

Trimble Access™ Software

Version 2017.10 Revision A September 2017



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www.trimble.com

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These Release Notes contain information about Trimble® Access™ software version 2017.10.

General Survey

This section includes features, enhancements and resolved issues that also apply to other Trimble Access applications.

New hardware supported

Trimble T10 tablet

Trimble Access version 2017.10 supports the new Trimble T10 tablet.

The Trimble T10 features a large 10.1" LED display and is designed for all-day survey fieldwork. IP65-rated with military-grade MIL-STD-810G ruggedness certification, the Trimble T10 is protected against rain, mud, dust, sand, and extreme temperatures—as well as drops and shocks. Supporting the Windows® 10 operating system, the Trimble T10 provides a complete field to office solution.

For more information, refer to the topic **Trimble Tablet** in the *General Survey Help*.

Trimble C3 and C5 total station

Trimble Access version 2017.10 supports the new Trimble C3 and C5 total stations.

These compact, lightweight, and rugged mechanical total stations are equipped with powerful, long range EDM and autofocus technology.

The C5 total station runs the Trimble Access software onboard. The C3 is supported as a total station connected to the controller running Trimble Access.

For more information, refer to the topic **Trimble C5 total station** in the *General Survey Help*.

LTI TruPulse 200X

Trimble Access version 2017.10 supports the Laser Technology TruPulse 200X laser rangefinder.

New features and enhancements

SX10 target illumination light

Trimble Access now supports the target illumination light (TIL) when connected to a Trimble SX10 scanning total station. This enables you to more easily see and locate targets when working in a dark environment.

To use the target illumination light, you must update your SX10 firmware to version 1.86.2.

For more information, refer to the topic **Target illumination** in the *General Survey Help*.

Using the Trimble R10 as a mobile hotspot

You can now use a Wi-Fi enabled receiver such as the Trimble R10 receiver as a mobile Wi-Fi hotspot when the receiver is operating as a Wi-Fi access point.

For more information, refer to the topic **Receiver settings** in the *General Survey Help*.

Lever extension antenna measurement method

The 0.150 m lever extension is now available in the list of antenna measurement methods for all supported Trimble integrated receivers. Previously this antenna measurement method was available only for the Trimble R10 receiver.

Stakeout reporting now displays material thickness

When staking a road or alignment relative to a digital terrain model (DTM), you can now choose to display the cut/fill value relative to the design as well as relative to the DTM. Previously, you could only display the cut/fill value relative to the design or the DTM.

This new feature is particularly useful for checking the material thickness when constructing a road. To check the thickness, define a DTM for the previous layer and then when staking out the current layer select *Design + DTM* in the *Display cut/fill to* field.

Attributes of base code changes now applied immediately

When you change the *Use attributes of base code* setting the changes are now applied immediately, including *Code* fields in open *Measure* screens.

NMEA GGA sentences from auxiliary GPS devices

Trimble Access now supports auxiliary GPS devices that produce GNSS NMEA GGA sentences (\$GNGGA). Auxiliary GPS devices include GPS devices integrated into tablets or non-Trimble GPS devices connected via Bluetooth. Auxiliary GPS can be used during a conventional survey for GPS search, navigating to a point, and to display the position in the map.

Additional COM ports now supported

To support USB serial devices on COM4 and other ports in Windows Mobile devices, the list of available COM ports in the *Controller port* field of the survey style now includes COM3 up to COM8. In previous versions only COM1, COM2, and a Bluetooth port were supported.

Focus 30/35 Autolock collimation to targets as close as 20 meters

When adjusting a Spectra Precision FOCUS 30/35 total station, the allowable slope distance when sighting to the target during Autolock collimation is now between 20 m and 300 m. Previously it was between 90 m and 300 m.

Copying jobs to and from a different location on the M3 controller

When using a Trimble M3 controller, you can now copy a job to or from a new location such as an external drive. Files associated with the job that were collected during the survey can be copied at the same time. For more information, refer to the topics **Copying job files to a different location** and **Copying job files from a different location** in the General Survey Help.

Improved display of alerts

Long alert messages are now displayed on multiple lines. Previously, messages in the *Alerts* screen were always displayed on a single line and long messages were truncated at the beginning and end.

