



RELEASE NOTES

TRIMBLE® ACCESS™ SOFTWARE

Version 2013.10
Revision A
May 2013



Legal Information

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Release Notice

This is the May 2013 release (revision A) of the Trimble Access release notes. It applies to version 2013.10 of the Trimble Access software.

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Trimble Access Software Version 2013.10

These Release Notes contain information about the Trimble® Access™ software version 2013.10.

The Trimble Access software provides a collection of survey tools for use in the field, and web-based services for the office and in the field. These applications may be installed on the controller, the office computer, or on servers hosted by Trimble, depending on the parts you have purchased.

Installing the software and licenses on the controller

Operating system installation

With a new Trimble Tablet, the operating system is not installed. Turn on the Tablet to install the Windows® operating system and then apply Windows updates.

With all other new controllers, the operating system is already installed.

Software and license installation

Before you use your controller, you must install the applications and licenses using the Trimble Access Installation Manager. If you have:

- not installed the Trimble Access Installation Manager before, go to www.trimble.com/taim for installation information.
- previously installed the Trimble Access Installation Manager, you do not need to reinstall it because it updates itself automatically. Select *Start / All Programs / Trimble Access Installation Manager* to start the Installation Manager.

For further information on how to install or update your software and license file, refer to the Help file in the Trimble Access Installation Manager.

Note – For Trimble CU controllers, Trimble Access version 2013.00 and later can be installed only on the Trimble CU model 3 (S/N 950xxxxx). Trimble CU models 1 and 2 have insufficient memory to run later versions of Trimble Access.

Am I entitled to this version?

To install and run Trimble Access software version 2013.10, you must have a warranty agreement valid up to 1 May 2013.

When you upgrade to version 2013.10 using the Trimble Access Installation Manager, a new license file is downloaded to your device.

Updating office software

When you upgrade to version 2013.10, you must also update your office software. These updates are required if you need to import your General Survey jobs into Trimble office software such as Trimble Business Center.

When you upgrade the controller using the Trimble Access Installation Manager, the office software on the computer that has the Trimble Access Installation Manager installed is also upgraded. To upgrade other computers that were not used to update the controller, do one of the following:

- Install the Trimble Access Installation Manager onto each computer and then run Office updates.
- Run the Trimble Update Office Software packages for the Trimble Access software from www.trimble.com/support_trl.asp?Nav=Collection-84862.
- Use the Trimble Data Transfer utility:
 - You must have version 1.51 or later installed. You can install the Data Transfer utility from www.trimble.com/datatransfer.shtml.
 - If you have version 1.51, you do not need to update to a later version of the Data Transfer utility; you can run one of the Trimble Update Office Software packages from www.trimble.com/support_trl.asp?Nav=Collection-84862.
- If you only need to update the latest version of the Trimble Business Center software, you do not need to run the Trimble Access Installation Manager to update the office software. The required converters are now available on the controllers running the Trimble Access software and, if required, they are copied from the controller to the computer by the Trimble Business Center software.

Trimble Solution Improvement Program

The Trimble Solution Improvement Program collects information about how you use Trimble programs and about some of the problems you may encounter. Trimble uses this information to improve the products and features you use most often, to help you to solve problems, and to better meet your needs. Participation in the program is strictly voluntary.

If you participate, a software program is installed on your computer. Every time that you connect your controller to this computer using ActiveSync® technology or the Windows Mobile® Device Center, the Trimble Access software generates a log file that is automatically sent to the Trimble server. The file includes data on what the Trimble equipment is being used for, what software functions are popular in specific geographical regions, and how often problems occur in Trimble products that Trimble can correct.

At any time, you can uninstall the Trimble Solution Improvement Program. If you no longer wish to participate in the Trimble Solution Improvement Program go to *Add or Remove programs* on your computer and remove the software.

Documentation

Trimble Access Help is "context-sensitive." To access the Help, tap ? at the top of the screen.

A list of Help topics appears, with the relevant topic highlighted. To open the topic, tap its title.

Go to <http://help.trimbleaccess.com> to download a PDF file of the Help. A separate PDF file is provided for each application.

