



User's Guide

HP iPAQ hx2000 Series Pocket PC

Document Part Number: 366426-001

June 2004

Note: Not all models described are available in all regions. Model shown in illustrations is iPAQ hx2000 Series Pocket PC

© 2004 Hewlett-Packard Development Company, L.P.

HP, Hewlett Packard, and the Hewlett-Packard logo are trademarks of Hewlett-Packard Company in the U.S. and other countries.

iPAQ is a trademark of Hewlett-Packard Development Company, L.P. in the U.S. and other countries.

Microsoft, Windows, the Windows logo, Outlook, and ActiveSync are trademarks of Microsoft Corporation in the U.S. and other countries.

HP iPAQ Pocket PC is Powered by Microsoft® Windows®.



SD Logo is a trademark of Secure Digital.

Credent Logo is a trademark of Credent Technologies.

Bluetooth™ is a trademark owned by the Bluetooth SIG, Inc.

All other product names mentioned herein may be trademarks of their respective companies.

Hewlett-Packard Company shall not be liable for technical or editorial errors or omissions contained herein. The information is provided "as is" without warranty of any kind and is subject to change without notice. The warranties for Hewlett-Packard products are set forth in the express limited warranty statements accompanying such products. Nothing herein should be construed as an additional warranty.

This document contains proprietary information that is protected by copyright. No part of this document may be photocopied, reproduced, or translated to another language without the prior written consent of Hewlett-Packard Company.



WARNING: Text set off in this manner indicates that failure to follow directions could result in bodily harm or loss of life.



CAUTION: Text set off in this manner indicates that failure to follow directions could result in damage to equipment or loss of information.

User's Guide
HP iPAQ hx2000 Series Pocket PC
First Edition (June 2004)
Document Part Number: 366426-001

Contents

1 Getting to Know Your iPAQ Pocket PC

Using the Stylus	1-5
Setting the Date and Time	1-5
Setting the Time for Home and Locations You Are Visiting	1-6
Setting the Date	1-6
Entering Owner Information	1-7
Setting a Password.	1-8
Resetting the Unit.	1-8
Performing a Soft Reset.	1-9
Performing a Hard Reset.	1-9
Aligning the Screen	1-11
Using the Touchpad or Cursor.	1-11
Routine Care.	1-12
Traveling with your Pocket PC	1-12

2 Synchronizing with Your Computer

Using Microsoft ActiveSync	2-1
Installing ActiveSync	2-1
Synchronizing with Your Computer	2-3
Changing Synchronization Settings.	2-3
Copying Files	2-5
Installing Programs	2-6
Backing up and Restoring Files	2-6
Synchronizing Links	2-6

Sending and Receiving E-mail	2-7
Requesting Meetings	2-7

3 Managing the Battery

Installing the Battery	3-1
Removing the Battery	3-4
Charging with the AC Adapter	3-5
Charging with the HP iPAQ Cradle and AC Adapter	3-7
Charging with the HP iPAQ Cradle and USB Cable	3-8
Charging a Spare Battery	3-9
Manually Checking the Battery Charge Level	3-10
Battery Saving Tips	3-11
Changing the Backlight Settings	3-12
Changing Wi-Fi Power Saving Modes	3-13
Disabling Buttons	3-13

4 Learning the Basics

Using the Today Screen	4-1
Navigation Bar and Command Bar	4-2
Status Icons	4-3
Pop-Up Menus	4-4
Creating Information	4-5
Customizing the Today Screen	4-5
Changing the Screen Orientation	4-7
Opening and Closing Applications	4-8
Closing with iTask	4-9
Closing Manually	4-9
Installing Applications	4-9
Backing Up Information	4-10
Using iPAQ File Store Folder	4-10

5 Learning Input Methods

Using Input Software	5-1
Changing Word Suggestion Options	5-1
Using the On-Screen Keyboard	5-4
Writing with the Stylus and the Letter Recognizer	5-5
Using the Touchpad or Cursor	5-6
Personalizing Your Touchpad Settings	5-6
Writing with the Stylus and Microsoft Transcriber	5-7
Writing with the Stylus and Block Recognizer	5-7
Drawing and Writing on the Screen	5-8

6 Using Security Features

Using HP ProtectTools	6-1
Configuring Security	6-1
Changing Your Security Information	6-4
Encrypting Your Data Using Vaults	6-5
Using the Fingerprint Reader	6-7
Learning to Enroll a Fingerprint	6-8
Working with Fingerprints	6-11
Setting Logon Passwords	6-15
Logging On Using PIN, Passwords, and Fingerprints	6-22
Setting Security Options	6-25

7 Applications

Installing Applications	7-2
Removing Applications	7-2
Using DockWare	7-2
Starting DockWare	7-3
Stopping DockWare	7-3
Adding Pictures	7-4
Using iPAQ Image Zone	7-4
Viewing Pictures	7-4
Viewing a Picture Full-Screen	7-5

Recording Sound With a Picture	7-5
Viewing a Slideshow	7-6
Printing Pictures	7-6
E-mailing Pictures	7-7
Using iPAQ Backup to Backup/Restore	7-7
Using ActiveSync To Backup/Restore	7-8
Using Pocket Informant	7-9
Pocket Informant Toolbar	7-9
Menus and Options	7-10
Using Pocket Panel Lite	7-11
Using iTask	7-11
HP ProtectTools	7-11
HP Mobile Printing	7-12

8 Using Wi-Fi

Getting Acquainted	8-1
Learning the Terms	8-2
Getting Started with Wi-Fi	8-3
Powering Wi-Fi On or Off.	8-3
Automatically Connecting to a Network	8-4
Manually Entering New Network Settings	8-5
Searching for Networks to Access.	8-7
Managing Wireless Network Settings	8-7
Viewing or Editing a Wireless Network	8-7
Deleting a Wireless Network.	8-8
Monitoring Signal Strength and Status	8-8
Working with Network Settings.	8-9
Looking Up an IP Address	8-9
Changing TCP/IP Settings.	8-10
Changing DNS and WINS Settings.	8-11
Setting Up VPN Server Connections.	8-12
Changing VPN Server Connections	8-13
Starting VPN Server Connections	8-14
Setting Up Proxy Server Settings	8-14
Wi-Fi Security Protocol Utilities	8-15

802.1X Certificate Enroller	8-15
LEAP Registration Utility	8-16

9 Using Bluetooth

Getting Acquainted with Bluetooth	9-2
Understanding Terms	9-3
Supported Services	9-4
Working with Bluetooth Settings.	9-4
Turning On/Off Bluetooth.	9-5
Opening Bluetooth Settings.	9-5
Setting Accessibility Properties.	9-6
Enabling Bluetooth Services	9-7
Setting a Shared Folder	9-10
Understanding Profiles	9-11
Working with Bluetooth Manager	9-13
Opening Bluetooth Manager	9-13
Locating and Selecting a Device	9-13
Connecting to Other Devices	9-15
Identifying the Communications Port	9-15
Establishing an ActiveSync Connection	9-15
Establishing a Serial Connection.	9-19
Dial-Up Networking	9-20
Joining a Personal Area Network	9-21
Working with Files.	9-21
Creating a File Transfer Connection	9-22
Sending Files	9-22
Creating a Folder on a Remote Device	9-22
Receiving a File from a Remote Device	9-23
Deleting a File from a Remote Device	9-23
Using Business Card Exchange.	9-23
Setting Up Your Business Card Information.	9-24
Opening a Connection	9-25
Viewing Connection Status	9-26
Closing a Connection.	9-26

