



USER GUIDE

GeoExplorer® 2008 series





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Release Notice

This is the March 2008 release (Revision A) of the *GeoExplorer 2008 Series User Guide*. The GeoExplorer 2008 series handheld's operating system is based on the Microsoft Windows Mobile version 6 Classic operating system (5.2.1433).

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To receive information regarding updates and new products, please contact your local dealer or visit the Trimble website at www.trimble.com/register. Upon registration you may select the newsletter, upgrade, or new product information you desire.

Notices

Class B statement- Notice to users This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions may cause harmful interference to radio communication.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes and modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission rules.

The radio devices used by this equipment are classified under 47 CFR §15.247 as spread spectrum transmitter equipment. In accordance with OET Bulletin 65 supplement C Edition 1-01, the device operates at low power levels where there is a high likelihood of compliance with the RF exposure standards, is categorically excluded from routine environmental evaluation as set forth in CFR 47 section 2.1093. The radiated output power of this equipment produces a calculated SAR that is significantly below the FCC radio frequency exposure limits.

The external antenna connector provided in this device is for GPS antennas only.

Accessories

The following accessories have been approved for use with this device: P/N 70970-00 GeoExplorer 2008 Series Support Module and P/N 70980-00 GeoExplorer 2008 Series Power/Serial Clip.

Canada

This Class B digital apparatus complies with Canadian ICES-003.

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

Cet appareil numérique de la classe B est conforme à la norme NNB-003 du Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Classe B prescrites dans le règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

Europe

This product has been tested and found to comply with all requirements for CE Marking and sale within the European Economic Area (EEA). It is classified and marked as being Class 2 Radio Equipment under 2000/299/EC, as Bluetooth and wireless LAN approvals are country specific. Please consult your local distributor for more information.

The Trimble GeoExplorer 2008 series has Bluetooth and wireless LAN approval in most EU countries and satisfies the requirements for Radio and Telecommunication Terminal Equipment specified by European Council Directive 1999/5/EC. These requirements provide reasonable protection against harmful interference when the equipment is operated appropriately in a residential or commercial environment.

Australia and New Zealand

This product conforms with the regulatory requirements of the Australian Communications Authority (ACA) EMC and Radiocommunications framework, thus satisfying the requirements for C-Tick Marking and sale within Australia and New Zealand.



Taiwan – Battery Recycling Requirements

The product contains an internal Lithium-ion battery. Taiwanese regulations require that waste batteries are recycled.



廢電池請回收

Notice to Our European Union Customers

For product recycling instructions and more information, please go to www.trimble.com/ev.shtml.

Recycling in Europe: To recycle Trimble WEEE (Waste Electrical and Electronic Equipment, products that run on electrical power), Call +31 497 53 24 30, and ask for the "WEEE Associate". Or, mail a request for recycling instructions to:





Trimble Europe BV
c/o Menlo Worldwide Logistics
Meerheide 45
5521 DZ Eersel, NL

Safety Information

Radio use

The Trimble® GeoExplorer® 2008 series handheld contains a Bluetooth® radio and a wireless LAN radio. In some situations, you may be required to turn off the radios. For example, aviation authority regulations restrict the use of radios on board aircraft.

To prevent the handheld from emitting radio signals, do one of the following:

- To turn off the handheld, press the **Power** button.
- To turn off the Bluetooth and wireless LAN radios only:
 - a. Tap the Wireless Connectivity icon ( or ) in the title bar of the *Today* screen and then tap *Wireless Manager*.
 - b. Tap **All** to turn off both radios. The status fields below the Wi-Fi and Bluetooth buttons change to *Off*.

Deactivating the integrated radios

The GeoExplorer 2008 series handheld is shipped with wireless LAN and Bluetooth wireless technology activated. To use the wireless LAN or Bluetooth radio, you need to turn it on (see [Turning on and turning off the integrated radios, page 78](#)).

Note – *You may need to deactivate the wireless LAN and/or Bluetooth radio in the handheld if the country in which you are working does not approve the use of wireless LAN and/or Bluetooth wireless technology. If you are unsure about whether the GeoExplorer 2008 series handheld's radios are approved for use in your country, check with your Trimble reseller.*

Use the Radio Activation Manager software to deactivate the integrated wireless LAN and/or Bluetooth radio, or to reactivate the radios if they have been deactivated. The Radio Activation Manager software runs on an office computer.

