

The Trimble Survey Controller™ software is the data collection solution that will make your survey work faster, easier, and more productive than ever before.

The Trimble Survey Controller software runs from a real-time map display and the touch screen provides rapid access to your data to speed up all your topographic and stakeout work. The Trimble Survey Controller software enables you to integrate data collected from GPS and optical instruments. Audible messages provide status updates and alert you to changing conditions so that you don't miss a beat at any stage. Innovative features, map-centric displays, and numerous customizable tools all help you to complete every job faster and more easily. Customizable ASCII export enables you to create almost any format file or report in the field or office.

Operating on a Trimble controller using a Microsoft® Windows® CE operating system, the Trimble Survey Controller software provides the versatility of new communication technologies including Bluetooth® cable-free technology with GPS sensors. It also provides easy and fast Internet connectivity communication with your office from in the field.

Discover the latest generation of field survey technology and take ultimate control of your instruments, productivity, and results.



The Trimble Survey Controller software main menu is shown on the Trimble CU Controller

TOPOGRAPHIC SURVEYS

The Trimble Survey Controller software provides a complete set of topographic survey tools.

Seamless conventional and GPS surveying

Switch seamlessly between GPS survey and robotic survey field processes—and have all the data stored in one job file. For example, to survey under a bridge, switch from GPS to a robotic survey in the same job file and continue work without going back to the instrument. You can then operate the robotic total station remotely with the controller through the radio communication supplied with the robotic instrument—ideal for one-person surveying.

Surface scanning

When used with a system such as the Trimble® S6 Total Station, the Trimble Survey Controller software can automatically measure points on a surface. There's no need for you to make time-consuming measurements to each point. Measuring building facades and stockpiles is quick and easy. You can scan using one of the following methods:

- Horizontal/vertical angle interval
- Rectangular plane
- Line & Offset

Continuous surveying

Survey without stopping. You can plot a continuous line, even a topo map, simply by walking or driving over the terrain and recording points at time and distance increments you define. In RTK mode you can create up to two offsets, horizontal and vertical, with feature codes.

TRIMBLE INTEGRATED SURVEYING™—YOUR TOTAL SURVEYING SOLUTION

The Trimble Survey Controller software continues to set the highest standard for survey performance, productivity, and ease of use.

The Trimble Survey Controller software:

- controls all your survey equipment: GPS, optical and robotic
- puts all the data and capabilities you need at your fingertips with a touch-screen graphic interface, an active real-time map, customizable ASCII output and full Microsoft Windows CE functionality
- provides Bluetooth wireless communications for cable-free operation
- communicates with the office via cellular networks, giving you more coverage options, and providing you with access to the Internet while you are in the field

- organizes data collection into single job file or multiple job files that can store both GPS and optical data and can easily be transferred in the field or the office
- gives you customizable tools to help you complete every job faster and more easily—Survey Styles enable you to configure all parameters in the software just once for each type of survey you do and each type of survey equipment you use
- operates and provides context-sensitive online Help in the language of your choice
- all operating in color on state-of-the-art Trimble hardware

You are instantly more productive. Instantly more competitive. Instantly better at what you do.

The Trimble Survey Controller software communicates with almost every field instrument you use for the original field-proven Integrated Surveying system:

- Trimble GPS solutions including the Trimble R8, 5800, Trimble R7 and 5700
- The Trimble S6 Total Station
- Trimble optical families including the 5600, 5500, 3600, 3300, and 600M
- Other Trimble controllers
- Laser rangefinders—several leading models
- Third-party optical total stations

The traditional job file stores the entire job for maximum convenience: all survey observations, points, lines, arcs, areas, attributes, all major industry standard road formats, QA/QC data and calibration data you can carry the entire survey from one field instrument to the other or back to your office computer for final processing.





Job review and Point Manager

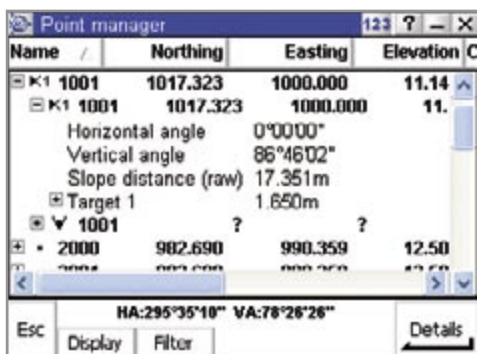
The Review Current Job feature gives you a complete and detailed record of everything that happened in the field—a real electronic field book. Alternatively use the Point Manager feature to manage your data.