Viewing Connection Information	9-26
Working with Connections	9-27

10 Connecting to the Internet

Connecting to a Private Network	10-2
Entering an Internet Address	10-2
Using a Favorites List	10-3

11 Expansion Cards

Installing a Secure Digital (SD) Expansion Card	11-2
Removing a Secure Digital (SD) Expansion Card	11-3
Installing a Compact Flash (CF) Expansion Card	11-4
Removing a Compact Flash (CF) Expansion Card	11-5
Viewing the Content of Memory Cards	11-5

12 Troubleshooting

Common Problems	12-1
ActiveSync	12-5
Expansion Cards	12-7
Bluetooth	12-8
Wi-Fi	12-10

Appendix A Regulatory Notices

Federal Communications Commission Notice	A-1
Declaration of Conformity for products marked with the FCC logo—United States only	A-2
Canadian Notice	A-3
Avis Canadien	A-3
Japanese Notice	A-3
Korean Notice	A-3
European Regulatory Notice	A-3
Declaration of Conformity	A-4
Battery Warning	A-6

Equipment Warning	A-7
Airline Travel Notice	A-7
Wireless Notices.	A-7
U.S. Regulatory Wireless Notice.	A-8
Canadian Regulatory Wireless Notice.	A-8
Japanese Regulatory Wireless Notice	A-8
Brazilian Regulatory Wireless Notice	A-9

Appendix B Specifications

System Specifications	B-1
Physical Specifications.	B-3
Operating Environment	B-3

Getting to Know Your iPAQ Pocket PC

Congratulations on purchasing your HP iPAQ hx2000 Series Pocket PC. Use this guide to help you set up your Pocket PC and to learn how it works.

The software programs described below are preinstalled on your iPAQ Pocket PC. You can find detailed information for using these programs in the Help files located on your iPAQ Pocket PC. To access these Help files, tap **Start > Programs > Help** and select a program.

Note: If your Pocket PC loses power, the preinstalled programs are not deleted.

In addition, the Microsoft Pocket PC Basics Help provides instructions on operating the Pocket PC. To locate Pocket PC Basics, tap **Start > Programs > Help > Pocket PC Basics**.

HP iPAQ Software	Function
Asset Viewer	Lists detailed information about your system and its configuration.
Backlight	Enables changes to the Pocket PC backlight settings such as brightness, and conserving on battery and external power.
Bluetooth	Enables short-range wireless communications technology capable of exchanging information up to a distance of about 30 feet (10 meters).

HP iPAQ Software	Function <i>(Continued)</i>
Button Lock	Enable this feature while the Pocket PC is in standby mode to disable all buttons except the power button to ensure the device is not accidentally turned on.
ClearVue Presentation Viewer	Allows you to view presentations as they were created or you can create a custom slide list of which slide you want to view. (Located on the Companion CD.)
ClearVue PDF Viewer	Allows you to view portable document format (pdf) files. (Located on the Companion CD.)
DockWare	A personalized desk clock and calendar for your Pocket PC, where you can select pictures to be used as a slideshow in the background.
HP Mobile Print Center	Enables printing.
HP Profiles	Allows the user to change alerts (ring type and tone or vibrate mode). For example, if your in a meeting, you can change the ring type for incoming calls to vibrate.
HP ProtectTools	Software security residing on the Pocket PC to ensure there is no risk of losing sensitive data.
iPAQ Backup	Allows you to back up your data to protect it from loss due to a drained battery, accidental deletion, or hardware failure.
iPAQ Image Zone	Displays individual images and runs slide shows. Also displays images from a digital camera's SD storage card.
iPAQ Wireless	Provides a centralized control to all wireless features on your Pocket PC. Allows you to turn all wireless features on and off and configure settings for the Wireless Local Area Network (WLAN), Bluetooth, etc.

HP iPAQ Software	Function <i>(Continued)</i>
iTask	Allows you to quickly access the most frequently used features on your iPAQ Pocket PC.
Pocket Panel Lite	Allows you to manage battery power and adjust the Pocket PC backlight.
Self-Test	Runs a basic diagnostic test on the device.

Note: Press and hold the iTask button () on the front of your iPAQ Pocket PC to switch between the current application and the last application you were running.

Microsoft Pocket PC Software	Function
ActiveSync	Synchronizes the information between your Pocket PC and computer so you have the latest information in both locations. Be sure you install ActiveSync on your computer before connecting the cradle and iPAQ Pocket PC to your computer.
Calculator	Performs calculations and converts currency.
Calendar	Schedules appointments, meetings, and other events, and sets an alarm to remind you of the appointments. Appointments for the day are displayed on the Today screen.
Connections	Connects your Pocket PC to the Internet and intranet to browse Web sites, sends and receives e-mail, and synchronizes information using ActiveSync.
Contacts	Provides a list of colleagues and friends to e-mail and telephone.

Microsoft Pocket PC Software	Function (Continued)
Inbox	Receives and sends Internet e-mail messages in Inbox on your iPAQ Pocket PC or your computer if ActiveSync is installed. You must have an e-mail address provided by your Internet Service Provider (ISP) or employer to send and receive e-mail.
Notes	Creates handwritten or typed notes, drawings, and recordings.
Pictures	Views individual pictures, runs a slide show, or sets a picture as the background on the Today screen.
Pocket Excel	Able to create and edit workbooks or view and edit Excel workbooks created on your computer.
Pocket Internet Explorer	Browses the Internet and downloads pages through synchronization or by connecting to the Internet.
Pocket Word	Creates new documents or views and edits Word documents created on your computer.
Settings	Obtains quick access to settings for the backlight, clock, memory, power, regional settings, Today screen, password, sounds and notifications, etc.
Tasks	Tracks your to-do list.
Terminal Services Client	Logs onto your computer and uses all the programs available on that computer from your Pocket PC (Windows 2000 and XP or later).
Windows Media Player 9 Series	Plays digital audio and video files in Windows Media or MP3 format on your device.

Using the Stylus

Your iPAQ Pocket PC comes with a stylus that you should use to tap or write on your screen.



CAUTION: To prevent damage to your iPAQ Pocket PC screen, never use any device other than the stylus that comes with the Pocket PC or an approved replacement to tap or write on the screen. If you lose or break your stylus, you can order extras at www.hp.com/go/ipaqaccessories.

You can perform three basic actions using the stylus:

Tap—Lightly touch the screen to select or open an item. Lift the stylus after you tap an item. Tapping is equivalent to clicking an item with the mouse on your computer.

Drag—Place the point of the stylus on the screen and drag an item across the screen without lifting the stylus until you have completed the selection. Dragging is equivalent to dragging with the left mouse button pressed on your computer.

Tap and hold—Hold the stylus pointer on an item for a short time until a menu displays. Tapping and holding is equivalent to right-clicking your computer mouse button. When you tap and hold, a circle of red dots appears around the stylus to indicate that the menu will soon pop up.

Setting the Date and Time

When you turn on your iPAQ Pocket PC for the first time, you are requested to select your time zone. After setting the time zone, you still need to set the time and date on your unit. All three settings are located in the Clock Settings screen and can be set at the same time.

Note: By default, the time on the iPAQ Pocket PC is synchronized with your computer each time the two devices connect using ActiveSync.

Setting the Time for Home and Locations You Are Visiting

From the **Start** menu, tap **Settings > System tab > Clock & Alarms** icon.