Resolved issues

- Unable to enter project height: An issue when opening a job that has no defined project
 height where the message prompting you to enter a project height did not properly display an
 OK button that allowed you to confirm the height you had just entered and close the message
 is now resolved.
- Instrument not oriented correctly after interrupted connection during station setup: An issue when using an SX10 scanning total station or an S Series total station where if you attempted to store the station setup when the instrument was disconnected the station setup appeared to be stored but was not, resulting in an incorrect instrument orientation, is now resolved. This issue usually occurred during an intermittent Wi-Fi connection to an SX10 but could also occur if you manually disconnected and then reconnected the serial connection to the instrument.
- Out of tolerance messages staking a DTM on face 2: An issue when staking a DTM using an SX10 scanning total station or an S Series total station with tracking was enabled for face 2, where on changing to face 2 the instrument would initially turn to the correct point but then move away slightly, resulting in an out of tolerance message, is now resolved.
- Target lock mode setting not remembered after changing modes or target type: An issue
 where the software did not automatically re-enable Autolock, FineLock or Long Range FineLock
 after completing a station setup during which the target was changed to Target DR, is now
 resolved.
- Target lock mode setting not changing after measure rounds: An issue where the software did not automatically change between Autolock, FineLock or Long Range FineLock during the measurement of automated rounds, is now resolved.
- **Measure rounds not automatic**: An issue when measuring rounds of observations with a mix of active and passive targets where measurements were not taken automatically despite the *Automate rounds* option being enabled, is now resolved.
- Multiple check backsight observations in tracking mode: An issue with Check backsight
 where if you selected Chk BS while the instrument EDM was in tracking mode and following the
 measurement you selected Rename in the Duplicate point screen, the instrument would
 measure and store multiple observations, is now resolved.
- Obstruction to target changing current fields: An issue when measuring topo points or
 rounds of observations with Autolock enabled but *Interrupted target* disabled, where the lineof-sight was temporarily broken by an obstruction then the available fields in the *Measure*topo or *Measure rounds* screen reset is now resolved.
- SX10 snapshots show drawings after discarding drawing edits: An issue when capturing a
 snapshot when connected to a Trimble SX10 scanning total station, where if immediately after
 capture you drew on the image and then tapped Esc to abandon the changes, the image
 appeared to show the discarded drawing, is now resolved.
- Current distance not reset when switching targets in Survey Basic: An issue where when switching from a DR target to a non-DR target, the software incorrectly applied the prism constant to the previously measured distance, is now resolved. This affected the displayed distance only and did not affect any calculations. When switching target modes, the current distance is now reset to 0 and if tracking mode is disabled you must tap *Measure* to remeasure to the target.

- Incorrect total station connection message: An issue when connecting to a total station using a serial cable where the **Connecting to total station** message incorrectly included a line detailing radio settings is now resolved.
- Incorrect antenna height warning: An issue where an incorrect antenna height warning message appeared when setting a valid zero antenna height, for example when measured to bottom of antenna mount after having used another measurement method, is now resolved.
- Receiver not responding message when connected to an SP60/80 receiver: An issue during an RTK survey where large amounts of correction data, such as RTCM v3.2 MSM messages, sent from the base to a Spectra Precision SP60 or SP80 receiver using an Internet data link routed through the controller via Bluetooth connection to the receiver, occasionally caused the Receiver not responding, attempting to reconnect message to appear and remain until the survey was ended, is now resolved.
- Staking out an alignment or road in an integrated survey: An issue when staking out an
 alignment or road during an integrated survey, where if you tap *Esc* from the *Measure* screen
 and then tap *No* to discard the observations but continue measuring the point, then new
 observations for the point cannot be stored because the *Store* button does not appear, is now
 resolved.
- **Stakeout elevation code**: An issue when staking out an elevation where if you entered a code for the as-staked point, the code you entered was not saved and the point was stored with an incorrect *Last code used* is now resolved.
- Staking out perpendicular to DTM: An issue when staking out using a DTM for elevation where if you changed the *Offset to DTM* to perpendicular the offset was not applied, is now resolved. This issue was introduced in Trimble Access version 2017.00.
- Shift key press to access second row of softkeys: An issue on the TSC3 controller where pressing the SHIFT key on the controller keypad did not always display the available second row of softkeys is now resolved.
- Scroll bars not available on 10" tablets: An issue where it was no longer possible to move the horizontal or vertical scroll bar on a Windows 10" tablet after installing Windows 10 version 1703 (Creator's update) is now resolved.
- Alignments in 3D map: An issue where alignments were drawn incorrectly in the 3D map when the first element was an arc or spiral is now resolved.
- **GPS position icon not updating on 3D map**: An issue when using an auxiliary GPS receiver or the tablet's internal GPS receiver where the GPS position icon did not always update regularly in the 3D map is now resolved.
- Marathi characters not displayed in 3D map: An issue where text in Marathi characters appeared as small boxes on the 3D map is now resolved.
- **Incorrect SX10 scan color**: An issue where the selected scan color was not always used for scan data if the job used a TTM file is now resolved.
- **Application errors**: You should no longer see occasional application errors when you do any of the following:
 - Operate Trimble Access version 2017.00 with the FOCUS 30/35 autoconnect option enabled (this is the default setting).
 - Use *Continuous topo* when connected to a FOCUS 30/35 instrument with laser blinking enabled. Laser blinking on the FOCUS 30/35 is now temporarily disabled when using *Continuous topo*.
 - Review points in a linked job that have more than one feature code with attributes.