You can easily review:

- Coordinates and observations
- The best point and all duplicate points
- Target and antenna heights
- Codes and notes

You can quickly and easily edit:

- Target and antenna heights (single or multiple)
- Codes and notes



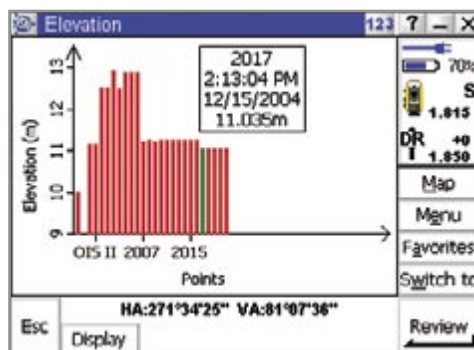
QC Graph

The QC Graph screen displays a graph of quality indicators that are available from data in a job.

Use this tool to quickly identify an erroneous measurement or an incorrect target height.

You can view a graph of:

- Horizontal and vertical precision
- Satellites
- PDOP, RMS and standard errors for HA, VA and Slope distance
- Elevation
- Target height



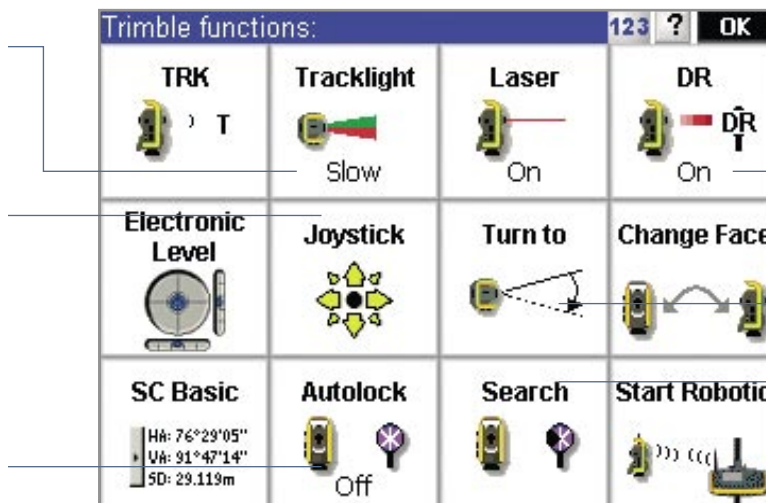
TRIMBLE FUNCTIONS FORM

The Trimble Functions Form allows you to quickly and easily control instrument functions and change instrument settings. For example, depending on the type of instrument you can:

Turn on the Tracklight

Joystick – when at the instrument or working in Robotic mode, you can turn the instrument both horizontally and vertically and control the speed at which it turns

Autolock – locks onto a remote target



Put the instrument into DR (Direct Reflex) reflectorless mode

Change Face

Turn to a selected point

Search controls – look for a target

Quick height/width measurement

The Remote Object function allows you to easily determine the height or width of remote objects that cannot be measured with a prism—ideal for power lines, radio masts or objects where safety is also an issue.

Feature coding

Powerful survey feature coding capabilities reduce or eliminate postprocessing, data-editing time, and errors in the office. You can continue to use familiar code names by customizing feature-code libraries. For high-precision GIS surveys, the data dictionaries you can create to suit your job/application simplify even demanding and complex field attribute collection.

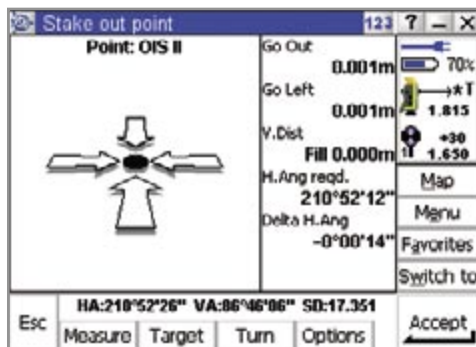
COGO

The Trimble Survey Controller software Coordinate Geometry (COGO) functionality allows you to calculate distances, azimuths and point positions by various methods. You can also rotate, translate, and scale a single point or a selection of points.