General Survey

New features

BeiDou constellation support

The BeiDou Navigation Satellite (BDS) system is the official name of the Chinese satellite navigation system formerly known as Compass. Previous versions of Trimble Access supported logging of BeiDou satellites for signal evaluation and test purposes. The BeiDou Interface Control Document, which specifies the satellite messages, was released in December 2012. Trimble Access now fully supports the use of BeiDou in RTK and postprocessed surveys.

Using BeiDou satellites:

- BeiDou is supported as standard in R10 and R8-4 receivers and as an option in R6-4 and R4-3 receivers.
- BeiDou satellites can be used in RTK surveys only if you are using a receiver that has firmware version 4.80 or later. Although logging of BeiDou satellites was available in earlier firmware versions, it is highly recommended that for postprocessed surveys you also use a receiver that has firmware 4.80 or later.
- To use BeiDou in an RTK survey, you must use CMRx as the correction format.
- In a logging survey (Fast static, PPK, RTK & logging), BeiDou can be used only if logging to the receiver.
- Because BeiDou tracking is an augmentation to GPS, at least 3 GPS SVs must be tracked for BeiDou SVs to be used in an RTK or postprocessed survey.
- When BeiDou is switched on in an SBAS differential survey, the BeiDou SVs are used to augment the solution if their corrections are available.

Precisions timer with observed control points

In RTK, the occupation epoch counter is reset when the precisions go outside tolerance. The counters only count up epochs where the precision of each consecutive epoch meets tolerance. This ensures that all epochs contributing to the final stored coordinate meet the precision criteria. When measuring points with long occupation times this could be frustrating in difficult environments. Now if you have been static measuring a point for longer than 15 seconds and the precisions go out of tolerance, a message warns that the occupation timer will reset and gives you the option to store the last position with good precisions.

eBubble improvements

There is now a shortcut to the *eBubble options* screen from the eBubble. Tap the Options icon on the top left of the eBubble to access the *eBubble options* screen and make changes, such as calibrate the eBubble or configure the eBubble sensitivity or responsiveness.

The tilt distance calculated at the current antenna height is now shown in the *eBubble options* screen and the *Position* screen.

Reset SV tracking

All GNSS receivers now support re-initializing on-the-fly using the *Reset SV Tracking* method in the *RTK initialization* screen.

GNSS connection improvements

When connecting to a GNSS receiver, the connection dialog now shows the connection method and the device it is connecting to. This information is useful when diagnosing why the receiver will not connect.

xFill technology

Receiver firmware version 4.80 improves the performance of xFill when the RTK base position is not accurate in terms of WGS84. The base position accuracy warning has been removed from the Survey Style and now appears when you start a survey with firmware earlier than version 4.80. You can tap *Ignore* on this message and it will not be shown again.

QC1 record improvements

Number of Satellites: The QC1 record now contains both the minimum number of satellites during the course of the occupation, and the number of satellites at the time the point was stored.

Dilution Of Precision: In addition to the inclusion of maximum DOP values, the QC1 record now also contains DOP values from the time the point was stored.

Radio frequencies

Radio frequencies are now shown to 5 decimal places.

Tracking group rename

In the *Base options* and *Rover options* screens, the *Tracking* group box is now named *GNSS Signal Tracking*. The *L2C* check box is now named *GPS L2C* and the *GPS L5* check box is now named *L5* to more accurately reflect the signals available with different constellation types.

New circular objects method

A new method, *Bisect tangent*, is now available for measuring circular objects. When using this method, you are prompted to observe an Angles only measurement to the tangent on the left and right. After measuring the second tangent the total station automatically turns to the center, measures to the center, and from the tangent observations calculates the radius, adding the radius distance to the measure distance storing a raw HA VA SD to the center of the object. The previous method, *Center + tangent*, is still available for measuring circular objects.

Adding points from Measure rounds to a CSV file

You can now add points measured using the *Measure rounds* option to a CSV file before storing the round. To use this option, enable *Add to CSV* from *Jobs / Properties of job / Additional settings* and then select the points to add to the file from the *Standard deviations* screen.