The latest copy of the software is available for download from the Trimble website. Go to www.trimble.com/support.shtml, click the link for your receiver type (*GeoXH*, *GeoXM*, or *GeoXT*), click *Downloads*, click *GeoExplorer 2008 Series* and then click *Radio Activation Manager*.

Exposure to radio frequency radiation (Bluetooth and WLAN transmitters)

This device is approved as a portable device with respect to Radio Frequency (RF) exposure compliance. The radiated output power of the internal wireless radio transmitters is less than 10 milliWatt, which results in exposure levels far below the FCC radio frequency exposure limits, even when operated in close proximity to the body. The internal wireless radios operate within guidelines found in international radio frequency safety standards and recommendations, which reflect the consensus of the international scientific community. Trimble therefore believes the internal wireless radios are safe for use by users. The level of electromagnetic energy emitted is hundreds of times lower than the electromagnetic energy emitted by wireless devices such as mobile phones. However, the use of wireless radios may be restricted in some situations or environments, such as on aircraft. If you are unsure of restrictions, you are encouraged to ask for authorization before turning on the wireless radios.

AC adaptor safety

To charge the handheld's battery, use the international adaptor kit provided with the GeoExplorer 2008 series handheld (see [Powering the handheld, page 24](#)).



WARNING – To use AC adaptors safely:

- Use only the AC adaptor intended for the GeoExplorer 2008 series handheld. Using any other AC adaptor can damage the handheld and may void your warranty. Do not use the AC adaptor with any other product.
 - Make certain that the input voltage on the adaptor matches the voltage and frequency in your location.
 - Make certain that the adaptor has prongs compatible with your outlets.
 - Do not use the AC adaptor in wet outdoor areas; it is designed for indoor use only.
 - Unplug the AC adaptor from power when not in use.
 - Do not short the output connector.
 - Be aware that there are no user-serviceable parts in this product.
 - If the AC adaptor becomes damaged, replace it with a new Trimble AC adaptor.
-

Electrostatic discharge



WARNING – Static electricity can harm electronic components inside your handheld. To prevent static damage:

- Discharge static electricity from your body before you touch any of the electronic components inside your device, such as a memory module. You can do so by touching an unpainted metal surface.

The GeoExplorer 2008 series is designed for outdoor conditions; however under conditions of low humidity extremely high voltage discharge events are possible. Users are advised that the risk of causing discharge to sensitive electronics can be minimised by avoiding finger contact to the recessed connectors at the back of the unit.



Should such an event occur, the screen may be temporarily affected and become difficult to read. Under such circumstances, applying the suspend resume key will restore the unit to the original display, and there will be no accompanying loss of data or functionality.

Battery safety

The internal rechargeable Lithium-ion battery is supplied partially charged. Charge the battery completely before using it for the first time (see [Powering the handheld, page 24](#)). If the battery has been stored for longer than six months, charge it before use.



WARNING – The GeoExplorer 2008 series handheld is powered by an internal rechargeable Lithium-ion battery. Charge and use the battery only in strict accordance with the instructions provided.

To prevent injury or damage:

- Never attempt to remove, replace, or repair the battery yourself.
- Do not damage the battery.
- Do not store or leave the handheld near a heat source such as a fireplace or other heat-generating appliance, or otherwise expose it to temperatures in excess of 70 °C (158 °F) such as on a vehicle dashboard. When heated to excessive temperatures, battery cells could explode or vent, posing a risk of fire.
- Do not use the handheld if the battery appears to be leaking.
- If the battery requires attention, send the handheld to your local Trimble Service Center.
- Discharge the handheld before disposing of the battery. When disposing of the battery, be sure to do so in an environmentally sensitive manner. Adhere to any local and national regulations concerning battery disposal or recycling.

Memory card use

The GeoExplorer 2008 series handheld provides a memory card slot, providing an alternative storage location to the storage memory in the handheld.



WARNING – Static electricity can harm electronic components inside your handheld. To prevent static damage:

- Discharge static electricity from your body before you touch any of the electronic components inside your device, such as a memory module. You can do so by touching an unpainted metal surface.



