

Geo2003 GPS Firmware New Features and Upgrade Procedure



This document describes the new features included in the Geo2003 GPS Firmware since version 1.04. New features are reported relative to the previous version. GPS Firmware can be checked by launching your field software (i.e. Terrasync, GPSCorrect, and GPS Controller) and going to Status/Receiver. Please ensure that your unit looks like the one pictured above. If it has many more buttons at the bottom, it is a Geo2005 and this document does not apply. If that is the case, please refer to Geo2005 documentation. Seiler recommends installing the version 1.05A GPS firmware onto all GeoExplorer 2003 series handhelds (pictured above), including those handhelds that were recently upgraded to version 1.26 GPS firmware.

Version 1.05A (August 2007)

- Resolves the issues seen with receivers recently upgraded to the version 1.26 GPS firmware where some receivers would fail to connect, and GPS settings were not retained after the receiver is shutdown.

Note: The version 1.05A GPS firmware reports as v1.05 in Trimble field software. To check that the version 1.05A GPS firmware has been installed correctly, go to "Start \ Settings \ System \ System Information". The version 1.05A GPS firmware reports as "v1.05, 15 Aug 2007"

Version 1.26 (August 2007)

- The new WAAS satellites (PRN 135 and 138) are included in the default tracking list of receivers running the version 1.26 GPS firmware. This allows these WAAS satellites to be tracked when using the Auto tracking mode in Trimble field software. *Without performing the firmware update, your unit will no longer have WAAS access.*
- Support for using Custom SBAS (WAAS) tracking mode with TerraSync software version 3.00 or later. This allows you to configure the receiver to track, or not to track, particular SBAS satellites.
- Updated SBAS (WAAS and EGNOS) ephemeris information and tracking to improve initial fix and reacquisition times.

Version 1.04 (October 2003)

- Low position yield issues have been addressed. When you collect or use data in challenging GPS environments, the version 1.04 GPS firmware gives improved position yield.
- Postprocessed positions will have improved yield when you log data with the SuperCorrect™ option enabled in the field software (TerraSync™ or the GPSCorrect™ extension for ESRI® ArcPad™).
- The integrated GPS receiver now correctly observes EGNOS health messages, which may result in improved yield when you use EGNOS corrections.

UPGRADE PROCEDURE

This section describes how to upgrade to the version 1.05A firmware on your Geo2003 series receiver. This is a free upgrade and is recommended for all versions of the Geo2003.

1. Make sure that you have a current version of ActiveSync
2. Ensure compatibility with USB 2.0
3. Download the GPS firmware upgrade file to an office computer.
4. Run the upgrade file to install the new GPS firmware.
5. Test your connection

Step 1: Make sure that you have a current version of ActiveSync

Ensure that you have Microsoft ActiveSync installed on your PC and are at version 4.5. If not, uninstall any older version and download the program here:

https://www.microsoft.com/windowsmobile/downloads/eula_activesync45_1033.mspx?ProductID=76

Step 2: Ensure compatibility with USB 2.0

http://www.seilerinst.com/images/pdf/mapping/MGIS_SprtNote_GeoExplorer_USB20.pdf

Step 3: Downloading the GPS firmware upgrade file

Obtain the GPS Firmware upgrade file. The file is the same for a GeoXH, GeoXT, or GeoXM.

Go to this link:

<http://trl.trimble.com/dscgi/ds.py/Get/File-387764/GeoExplorer%202003%20and%20CE%20series%20v1.05A%20Firmware.exe>

Save the target file to your desktop or a folder that you can find later.

Step 4: Running the upgrade file

1. Ensure that your Geo2003 series handheld is in the black support module, connected to a power source and connected to your computer using ActiveSync technology or the Windows Mobile Device Center.
2. Browse to the location where you saved the upgrade file and then double-click to run the executable file to start the upgrade process. Be sure to press the “Upgrade” button on the dialog box on your PC to continue the process. The upgrade files are automatically transferred to your Geo2003 series handheld and the upgrade will begin.

If the upgrade fails to start, ensure that you have an ActiveSync connection. Also, connect to your GPS receiver and then disconnect. Then repeat Step 2.

Step 5: Test your connection

1. Connect to GPS in your field software. It may take 20-30 seconds to initially connect after the upgrade.
2. Go to Status/Receiver in your field software. If GPS Firmware is blank, connect to the GPS receiver using your field software and then check again. GPS Firmware should be listed at version 1.05. You will now be able to track WAAS assuming you have set your field software to “Integrated SBAS” as the first choice. Allow at least 5 minutes for the first connection for WAAS to lock in.