


# Geo2005 Operating System New Features and Upgrade Instructions

August 28, 2007

This document describes the new features included in the Geo2005 OS since version 5.1.12. New features are reported relative to the previous version. OS version can be checked on the Geo by going to:

Start  /Settings/System/System Information. Please make sure that your Geo is like the one pictured here. If your Geo has only two buttons at the bottom it is a Geo2003 unit. This document does not apply to Geo2003 units. OS upgrade instructions are at the end of this document.



## NEW FEATURES

### Version 5.1.16 (August 2007)

- Improved system reliability  
The version 5.1.16 operating system has improved system reliability and resolves the occasional issue where the handheld would not resume after being suspended, and required a 60 second reset.
- Bluetooth® radio on/off state retained after suspend/resume  
The version 5.1.16 operating system retains the on/off state of the integrated Bluetooth radio after the handheld is suspended and then resumed. Previously, the Bluetooth radio did not always restart automatically if it was on before the handheld was suspended.
- Device icon and links added to the Windows Mobile Device Center  
When a GeoExplorer 2005 series handheld with the version 5.1.16 operating system is connected to a computer running the Microsoft Vista® operating system, the handheld is recognized and the device name and an icon are displayed in the Windows Mobile Device Center. Useful links to the Trimble website are also provided.

### Version 5.1.15 (May 2007)

- File system “?” wildcard searches  
An issue introduced in the version 5.1.14 operating system relating to “?” wildcard search operations on the internal file system has been resolved in the version 5.1.15 operating system.
- Updated touchscreen driver  
The version 5.1.15 operating system contains an updated touchscreen driver resolving issues occasionally seen where the touchscreen became unresponsive in temperatures near freezing point or with the screen protector applied.
- Improvements to the file system.  
This includes a disk caching system to improve performance.

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- Programming the softkeys.  
You can now program the softkeys to run a selected application, act as an OK/Close or scroll button, launch the Context menu or Input panel, or return to the *Today* screen. To assign an application to run, or to perform an action when you tap the left or right softkey, tap Start/Settings/Buttons.
- Minor improvements to the 802.11 wireless networking drivers to improve performance and connection reliability.
- Backlight operation  
The backlight now turns off correctly after the pre-configured time when the Terra-Sync™ software and other applications are running.
- Accessing files on an SD card after resuming a suspended unit  
You can now access files that were open in an application on an SD card after you resume operations from Suspend mode.

### **Version 5.1.14 (January 2007)**

*This OS version is not available to download and was factory installed on some units. Versions 5.1.13 and 5.1.14 will both upgrade to version 5.1.15.*


### **Version 5.1.13 (July 2006)**

- New USB to PC utility for managing connections to a computer using a USB cable.  
If you experience connection issues, Trimble recommends using this utility to change the connection method that the handheld uses to connect to Microsoft ActiveSync® on the computer. To access the USB Switch utility, tap Start/Settings/Connections/USB Switch. To change the connection method, clear the *Enable advanced network functionality* checkbox. The handheld stops using the default RNDIS method to connect to ActiveSync. Changing this setting can avoid conflicts with network settings and VPN client software.
- Support for GPS error reporting.  
Messages inform you of any GPS receiver issues when you connect to the receiver, and are logged to a system report, which can assist Trimble Support and/or Service Providers to resolve any GPS connection issues.
- Handheld slowdowns  
When using an earlier version of the handheld to establish an ActiveSync partnership with another device, ActiveSync regularly woke up the handheld to synchronize with the partnered device, causing the handheld to slow down. By default, ActiveSync no longer wakes up the handheld when using a partnership, so this issue no longer occurs.
- Incorrect touchscreen outputs  
Occasionally, tapping the touchscreen resulted in wayward outputs. This issue no longer occurs.
- Failed detection of AC power  
Previous versions of the operating system did not always recognize that AC power was available. The handheld now always recognizes that it is charging.
- Disappearing Bluetooth and Wireless LAN driver  
Occasionally, the Bluetooth and Wireless LAN driver would not load, and the handheld required a reset. This issue no longer occurs.

## Version 5.1.12 (January 2006)

- Support for the serial clip. You can use the serial clip to:
  - supply external power from the external power kit or a vehicle's battery
  - recharge the internal battery from an external power source
  - receive differential corrections from an external real-time correction source, such as a Trimble GeoBeacon™ or Beacon-on-a-Belt (BoB™) receiver, or a DGPS radio
  - receive GPS data from a Trimble GPS Pathfinder® series or GPS Pathfinder Pro series receiver
  - connect to an external modem or mobile phone for wireless Internet access
  - connect to other external devices, such as a laser rangefinder
  - connect to a computer to supply GPS data (for example, when running the Trimble GPS Analyst™ extension for ESRI ArcGIS software on a laptop)
- Support for error reporting. Warnings are provided when a system error occurs. By default this feature is turned on. To turn off or to turn on error reporting, go to Start/Settings/System/Error Reporting, and enable or disable this feature.
- Forming partnerships using Microsoft ActiveSync® technology now causes no adverse effects to the handheld.
- System Report is now supported.

