of BL records in raw file [D8215]
- **GeoMax Zenith15** – New Driver [F2977]
- **GeoMax Zenith25** – Added Galileo support [F3166]
- **GeoMax Zenith35** – Full Tilt Support and NTRIP Server Mode [F3012, F3157]
- **GeoMax Zenith35 Pro** – New Driver [F3012, F3115, F3117]
- **GINTEC G10** – Fixed Issue with Data Collector Internet [D8184]
- **Hi-Target V100** – New Driver [F3189]
- **Kolida K5 PLUS+** – New Driver [F3184]
- **Kolida K9 Mini** – New Driver [F3192]
- **Kolida S680/S680P** – New Drivers [F3179]
- **KQ GEO M8** – Added support for new OEM Firmware and fixed issue with time stamp [F3053, D8236]
- **Linertec LGN 100T/100N** – New Drivers [F3047]
- **NavCom SF3040/3050** – Fixed Issue with QuickStart, added support for new firmware [D8083, F3031]
- **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]
- **Septentrio APS3G** – Fixed Issue with GSM PIN Setting [D8147]
- **South Galaxy G1** – Added elevation mask parameter [F3092]
- **South Galaxy G1/G1 Plus** – Added support for raw data logging [F3095]
- **South Galaxy G1 Plus** – New Driver [F3111]
- **South Galaxy G6** – Fixed Firmware Issues [D7977]
- **South S660P** – New Driver [F3034]
- **South S82-2013** – Fixed issue with setting raw data logging rate [D8111]
- **Stonex S8 Plus** – Fixed issue with Satellite Plot and List display [D8088]
- **Stonex S8 Plus / S9III / S10** – Added support for TRM100 radios and NMEA 4.1 [F3057, F3056]
- **Stonex S9i** – New Driver [F3107]

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]
- **GeoMax Zipp20** – Fixed issue with setting “Foil” target [D8194]
- **Kolida CTS-660** – New Driver [F3119]
- **Leica iCON builder 60 Onboard** – Fixed issue with onboard installation on **iCON robot 60** incorrectly displaying options for **iCON robot 60** [D8148]
- **Pentax** – Fixed error with reading Angles formatted as Gons with Basic driver [D8355]
- **Sanding STS** – New Driver [F3044]
- **South NTS** – Fixed issue with distance units [D8173]
- **South NTS-370R10** – Fixed various issues for onboard
- **Stonex R1Plus/R2Plus** – Fixed various driver issues [D8104, D8192]
- **Stonex R2W+** – Fixed issue with reflectorless mode setting the EDM mode to reflective sheet [D8172]
- **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

- Added support for Ordnance Survey OSTN15 transformations and OSGM15 geoid, added [OSB36-OSTN15](#) coordinate system to pre-defined list in *European Systems* group. [F3046]
- Added support for Slovak JTSK2013 transformations, added [Slovak JTSK03](#) and [Slovak JTSK2013](#) coordinate systems to pre-defined list in *European Systems* group. [F3028]
- Coordinate systems [Merchich.NordMaroc](#) and [Merchich.SudMaroc](#) have updated limits. [D8155]
- Added Korean coordinate systems to pre-defined list in *Asian Systems* group. [F3097]
- Added Denmark coordinate systems to pre-defined list in *European Systems* group. [F2988]
- Added [Jamaica JAD2001](#) coordinate system to pre-defined list in *Caribbean Systems* group. [F3059]
- Added Nova Scotia MTM zones with modified false coordinates for NAD83(CSRS) 1997.0 and NAD83(CSRS) 2010.0 in *Canadian Systems* group. [F2917]
- Updated [HTRS96](#) coordinate system parameters in the *European Systems* group. [D7266]
- Selecting **RTCM Transformation** for Horizontal or Vertical System would cause an error. [D8200]
- User-Defined Coordinate System Latitude of Origin is now possible to set to 90 degrees [D7725]
- Coordinate system files updated to new version, the new names are:
  - **Map2\_Datums** – formerly *Datums*
  - **Map2\_Ellipsoids** – formerly *Ellipsoids*
  - **Map2\_Systems** – formerly *Coordsys*
- *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.*