Shortcut: From the **Today** screen, tap the **Clock** icon to set the time.

1. Tap either **Home** or **Visiting**.
2. Tap the **time-zone** down arrow, and select the appropriate time zone.
3. Tap the hour, minutes, or seconds, and use the up and down arrows to adjust the time.

Shortcut: You can also adjust the time by moving the hands of the clock with the stylus.

4. Tap **AM** or **PM**.
5. Tap **OK**.
6. Tap **Yes** to save the clock settings.

Setting the Date

1. From the **Start** menu, tap **Settings > System tab > Clock & Alarms** icon.

Shortcut: From the **Today** screen, tap the **Clock** icon to set the date.

2. Tap the down arrow by the date.
3. Tap the left or right arrow to select a month and year.
4. Tap a day.
5. Tap **OK**.
6. Tap **Yes** to save the date settings.

You need to reset your time zone, time, and date if:

- The location time (Home or Visiting) needs to be changed.
- All power to the iPAQ Pocket PC is lost, which removes all saved settings.
- You perform a full reset of your iPAQ Pocket PC.

Shortcut: From the **Today** screen, tap the **Clock** icon to set the time zone, time, and date.

Entering Owner Information

You can personalize your iPAQ Pocket PC by entering owner information. To enter owner information:

1. From the **Today** screen, tap **Start > Settings > Owner Information**.

Shortcut: From the **Today** screen, tap **Tap here to set owner information**.

2. Tap in the **Name** field. A keyboard appears at the bottom of the screen. Tap on the characters to enter your name.

Note: If you prefer, you can use Letter Recognizer, Microsoft Transcriber, or Block Recognizer to input information. Refer to Chapter 5, “Learning Input Methods.” for more information.

3. Tap the **Tab** key on the keyboard to move the cursor to the next field.
4. Continue entering whatever information you want to include.
5. To display owner information at startup, tap the **Options** tab and select the **Identification information** checkbox.
6. Tap on the **Notes** tab to enter any notes.
7. Tap **OK** to save the information and return to the **Today** screen.

Setting a Password

You can set a password to prevent unauthorized access to or use of your Pocket PC.

1. From the **Start** menu, tap **Settings > Personal tab > Password**.
2. On the Password screen, tap the box next to **Prompt if device unused for**, and then set the amount of time allotted to pass before the Pocket PC prompts the user for a password.
3. Tap the list box to select **Simple 4 digit password** or **Strong alphanumeric password**.
4. Enter your password in the Password box using the screen keyboard and tap **OK**.

NOTE: Keep a record of your password in a safe place in case you forget it. If you are unable to retrieve your password, you must perform a hard reset on your Pocket PC and will lose settings and information that are not saved in iPAQ File Store. See the section in this chapter “Performing a Hard Reset” for more information.

Resetting the Unit

Sometimes there is a need to reset your Pocket PC. Resetting the unit is known as performing a “soft” or “hard” reset. A soft reset (also known as a normal reset) stops all running applications, but does not erase any programs or saved data.

A hard reset (also known as a full reset) is used when you want to clear all user-installed settings, programs, and data from the Read-Only Memory (ROM). By performing a hard reset, you return the device to its original shipping state.

Performing a Soft Reset

Since a soft reset stops all running applications, be sure to save any unsaved data within a running application before performing a soft reset.

To perform a soft reset:

1. Locate the recessed **Reset** button on the bottom of your iPAQ Pocket PC.
2. Use the stylus to lightly press the **Reset** button.

The Pocket PC restarts and displays the **Today** screen.



Performing a Hard Reset

Perform a hard reset only when it is necessary because this process does clear all user-installed settings, programs, and data from ROM.



CAUTION: If you perform a hard reset, your Pocket PC returns to its default settings and loses all data and programs not saved in iPAQ File Store.

To perform a hard reset:

1. Press and hold down the **Calendar** and **iTask** buttons.
2. While holding down these buttons, use the stylus to lightly press the **Reset** button on the bottom of the iPAQ Pocket PC for about two seconds.



3. When the Pocket PC screen begins to fade, release the **Calendar** and **iTask** buttons first, and then remove the stylus from the **Reset** button.



CAUTION: If you push and hold the **Reset** button for more than two seconds, the battery disconnects. To restart the unit, either plug the unit into the AC Adapter or press the Reset button again.

4. The Pocket PC resets and powers on.

Aligning the Screen

When the iPAQ Pocket PC is turned on for the first time, you are guided through a screen alignment process. You must realign your screen if:

- The Pocket PC does not respond accurately to your taps.
- You perform a full reset of your Pocket PC.

To realign the iPAQ Pocket PC screen:

1. From the **Start** menu, tap **Settings > System** tab > **Screen** icon.
2. Tap the **Align Screen** button.
Shortcut: To access the **Align Screen** application without tapping on the screen, press and release all four application buttons at the same time. [Verification to come.]
3. Tap the cross-hair object at each location. Be precise when tapping the cross-hair object.
4. Tap **OK**.

Using the Touchscreen

[Information to come.]

Routine Care

To keep your Pocket PC in good condition and working properly, follow these guidelines:

- Keep your Pocket PC away from excessive moisture and temperature extremes.
- Do not expose your Pocket PC to liquids or precipitation.
- Do not place anything on top of your Pocket PC to prevent damage to the screen.
- Clean your Pocket PC by wiping the screen and the exterior with a soft, damp cloth lightly moistened only with water.
- Avoid exposing your Pocket PC to direct sunlight or strong ultraviolet light for extended periods of time.
- Avoid scratching the surface of the screen and banging it against hard objects.
- Use only the stylus that comes with your Pocket PC or an approved replacement on the screen to prevent scratching it.



CAUTION: To reduce the risk of damage to the internal components, do not spray liquid directly on the screen, or allow excess liquid to drip inside your Pocket PC. Using soap or other cleaning products on the screen might discolor the finish and damage it.

Traveling with your Pocket PC

Use the following guidelines when traveling with your Pocket PC.

- Back up your information.
- Take a copy of your backup with you on an SD memory card.
- Disconnect all external devices.
- Take the AC Adapter and Charger Adapter with you.

- Keep your Pocket PC in a protective case and keep it in your carry-on luggage.
- For air travel, be sure to turn off the Phone, Bluetooth, and Wi-Fi. To turn off all wireless features, from the **Today** screen, tap **Start > iPAQ Wireless > All Off**.
- If you are traveling internationally, be sure you have the plug adapter appropriate for the country you are visiting.

Synchronizing with Your Computer

Using Microsoft ActiveSync

Your device can be connected to a computer so you can transfer files back and forth. In this way, you only have to input data once. Microsoft ActiveSync is a synchronization program you install on your desktop or laptop computer to:

- Copy files (data, audio or video) between your device and up to two host computers so you always have the latest information in all locations.
- Install programs on your device
- Back up and restore device information
- Synchronize links
- Send and receive e-mail
- Request meetings

Installing ActiveSync

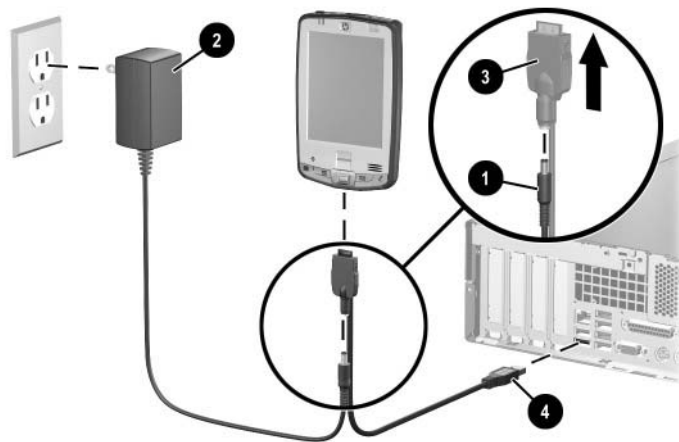


CAUTION: For synchronization to work properly, install Microsoft ActiveSync on your computer (Steps 1 and 2 below) **before** you connect your iPAQ Pocket PC to your computer (Step 3).