WARNING – The presence of any dust or moisture in the memory card slot may adversely affect the device and void your Trimble warranty. To prevent dust or moisture entering the memory card slot:

- Make certain that the memory card slot door is attached correctly when you are using the handheld outdoors.
 - When inserting or removing a memory card, place the handheld on a dust-free indoor surface.
-

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Introduction

In this chapter:

- About the GeoExplorer 2008 series handheld
- What's in the box?
- Accessories
- Use and care of the handheld
- Technical assistance
- Your comments

The *GeoExplorer 2008 Series User Guide* describes how to set up and use the Trimble® GeoExplorer® 2008 series handheld. The information in this guide supplements the information in the *GeoExplorer 2008 Series Quick Start Guide*, which you received with the handheld.

This guide describes how to:

- use the Microsoft® Windows Mobile® version 6 operating system.
- use the handheld's integrated GPS receiver.
- synchronize information between a computer and the handheld.
- exchange information between the handheld and other devices.
- connect to the Internet or to a computer network.

Even if you have used other Global Positioning System (GPS) products before, Trimble recommends that you spend some time reading this guide to learn about the special features of the product. If you are not familiar with GPS, go to the Trimble website (www.trimble.com) for an interactive look at Trimble and GPS.

About the GeoExplorer 2008 series handheld

The GeoExplorer 2008 series includes the GeoXH™, GeoXM™ and GeoXT™ handhelds. These handhelds combine a Trimble GPS receiver with a field computer powered by Microsoft Windows Mobile version 6 operating system.

The GeoExplorer 2008 series handheld has built-in Bluetooth® wireless technology for cable-free connection to other devices, and wireless LAN (Local Area Network) connectivity for connections to networks.

The GeoXM handheld provides reliable accuracy within 1 to 3 meters. The GeoXT handheld uses EVEREST™ multipath rejection technology to provide submeter accuracy. The GeoXH handheld uses both EVEREST and H-Star™ technology to provide decimeter (10 cm) to subfoot (30 cm) accuracy, either in real time or after postprocessing. For more information, see [Chapter 5, Using the GPS receiver](#).



Supported GPS field software

To collect GPS data with the GeoExplorer 2008 series handheld, you must install GPS field software onto the handheld. You can use the GeoExplorer 2008 series handheld with the following GPS field software:

- Trimble TerraSync™ software, for configuring real-time differential correction options and for productive GIS data collection and maintenance.
- The Trimble GPSCorrect™ extension for ESRI ArcPad software, for configuring real-time differential correction options and for productive GIS data collection and maintenance.
- The Trimble GPS Pathfinder® Tools Software Development Kit (SDK), for integrating GPS data and adding value to an existing mapping and GIS field software application.
- Trimble GPS Controller software, for configuring real-time differential correction options and NMEA output settings.
- Other GPS field software that accepts NMEA messages.

Note – Real-time subfoot capability is only available if you are using the TerraSync software, the GPSCorrect extension, or an application based on the GPS Pathfinder Tools SDK.

For more information, see [Chapter 5, Using the GPS receiver](#).

What's in the box?

When you unpack the GeoExplorer 2008 series handheld, check that you have received all the components, as shown below.



Figure 1.1 Items included with the GeoExplorer 2008 series handheld

Inspect all contents for visible damage (scratches, dents) and if any components appear damaged, notify the shipping carrier. Keep the shipping and packaging material for the carrier's inspection.

Accessories

The following optional accessories are available:

- Power/serial clip
- Null modem cable¹
- Vehicle power adaptor¹
- External power kit
- Hard carry case
- Range pole
- Range pole bracket
- Hurricane antenna kit²
- Zephyr™ antenna kit³
- External patch antennas
- Pole-mountable ground plane
- Baseball cap with antenna sleeve
- Backpack kit
- Screen protectors (2 pack)
- Stylus kit
- GeoBeacon™ receiver (receives differential corrections from a beacon network)

¹Requires power / serial clip (sold separately)

²Compatible with GeoXH/XM/XT handhelds for improved yield. Also improves accuracy for the GeoXM and GeoXT handhelds only.

³Compatible with the GeoXH handheld for improved accuracy.

For more information, go to www.trimble.com/geoxh.shtml, www.trimble.com/geoxm.shtml, or www.trimble.com/geoxt.shtml.

Use and care of the handheld

To protect the GeoExplorer 2008 series handheld when not in use, Trimble recommends storing the handheld in the pouch provided.

When using the handheld:

- To protect the touch screen from pressure and abrasive objects, Trimble recommends that you apply one of the screen protectors provided with the GeoExplorer 2008 series handheld.
- Protect the touch screen by using the stylus provided, and avoid using excessive pressure and sharp or abrasive objects.
- Keep the outer surface free of dirt and dust.
- Ensure that protective covers and doors are appropriately fitted to the external antenna port and memory card areas, so that they are kept free from dirt, dust, fluid ingress & electrostatic discharge (see [Memory cards, page 31](#)).
- Protect the handheld from extreme temperatures. For example, do not leave the handheld on the dashboard of a vehicle.

