

# RELEASE NOTES

## GeoExplorer® 2005 series

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## Legal Notices

For a complete list of all relevant legal notices regarding this product, please refer to the *GeoExplorer 2005 Series Getting Started Guide*.

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This product is covered by the following US patents: 5,187,450; 5,311,149; 5,402,450; 5,493,588; 5,815,539; 6,377,891; 6,587,788; and 6,807,485.

## Release Notice

This is the July 2006 release (Revision A) of the *GeoExplorer 2005 Series Release Notes* (part number 46507-42-ENG). It applies to version 5.1.13 of the GeoExplorer 2005 series operating system. The GeoExplorer 2005 series handheld's operating system is based on the Microsoft Windows Mobile version 5.0 software for Pocket PC.

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## Introduction

These release notes provide important information about the Trimble® GeoExplorer® 2005 series handhelds, including how to upgrade to the version 5.1.13 operating system. Please read these release notes carefully.

***Note** – Trimble recommends that you upgrade all GeoExplorer 2005 series handhelds to the version 5.1.13 operating system.*

***Note** – To upgrade to the version 5.1.13 operating system, you **must** have the **version 5.1.12 operating system installed** on your handheld.*

The GeoExplorer 2005 series includes the GeoXH™, GeoXT™, and GeoXM™ handhelds. These handhelds combine a Trimble GPS receiver with a field computer running Microsoft® Windows Mobile® version 5.0 software.

## Documentation information

For information on using the GeoExplorer 2005 series handheld, refer to the *GeoExplorer 2005 Series Getting Started Guide*. Context-sensitive help for the operating system and pre-installed software is also provided on the handheld.

The Trimble website has FAQs and support notes covering technical issues. To view or download these documents, go to [www.trimble.com/geoxm.shtml](http://www.trimble.com/geoxm.shtml), [www.trimble.com/geoxt.shtml](http://www.trimble.com/geoxt.shtml), or [www.trimble.com/geoxh.shtml](http://www.trimble.com/geoxh.shtml) and then click the *Support* link.

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## Documentation changes

This section describes changes to the *GeoExplorer 2005 Series Getting Started Guide*.

- Aligning the touch screen

The Getting Started Guide states that the first time you turn on the handheld, you are prompted to align the touch screen.

When you first turn on the handheld, it skips this stage. However, you may need to realign the touch screen if it does not respond correctly to the stylus at any time. To begin the alignment sequence, press the **Display** button and the **Start** button at the same time and then follow the on-screen instructions.


- Bluetooth Activation Manager software is now Radio Activation Manager software

The Getting Started Guide refers to the software used to deactivate and reactivate the handheld's integrated Bluetooth® and WLAN radios as the Bluetooth Activation Manager software. This software is now called the Radio Activation Manager software.

## Wireless networks utility

The GeoExplorer 2005 series handheld has an integrated Wireless Local Area Network (WLAN) radio that you can use to receive data anywhere within the range of a wireless LAN access point.


You can use the Wireless Networks utility to control the WLAN radio and to show the status of available wireless networks.

To access the Wireless Networks utility, tap  / *Settings* / *Connections* / *Wireless Network*.

Alternatively, when the Wireless Networks utility is running, tap the signal strength bar that appears in the lower right corner of the *Today* screen to view the *Wireless Networks* screen.

The Wireless Networks screen shows the status of the WLAN radio, and of the network/s that it is monitoring.

The table below describes the function of the controls available in each tab of the Wireless Networks utility.

Tab	Control	Description
Tools	Enable / Disable Radio	Allows you to enable or disable the WLAN radio.
	Power Management	When this option is selected, the radio transmitter is turned off when not in use, to help reduce power consumption. However, this option can reduce the radio's ability to quickly form connections to available networks.
	Suspend While Connected	When this option is selected, the handheld will suspend according to the settings made in the <i>Advanced</i> tab of the Power control. (To access this tab, tap  / <i>Settings / Power / Advanced.</i> )
	Log	Logs a snapshot of the current status of the monitored network.
	Configure Wireless Networks	Tap to access the Configure Network Adaptors screen in the Network Cards utility.
Advanced	Network Troubleshooting	Displays detailed network information, and allows you to repair a faulty connection or test a connection on a network.
	Site Monitor	Displays information about available access points in range.
	Link Test	Displays connection status of other devices on the network and allows testing of the communications between devices.
	View Certificates	Displays certificates available for network connections.
	Enroll	Advanced Wireless option for requesting a network certificate.
About		Displays version information about the Wireless Networks utility and information about the wireless driver and wireless card.

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## Version 5.1.13 operating system

This section describes the version 5.1.13 operating system, and how to upgrade your GeoExplorer 2005 series handheld's version 5.1.12 operating system to the version 5.1.13 operating system.

**Note** – *To upgrade to the version 5.1.13 operating system, you **must** have the **version 5.1.12 operating system installed** on your handheld.*


To upgrade your handheld to the version 5.1.12 operating system, go to the *Downloads* area of the Trimble support website and then click the *v5.1.12 - GeoExplorer 2005 series operating system* link.

### Enhancements

The version 5.1.13 operating system provides the following enhancements:

- 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® technology running on the computer.

To access the USB Switch utility, tap  / *Settings* / *Connections* / *USB Switch*.

To change the connection method, clear the *Enable advanced network functionality* check box.

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.

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If error code 5 appears, a GPS receiver time-out has occurred. This occasionally occurs after the handheld is resumed. To resolve this issue, try reconnecting to the receiver.

If any other error codes appear, they indicate a more serious issue with the GPS receiver. Trimble recommends that you contact Trimble Support.

## Resolved issues

The version 5.1.13 operating system resolves the following 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.