STAKEOUT

The Trimble Survey Controller software gives you unbeatable stakeout capabilities. The graphical stakeout screens and the active map get you to each point quickly and easily for all your construction projects.

You can now build stakeout lists from comma delimited (.CSV) files without importing the design points into the current job database—only measured points that you store end up in the job file, keeping the job file smaller and more manageable.



Graphical stakeout

You can stake out directly from the active map. Just tap and hold on the point and select Stakeout from the drop-down list that appears. Other options include Review, Compute Inverse, Key in Line, Compute Area, Delete, and more. The powerful stakeout screen makes it fast and easy to

stake out points, roads, lines, arcs, slopes, and surfaces. Use either the text on the right or the graphical display on the left to navigate to the point.

Staking out with a robotic total station has never been easier. When the instrument has locked on to the target, the continuous stakeout tracking in the graphical screen updates your target position in real-time. When you are close to the point, the large arrows get you to the stakeout point with ease.

Audible voice prompts

When doing conventional stakeout, pre-recorded sound messages tell you to “Go Left”, “Go Right”, “Go In”, or “Go Out” to help get you to the point easily. “Stake point” tells you you’re there. These messages are customizable for your local language needs too.

CONTROL

The Trimble Survey Controller software makes establishing control for your survey easier than ever; all you need is your control points in a comma delimited file or control job. Then you can share these between crews and start with a fresh job every morning and still have easy access to your control or any other important points.

Station setup and station elevation

The Trimble Survey Controller software allows you a range of methods to establish your station:

- Simple station setup
- Using multiple backsights
- Resection

When using the resection or multiple backsights functionality, advanced statistical reporting allows you to view the observation residuals. Multiple rounds of observations can be collected automatically when using the Autolock® function; all you have to do is identify the points when measuring the first face observations.

The station elevation function allows you to determine the height of your instrument by observing to one or more marks with known elevation.

Site Calibration

For GPS surveys, you can apply a site calibration before staking out points or computing offset or intersection points. The solution adjusts the projected (grid) coordinates to fit the local control. And you’re in complete control—you can either key in site calibration details or let the system compute it for you.

Duplicate Points and Averaging

The Trimble Survey Controller software provides several ways of checking your data. You can perform duplicate point tolerance checking. And if you have several GPS or conventional measurements to one point, you can choose to average your measurements.

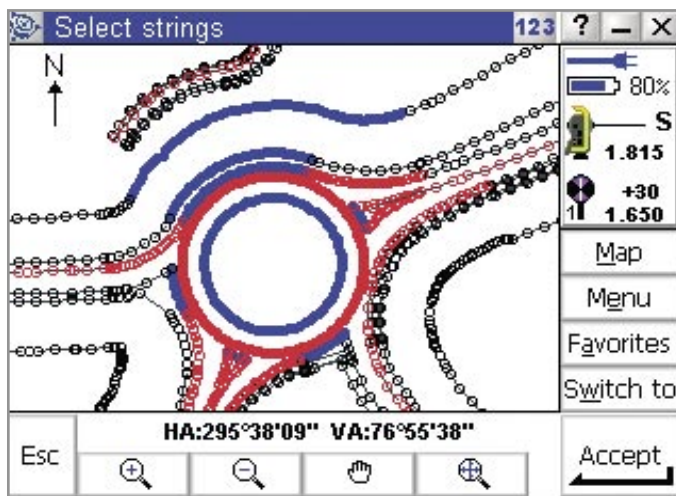
CUSTOM REPORTS

The Trimble Survey Controller software can export data in many different formats. Flexibility to create files of almost any description is a valuable tool for checking data in the field, producing reports to e-mail to the office or your client from the field.

Either use the default styles provided with the Trimble Survey Controller software or create your own XML style sheet to set up your own custom format.

ROAD STAKEOUT

The Trimble Survey Controller software accepts uploaded road definitions from a wide variety of third-party sources. You can also key in a complete road definition including horizontal and vertical alignments, templates and superelevation and widening records. And if you work with LandXML or GENIO road files, the Trimble Survey Controller software can read these files directly.



The unique cross-section view provides a comprehensive graphical view of the road at the selected station. Your position and the target are clearly indicated and you have all the information necessary to mark up the stakes.

