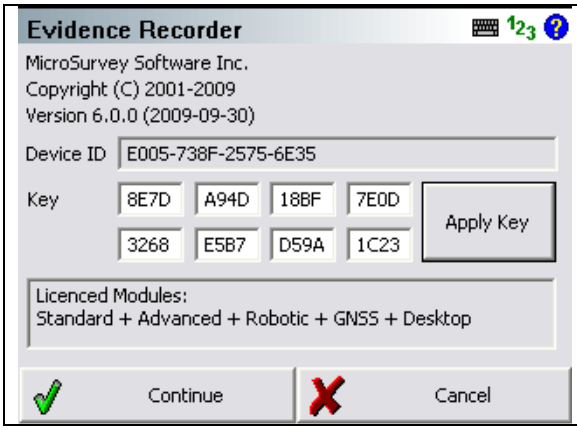
Evidence Recorder 6.0.0 Release Notes

Released on: October 5, 2009

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.

New Features

RTK GPS – This version includes RTK GPS support.

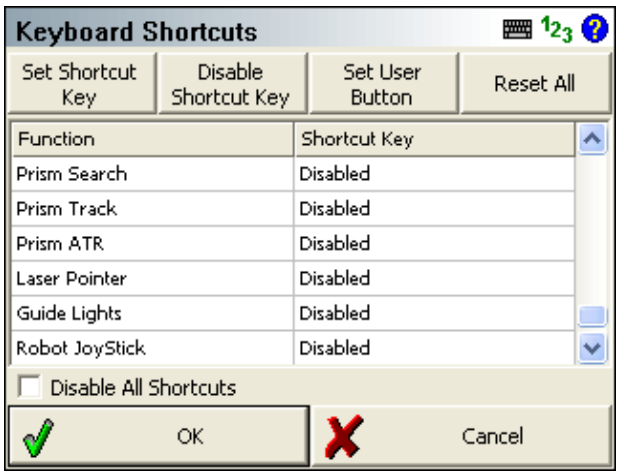
Raw File, EDM Mode – The current EDM mode being used is now recorded as a comment in the raw file any time it is changed.

-- RL Fine

Raw File, Instrument – When you connect to an instrument, the instrument make and model are now recorded as a comment in the raw file.

-- Leica TPS Series (GeoCOM)

Keyboard Shortcuts – New keyboard shortcuts are now available for the following instrument controls: Prism Search, Prism Track, Prism ATR, Laser Pointer, Guide Lights, Robot Joystick. All of these are currently disabled by default but can be assigned to any shortcut key.



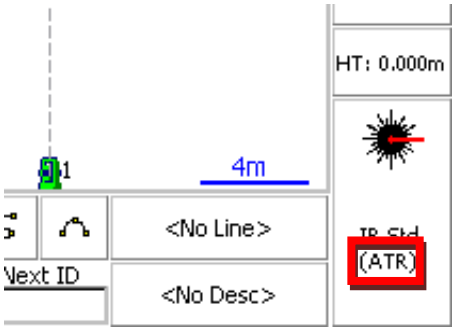
Raw File Time Stamp – Evidence Recorder now includes an optional time stamp feature that will stamp the raw file with a JB (Job) record before measurement. Job records include the project name, date and time.

--Instrument Selected: Total Station Demo
LS,HI5.000,HR6.562
JB,NMHouse 2,DT08-28-2008,TM20:56:32
SS,OP1,FP20,AR45.00000,ZE90.00000,SD99.0000,--

This feature is off by default. It can be turned on in the Point Settings in the Options Menu.

EDM Modes – Current instrument EDM mode is now displayed on the Measure Button.

ATR Mode – When ATR mode is enabled for robotic total station, ATR will be displayed on the measure button.



Distance / Bearing Recall by Map Pick Points - Evidence Recorder now supports inversing (Pick Map Points) in all distance and direction fields. For example, if you are using the Traverse/Intersect command, you can now double tap either the distance or direction fields which will open a small menu. If you select “Inverse”, you will be able to pick two points in the map and when you exit the inverse toolbar the inverse value will be copied.