To install Microsoft ActiveSync on your host computer:

1. Insert the Companion CD into the CD tray or slot on your computer.

2. After the introductory screen displays, click **Setup Wizard**. The **Setup Wizard** detects the programs on your computer, and guides you step by step so you can install ActiveSync on your computer as well as other programs on your Pocket PC.
3. Follow the screen recommendations and when prompted, connect your Pocket PC to your personal computer:
 - a. Plug the round end of the AC Adapter ❶ into the charger adapter on the sync cable.
 - b. Connect the AC Adapter ❷ to a standard electrical outlet.
 - c. Connect one end of the sync cable ❸ to the bottom of the Pocket PC.
 - d. Connect the USB connector on the sync cable ❹ to the USB port on your computer.



4. Once you are finished with the **Setup Wizard**, you can disconnect the Pocket PC from the sync cable.

Synchronizing with Your Computer

With ActiveSync installed on your computer, you can:

- Use it any time to create an additional partnership so you can synchronize information with up to two computers.
- Add or delete the type of data (Contacts, Calendar, Inbox, Tasks, Favorites, Files, Notes, and AvantGo) you want synchronized with your Pocket PC.

Note: When you synchronize files, you can drag and drop the selected files from your computer to the synchronized folder on your iPAQ Pocket PC. If you named your device “PC1” when you created your partnership, then the synchronized folder is named “PC1.” When you synchronize, the files are automatically moved to and from your iPAQ Pocket PC.

Changing Synchronization Settings

You can modify your synchronization settings for Microsoft ActiveSync to:

- Change when your iPAQ Pocket PC synchronizes with your host computer.
- Change the type of connection (serial, USB, or infrared) from your iPAQ Pocket PC to your computer.
- Select the files and information to synchronize.
- Select the files and information you do not want to synchronize (for example, e-mail attachments).
- Determine how conflicts between information on your iPAQ Pocket PC and information on your computer are to be handled.

To change synchronization settings:

1. From the **Start** menu on your computer, click **Programs > Microsoft ActiveSync > Tools > Options**.
 - a. On the **Sync Options** tab, select the files and information to synchronize with your computer.
 - b. On the **Schedule** tab, select when your iPAQ Pocket PC synchronizes with your computer.
 - c. On the **Rules** tab, determine how conflicts between information on your iPAQ Pocket PC and information on your computer are to be handled.
2. Tap **OK** when you are finished.
3. From the **File** menu, click **Connection Settings**. Select the type of connection to be allowed between the iPAQ Pocket PC and the computer.

Using the Infrared Connection

As an alternative to using the desktop cradle, you can synchronize your Pocket PC and your computer using the infrared connection if you have an infrared port or an infrared USB adapter installed on your computer. The infrared connection option works only on computers that have Microsoft Windows 98SE, Me, 2000, or XP operating systems installed.

To set up an infrared connection to a computer:

1. Synchronize your Pocket PC with your computer using the desktop cradle **before** the first time you establish an ActiveSync connection via infrared.
2. Follow your computer manufacturer's instructions to install and set up an infrared port.
3. Remove the Pocket PC from the cradle and line up the infrared port with the computer infrared port so they are unobstructed and within 12 inches (30.5 cm) of each other.

4. Initiate a connection by tapping **Start > Programs > ActiveSync > Tools > Connect via IR**. Synchronization begins on your device.
5. To disconnect, move the devices away from each other or tap **X** in the upper right of the screen to turn off.

Copying Files

You can copy files to and from your host computer using **Explore** in ActiveSync and Windows Explorer.

To copy files:

1. Insert your iPAQ Pocket PC into the sync cable.
2. From the **Start** menu on your computer, click **Programs > Microsoft ActiveSync**.
3. Click **Explore**.
4. Double-click the **My Pocket PC**.
5. On your computer, right-click the **Start** menu, and select **Explore**.
6. Locate the file to be moved.

Note: You cannot copy preinstalled files or system files.

7. Drag and drop your files between your iPAQ Pocket PC and your computer. ActiveSync converts the files so that they can be used by the Pocket Office programs, if necessary.

Note: Move your files directly into My Documents on your iPAQ Pocket PC (or into a folder inside My Documents), so the programs on your iPAQ Pocket PC can locate them.

Installing Programs

To install programs on your iPAQ Pocket PC from your computer using ActiveSync:

1. Connect your iPAQ Pocket PC to your computer using the sync cable.
2. Follow the instructions on the screen.
3. Check the screen of your iPAQ Pocket PC to see if any further steps are necessary to complete the installation.

Backing up and Restoring Files

To help reduce the chance of losing information, you should back up information to your computer regularly. For more information on backing up and restoring information using Microsoft ActiveSync, refer to Chapter 7, in section “Using iPAQ Backup to Backup/Restore.”

Synchronizing Links

You can synchronize links to websites from the **Favorites** list on your computer to view them offline with Pocket Internet Explorer.

1. From the **Start** menu on your computer, click **Programs** and double-click the **Internet Explorer**.
2. Click **Favorites** to see the list of links to your favorite websites.
3. To save a website link to Mobile Favorites, open the website and click **Create Mobile Favorite**.

If you select “Favorites” as an information type to be synchronized, ActiveSync copies your mobile favorite to your Pocket PC the next time you synchronize.

4. Follow the instructions in Synchronize information to manually synchronize your favorite links.

Sending and Receiving E-mail

You can send and receive e-mail messages by synchronizing your iPAQ Pocket PC with your computer using ActiveSync. If you are using ActiveSync to send and receive e-mail messages, the name of the folder you are using is displayed at the bottom of the screen. For more information on sending and receiving e-mail using ActiveSync, from the **Start** menu, tap **Help > Inbox**.

Requesting Meetings

You can schedule a meeting and send a meeting request through ActiveSync. For more information, from the **Start** menu, tap **Help > Calendar**.

Managing the Battery

Your iPAQ Pocket PC is shipped with a rechargeable battery that is partially charged. It is recommended that you fully charge the Pocket PC battery **before** setting up the unit, and recharge regularly. Your Pocket PC uses some power to maintain files in RAM and the clock. While working at your desk, keep the Pocket PC and AC Adapter connected through the USB Synchronization Common cradle. When you travel, it is recommended that you carry the AC Adapter, Charger Adapter plug, or an optional spare battery with you.



CAUTION: Use only an HP approved battery for your iPAQ Pocket PC. Inserting a battery that does not comply with HP requirements might cause the Pocket PC to malfunction.

The iPAQ Pocket PC also has a small internal backup battery that allows you to change the main battery without losing RAM data (user-installed programs and data) as long as it is replaced within 15 minutes. The internal battery can only be removed by qualified HP Technical Support.