To clean the handheld, wipe it with a clean dry cloth. Do **not** immerse the handheld in water.

Storage

If you are not going to use the handheld for three months or more, Trimble recommends that you do not leave the handheld in Suspend mode (see [page 28](#)). Instead, partially charge the battery and then turn off the handheld.

To prepare the GeoExplorer 2008 series handheld for storage:

1. Transfer any data that you need to an office computer.
2. Charge the battery to approximately 30% and then remove the handheld from the support module.
3. Press the **Power** key for one second until the *Power* menu appears and then tap the **Shutdown** button.
4. Store the handheld at room temperature.

To use the GeoExplorer 2008 series handheld after storage:

1. Press the **Power** key to turn on the handheld.
2. Recharge the internal battery using the support module (see [Charging the battery, page 25](#)).

Technical assistance

Technical support

Go to the GeoExplorer 2008 series handheld technical support page (www.trimble.com/geoxh_ts.asp, www.trimble.com/geoxm_ts.asp, or www.trimble.com/geoxt_ts.asp) on the Trimble website for the latest support information about the software, including:

- FAQs
- support notes detailing support issues
- documentation
- the latest files available for download

Additional help

If you still cannot find the information that you need, **contact your Trimble reseller**.

Windows error reporting

If for any reason a Microsoft Windows Error Reporting dialog appears, indicating that the handheld or Trimble GPS field software has encountered a problem and needs to close, you are prompted to send an error report to Microsoft.

Trimble recommends that you click **Send** and then click any subsequent links that are used to obtain additional information.

Trimble can access the report that is sent to Microsoft and use it to improve the GeoExplorer 2008 series handheld.

Your comments

Your feedback about the supporting documentation helps us to improve it with each revision. E-mail your comments to ReaderFeedback@trimble.com.

Getting Started

In this chapter:

- Parts of the GeoExplorer 2008 series handheld
- Keypad buttons
- Powering the handheld
- Turning on and turning off the handheld
- Resetting the handheld
- Storing data
- Fitting the handstrap

This chapter describes the main features of the GeoExplorer 2008 series handheld, and provides the information you need to get up and running with the handheld.

Parts of the GeoExplorer 2008 series handheld

The following pages show the main parts of the handheld.



Figure 2.1 Parts of the GeoExplorer 2008 series handheld

Keypad buttons

The GeoExplorer 2008 series handheld provides ten keys and a Reset button for fast, easy access to common actions.

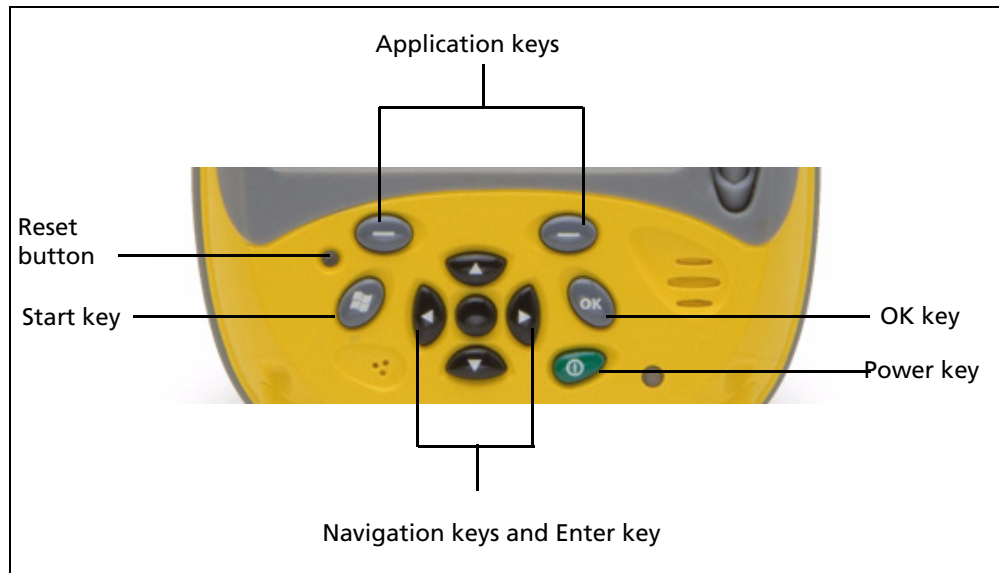


Figure 2.2 GeoExplorer 2008 series handheld keypad buttons

The function of each key is described below:

Key	Description
Power	Press briefly (less than one second) to turn on or to turn off the handheld (put it into Suspend mode). To access other power options, press and hold for one second until the <i>Power</i> menu appears (see Turning on and turning off the handheld, page 27).
Start	Press to display the Windows Mobile <i>Start</i> menu.
OK	Press to select OK or to close an application.
Navigation keys	Use these keys to navigate around the screen, scroll through menus, or to tab through options on windows and forms. Use the: <ul style="list-style-type: none"> • arrow keys to move up, down, left, and right. • action key (the center key) to perform an application-specific action, which is usually Enter.
Application keys	By default these keys perform the same action as the left and right softkeys in the menu bar. Alternatively, program these keys to perform a selected action. To program the keys, use the <i>Buttons</i> control (see Buttons, page 43).
Reset button	Use to reset the handheld (see Resetting the handheld, page 29). To activate this button, use the nib of the stylus.



Tip – To lock the screen and handheld keys without turning off the handheld, use the device lock option (see [Device lock, page 45](#)).

Powering the handheld

The GeoExplorer 2008 series handheld contains an internal rechargeable Lithium-ion battery.

Note – Charge the battery completely before using the handheld for the first time. If the battery has been stored for longer than six months, charge it before use. Trimble recommends charging the battery for eight hours to recharge it fully.

When fully charged, the handheld battery provides enough power for a full working day (eight hours) using the internal GPS antenna and with the backlight on at the default settings.

Note – Cold temperatures, or using Bluetooth wireless technology or wireless LAN connectivity consumes additional battery power and so shortens battery life between charges.

AC adaptor safety



WARNING – To use AC adaptors safely:

- Use only the AC adaptor intended for the GeoExplorer 2008 series handheld. Using any other AC adaptor can damage the handheld and may void your warranty. Do not use the AC adaptor with any other product.
 - Make certain that the input voltage on the adaptor matches the voltage and frequency in your location.
 - Make certain that the adaptor has prongs compatible with your outlets.
 - Do not use the AC adaptor in wet outdoor areas; it is designed for indoor use only.
 - Unplug the AC adaptor from power when not in use.
 - Do not short the output connector.
 - Be aware that there are no user-serviceable parts in this product.
 - If the AC adaptor becomes damaged, replace it with a new Trimble AC adaptor.
-

Battery safety



WARNING – The GeoExplorer 2008 series handheld is powered by an internal rechargeable Lithium-ion battery. Charge and use the battery only in strict accordance with the instructions provided.

To prevent injury or damage:

- Never attempt to remove, replace, or repair the battery yourself.
 - Do not damage the battery.
 - Do not store or leave the handheld near a heat source such as a fireplace or other heat-generating appliance, or otherwise expose it to temperatures in excess of 70 °C (158 °F) such as on a vehicle dashboard. When heated to excessive temperatures, battery cells could explode or vent, posing a risk of fire.
 - Do not use the handheld if the battery appears to be leaking.
 - If the battery requires attention, send the handheld to your local Trimble Service Center.
 - Discharge the handheld before disposing of the battery. When disposing of the battery, be sure to do so in an environmentally sensitive manner. Adhere to any local and national regulations concerning battery disposal or recycling.
-

Charging the battery

Charge the battery using the support module provided with the GeoExplorer 2008 series handheld. If you have the optional serial clip, you can also use it to charge the handheld. For more information, see [Connecting to an external power source with the serial clip, page 111](#).

To charge the battery using the support module:

1. Connect one end of the AC adaptor cable to the support module and the other to an AC power outlet. An international adaptor kit is provided with the handheld.
2. Turn off the handheld or put the handheld in Suspend mode (see [page 27](#)) and then place the handheld in the support module as shown below:



Note – Trimble recommends that you charge the handheld at or below normal room temperature (0 to 30 °C).

3. Leave the battery to charge. It may take up to eight hours for the handheld to charge completely.

When the handheld is charging, the Power LED on the handheld is solid orange. If the Power LED changes to flashing orange, a battery charging fault has occurred. For more information, see [page 26](#).


When fully charged, the Power LED is green.