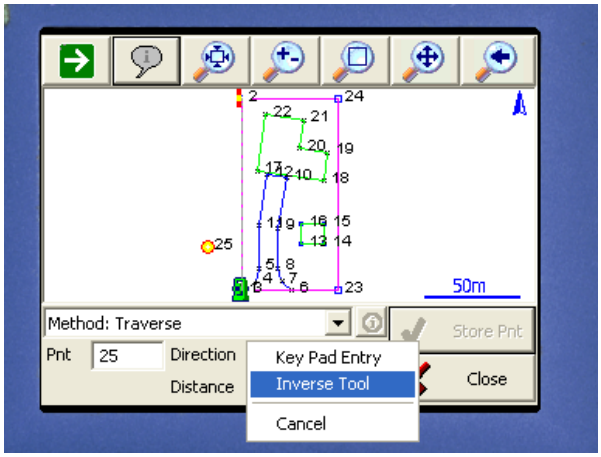
Flexline – A new driver is available for the new Leica Flexline Total Station

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

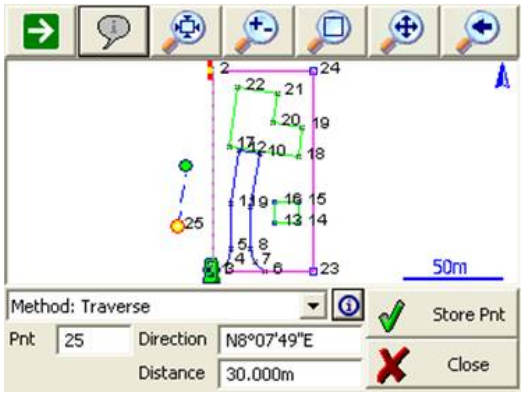
Licensing – Licensing system updates to eliminate situations where duplicate machine ids could be generated from devices.

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.

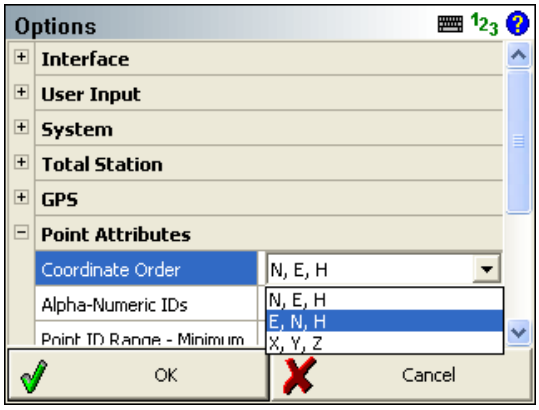


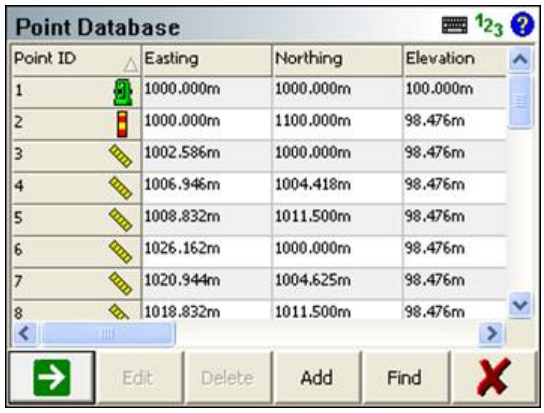
Info button on Traverse / Intersect Toolbar - Also added was an info button on the traverse/intersect toolbar. If you press this it will display the results so you can confirm your calculation before storing it.



SDR Export – A new export SDR raw file is available in the Export Menu.

Coordinate Order – A new option is available for controlling the display of coordinate values in Evidence Recorder. Options are NEH, ENH, XYZ and will affect any area of the program where coordinates are displayed. An important thing to note is that this only affects display of the coordinates, internally in the point database, or raw file we store information as N,E,Z.