Installing the Battery

To install the removable/rechargeable battery:

1. Insert the right side of the battery into the right side of the battery compartment.

2. Press the left side of the battery into place.



3. Insert the top of the battery cover into the top of the battery compartment ❶.
4. Press the bottom of the battery cover into place until it clicks ❷.



CAUTION: The cover must be in place for the Pocket PC to operate. If the battery cover is not in place when you press the Power button, the Pocket PC will not power on.

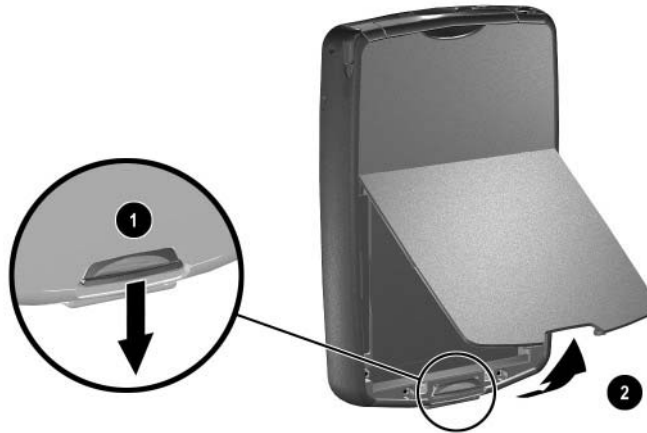
NOTE: If the battery is fully discharged, you must connect the AC Adapter to the Pocket PC to fully charge it before continuing. It takes up to four hours to fully charge a completely drained battery.

Removing the Battery

 **CAUTION:** Before removing the battery, use iPAQ Backup or ActiveSync to back up data on your Pocket PC. If you need to clear the memory during the removal process, you will be able to restore the data. To prevent losing information, you can also copy user-installed applications to the iPAQ File Store folder. For more information on the File Store, refer to Chapter 4, in section "Using iPAQ File Store Folder."

To remove the battery:

1. Press the battery button down ❶.
2. Swing the battery door up and remove it from the unit ❷.



3. Lift the left side of the battery up and remove it from the Pocket PC.



CAUTION: Because most of the applications and data you install on your Pocket PC are held in memory (RAM), you will need to reinstall them if the battery completely discharges or if the battery is removed from the unit for more than 15 minutes. Otherwise, when fully charged, the internal backup battery saves the user-installed data for up to 15 minutes when the standard battery is removed. Before removing the battery, check to see that the internal backup battery is fully charged by tapping **Start > Settings > System** tab > **Power**.

You do not need to reinstall applications and data installed in the iPAQ File Store folder because they are saved in nonvolatile memory.

Charging with the AC Adapter

The standard AC Adapter works in a standard electrical outlet. You can also charge your Pocket PC in your automobile with an optional automobile adapter that works in your vehicle's electrical cigarette lighter or a 12-volt power outlet.

To purchase an optional automobile adapter, refer to the HP Web site at: www.hp.com/go/ipaqaccessories.



CAUTION: Use only HP recommended AC adapters.

To charge your Pocket PC using the AC Adapter:

1. Insert the AC Adapter plug into the AC Charger adapter ❶.
2. Plug the AC Adapter into an electrical outlet ❷.
3. Insert the AC Charger adapter into the bottom of the Pocket PC ❸.



CAUTION: To avoid damaging your Pocket PC or the AC Adapter, check to be sure all connectors are properly aligned before connecting them.



4. When the Power button indicator on the front of the Pocket PC turns solid amber, the unit is fully charged and you can disconnect the AC Adapter. The approximate time to fully charge a drained battery is four hours.

NOTE: A standard battery can be charged in about four hours, an optional extended battery takes longer.

Charging with the HP iPAQ Cradle and AC Adapter

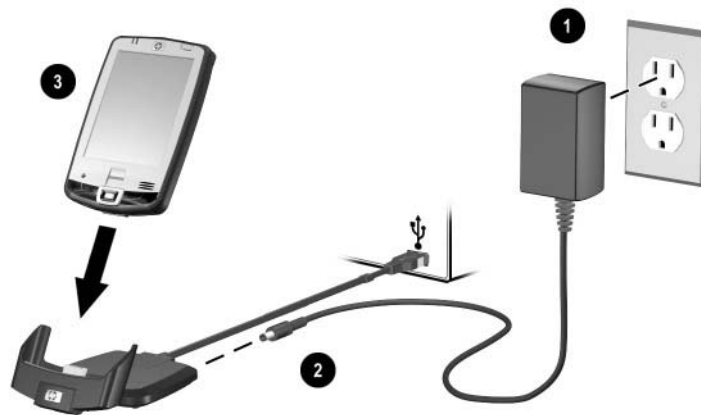
Use the HP iPAQ cradle to charge your Pocket PC.

NOTE: It is not necessary to synchronize your Pocket PC before charging it.

To charge your Pocket PC using the HP iPAQ cradle:

1. Plug the AC Adapter into an electrical outlet **1** and connect the other end of the AC Adapter to the AC connector on the HP iPAQ cradle **2**.
2. Slide the bottom of your Pocket PC into the HP iPAQ cradle **3** and push firmly to seat it.

 **CAUTION:** To avoid damaging your Pocket PC or the cradle, check to be sure the Pocket PC and cradle connectors are properly aligned before pushing the Pocket PC into the HP iPAQ cradle.



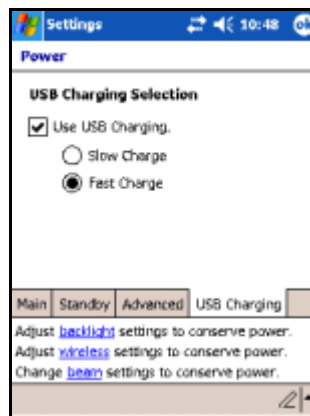
NOTE: The amber charge light on the front of the Pocket PC blinks while the battery is recharging and turns solid amber (nonblinking) when the battery is fully charged.

Charging with the HP iPAQ Cradle and USB Cable

An alternative method of charging the Pocket PC is to charge the unit by using a USB cable. However, because this charging method drains the host battery (i.e., laptop), you must enable USB charging **on the Pocket PC** before you can charge the unit.

To charge your Pocket PC using the HP iPAQ Cradle and USB Cable:

1. Turn on USB charging by tapping **Start > Settings > System** tab > **Power** on the Pocket PC.
2. Select the **USB Charging** tab, and then check **Use USB Charging**.
3. Tap **OK** once USB Charging has been enabled.



4. Connect one end of the USB sync cable to the bottom of the Pocket PC.
5. Connect the USB cable to an available USB Port on your USB powered device, such as a laptop.

NOTE: The Pocket PC charges slower when using an USB cable than with an AC Adapter.