Blinking laser pointer

You can now configure the laser pointer to blink after storing a DR measurement. In dark environments the blinking laser is a great visual tool to indicate a measurement is complete.

Sort by name and description

When selecting a feature code you can now tap the *Name* or *Description* field to sort by name or description.

Camera

For controllers with an inbuilt camera you can now access the camera directly from the *Instrument* menu.

Trimble keyboard for the Tablet

A Trimble keyboard is now available when using Trimble Access on a Trimble Tablet. The Trimble keyboard has the following advantages:

- Automatically appears when you tap in a field in the Trimble Access software .
- Automatically displays the number keys when you tap in a numeric field in the Trimble Access software .
- Automatically changes where it appears, so that the field you are in is not obscured.
- Better contrast when working outdoors.
- The keyboard layout maximizes the available space so that keys are larger, for easier data entry.

Known issues: Resolved

- **Shortcut keys:** An issue where the shortcut keys did not always work has been resolved.
- **Tilt auto-measure:** Trimble Access now allows users to start *Stakeout* or *Navigate to point* while *Tilt Auto-Measure* is showing "Waiting for Level" or "Waiting to Move".
- **Excess tilt staking an alignment:** An issue has been resolved where, having stored a point with excess tilt, and despite the pole being within tolerance, the excess tilt message continued to display.
- **eBubble tilt tolerance:** The eBubble now reflects the tilt tolerance setting based on the current measurement type. If the measurement had been paused and the method changed the tilt tolerance wasn't always correctly updated for the changed method.
- **Internet connection:** A Redial softkey is now available after you tap *Hang up* to end an Internet connection.
- **RTK network status:** The menu option previously named *Network / Reference Sta.* has been renamed to *RTK network status.*
- **RTCM transformation:** An issue where coordinates would not be transformed if the RTCM RTK network was sending only height transformation grid residual messages has been resolved.

- **Rapid points:** An issue where you could not measure a point by the *Rapid point* method using the *Accept* softkey has been resolved.
- **Review point details:** An issue where the *Chainage and offset* option was not displayed when reviewing the details of a point has been resolved.
- **Importing files:** The receiver *Import file* screen now displays the *Parent* folder only if the receiver supports both internal and external memory.
- **Stakeout Options:** Stakeout *Options* now provides access to the *Auto F1/F2* option.
- **Staking from a fixed point:** An issue where the *From fixed point* name was drawn over the name of the point being staked in the graphical stakeout screen has been resolved.
- **Stakeout alignment:** An issue where the designed elevation value occasionally disappeared if an offset along with a construction offset was specified has been resolved.
- **Active map in Templates:** When you switch users, Active Map files defined by the Template are now correctly linked in the new job.
- **Camera:** An issue where the **OK** button in the camera application sometimes interacted with the background application has been resolved.
- **Images in Trimble Business Center:** An issue where an image in a panorama was out of position when viewed in the Trimble Business Center software has been resolved. This was an issue only when using a vision instrument and was caused by the total station being in Autolock mode. Autolock is now turned off when measuring a panorama.
- **Arc solutions:** The following issues have been resolved for the *Cogo / Arc solutions* option when computing points on the arc or adding the arc to the database:
 - The code field can now be set back to null after a value has previously been entered.
 - You can now easily change the point name. Previously you had to enter the name more than once before the new value was accepted.
 - An edited point name no longer reverts to the default value when the code is edited.
- **Grades as angles:** Grades configured as an Angle are now correctly displayed.
- **Autolock for offsets:** An issue where the status of the *Autolock off for offsets* check box in the *Survey Styles Options* or *Measure Points Options* screen was ignored has been resolved.
- **Application errors:** You should no longer see occasional application errors when you do any of the following:
 - Change the rover radio settings
 - Cancel the message box during robotic connection to a Trimble 5600
 - Cancel the message box when starting a dial-up or Internet survey
 - Import large receiver files into the controller

Roads

New features

Additional points relative to a road

You can now define additional points relative to a road from the *Define* menu. These points can be keyed in or imported from a .csv/.txt file. Both keyed in and imported points can be edited. The additional points can be seen when reviewing the road. Previously the additional points could only be imported and only when surveying the road, and manual entry was not supported.