To remove the handheld from the support module, press the release button on the support module and then lift the bottom of the handheld upward, as shown below:



The Power LED beside the Power key on the handheld indicates the battery power or charging status, as shown below:

Power source	LED state	Handheld/battery state
Battery power	Off	Off (in Suspend mode or turned off).
	Off	On and battery level is good.
	Flashing red	On and battery is low (less than 15%).
External power	Solid orange	Charging.
	Flashing orange	Charging fault - for example, there is a problem with the battery, or the temperature of the battery has exceeded the acceptable temperature range.
	Solid green	Charging is complete.


Note – During normal charging, the battery may become hotter than the maximum temperature allowed (40 °C or 104 °F). If this happens, charging is automatically suspended until the battery cools and then charging automatically restarts. During this time the battery icon in the title bar shows  to indicate that the handheld is running on external power. It may take about one hour for the battery to cool.

Avoid keeping the battery at full charge at high temperatures. For more information, see [Storage](#), page 19.

Note – The life of the battery can be significantly shortened if power is constantly supplied to the handheld. To avoid this issue, connect the handheld to an external power source only when the battery requires charging. Once fully charged, disconnect the external power source and allow the battery to discharge through normal use.



Checking the level of battery power

To check the level of battery power remaining at any time, tap the battery icon  in the title bar of the *Today* screen. The Power control appears, displaying the *Battery* tab.

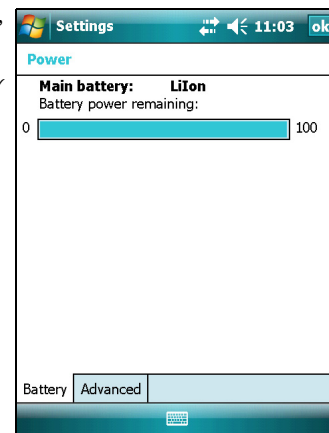
When the handheld battery is recharging from an external power source, the battery icon in the *Today* screen changes to . You can still tap the icon to view the level of battery power.

Low battery indicators

When the battery level reaches:

- 20%, the battery icon  in the title bar of the *Today* screen changes to .
- 15%, the Power LED on the handheld flashes red and the **Main battery low** message appears on the handheld.
- 5%, the **Main battery very low** message appears on the handheld.

Trimble recommends that you recharge the battery when any of these indicators appear.



Conserving power

Although the handheld battery can operate for a full day without recharging, Trimble recommends that you do the following to reduce power consumption:

- Set the handheld to automatically turn off when idle. For more information, see [Suspend mode, page 28](#).
- Set the backlight to automatically turn off when the handheld is idle for a specified time. For more information, see [Backlight, page 48](#).
- Reduce the brightness setting for the backlight. For more information, see [Backlight, page 48](#).
- Turn off the integrated Bluetooth or wireless LAN radios whenever you are not using them. For more information, see [Bluetooth wireless connections explained, page 105](#) and [Connecting to a wireless LAN access point, page 82](#).
- Disconnect from the integrated GPS receiver when GPS data is not required, using the application's Disconnect or Deactivate GPS command. When you disconnect from GPS, the integrated GPS receiver switches off and stops drawing power.

***Note** – Do not disconnect from GPS if you will be reconnecting within about five minutes. A GPS application can take up to 30 seconds to reactivate the integrated GPS receiver, so disconnecting to save power can cost time.*

Turning on and turning off the handheld

If the screen on the handheld is blank, the handheld is in Suspend mode (see [page 28](#)) or has been shut down. To turn on the handheld, press the **Power** key briefly (less than one second).

To turn off the handheld and put the handheld into Suspend mode, press the **Power** key briefly (less than one second).

To completely shut down the handheld, press the **Power** key for one second until the *Power* menu appears and then tap the **Shutdown** button. All running applications are shut down, and the handheld is completely turned off.

The options available from the *Power* menu are as follows:

Button	Description
Align Screen	Starts the screen alignment sequence. If at any time the touch screen does not respond correctly to stylus taps, start the screen alignment sequence and follow the on-screen instructions.
Suspend	Puts the handheld into Suspend mode. This is a low-power mode. The handheld and the integrated receiver are turned off and you can not operate the handheld.
Shutdown	Puts the handheld into Shutdown mode. Applications are shut down and the handheld is completely turned off.
Soft Reset	Restarts the handheld. If the handheld stops responding to the stylus, or if it does not respond when you press any of the keypad buttons, try a soft reset. For more information, see Resetting the handheld, page 29 .