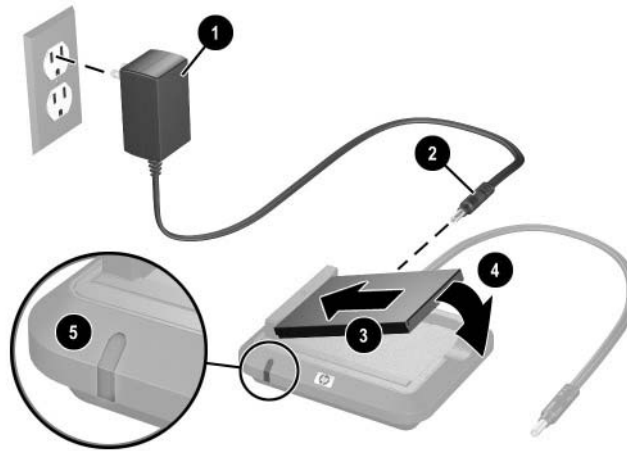
Charging a Spare Battery

Battery Saving Tip: To ensure you always have battery power available, invest in an extra Standard Slim Battery or Extended Battery. These batteries can be charged in the HP iPAQ Battery Charger. To purchase an extra battery and/or a battery charger, refer to the HP Web site at www.hp.com/go/ipaqaccessories.

To charge a spare battery:

1. Plug the AC Adapter into an electrical outlet ❶ and connect the other end of the AC Adapter to the AC connector on the battery charger ❷.
2. Insert the battery into the battery compartment ❸ with the connectors on the top of the battery lined up with the connectors inside the battery compartment, and push in to seat it ❹.
3. When the light on the front of the battery charger ❺ is blinking amber, the battery is charging. When the light becomes solid amber, the battery is completely charged and ready to use.

NOTE: If the battery light goes out when you are charging the battery, you either have a bad battery or a timeout has occurred.



NOTE: If you connect another Pocket PC while you are charging a spare battery, charging time increases. Depending how many units you have hooked up, it can take from up 30 hours to charge the battery.

Manually Checking the Battery Charge Level

To manually monitor the battery power:

1. From the **Start** menu, tap **Settings > System** tab.
2. Tap **Power > Battery** tab.

If the battery charge level is low, connect to AC power using the HP iPAQ Cradle and the AC Adapter, or change the battery. For information on purchasing a spare battery or optional Extended Battery, visit the HP Web site at www.hp.com/go/ipaqaccessories.

To use a shortcut to view your battery charge level, tap the battery icon located in the Pocket Panel Lite on the Today screen plug in.

Battery Saving Tip: Tap **Start > Settings > System** tab > **Power > Advanced** tab, and then tap the **Turn off device if not used for** checkbox and set it to turn your iPAQ Pocket PC off after a short time of not being used.

CAUTION: It is recommended that you do not allow the battery installed in your iPAQ Pocket PC to discharge completely. Doing so does not harm your Pocket PC or battery; however, you will lose all data not stored in File Store (ROM). Discharging the battery completely is similar to performing a hard reset. Refer to Chapter 1, “Performing a Hard Reset” for more information.

Battery Saving Tips

Here are some battery saving tips to help save energy in your Pocket PC battery.

- Leave your Pocket PC connected to AC power at all times when you’re not using it. For more information, refer to “Charging with the AC Adapter” earlier in this chapter.
- Set your Pocket PC to turn off after a short time if not being used. Tap **Start > Settings > System** tab > **Power > Advanced** tab. Next, check the “Turn off device if not used for” box, and then select a time duration.
- Set the backlight to go off quickly (10 or 30 seconds) after you stop using your Pocket PC, or implement Power Save mode to turn off the backlight completely. For more information, refer to “Changing the Backlight Settings” later in this chapter.
- Turn off all wireless activities when not in use. Refer to Chapter 8, in section “Powering Wi-Fi On or Off” and Chapter 9, in section “Turning On/Off Bluetooth.”

- Turn off the “Receive all incoming beams” setting and receive infrared beams manually instead. Refer to Chapter 2, “Synchronizing with Your Computer.”
- You can program an Application Button to turn off the screen when an MP3 is playing, thus saving battery power used to run the screen. Tap **Start > Windows Media > Tools > Settings > Buttons**. From the **Select Function** drop-down list, tap **Screen Toggle**. Press either the Contacts or Inbox application buttons on the front of your iPAQ Pocket PC, and then tap **OK**.
- Power off your Pocket PC when it is being charged to allow it to charge at a faster rate.

Changing the Backlight Settings

To adjust the backlight settings in order to conserve more battery power:

1. From the **Start** menu, tap **Settings > System** tab > **Backlight**.
2. Select from the following backlight settings:
 - Battery Power
 - External Power
 - Brightness
3. Make your changes to the backlight settings, and then tap **OK**.

Battery Saving Tip: Set the backlight to go off quickly after you stop using your iPAQ Pocket PC, or change the brightness level to save power.

Changing Wi-Fi Power Saving Modes

<Exact settings and user interface subject to change. More information to come.>

To change Wi-Fi power saving modes:

1. From the **Start** menu, tap **Settings** > **System** tab > **Power** > **Wireless** settings link located at the bottom of the screen.
2. For Wi-Fi Power Save mode, select:
 - **OFF**—No Wi-Fi Power Save. Use only if the absolute highest Wi-Fi throughput is required or if your network configuration does not support these modes.
 - **Auto**—Automatically switches between Power Save and no power save.
 - **Extended**—Uses the least battery power while maintaining a Wi-Fi connection. This mode significantly reduces the Wi-Fi data throughput. It is not recommended for large file transfers.

Note: The Extended power saving mode is not recommended if Bluetooth is also on.

Disabling Buttons

The Button Lock application allows you to disable all the buttons on your Pocket PC, except the power button whenever the unit is in Standby mode. By enabling this feature, you can ensure the device is not accidentally turned on, thus draining your battery.

To enable the button lock feature:

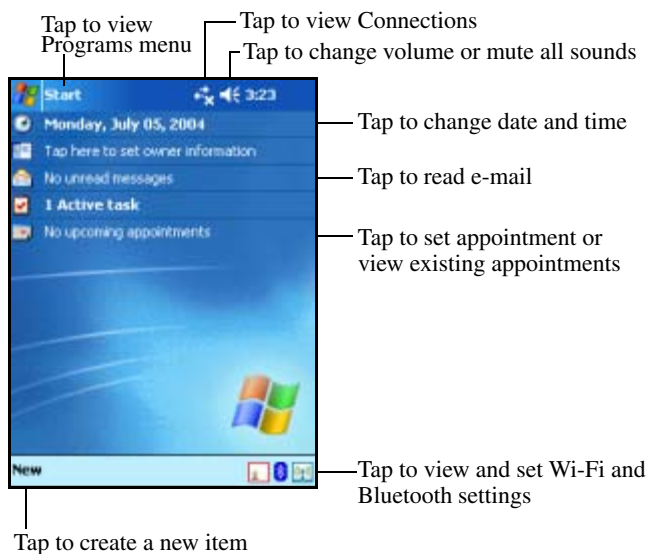
1. From the **Start** menu, tap **Settings** > **Buttons** icon.
2. Tap the **Lock** tab and check **Disable all buttons except power button**.
3. Tap **OK**.