## LANGUAGES

The following program interface language translations have been updated:

- Czech
- French
- German
- Italian
- Portuguese
- Spanish

## DEFECTS FIXED

**Full-screen dialogs** – On Windows tablets when running Layout full-screen, the Point Database, the AutoMap library, and some other screens would not get resized properly to stay on top of the Windows taskbar. [D8157]

**Photo Notes** – Photo Notes on some Windows Tablet/PC devices were not saved. [D7862]

**Image Loading** – Loading a large background image could crash the program, a check is now made to ensure memory allocation succeeds. [D8161]

**DXF Display** – DXF arcs with small radius were not displayed to prevent possible issues. The thresholds have been refined for improved balance of display and performance. [D8079]

**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]

**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]

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

## KNOWN ISSUES

**Photo Notes** – Camera rotation is not supported on Windows Tablets.

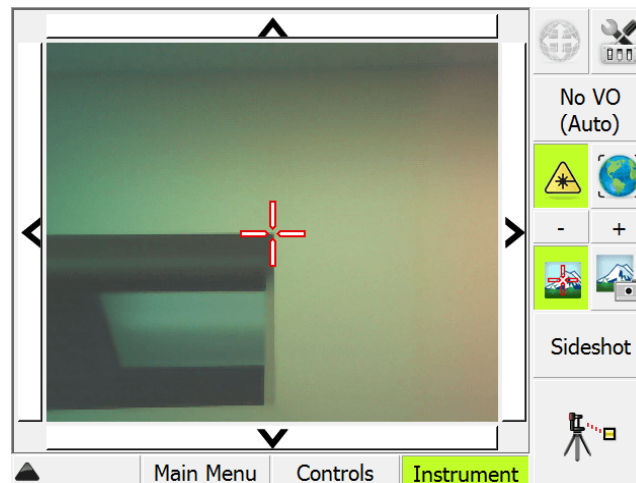
## DISTO/LASER REFERENCE

### 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.

Layout 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 Layout.

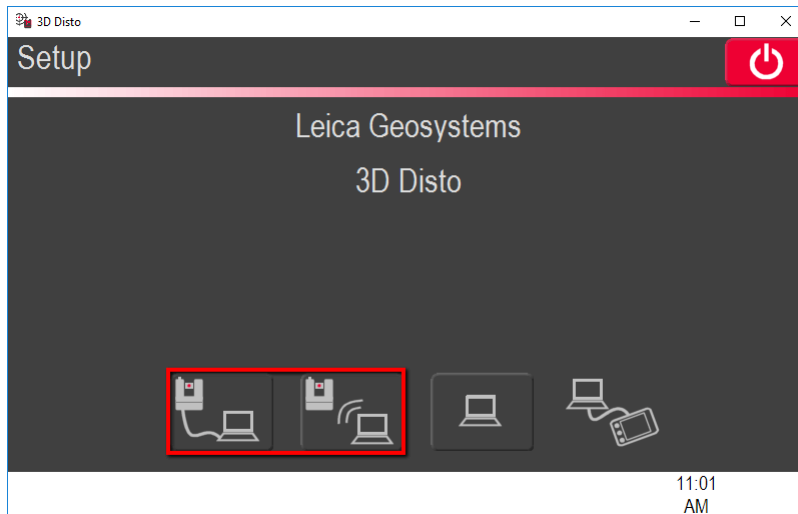
### Staking

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.