Key station abbreviations

The abbreviations for key stations on a road such as RS, RE, SC, VCS, VCE, and VPI, are now displayed at on the stakeout screen, and more consistently on other screens throughout Roads.

Adjoining elements defining a curve

The radii of a spiral-arc-spiral curve typically match, but if adjoining elements defining a curve have different radii then the icon to the left of the element is now shown red.

Reporting of Trimble Roads

For a Trimble Road, the *Define / Report* option now includes the coordinates for each point in the cross section. Also, the report format has been improved to provide better readability.

Known issues: Resolved

- **Inserting new records above the existing record:** When defining Template position and Superelevation and widening records you can now insert a new record before the first record when you only have one record. Previously you had to edit or delete the first record to do this.
- **Position from file:** An issue where you could not edit the design elevation when staking by stake option *Position from file* has been resolved. Previously the edited value reverted to the original value.
- **Cross slope definition:** An issue where a previously defined cross slope, when staking by Station and offset, was retained when staking by Position from file, has been resolved.
- **Auto-measure:** An issue where Automeasure failed to auto measure a staked position has been resolved. This was only an issue when in an Integrated survey with *Precise elevation* selected.
- **Rapid points:** An issue where you could not measure a point by the *Rapid point* method using the *Accept* softkey has been resolved.
- **SnakeGrid:** An issue where you could not start a survey when using SnakeGrid for the coordinate system has been resolved. This was only an issue if you selected SnakeGrid using *Coordinate system / Key in parameters*.
- **Stakeout:** An issue where, having stored a position, you were returned to the *Stake option selection* screen has been resolved. You now stay in the graphical stakeout screen enabling

further points to be measured until you tap *Esc*. This was only an issue when staking a Trimble road by nearest offset using a conventional instrument.

- **Trimble Road plan view linework:** An issue when staking a Trimble road where the plan view linework disappeared when you neared the target has been resolved. This was an issue only when in a conventional survey and staking robotically.
- **Trimble Road staked point display:** For this release the display of design points as solid circles, when they have been staked, has been reinstated. This feature was removed from Trimble Access version 2013.01 as it could have resulted in an application error.
- **Trimble Road stakeout arrow display:** An issue where the stakeout arrow appeared hollow when staking a side slope for a Trimble road has been resolved. This was an issue only when you were positioned on the station being staked between the hinge and the catch.
- **Trimble Road stakeout delta display:** An issue, when staking by Station and offset using a conventional instrument, where the delta display setting was not remembered has been resolved.

Tunnels

New features

Multiple surfaces

You can now create more than one surface when defining a template. A surface can be defined relative to an existing surface by a specified offset. Alternatively a surface can be defined using existing line and arc elements methods. All surfaces are displayed in the cross section view when reviewing a tunnel definition and when surveying a tunnel.

The function "Measure template" has been renamed to "Measure surface".

When measuring a surface, you are now prompted to measure the surface in a clockwise direction.

Key station abbreviations

The abbreviations for key stations on a tunnel such as TB, TE, SC, VCS, VCE, and VPI, are now displayed on the stakeout screen, and more consistently on other screens throughout Tunnels.

Adjoining elements defining a curve

The radii of a spiral-arc-spiral curve typically match, but if adjoining elements defining a curve have different radii then the icon to the left of the element is now shown red.

New Tunnel report option

You can now generate a report for the alignment and all points defining the template elements for each tunnel profile. To generate the report tap *Define*, select the tunnel and then tap the *Report* softkey. For the alignment, the offset, coordinates, elevation, and code at each station is reported. For each surface, the surface name, offset, coordinates, elevation, template element type, and code at each station is reported. These values are for the resolved cross sections and include any rotation

and alignment offset values that may have been applied, as well as any interpolation between different templates.

