

Layout 2.3.14.3

Release Notes

2015-07-28

Announcement

Starting in Layout 2.3, all features previously in the Advanced Module except for the roading package are now available for FREE to all Layout users. (This includes surfaces, areas, volumes, slope staking, point scanning, and more.)

In addition, MEP module is now available FREE of charge to all Layout Pro users.

New Features and Changes

- **Redesigned GNSS Local Transformation**
 - All new easy-to-use interface
 - Ability to export/import localization files
 - Added 7 parameter Helmert transformation
 - Ability to delete or reuse control points
 - Improved scaling and many other options
- **DXF Enhancements**
 - DXF Blocks are now supported
 - Extrusion vectors on various entities are now supported
 - Improvements to circles and other entities types
 - Layer visibility settings from CAD programs will now be honored
 - Added a dialog to show entities being during import
- **Electronic Bubble Support** – Tilt compensation/Rejection is now available on supported GNSS receivers that enables tilted surveying at corners or edges of walls.
- **MEP Improvements**
 - New interfaces has been added for all MEP Auto-Locate features to make them easier to use
 - MEP auto-locate routines have been added to point layout screen for easier access
- **Roads Module Improvements**
 - Alignment toolbar added to enable easy navigation between alignments and Roads Manager
 - Station/Offset/Cut/Fill are now visible in the observation toolbar and point database to display position relative to the selected alignments
 - Added the ability to arrange alignment label intervals and orientations
- **Unicode Encoding Support** - Unicode is now supported throughout the program, which includes point descriptions, profiles, settings, exported files, and more.
- **ASCII Export Improvements**
 - Added the ability to sort points by either time or point ID
 - Post-processing time markers can be exported in either GPS time or UTC time
 - The encoding of the export file can be either ANSI or Unicode

Layout 2.3.14.3

Release Notes

- Added an option to export all measurements used for averaged points
- More options are available for custom ASCII export formats
- **Basic Measure Mode** – a new measure screen has been added for total Station onboard version that allows quick measurements without even creating a project.
- **Map View Select** – a new option that allows user to tap anywhere on the map to store point, measure distance, or turn total station to the point.
- **Total Station Target and Measurement Improvements** – Target and EDM updates are now more consistent between FieldGenius and total stations. Each measurement is noticeably faster.
- **Dynamic Screen Rotation** – FieldGenius now dynamically rotations between landscape and portrait mode on Windows 8.1+ tablets.
- **Total Station Angular Precision Control** – Angular measurements from total stations can now be rounded to different level of precisions.
- **More Serial Ports** – Choosing <COMXX> option during connection setup will allow user-definable COM port from 1 to 99.
- Added an option that allows user to manually define point increment interval
- Show/Hide All Project Data button has been added to Landscape and Portrait mode
- GNSS Auto Store mode prompts for interval selection automatically
- Decimal feet has been replaced by feet and inches throughout the program
- Entering licensing key should be easier now with cursor auto-advancing
- Added CST ASCII output format for compatibility with Leica ECLIPSE Neo
- Special supports have been added for Japanese JENOBA network
- Post-Processing Tagging option is now always enabled
- Observation toolbar state now persistent between sessions
- Stakeout viewing modes are now persistent between sessions
- Show ToolTips option is now persistent between sessions
- Standard deviation values have been added to the averaging screen in point database.
- Grid view has been enabled on the PC/Tablet version
- Improved the resolution on certain icon images
- Headers for ASCII export is now defaulted to be OFF
- Improved screen focuses on various button during connection process
- Improved various error messages in the ASCII Import

Hardware Specific Updates

- **Altus**
APS-NR2 – Added support for APS-NR2 GNSS receivers

Layout 2.3.14.3

Release Notes

- **ComNav**
T300 – Correction messages will no longer be outputted when switching from Base to Rover mode
T300 – Fixed an issue with Averaged Position in the base mode always stay the same
- **FOIF**
A30 – Electronic Bubble/Tilt Sensor support has been added for this instrument
A30 – Fixed a problem with GSM module when requesting source table
A30 – Updated antenna calibration values and add hook offsets
RTS-350 – Added an option to enable/disable laser dot in the instrument settings
- **GeoMax**
Zenith 04 – Added support for Zenith04 data collectors
Zenith 10/20 – Fixed a cosmetic issue with satellite plot where satellites are showing as not used in solution. (This fix requires ME firmware v6.600 or newer)
Zenith 25 – Fixed a compatibility issue with Quebec network RTK service
All Total Stations – Improved target list in Target Manager
- **geo-FENNEL**
FGS 1 – Correction messages will no longer be outputted when switching from Base to Rover mode
FGS 1 – Fixed an issue with Averaged Position in the base mode always stay the same
- **Hi-Target**
V30 – Resolved a compatibility issue with CORS-TR network
- **Handheld**
Nautiz X8 – Splash screen now display correctly
Nautiz X8 – Fixed an issue that stakeout screen causes memory issue
Algiz 10X – Added support for Algiz 10X tablets
- **Hemisphere**
S320 – Added support for S320 GNSS receivers
- **KOLIDA**
K96T – Driver updated as instructed by KOLIDA
- **KQ GEO**
M8 – Added support for M8 GNSS receivers
K8 – Added support for K8 data collectors
- **Leica**
Viva TS16 – Added support for Viva TS16 total stations
Nova TS60 – Added support for Nova TS60 total stations
Nova MS60 – Added support for Nova MS16 multi stations
CS20 – Added support for CS20 data collectors