Improved / Updated Features

Traverse/Intersect – If you specify a start point that doesn't exist, you now get a message allowing you to store it as a new point.

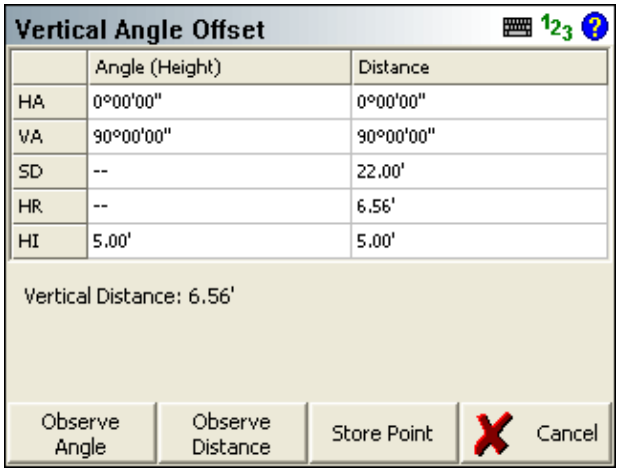
Inverse – If you specify a start point that doesn't exist, you now get a message allowing you to store it as a new point.

Robotic Instruments – A new info message now comes up after measuring a backsight, to indicate that the prism lock has been turned off. Previously, the lock was turned off without a message to the user.

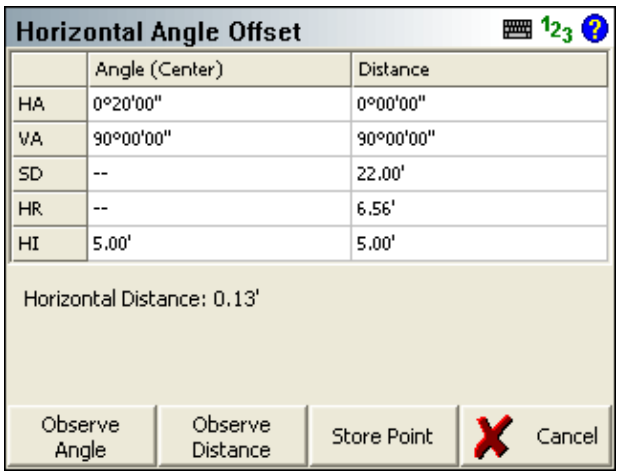
Survey Roles – Calculated Points are now stored with their survey role set to "Calculated" which allows you to edit the coordinates if desired.

Staking – When staking with a "User Point" reference mode, the reference point being used can now be changed at any time.

Vertical Angle Offset – When measuring a vertical angle offset, the height difference between the two points (the ground point and the offset point) is now displayed.



Horizontal Angle Offset – When measuring a horizontal angle offset, the horizontal difference between the two points is now displayed.



Feature List Attributes – The drop down box has been made larger so that more attributes are visible at once without having to scroll through as many.

Staking – When storing staked points, you can now specify a default description from the description button on the main interface.

Staking – When you go into the staking screen, the design point ID field now automatically has focus so you don't have to tap into it first before typing the point ID you want to stake.

DXF Export – DXF Files exported now have the PDMODE variable set to 3 so points will appear as a small X instead of a dot when opened in CAD programs.

Store and Edit Dialog - Layout of points edit/store dialog modified.

DBF Time Stamp – Time stamp in DBF points file now stores time in the 24 Hour format.

Backsight Target Height – When storing the backsight point, the user is now able to change the backsight target height.

Robotic Backsight Measurement – improved work flow so that the Lock isn't turned off when settings the backsight instrument plate reading.

Fixed

QSB Surfaces – When loading QSB Surface File, if a surface name contained any dashes or spaces, then loading it would cause Error 45P-P98 and the surface would not load.

