Trimble Survey Controller(TM)

Release Notes

Version 10.80
Revision A
May 2004

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Release Notes

Corporate Office

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Release Notice

This is the May 2004 release (Revision A) of the *Trimble Survey Controller Release Notes.* It applies to version 10.80 of the Trimble Survey Controller software.

Product Information

This section contains information about the Trimble Survey Controller software version 10.80 running on a Trimble® ACU or TSCe controller ("the controller"). For detailed information, refer to the *Trimble Survey Controller Getting Started Guide.*

New user

In a new controller, Microsoft Windows® CE.NET and the Trimble Survey Controller 10.80 software are already installed.

To use the Trimble Survey Controller software in a language other than English, you must transfer the language pack file from the *Trimble Survey Controller Software CD* to the controller.

Upgrading from a previous version of Trimble Survey Controller

- If your TSCe controller is running Trimble Survey Controller version 10.00 or version 10.01, Microsoft Windows CE v3 is installed on the controller. You require a Trimble Survey Controller version 10.8 upgrade kit and a valid warranty agreement in order to upgrade. The upgrade kit contains a Microsoft CE.NET authorization key and sticker and can be requested by registering on the Trimble website.

- If your controller is running Trimble Survey Controller version 10.5, 10.6, or 10.7, Microsoft Windows CE.NET is already installed. You need to upgrade to the latest version of Windows CE.NET, but you do not need a Microsoft authorization key.

Note *− When you install the latest operating system, the existing /Disk/Trimble Data folder is renamed /Disk/Trimble Data V10. If the controller has limited disk space, you may need to delete files before you can complete the installation. You can usually delete files between Step 3 and Step 4 below.*

During the upgrade, complete all of the following steps. Follow the prompts that are provided by the installation wizard:

1. Install Microsoft ActiveSync software version 3.7 from the *Trimble Survey Controller Software CD.*
2. Upgrade the controller to the latest version of the Microsoft Windows CE.NET operating system.
3. Install Trimble Survey Controller version 10.80 on the controller.
4. Transfer a new language pack to the controller.

Trimble Survey Controller 10.7 files and version 10.8 software

All Trimble Survey Controller 10.7 files (such as Jobs, Survey Styles, and Feature and Attribute Libraries) are compatible with version 10.80 software.

During the upgrade, the existing /Disk/Trimble Data folder is renamed /Disk/Trimble Data V10. To use your Trimble Survey Controller 10.7 files in version 10.80, copy the files to the new /Trimble Data folder using Microsoft Explorer.

When you open a version 10.7 job, Trimble Survey Controller asks you to confirm the job upgrade to version 10.80. You cannot use an upgraded job in Trimble Survey Controller version 10.7 and you cannot later downgrade the job.

Using Trimble Survey Controller version 10.80 with other Trimble products

Trimble Survey Controller version 10.80 communicates best with the software and hardware products shown in the following table. The software can also communicate with any version later than that shown.

Product type	Trimble product	Version
Software	Trimble Geomatics Office	1.61
	Trimble Link	3.00
	Data Transfer	1.11
	Trimble Total Control	2.71
	Terramodel®	10.13
Receiver	Trimble R7	2.10
	Trimble R8	2.10
	5700	2.10
	5800	2.10
	4800	1.30
	4700	1.30
Conventional Instrument	Trimble 5600 Series	696−03.05
	Trimble ATS	696−03.05
	Trimble 3600 Elta CP (with interpreter)	1.15
	Trimble 3600	2.00
	Trimble 3300 Series	5.65

Updating office software

Note *− If you have GPS Pathfinder® Office software version 2.51 or later installed, make sure that the Connection Manager utility is closed before you update the office software.*

Before using Trimble Survey Controller with Trimble office software, update the office software. To do this, select *Update Office Software* from the main menu on the *Trimble Survey Controller Software CD.*

The Trimble Survey Controller version 10.80 software uses a version 10.7 DC file.
If you use Trimble Geomatics Office, Trimble recommends that you update the Trimble Geomatics Office software from version 1.60 to 1.61. This option will not update versions of Trimble Geomatics Office that are earlier than version 1.60.

Although Trimble Survey Controller version 10.80 can output a version 10.0 DC file to older versions of the office software, the process does not support all new records and some information may be lost.

Upgrading Trimble 3600 and 5600 instrument firmware

If you need to upgrade the Trimble 3600, 5600, or ATS instrument firmware, return the instrument to your Trimble service center.