Layout 2.3.14.3

Release Notes

CS35 – Added support for CS35 data collectors

GS14 – Resolved an GSM module compatibility issue with firmware 5.61

1100 TCRA – Significantly reduced measurement time and improved target management

iCON robot 60 – Improved power search and tracking

ZenoConnect – Added support for ZenoConnect series of GIS devices with improved antenna profiles

- **Linertec**

LGP-300 Series – Added an option to enable/disable laser dot in the instrument settings

LGP-300 Series – Can now be connected through data collectors

- **NavCom**

SF-3040 – Added support for FEC control for SF-3040

SF-3040 – Fixed an issue with auto-store function in time internal mode

- **Pentax**

W-1500 Series – Can now be connected through data collectors

W-1500 Series – Added an option to enable/disable laser dot in the instrument settings

W-1500 Series – Level of angular precision has been improved

W-1500 Series – Added Battery indicator

W-1500 Series – Fixed an issue where switching between No Prism modes will stop measurement updates

W-1500 Series – Tilt correction check is now set to 3'20"

W-1500 Series – Added a warning message for class 3R laser

W-1500 Series – ESC button will cancel/stop loop measurement mode

G3100-R2 – Antenna calibration values have been updated

P7H – Added support for P7H data collectors

All GNSS receivers – Antenna definitions have been updated (requires latest firmware)

- **Prexiso**

G4/G5 – Direct dial (CSD) option has been added

- **Spectral Precision**

SP80 – Added support for SP80 GNSS receivers

- **Stonex**

W-R2W Plus Series – Added an option to enable/disable laser dot in the instrument settings

- **South**

S650/S660 – Added support for S650/S660 GNSS receivers

GALAXY G1 – Added support for GALAXY G1 GNSS receivers (Electronic Bubble supported)

NTS-36R0 – Fixed an angular issue when using gradient unit on data collectors

- **Topcon**

Hiper – Fixed an issue where Arwest radio is not responding quick enough to driver's request

Layout 2.3.14.3

Release Notes

Coordinate Systems and Geoids

- **Various Geoid and Grid Shift files have been added, check Help Desk on MicroSurvey.com for details.**
- South Africa Harebeekthoek94 has been changed to South orientated
- Using Japanese JDG2K coordinate system will no longer display Invalid Projection messages
- Switzerland CH1903.LV03 3 parameter system has been added to work with SWIPOS

Defects Fixed

- Fixed an issue with finding the next nearest point during stakeout
- Fixed an issue where laser point would turn off after an Auto-Locate routine
- Fixed an issue that deleted point still showing up in the ASCII exported files
- Fixed a problem in determination of geoid undulation for orthometric heights when using RTCM transformation
- Fixed an issue where Stored survey role will cause missing reference information
- "Fade out Laid out point" option should now work if Layout List is not used
- Fixed a memory issue with staking routine
- RTCM Transformation field in Link information screen now display "Not Applicable" if not used
- Click on Back button in the RTCM option window will no longer reset the messages timer
- Add points to staking list should no longer reset survey role for the points already staked out
- Adjust point for localization will now adjust more than 250 points
- Adding Spiral, Curves, Spiral-Curve-Spiral in an alignment should work once again
- Automap name can no longer be edited if a template is used
- Show/Hide All Project Data will now be properly deactivated when existing from line staking mode
- The last connected receiver information is now appropriately saved to address reconnect button issue
- Fixed an issue where measurement observation averaging is too fast in when DCI with RTCM is used
- Translations should not affect the visibility of default ASCII export formats anymore
- Automap template file location is now properly saved so the software will not ask for it every time
- Cancel out of orientation setup will no longer continue to measure backsight
- Fixed an issue where ASCII export does not process all point range
- In Automap editor, point size will now be saved if color is changed
- Reopen a project with custom raw file name will no longer load default name instead
- Standard format in ASCII export will once again include Note in the Description separated by a colon
- Localization adjusting point will no longer crashes the program if no instrument is connected
- Fixed an issue with NETWORK option when acquiring RTK corrections
- Specially characters are now being handled correctly in the LandXML export
- Resolved a crash from reading Chain element in the LandXML surface file
- Non-ASCII characters in the settings.xml should no longer cause device profile saving issues
- Having '+' sign in height will not cause ASCII import to ignore the field
- Fixed a special parsing issue with RTCM transformation
- Cancel out of the staking/layout list after finding 0 points will no longer crash the application

Layout 2.3.14.3 Release Notes

- Fixed an issue where exceptionally small DXF arcs and circles will cause application to crash
- Fixed an issue where dropdown list does not showing up occasionally
- Fixed various issues related to point scanning
- Edit Staking List should no longer causes layering issue
- Measurement toolbar will stay in staking mode after disconnect during stakeout and reconnect