## UPGRADE INSTRUCTIONS

On your Geo, confirm what OS Revision you are currently running. The OS version can be checked on the Geo by going to Start  /Settings/System/System Information. Once you confirm your OS version, you will need to download the appropriate (free) OS update files and perform the upgrade procedure one upgrade at a time. Earlier versions will require several upgrades using the same procedure to get current.

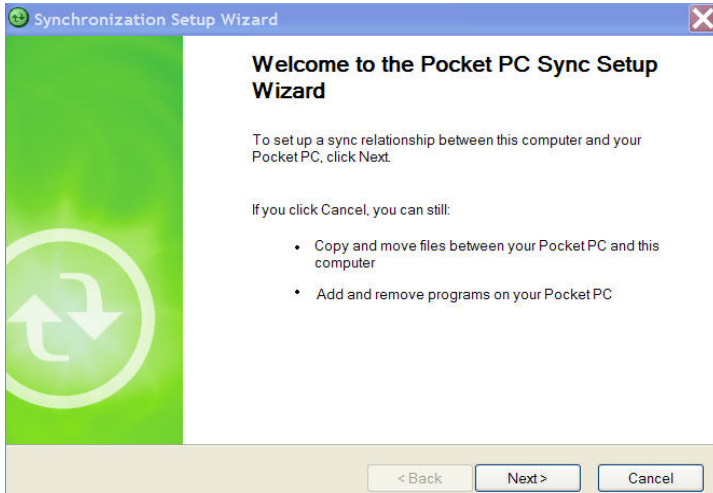
Determine which downloads you will need. For example, if you are currently at 5.1.12, you will need to download 5.1.13, 5.1.15, and 5.1.16.

**Step 1:** Obtain the OS upgrade files from this link: [http://www.trimble.com/geoxh\\_ts.asp?Nav=Collection-36699](http://www.trimble.com/geoxh_ts.asp?Nav=Collection-36699).

*NOTE: While this takes you to the GeoXH download page, it is fine to download the OS upgrade files for GeoXT and GeoXM units, as well. They use the same OS.*

Click on the links of the files you have determined you need, and save the target to your desktop or a folder that you can find later.

**Step 2:** Establish an ActiveSync connection with your unit. Ensure that it has been properly seated in the gray cradle and the USB cable is plugged in. After about 10 seconds, you should have the following dialog appear:



It is important at this point to click “Cancel”. If you click “Next” and establish a partnership with the unit, it will work for that PC. However, you will have difficulty connecting that Geo to any other PC or connecting any other Geo to this PC. Therefore, it’s recommended that you click “Cancel” and establish a Guest connection.

**Step 3:** Locate the first file you downloaded and copy it by right-clicking on it and then clicking Copy, or by highlighting it and then pressing Ctrl+C. Open “My Computer” so you can view your root drives. You will see the “C” drive, any other drives you may have, and the Mobile Device. Click on “Mobile Device”:

**Hard Disk Drives**



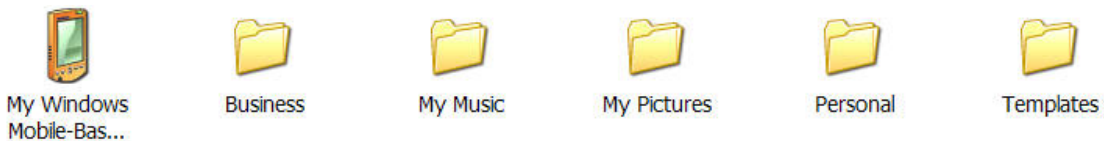
**Devices with Removable Storage**



**Other**

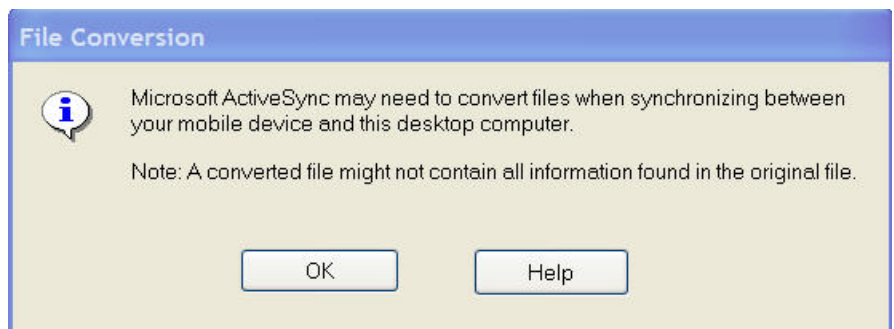


Here is what you will see:



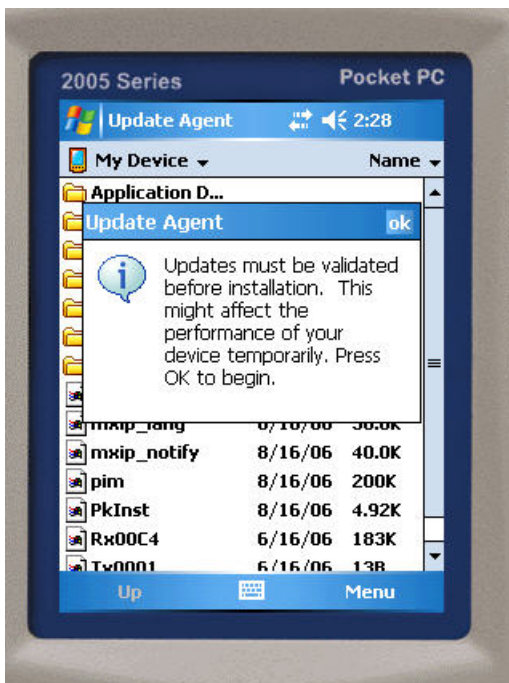
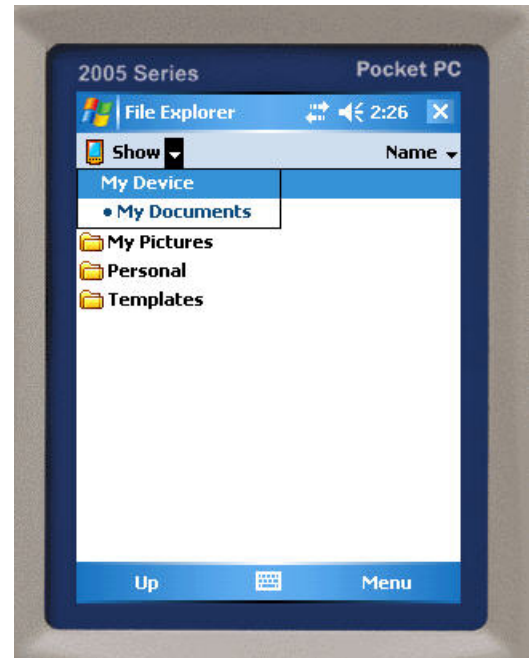
Right-click on the “My Windows Mobile-Based Device” (the full name will be cut off) and select “Paste”. It will paste the file you copied earlier onto the handheld. Select “OK” when the File Conversion dialog appears:

After a few seconds, the file will transfer to your Geo.



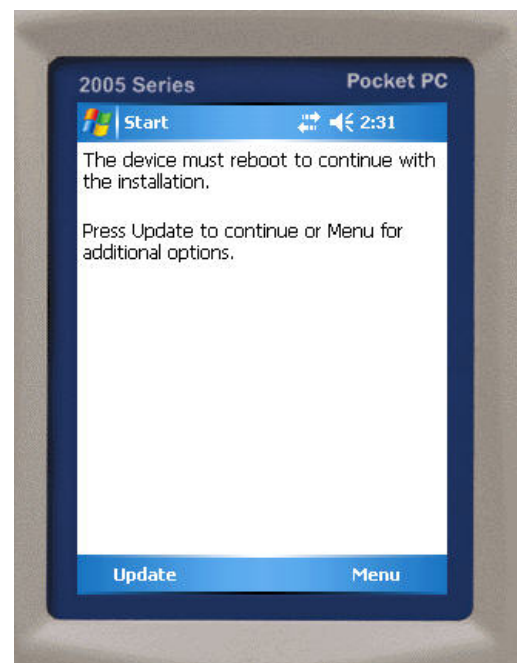
**Step 4:** Now you are ready to run the upgrade.

Click on the Start icon on your Geo (upper left corner) and open File Explorer. Depending on your settings, File Explorer may be on your Start Menu or it would be found under Programs. Tap on File Explorer and navigate to the My Device folder. Navigation is possible by clicking on the dropdown arrow in the upper-left toolbar.




Click on the “GeoExplorer...” file. That is the file you just transferred from your PC to the Geo. Click “OK” to the message that appears.

After a few seconds, this screen appears. Select “Update” in the lower-left corner.



The screen will then turn black and restart. After about 30 seconds, the screen will say Updating at the top, and there will be a progress bar at the bottom. The upgrade takes about 3-4 minutes to complete. Please do not interact with the unit during this procedure. The screen will turn black, and the unit will restart again. After about 30 seconds, "Windows Mobile" will appear on the screen, and then the message should appear letting you know the upgrade is complete.

Start  /Settings/System/System Information will confirm that your OS upgrade has been completed.

Repeat these steps until you are at OS version 5.1.16.