Known issues: Resolved

- **Inserting new records above the existing record:** When defining Template position, Rotation, Set out position, and Alignment offset records you can now insert a new record before the first record when you only have one record. Previously you had to edit or delete the first record to do this.
- **TXL files:** An issue where a tunnel definition with zero length arc elements could not be reviewed or surveyed has been resolved.
- **Review setout positions:** Now, when reviewing the details for a measured set out position, the delta offset value is reported.
- **Autoscan:** An issue where the standard errors were not recorded for points measured when performing an Autoscan, measuring a position in a tunnel, or setting out a point has been resolved.
- **Scan range:** An issue where you could not start a scan when the first station in the scan range had a <None> template assigned to it has been resolved.
- **SnakeGrid:** An issue where you could not start a survey when using SnakeGrid for the coordinate system has been resolved. This was only an issue if you selected SnakeGrid using *Coordinate system / Key in parameters*.
- **Application errors:** You should no longer see occasional application errors when you do any of the following:
 - Auto scanning a tunnel where some stations have no templates
 - When attempting to scan a tunnel with a <None> template

Mines

New features

Staking laser lines relative to a center line

You can now stake laser lines generated relative to a center line. You can also extend a center line or grade line beyond the end points. To do this, enter a value in the *Extend beyond end point* field when defining the line.

Swap softkey for center line and grade line

A swap softkey has been added when defining a center line and grade line, enabling the direction of the line to be swapped.

Stakeout delta display

Auto-stakeout routines iterate to locate the position on the surface. This process occurs automatically, and once the position has been determined the laser blinks, and the Mark delay period pauses the system while the position on the surface is marked. The resultant deltas of the auto-stakeout process are now displayed during the Mark delay period.

Measure rounds

You can now measure rounds from the Mines application. Previously you could measure rounds only from the General Survey menu.

Adding points from Measure rounds to a CSV file

You can now add points measured using the *Measure rounds* option to a CSV file before storing the round. To use this option, enable *Add to CSV* from *Jobs / Properties of job / Additional settings* and then select the points to add to the file from the *Standard deviations* screen.

Blinking laser pointer

You can now configure the laser pointer to blink after storing a DR measurement. In dark environments the blinking laser is a great visual tool to indicate a measurement is complete.

Known issues: Resolved

Laser lines: An issue where positions on the right side of the mine were incorrectly positioned has been resolved. Previously if the first position to be measured on the right side was skipped over or failed to measure, the instrument would re-orientate to the left side of the mine and auto stake subsequent right hand side positions on the left side of the mine.

Trimble Access Installation Manager

New features

- The Trimble Access Installation Manager now includes an information icon next to each component. Click the icon to view the latest new features and resolved issues available for that component.
- The **Release Notes** button now takes you directly to the Trimble Access Help homepage, where the Release Notes and Help files for the current and all earlier versions of the software are available.

Software and Hardware Requirements

Trimble Access software version 2013.10 communicates best with the software and hardware products shown below. The software can also communicate with any version later than that shown.

Trimble software	Version
Trimble Business Center (32-bit)	2.90
Trimble Business Center (64-bit)	3.00

Trimble receiver	Version
Trimble R10	4.80
Trimble R8-4, R8-3	4.80
Trimble R6-4, R6-3	4.80
Trimble R4-3, R4-2	4.80
Trimble R7 GNSS	4.80
Trimble R5	4.80
Trimble NetR9	4.80
Trimble GeoXR	4.55
Trimble R8-2, R6-2, R4-1	4.63
5800 II	4.63
5700 II	4.63

Trimble Instrument	Version
Trimble VX Spatial Station	R12.4.11
Trimble S8 total station	R12.4.11
Trimble S6 total station	R12.4.11
Trimble S3 total station	M2.1.31
Trimble M3 total station	1.30 2.10

For the latest software and firmware versions, see also <http://trl.trimble.com/dscgi/ds.py/Get/File-93082/Survey%20Software%20and%20Firmware.pdf>.

Controller operating system support

The latest controller operating systems are first supported in the Trimble Access software versions listed below.

Controller	Microsoft Windows operating system	First supported in Trimble Access version
Trimble TSC3	Microsoft Windows Mobile Embedded Handheld 6.5	2012.00
Trimble TSC3	Microsoft Windows Mobile Version 6.5 Professional	1.8.0