Configuring the system options

The new Trimble Survey Controller systems are shipped unconfigured. They are configured automatically when you connect the controller to the instrument. Alternatively, select *Configuration/Options* and select the option(s) appropriate for you:

- GPS users − select *GPS surveying*
- Conventional Total Station users − select *TS surveying*
- Integrated surveying users − select both options
- Helmert, Station Setup Scale factor users − select *Advanced Geodetic Support*

These options control the styles that are available and the relevant options that appear throughout the software. You can reconfigure the Trimble Survey Controller system at any time.

New Features

This section summarizes new features in the Trimble Survey Controller software. For more information about the features, refer to the Trimble Survey Controller Help or the *Trimble Survey Controller Getting Started Guide*.

Note *− The help is also provided on the Trimble Survey Controller Software CD in a PDF document, which you can search or print.*

Trimble Survey Controller 10.7 files and version 10.8 software

All Trimble Survey Controller 10.7 files (such as Jobs, Survey Styles, and Feature and Attribute Libraries) are compatible with version 10.80 software.

Trimble internal radio communication solutions

Trimble Survey Controller 10.80 supports the Trimble R8 GPS receivers with Trimble internal 450MHz UHF transceiver, and internal GSM dial−up solutions.
Automatic switching between UHF and GSM modes is not supported. To change modes manually, change between Survey Styles.

Cellular modems, Internet connections, and Bluetooth

- It is now easier to use a cellular modem, and to connect to the Internet for RTK base data.
- You can configure connection parameters within the Survey Style.
- Trimble Survey Controller can now initiate an Internet connection when the survey is started.
- Bluetooth2Mobile has been integrated for connections initiated from within Trimble Survey Controller.
- The software now displays improved connection progress messages during the dial−up.
- When you use Trimble Internal dial−up solutions, the GSM signal strength is available from within Trimble Survey Controller.

RTCM version 3

Trimble Survey Controller 10.80 now supports RTCM version 3.

Smart Alpha / Numeric Controls for ACU

When you use Trimble Survey Controller on the ACU controller, the software now automatically sets the ACU into numeric mode for numeric fields.

ACU and TSCe Screen Lock

You can now use the keypad when the Touch screen is disabled.

ACU	[Ctrl]+[Trimble key]
TSCe	[Ctrl]+[Power key]

Improved Robotic connections

If you walk out of range or behind an obstruction when you move between points, Trimble Survey Controller now seamlessly picks up the connection again when you are back within range.
If you try to measure a point but you do not have current radio communication, Trimble Survey Controller will attempt to reconnect to the instrument before continuing.

Map and DXF improvements

Trimble Survey Controller now loads DXF files faster.

Trimble Survey Controller is now faster when zooming and panning.

SiteNet Base 900

Trimble Survey Controller 10.80 now supports the SNB900 radio modem.

Other Information

Charging the controller batteries
Before using a controller for the first time, make sure that the battery is fully charged. For more information, refer to the *Trimble Survey Controller Getting Started Guide* and the *TSCe Getting Started Guide.*

Running the ACU on its internal batteries
Trimble recommends that you do not run the ACU on its internal batteries. By default, the Microsoft Windows CE.NET v4.0.9 (or later) operating system does **not** allow you to do so. However, you can reconfigure this in the Control Panel. When the ACU is running on its internal batteries, the battery icon flashes. If this occurs, connect the ACU to an external power source as soon as possible.

Hard reset on the ACU
When you perform a hard reset on the ACU, make sure that it is running on external power. Otherwise the controller will not restart.

Database search rules
Trimble Survey Controller gives points and observations a classification to determine the relative importance of coordinates and observations stored in the job database.

Classifications are in the following descending hierarchy:

- Coordinates:

    1. Control − keyed in or transferred
    2. Averaged − created when duplicate points are averaged
    3. Adjusted − traverse adjusted points
    4. Normal − keyed in, measured or transferred
    5. Construction − created using COGO functions

- Observations:

    6. Normal / Mean Turned Angle (MTA) − created from conventional observations
    7. Construction − created by fast−fix observations
    8. Stakeout − staked point observations
    9. Backsight − conventional backsight observations
    10. Check − duplicate observations stored as check point

        Deleted − created when an observation is deleted

Notes:
If more than one coordinate or observation exists for a point within the current job, Trimble Survey Controller uses the first.
A Mean Turned Angle observation (MTA) is always used in preference to any other face 1 or face 2 observation from the same station setup.

For more information about search classes, refer to Database Search Rules in the Help.

Documentation

Trimble Survey Controller help is "context−sensitive." This means that to get assistance, you tap the "?" at the top of the screen. This locates the topic that relates to what you are doing. You then tap the topic title to view the relevant help.

The help is also provided on the *Trimble Survey Controller Software CD* as a single file in Adobe Portable Document Format (PDF). View this file on an office computer. You can use it to search for a particular topic or to print pages from the help.