- Attempt to key in a line using the bearing-distance method but do not enter an azimuth or a distance. This issue was introduced in Trimble Access version 2017.00.
- Attempt to use the map and the stakeout alignment screen to access the same alignment at the same time.
- Open a job that has no defined project height and then leave the message prompting you to enter a project height open for a short period of time.
- Attempt to create a survey style that contains a back slash (/) in the style name.
- Edit AT360 active target details after losing the connection to the instrument.
- Exit the Trimble Access software when connected to an AT360 active target.
- Change the log in mode you are using to log into the Trimble Access software and then exit the software.
- Run the software in full screen mode on a tablet with a 10" screen.
- Select a LandXML file to display in the map and the file contains a road with a spiral type that is not supported. Now, a message warns that the spiral type is not supported and the file is not loaded.

Roads

New features and enhancements

Stakeout reporting now displays material thickness

When staking a road or alignment relative to a digital terrain model (DTM), you can now choose to display the cut/fill value relative to the design as well as relative to the DTM. Previously, you could only display the cut/fill value relative to the design or the DTM.

This new feature is particularly useful for checking the material thickness when constructing a road. To check the thickness, define a DTM for the previous layer and then when staking out the current layer select *Design + DTM* in the *Display cut/fill to* field.

Side slope staking

In Trimble Access version 2017.10 you can now:

• Add a side slope when staking a station on a string or measuring your position relative to a string.

To access this new option, tap in the graphics area at the navigation screen and select *Add side slope* from the pop up menu.

You can define the cut and fill side slope values, the cut ditch width (available when a cut slope has been defined) and if required, select a different hinge string from the current string.

• When editing a side slope, you can add or edit the cut ditch width.

Note – Adding a side slope is available only for a Trimble road.

Resolved issues

- LandXML files with multiple profile alignments: An issue where a LandXML file had multiple profiles but the resulting road always used the last profile in the list is now resolved.
- Missing survey method fields when using railroad terminology: An issue when surveying a road using the traditional menu selection option to activate the survey method, where the related fields for each survey method were missing is now resolved. This was an issue only when the *Use railroad terminology* option was selected in the *Settings/Language* screen. This issue was introduced in Trimble Access version 2016.03.
- **Application errors**: You should no longer see occasional application errors when you do any of the following:
 - View in the 3D map a LandXML file containing a road defined only by a Start point.
 - Select a station on a 5D string where the selected position defines the transition from a cut side slope to a fill side slope (or vice versa).

Pipelines

New features and enhancements

Pipelines Tally and Joint Map Updater Utility

The Trimble Access Pipelines Tally and Joint Map Updater utility is used to merge the updated tally and joint map data from multiple field crews into a master set of files in the office at the end of each day. The master tally files are then distributed to each field crew, ready for the next day's work. An XML file containing all the merged data is also available for generating custom reports from.

The utility is available for download from www.trimble.com/Survey/Trimble-Access-IS.aspx by clicking *Downloads* on the right and navigating to the *Trimble Access Pipelines* section.

This utility is updated from time to time. To view the latest update information and all updates to the utility since it was first released, view the *Pipelines Tally and Joint Map Updater Utility Release Notes* document available with the utility download file.

Resolved issues

• Incorrect joint map file details if updated during as-built process: When measuring an as-built joint map item (weld, bend or loose end), if you updated the attribute details with changes that affected the definition of the joint map and then chose to update the joint map to match the new details, the joint map details were not being updated correctly. This could lead to an error if the updated joint map was selected later in the project.

Tunnels

New hardware supported

Trimble SX10 scanning total station support

The Trimble SX10 scanning total station can now be used with Trimble Access Tunnels.

When connected to an SX10, you can use Tunnels to scan cross sections of the tunnel at defined station intervals, in the same way as you use an S Series total station. To perform full high-density scans or to capture panoramas with the SX10, you must use the *Scanning* and *Panorama* measurement methods in General Survey.

When setting out points in a tunnel using the SX10, change to the *Video* screen using the onscreen *Switch to* button, and then use the inner crosshair in the *Video* screen as a guide to mark the position on the tunnel surface. To return to the *Set out* screen, tap *Switch to* and select *Set out*. Alternatively, add the *Video* and *Set out* screens to your *Favorites* list.

Spectra Precision FOCUS 35 and FOCUS 30 total station support

The Tunnels software now supports the Spectra Precision® FOCUS® 35 and FOCUS 30 total stations.