Suspend mode

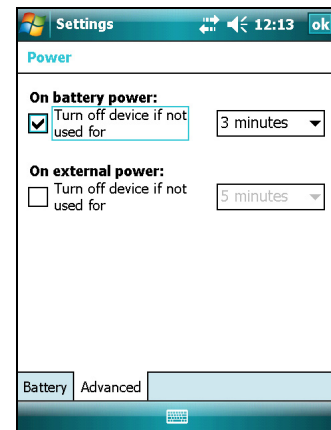
When you press the **Power** key to turn off the handheld, the handheld goes into Suspend mode. This is a low-power mode that maintains the main memory contents and keeps applications running but does not allow you to operate any of the handheld's functions. The handheld appears to be turned off. The integrated GPS receiver is turned off and any application using GPS is disconnected.

To turn on the handheld when it is in Suspend mode, press the **Power** key. The handheld is immediately ready for operation. There may be a delay of up to 30 seconds while the integrated GPS receiver automatically reactivates.

You can configure the handheld to automatically enter Suspend mode when it has been idle for a specified time. By default, the handheld is set to enter Suspend mode if it is not used for three minutes.

To change the time before the handheld enters Suspend mode:

1. Tap the battery icon  in the title bar of the *Today* screen. The Power control appears.
2. Tap the *Advanced* tab.
3. From the *On battery power* option, select the *Turn off device if not used for* check box and then select the idle time from the drop-down list.
4. Tap **OK**.



Resetting the handheld

If the screen on the handheld is blank, the handheld has turned off. Press the **Power** button to turn on the handheld.

If the handheld stops responding to the stylus, or if it does not respond when you press any of the keypad buttons, you may need to reset it. First, try a soft reset. If the handheld does not respond, perform a hard reset.

You can also reset the handheld to its factory default settings.

Performing a soft reset

A soft reset is similar to restarting a computer. A soft reset saves data and closes all open applications and then restarts the handheld. All data and settings are retained after a soft reset.

To perform a soft reset, use the tip of the stylus to lightly press the **Reset** button.

Alternatively, press the **Power** key for one second until the *Power* menu appears and then tap the **Soft Reset** button.



Performing a hard reset

A hard reset retains settings and data that you have previously saved on the handheld. However, any unsaved data may be lost.

Note – Perform a hard reset only if a soft reset does not resolve the problem.

To perform a hard reset, press and hold the **Power** button as you use the tip of the stylus to lightly press the **Reset** button.



Resetting to factory default settings

Reset the handheld to factory default settings to restore the handheld to its original state, or only if a soft reset and then a hard reset does not resolve the problem.



CAUTION – Resetting the handheld to factory default settings erases **all** data, installed applications, and settings stored in the handheld, except for any data or applications that were pre-installed on the handheld or are stored on a memory card. It does not change the language of the operating system used on the handheld.



CAUTION – If you have encrypted files on a memory card and you reset the handheld to factory default settings, the encryption key on the handheld is deleted. This means that any files you have encrypted on a memory card are permanently locked and unreadable by any device. For more information, see [Encrypting files on memory cards, page 32](#).



Tip – To quickly and easily restore data deleted by performing a factory reset, synchronize the handheld with a computer **before** you reset the handheld to the factory default settings. Once the handheld is reset then resynchronize the handheld with the computer.

To reset the handheld to the factory default settings:

Press and hold the two application buttons on the handheld.


1. While holding the buttons, use the tip of the stylus to lightly press the **Reset** button.
2. Keep holding the two application buttons until the handheld restarts.
3. Follow the on-screen instruction to continue the factory reset.



Storing data

The handheld has two types of memory:

- Storage memory is similar to the hard disk in a computer, and is used for storing programs and data.
- Program memory is similar to the RAM in a computer, and is used for running programs. You cannot use it to save data.

To check the memory capacity on the handheld, tap  / *Settings* / *System* / *Memory*. The Storage and Program columns show the current memory available, and the memory that is already in use.

Pre-installed documents and program files are not affected by power loss or resetting. However, you can still lose data if you accidentally delete or overwrite it.

Settings		12:28	ok
Memory			
Storage	Program		
Total: 986.25 MB	Total:	120.01 MB	
In use: 34.94 MB	In use:	35.23 MB	
Free: 951.31 MB	Free:	84.78 MB	
Main	Storage Card	Running Programs	
Find large files using storage memory.			