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## Upgrading to the version 5.1.13 operating system

This section describes how to install the version 5.1.13 operating system on your GeoExplorer 2005 series handheld.

To upgrade the operating system, do the following:

1. Download the operating system upgrade file to an office computer.
2. Transfer the upgrade file from the computer to the handheld.
3. Run the upgrade file to install the new operating system.

### Step 1: Downloading the operating system upgrade file

1. Go to the Support page of the Trimble website ([www.trimble.com/support.shtml](http://www.trimble.com/support.shtml)).
2. Click the link for the model of GeoExplorer 2005 series handheld that you are upgrading (*GeoXM*, *GeoXT*, or *GeoXH*).
3. Click *Downloads*.
4. If you are viewing the downloads page for either the GeoXM or GeoXT handheld, click *GeoExplorer 2005 series*.
5. Click *v5.1.13 - GeoExplorer 2005 series operating system* to download the upgrade file.
6. The *File Download* dialog appears. Click **Save** to save the upgrade file to your desktop.

### Step 2: Transferring the upgrade file to the handheld

To transfer the upgrade file from the computer to the handheld, use any of the following:

- the support module connected to a USB port on the computer
- a Bluetooth wireless connection to the computer
- a Secure Digital (SD) memory card
- a wireless LAN connection

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If you use either the support module or Bluetooth wireless technology, connect the handheld and the computer and then use ActiveSync technology to establish a relationship between the two devices. For more information, refer to the *GeoExplorer 2005 Series Getting Started Guide*.

### **Step 3: Running the upgrade file**

1. On the handheld, browse to the location where you saved the operating system upgrade file and select the file.
2. The Update Agent appears. Tap **OK**.
3. A message appears explaining that once the upgrade is installed the handheld will automatically reset. Tap the **Upgrade** softkey to start the installation.

The upgrade file runs and a progress bar appears.

***Note** – If you have the TerraSync™ software installed on your handheld, symbols may appear in the update application screen as the upgrade file runs. Ignore the symbols and allow the upgrade to complete.*

Once the operating system is upgraded, the handheld automatically resets.

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## Known issues

This section describes known issues with the GeoExplorer 2005 series handheld.

### Battery

- Handheld charge state incorrectly reported.

The handheld charge state may be reported incorrectly when the internal temperature rises beyond the allowed range for charging the battery. The UI will report charging even when it is actually too warm to charge. If the device is removed from the support module while the temperature is out of range and then quickly returned to a powered support module, the charge state will not change to “charging” until the internal temperature returns to the allowed range.

To confirm that there is not a battery charging issue, remove the handheld from any external heat sources (for example, direct sunlight), and allow an hour for the internal temperature of the handheld to cool again before placing the handheld in the support module.

### Bluetooth wireless technology

- Bluetooth radio turns off without user interaction.

If the handheld’s integrated Bluetooth radio crashes, the radio may turn itself off. To resolve this issue, use the handheld’s Bluetooth control to turn on the radio again and, if required, reinitiate the connection. If this fails to resolve this issue, turn off and then restart both the handheld and the connected Bluetooth device to reinitiate the connection with both radios in a fresh state.

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## External antenna

- The connected external antenna can “lock up” the handheld.

If you connect an external antenna to the handheld while Trimble GPS field software is not running, or is running but is not the currently displayed screen, the handheld can “lock up”. To avoid this issue, either connect the external antenna when the handheld is turned off, or while Trimble GPS field software is running and displayed on the screen. Trimble GPS field software includes the TerraSync or GPS Controller software, or the Trimble GPSCorrect™ extension for ESRI ArcPad software is running.

## GPS / Real-time correction

- GPS Connector software reports **Unknown** on COM 3.

The GPS Connector software may report **Unknown** when connected to the GPS port. This should not interfere with operation of the handheld.

- Error Code 5 appears when you connect to the GPS receiver.

Error Code 5 is a Receiver Timeout error, caused by issues with communications to the receiver. However, a *false* connection failure/timeout is sometimes reported if the GPS receiver was connected when the device is Suspended and then Resumed. The dialog reporting Error Code 5 may appear before the GPS receiver has had a chance to complete the connection, and often the connection occurs just after the error dialog appears.

To resolve this issue, close the dialog and if the handheld does not automatically connect to the receiver, try to connect to the receiver again.

If repeated attempts to connect to the receiver fail, contact your Trimble representative.

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## SD card

- Handheld does not recognize an SD memory card.

Occasionally the handheld does not recognize a Secure Digital (SD) memory card when the card is inserted into the SD card slot, or it fails to recognize the SD card currently inserted.

To resolve this issue, press the **Power** button for 5 seconds to reset the handheld.

## Serial clip

- Handheld does not recognize that the serial clip is attached.

To resolve this issue, press the **Power** button for 5 seconds to reset the handheld.


- Handheld resumes when the serial clip is removed.

If you remove the serial clip while the handheld is in Suspend mode, the handheld may resume. To return the handheld to Suspend mode, press the **Power** button.

- Unable to receive information from COM 1.

Removing and then reconnecting the serial clip, or suspending and resuming the handheld while it is connected to an external device using the serial clip, may cause connection issues with the external device.

To resolve this issue:

- If the handheld is connected to a real-time correction device such as a GeoBeacon receiver, wait for the RTCM connection to time out (this is the length of time specified in the *Real-time Age Limit* field of your GPS field software). After timing out, the connection should automatically resume.
- If the handheld is connected to a cellphone, you need to manually end the connection. Tap  in the title bar, tap **Disconnect** and then end the call on the cellphone.

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- **Unidentified USB device** notification appears

When a serial clip is unevenly connected to the device, the **Unidentified USB device** notification may appear. To continue, cancel the notification.