Resolved issues

- **Set out positions**: The option to define set out positions by the *Multiple radial* method has been reinstated. This method was removed in Trimble Access version 2015.21.
- **Surface selection**: An issue where you could not tap a surface to select it when using the *Position in tunnel* survey option is now resolved.
- **Cross section icon**: An issue where the cross section button was not shown when you selected *Auto scan* and then changed the map to widescreen is now resolved.
- Appearance of icons on a 10" tablet: The appearance of icons in the plan and cross section view on a 10" tablet is now improved. It is also now easier to select the items in the plan and cross section view.
- **Application errors**: You should no longer see occasional application errors when you do any of the following:
 - Set out a position that does not have a surface assigned. This could happen if you defined set out positions before defining the tunnel template. Now setout positions without a surface are assigned the first surface defined in the template when the tunnel is stored.
 - Auto scan a scan zone that contains fewer than 6 points where the *VX scanning* option is selected and the *Point code* field is empty.
 - Auto scan a scan zone that does not contain any points.

Mines

New hardware supported

Spectra Precision FOCUS 35 and FOCUS 30 total station support

The Mines software now supports the Spectra Precision® FOCUS® 35 and FOCUS 30 total stations.

Trimble Installation Manager

Resolved issues

• Windows Mobile Device Center connection issues: An issue where it was no longer possible to connect a controller to an office computer or tablet using Windows Mobile® Device Center (WMDC) after installing Windows 10 version 1703 (Creator's update), is now resolved. Trimble Installation Manager now makes some registry setting changes to enable this to work again, but the computer requires rebooting for registry changes to take effect. If you experience connection issues, restart the office computer or tablet.

Installation Information

This section provides information on installing version 2017.10 of the Trimble Access software.

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.

From time to time new operating systems are made available and can be found at www.trimble.com/Survey/Controllers.aspx.

WARNING – Operating system updates will erase all data from the device. Make sure you backup your data to your PC before installing. Otherwise you may lose your data.

Note – The process of upgrading Trimble Access from one version to another converts the jobs (and other files like survey styles). If you copy the original Trimble Access data files off the controller and then upgrade the operating system, before installing the new version of Trimble Access please ensure you copy the original Trimble Access data files back onto the controller. If you follow these steps then the original Trimble Access files will be converted and made compatible with the new version of Trimble Access.

Software and license installation

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

- Never installed the Trimble Installation Manager, go to www.trimble.com/installationmanager for installation information.
- Previously installed the Trimble Installation Manager, you do not need to reinstall it because it
 updates itself automatically. Select Start / All Programs / Trimble Installation Manager to start
 the Trimble Installation Manager.

For more information, click Help in the Trimble 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 2017.10, you must have a warranty agreement valid up to 1 September 2017.

When you upgrade to version 2017.10 using the Trimble Installation Manager, a new license file is downloaded to your device.

Updating office software

When you upgrade to version 2017.10, 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 Installation Manager, the office software on the computer that has the Trimble 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 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.aspx?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.aspx?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 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://apps.trimbleaccess.com/help to download a PDF file of the Help. A separate PDF file is provided for each application.

Software and Hardware Requirements

Trimble Access software version 2017.10 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)	2.99
Trimble Business Center (64-bit)	3.90

Trimble receiver	Version
Trimble R10	5.30
Trimble R8s	5.22
Trimble R2	5.22
Trimble R8-4, R8-3	5.22
Trimble R6-4, R6-3	5.22
Trimble R4-3, R4-2	5.22
Trimble R9s	5.22
Trimble NetR9 Geospatial	5.22
Trimble R7	5.03
Trimble R5	5.03
Trimble Geo7X	4.95
Trimble GeoXR	4.55
Trimble R8-2, R6-2, R4-1	4.64
5800, 5700 II	4.64
Spectra Precision SP60/80	3.31

Trimble instrument	Version
Trimble SX10 scanning total station	\$1.86.2
Trimble S5/S7/S9 total station	H1.1.26
Trimble S6/S8 total station	R12.5.52
Trimble VX Spatial Station	R12.5.52
Trimble S3 total station	M2.2.30
Trimble V10 imaging rover	E1.1.70
Trimble C5 total station	3.0.0.x
Trimble M3 total station	V2.0.4.4

Trimble instrument	Version
Spectra Precision FOCUS 30/35 total	R1.6.7
station	

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

TSC2 controller no longer supported

Trimble Access version 2017.00 and later cannot be installed on Trimble TSC2 controllers, regardless of the controller's software warranty status. During the last year the TSC2 platform has shown it is underpowered for recent versions of Trimble Access. To continue developing Trimble Access we are no longer able to support the installation of new versions of Trimble Access to the TSC2 controller. TSC2 controllers can continue running Trimble Access version 2016.12.