CAUTION – The Windows Mobile 6 operating system does not include a Recycle Bin. When you delete files from the handheld, they are deleted permanently.

Trimble recommends that you regularly copy important data to an office computer. For more information, see [Connecting to an Office Computer, page 53](#).

Memory cards

As an alternative to storage memory, you can save data to a memory card. Use either an SD or SDHC (high capacity SD) memory card to securely transfer data to and from another device that supports SD or SDHC memory cards.

Note – The GeoExplorer 2008 series handheld does not support SDIO (SD input/output) cards.



WARNING – The presence of any dust or moisture in the memory card slot may adversely affect the device and void your Trimble warranty. To prevent dust or moisture entering the memory card slot:

- Make certain that the memory card slot door is attached correctly when you are using the handheld outdoors.
- When inserting or removing a memory card, place the handheld on a dust-free indoor surface.



WARNING – Static electricity can harm electronic components inside the handheld. To prevent static damage:

- Discharge static electricity from your body before you touch any of the electronic components inside your device, such as a memory module. You can do so by touching an unpainted metal surface.

To insert an SD or SDHC memory card:

1. Place the handheld on a dust-free indoor surface.
2. Use the thumb screws on the base of the handheld to remove the memory card slot door.
3. Insert the memory card into the memory card slot with the swipes facing down. Gently press the card until you hear a click, and the card is locked into place.
4. Reattach the memory card slot door to the handheld and then tighten the thumb screws.

When you select the *Save As* option in an application, the memory card appears in the list of available storage locations.

Note – Do not store required data or applications to a memory card if the card will be removed. Data saved to a memory card is available only when the card is inserted in the handheld.

To remove the memory card from the memory card slot, gently press the card in and then let go. The card pops out.

Encrypting files on memory cards

To prevent sensitive data on an SD or SDHC memory card from being used if the card is lost or stolen, files can be encrypted as they are placed on the card.


When encryption is enabled, an encryption key is stored on the handheld. Files are encrypted as they are copied or written to the memory card. Files already saved on memory cards before enabling encryption are not automatically encrypted.

***Note** – Because the encryption key is stored on the handheld, encrypted files are only readable on the handheld on which they are initially encrypted. It is not possible to read encrypted files on the storage card with any other device, including another GeoExplorer 2008 series handheld or an office computer.*



CAUTION – If you reset the handheld to the factory default settings, the encryption key is deleted and the handheld is no longer able to read any encrypted files on a memory card. This means that any files you have encrypted are permanently locked and unreadable by any device. To avoid being unable to read previously encrypted files, Trimble recommends that you use another device, such as an office computer, as the primary location for storing important data and to control the encryption of important files.

To enable encryption of files as they are written to a memory card:

1. Tap  / *Settings / System / Encryption*.
2. Select the *Encrypt files placed on storage cards* check-box.

***Note** – Encrypted files appear as ordinary files on the handheld they were encrypted on. If the memory card is inserted in another device, the files appear with a .menc file extension and cannot be opened.*

To disable encryption, clear the *Encrypt files placed on storage cards* check-box.

***Note** – Disabling encryption does not remove encryption from any existing files on the memory card, but ensures that new files placed onto the memory card are not encrypted.*

To encrypt files that are already stored on a memory card:

1. Copy the files to the handheld's internal memory or to an office computer.
2. Ensure encryption is enabled on the handheld.
3. Copy the files back to the memory card. The files are encrypted as they are written to the memory card.

To remove encryption from files so they can be read by other devices:

1. Insert the memory card in the handheld and then connect the handheld to an office computer using ActiveSync technology.
2. Copy the encrypted files from the memory card to the office computer.
3. To use the decrypted files on the handheld, copy the files from the office computer to the handheld's main memory.
4. To store the decrypted files on a memory card, ensure encryption is not enabled on the handheld and then copy the decrypted files from the office computer to the memory card.

Fitting the handstrap

The handstrap and screws are provided in the box with the handheld. To fit the handstrap:

1. Align the straight bracket with the slots below the Microsoft Windows Mobile logo. Insert the bracket by pressing it down and into the slots.



2. Insert the first screw and then use a coin or screwdriver to tighten the screw.



3. Align the curved bracket with the slots above the communication swipes at the base of the handheld. Insert the bracket by pressing it down and into the slots.



4. Insert the second screw and then use a coin or screwdriver to tighten the screw.