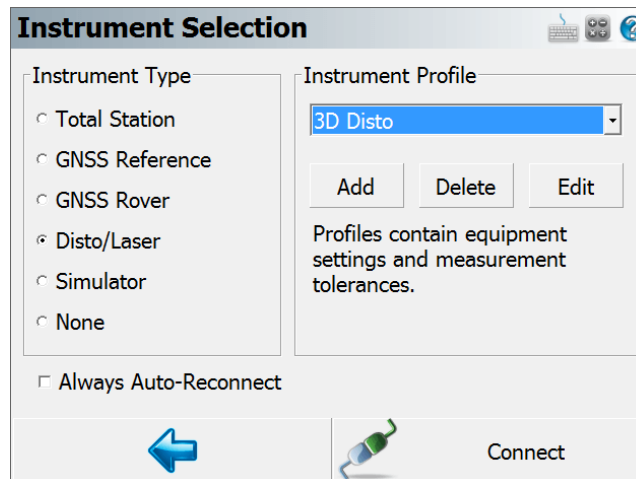
### 3D Disto Connection Guide

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

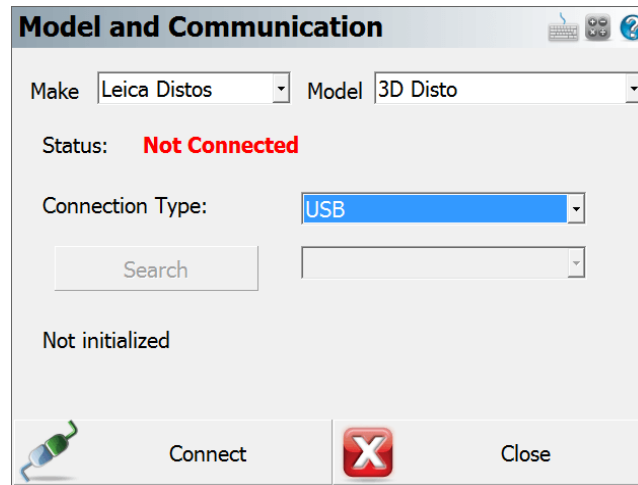


- Once connected, the main screen of the 3D Disto software will be displayed. The communication ports are now configured on the PC/Tablet.
  - Close the 3D Disto software.
2. Launch Layout and open a Project.
  3. At the Instrument Selection screen, pick the **Disto/Laser** type and choose the pre-configured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



6. Complete.



## S910 Disto

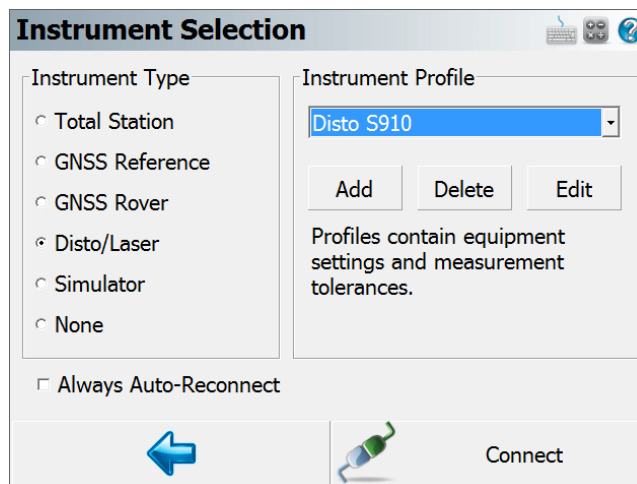
The Leica S910 Disto is fully supported using a WiFi connection. It can be operated using workflows very similar to a Total Station when combined with a tripod or stand. Without a tripod or stand, the S910 can be used to capture distances for various applications, including:

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

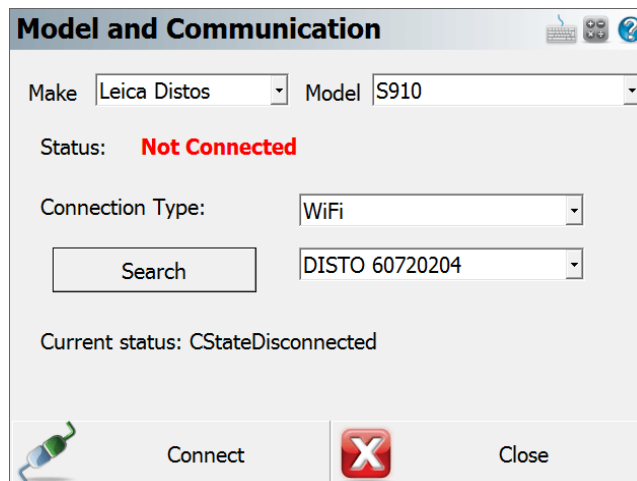
## Disto S910 Connection Guide

The general connection procedure for Leica Disto S910:

1. Launch Layout 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**:



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**.



5. Complete.

## Bluetooth Disto

Layout 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