Construction offsets

When staking out you have the capability to stake out an offset from your point. You can apply a horizontal offset either horizontally or by the slope of the previous template element. You can also apply a vertical offset. Construction offsets are shown in the cross-section view.

Slope staking

Now you can find and stake the points where the design surface and the existing surface intersect much more easily and accurately. This is done on site in real-time using unique cross-section graphics.

Real-time redesign

Often the original designer is unaware of situations that may arise in the field. For example, design elevations may have to be altered to better suit existing structures, or side slopes may require adjusting due to ground conditions. The Trimble Survey Controller software provides full editing capabilities of all aspects of the design, while in the field.

Cross Slope

Graphical selection makes cross slope application as easy as tapping the template element that defines the cross slope. The Trimble Survey Controller software will navigate you to the position and provide you with the resultant cross slope delta value.

Real-time quality control

You can place your measurement equipment anywhere on site and see an instantaneous grid position, station, offset, and cut/fill report. This a great tool for checking stakes in record time and for making spot checks on points, grades, and earthworks progress.



SEAMLESS DATA FLOW IN THE FIELD AND IN THE OFFICE

Integration of survey data has never been so easy. The advanced features of the Trimble Survey Controller software make working with mixed GPS and conventional survey data simple and efficient.

Not only is data transfer easy, it's also flexible and fast with various communication options including Bluetooth and e-mail via the Internet.

Efficient two-way data flow also means that data can be easily transferred to and from Trimble's office software—including Trimble Geomatics Office™, Trimble Total Control™, and Terramodel® software. These packages support many native data formats of popular survey, design, and GIS packages.

In addition, data from third-party survey, design or GIS software can be easily transferred into the Trimble Survey Controller software. For example, the embedded Trimble Link module allows direct data transfer between the Trimble Survey Controller software and Autodesk Land Desktop software or CAiCE software. Trimble Survey Extension provides the same easy transfer mechanism for ESRI's ArcGIS Survey Analyst software.

Integrate your office and field data as never before possible: that's what the Trimble Survey Controller software and Integrated Surveying are all about.

GPS INFRASTRUCTURE COMPATIBILITY

There's no need for a GPS base station when you use the Trimble Survey Controller software with a Trimble VRS™ (Virtual Reference Station) network. You can be up and running as soon as you get to the field. For an even more cost-effective solution, you can connect to a GPRS-enabled cellphone and stream correction data from an Internet server. Furthermore, the Trimble Survey Controller software is WAAS and EGNOS capable—so that all your infrastructure options are covered.

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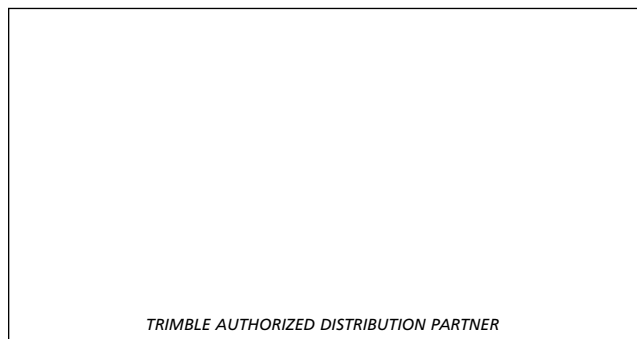


CONCLUSION

You demand productivity, flexibility and quality in your surveying tools. The Trimble Survey Controller software offers the consistent quality of a field-proven solution plus advanced features and benefits that will revolutionize the way you work. It provides:

- Bluetooth wireless communications for cable-free operation.
- Internet and e-mail capabilities in the field for keeping in touch with the office wherever you are.
- Map-centric touch screen display and sound prompts for maximum convenience and ease of use in all aspects of your work.
- Integrated Surveying with Trimble GPS and conventional, and most major optical and robotic surveying instruments and laser rangefinders.
- Seamless data flow between a variety of instruments to office software systems, using a choice of transfer methods from serial cable to Internet to infrared.
- Powerful features and availability in your preferred language make every job faster, easier, and better, and dramatically increase your productivity.

With no add-ons, hidden optional extras or upgrades necessary, the Trimble Survey Controller software is your total solution. You're in complete control of your work, from concept to completion.



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