Points Database, Deleting Points – When deleting all points from a project, this resulted in a crash for some projects.

Points Database, Add Points – When points are added into the database, the list was not being refreshed so the new points did not immediately appear in the list – they now appear immediately.

GPS, NMEA SVs Count – The number of Satellites in View shown was inconsistent when using a NMEA connection.

Off Level – Some Sokkia SRX instruments would not notify Evidence Recorder when they went off level, causing invalid data to be recorded. Evidence Recorder now notifies the user when this condition occurs.

Feature List Editor – It was previously possible to create an attribute named "Name" which conflicted with other data in the feature file. This is now prevented.

Curvature and Refraction – The option to correct for curvature and refraction (previously located in the Units and Scale Settings screen) was not functioning, so it has been removed. If necessary, correction for C&R should be handled by your instrument.

Descriptions Not Persistent – if you set the current description on the main interface, then store a point either manually or with a sideshot, the description isn't displayed in the store screen forcing you to pick it again.

Export DXF – When exporting a DXF file, Evidence Recorder would crash if a figure referenced a point which had been deleted.

Export DXF – When exporting a DXF file, layer names could contain invalid characters such as dots or spaces (as specified in the AutoMap Library), and opening the DXF file in AutoCAD would generate errors. Only valid layer names are now written into the DXF file.

DXF, LandXML, Image Fail To Load Error – Evidence Recorder used to store the explicit path to the file loaded which would cause an error to appear when the Evidence Recorder was moved to different data collectors. If the file isn't found a message will be displayed notifying the user where the file is supposed to be.

DXF, LandXML, Image Paths – Evidence Recorder will now only store the full path to the files if they are not in the Evidence Recorder project folder. If the file is in the Evidence Recorder project, only the name of the file will be saved. This prevents path errors when moving projects back and forth between different data collectors.

DXF Blocks and Attributes – Certain DXF blocks and attributes could cause display problems in Evidence Recorder when a zoom extents was issued. These types of entities are now ignored by Evidence Recorder.

DXF Layer State – This wasn't always saved to the ini file when the project was closed.

Stake Point ID – After a user stored a stake point and the program automatically returned to the Stake Point screen, if the user manually entered a new point to stake and kept focus in the point id field and pressed stake point, the Map Screen text would display the last point id staked. This was a display bug, the correct point location was staked.

Next Point ID – Sometimes going to the Raw File Viewer could reset the next point id.

Trimble 5600 – Evidence Recorder could get unstable when the calibration routine was executed upon instrument connection.

Resection Keypad Problems – During a resection you could not open the keypad by tapping in the point number field.

Stake Point / Check Point Prism Offset – After checking the backsight, immediately staking a point with Evidence Recorder would use the backsight prism offset constant for the first stake shot instead of the foresight prism offset. This only appeared if you were using different prism offsets for the backsight and foresight prism offsets.

Leica RL Mode Error – Sometimes after turning Prism Lock off, if you immediately tried to take a reflectorless measurement, Evidence Recorder could display a Measurement Error message.

Leica 1200 – Trying to setup a search window would display error message when defining the extents.

Raw File Viewer – Horizontal scroll bars didn't work correctly.

Negative Feet and Inch Coordinates – Entering negative feet and inch distances could cause incorrect coordinates to get computed.

Keypad – Problems could occur when using the full screen keypad to enter elevations for vertical profiles.

Desktop Version Network Browsing – The desktop version of Evidence Recorder now allows the user to browse mapped network drives.

Zoom to Extents - Problem in Robotic Tracking Mode Pocket PC build would not always zoom extents properly.

FBK Export – Evidence Recorder FBK files used to store coordinate points as "NEZ" records which was incorrect. Evidence Recorder will now export them as "NE SS".

Project Names – Spaces entered at the end of a project name would cause issues when moved to a desktop computer. Spaces are now not allowed at the end of project names.

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 Evidence Recorder 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.

Opening Evidence Recorder 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.