Learning the Basics

Using the Today Screen

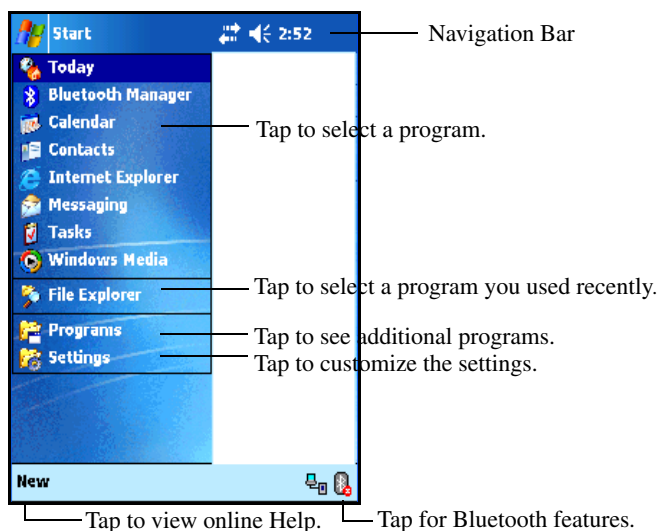
When you first turn on your iPAQ Pocket PC, the **Today** screen displays. You can also display it by tapping **Start > Today**. Use the **Today** screen to view:

- Owner information
- Upcoming appointments
- Unread and unsent messages
- Tasks that need to be completed

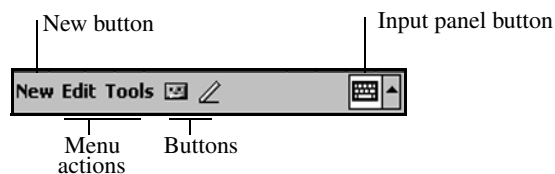


Navigation Bar and Command Bar

The Navigation Bar is located at the top of the screen. It displays the **Start** button, active notifications (such as new e-mail, Wi-Fi connection status, speaker status) and current time. Use the **Start** menu to select a program.



The Command bar is located at the bottom of the screen. The **New** menu provides shortcuts in creating new appointments, contacts, tasks, notes, etc. The **Input panel** button allows you to enter text.



Status Icons

You may see the following status icons displayed on the Navigation or Command bar. Tap the icon on the screen to view more information related to the item.

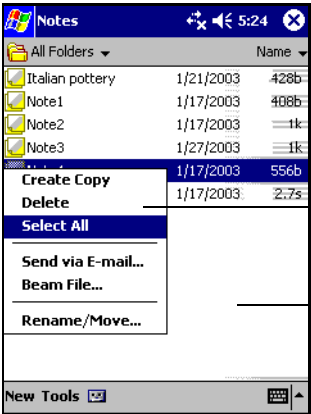
Icon	Status
	Active connection to computer or wireless network.
	Inactive connection to computer or wireless network.
	Microsoft ActiveSync is synchronizing.
	Speaker is on.
	Speaker is off (or in mute position).
	Battery power is low.
	Battery power is very low.
	E-mail, SMS or MMS messages received.
	Instant messages received.

Icon	Status (Continued)
	iPAQ Pocket PC is connected with the desktop cradle. This icon appears only when there is an active connection.
	iPAQ Wireless icon—Tap to display Wireless screen. Provides a control center to turn all wireless activities on and off, and to configure their settings.

Pop-Up Menus

Pop-up menus allow you to quickly perform an action. Use the pop-up menu to cut, copy, rename, and delete an item, also send an e-mail or send a file to another device.

To access a pop-up menu, **tap** and **hold** the stylus on the item on which you want to perform the action. When the menu appears, tap the desired action, or tap anywhere outside the menu to close it without performing an action.



Tap and hold to display the pop-up menu.
Tap the action you want.

Tap outside the menu to close it without performing an action.

Creating Information

From the **Today** screen, you can create new information, including:

- Appointments
- Contacts
- Messages
- Excel Workbook
- Notes
- Tasks
- Word documents

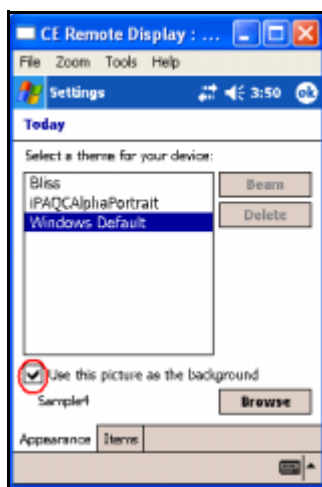
1. From the **Start** menu, tap **Today** > **New** at the bottom of the screen.
2. Tap an option to create a new item.
3. Tap **OK** after you finish creating a new item.

Customizing the Today Screen

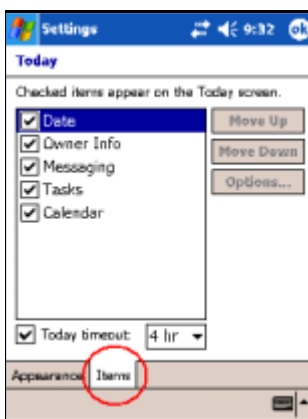
From the **Settings Today** screen, you can:

- Add a picture as the background.
- Select the information that appears on the **Today** screen.
- Select the **Today** screen theme.
- Set the order of the information.
- Set when to see the **Today** screen.

1. From the **Start** menu, tap **Settings > Today**.
2. Select **Use this picture as the background** checkbox.



3. Tap **Browse** to select a picture from File Explorer.
4. Tap the **Items** tab to select or reorder the information on the **Today** screen.



5. Tap an item to highlight it.

6. Tap **Move Up** or **Move Down** to change the order of items on the **Today** screen.

Note: You cannot change the placement of the **Date** on the **Today** screen.

7. Tap the down arrow associated with **Today timeout** checkbox to determine how many hours must pass before the **Today** screen displays.
8. Tap **OK**.

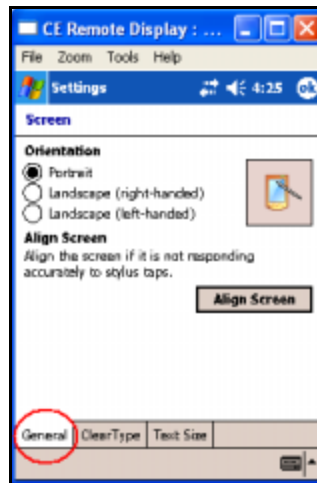
Changing the Screen Orientation

You can change the screen orientation of your Pocket PC from Portrait to Landscape mode. You can also change the Pocket PC font text size or enable ClearType for smoothing font edges for easier readability.

To change the screen orientation of your Pocket PC:

1. From the **Start** menu, tap **Settings > System** tab.
2. Tap the **Screen** icon > **General** tab, and then select Portrait or Landscape orientation.

For Landscape mode, you have a choice of right-handed or left-handed screen orientation.



Note: Enable ClearType and Text Size to smooth font edges and increases text size.

3. Tap **OK** when you have completed making your changes.

Opening and Closing Applications

Open any application on your iPAQ Pocket PC from the **Start** menu.

Note: You can also open an application by assigning it to an Application Button. To assign Application Buttons, from the **Today** screen, tap **Start > Settings > Buttons**.

To open an application:

1. Tap **Start > Programs**.
2. Tap the desired application title or logo.

To minimize an open application, tap the **x** at the top right of the screen.

Close applications either manually or by using iTask.

Note: Applications automatically close based on available memory.

Closing with iTask

1. Press the **iTask** button (Application Button 4 on the lower right side of your unit).
2. Tap and hold the program to be closed.
3. From the pop-up menu, tap **Close This Task**.

Closing Manually

1. From the **Start** menu, tap **Settings > System tab > Memory > Running Programs** tab.
 2. Tap **Stop All** or select a particular application, then tap **Stop**.
-

Note: To bring a currently running program to the foreground, tap **Activate**.

Installing Applications

Install applications on your iPAQ Pocket PC from your:

- Computer by using Microsoft ActiveSync.
- iPAQ Pocket PC if the application file has a .cab extension.
- iPAQ Pocket PC or your computer by copying an application file that has an .exe or .cef extension.

When installing applications, look for the correct version for your iPAQ model or Pocket PC 2003.

- Follow the instructions provided with the application and by the installation Wizard to install applications from your computer.
- Tap the application file in File Explorer on your iPAQ Pocket PC and follow the instructions on the installation Wizard to install applications on your Pocket PC.

Backing Up Information

Use iPAQ Backup or Microsoft ActiveSync Backup to back up and restore information on your iPAQ Pocket PC.

Note: Your iPAQ Pocket PC came preinstalled with iPAQ Backup. However, you must install ActiveSync on your computer before using ActiveSync Backup.

To help reduce the chance of losing information, you should back up information on a regular schedule. For more information on backing up your data, refer to Chapter 7, in section “Using iPAQ Backup to Backup/Restore.”

Using iPAQ File Store Folder

You can install programs and save files to the iPAQ File Store folder, which is accessed from File Explorer on your iPAQ Pocket PC.

Programs and files stored in iPAQ File Store are held in ROM and are saved if you perform a full reset of your iPAQ Pocket PC or if the battery discharges completely.

To save to iPAQ File Store:

1. Copy the files to be saved to the iPAQ File Store folder.
2. From the **Start** menu, tap **Programs > File Explorer > My Device > iPAQ File Store**.
3. Paste the selected files.

Note: Before saving files to the iPAQ File Store folder, it is a good idea to determine how much memory is available in the folder. To view the amount of memory, from the **Start** menu, tap **Settings > System tab > Memory > Storage Card** tab, then select **iPAQ File Store** from the drop down menu.

Learning Input Methods

Using Input Software



CAUTION: To avoid damaging your iPAQ Pocket PC screen, always use a stylus. **Never** use a pen or any type of metal pointer on the screen.

To input information to your Pocket PC, you can tap the on-screen keyboard or write with the Letter Recognizer, Microsoft Transcriber, or Block Recognizer in any application. You can use the stylus to draw and write on the screen in the Notes application and from any **Notes** tab in the Calendar, Contacts, and Tasks applications.

Changing Word Suggestion Options

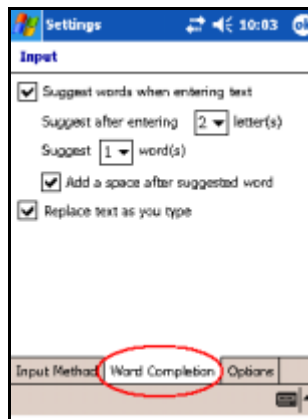
As you type or write, the Pocket PC suggests words for you in a box above the keyboard, Letter Recognizer, or Block Recognizer, but not in the Transcriber.

You determine:

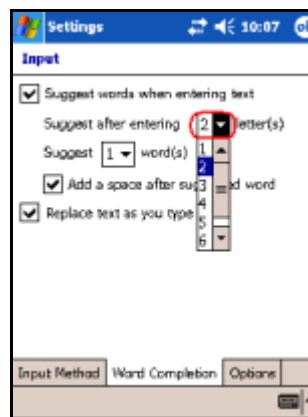
- If words are suggested.
- The number of letters you enter before a word is suggested.
- The number of words that are suggested per entry.

To change settings for word suggestions:

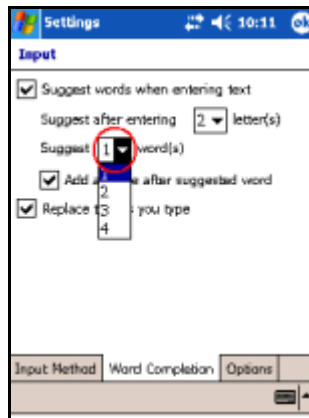
1. From the **Start** menu, tap **Settings > Input**.
2. Tap the **Word Completion** tab.



3. Tap the down arrow associated with letters and select the number of letters you want to type before a word is suggested.



4. Tap the down arrow associated with words and select the number of words you want suggested.



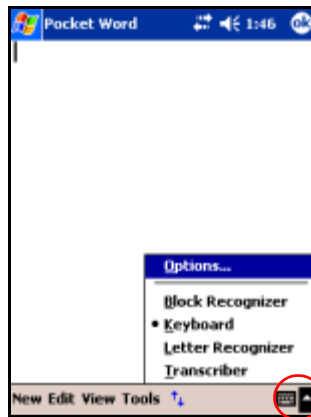
5. Tap **OK**.

Note: If you do not want any words suggested, remove the checkmark by tapping the checkbox next to **Suggest Words When Entering Text**.

Using the On-Screen Keyboard

Use the stylus to tap letters, numbers, and symbols on the on-screen keyboard to enter typed text directly onto the screen.

1. From any application, tap the up arrow next to the **Input Panel** icon.



2. Tap **Keyboard** to display a keyboard on the screen.

Note: To see symbols, tap the **123** key.

3. Tap a letter, symbol, or number to enter information.
4. Tap **OK**.

Writing with the Stylus and the Letter Recognizer

Use the stylus and Letter Recognizer to write letters, numbers, and symbols on the screen. Create words and sentences by writing in uppercase (ABC), lowercase (abc), and symbols (123) as instructed here.

To write with the stylus and Letter Recognizer:

1. From any application, tap the up arrow next to the **Input Panel** icon.
2. Tap **Letter Recognizer**.
3. Write a letter or symbol between the dashed line and baseline.
 - ☐ To display in uppercase, write a letter between the hatch marks labeled **ABC**.
 - ☐ To display in lowercase, write a letter between the hatch marks labeled **abc**.
 - ☐ Write a number or draw a symbol between the hatch marks labeled **123**.

What you write will be converted to text.

Note: A question mark within a program indicates a **Help** file.

Note: For the Letter Recognizer to work effectively, write characters between the dashed line and baseline.

- If you are writing a letter like “p,” write the top portion within the dashed line and baseline, and the tail portion below the baseline.
 - If you writing a letter like “b,” write the bottom portion within the dashed line and baseline, and the top portion above the dashed line.
-

Using the Touchpad or Cursor

The touch-sensitive pad on your HP iPAQ senses the position of a person's finger on its surface to provide screen navigation, cursor movement, and interactive input. Use your touchpad to select items, scroll, launch applications, and cursor control.

The touchpad is similar to using a mouse. Here are some terms used when using the touchpad or cursor.

- **Center Tap** selects an item or launches an application.
- **Tapping** means quickly touching and then lifting your finger off the Touchpad surface.
- **Swipe Gesture** swipes a specified number of steps in the direction you swipe (vertical or horizontal).
- **Swipe-and-Hold** provides continuous scrolling in the direction you want to scroll.

Personalizing Your Touchpad Settings

You can personalize the following settings for your HP iPAQ touchpad:

- **Touchpad sensitivity** allows you to control how much finger pressure is required to move the pointer at a particular speed.
- **Scrolling Rate** specifies how many steps a Swipe gesture or a Swipe-and-Hold gesture scrolls when you are in Navigation Mode.
- **Cursor Speed** allows you to adjust how quickly the cursor moves in your iPAQ screen when you are in Cursor Mode.

For more information on your HP iPAQ touchpad, refer to the online help on your HP iPAQ or go to the Synaptics NavPoint tutorial located on the Companion CD. To locate the online help, go to the **Start** menu > **Help** > ...<need new ROM to fill in>.

Writing with the Stylus and Microsoft Transcriber

Use the stylus and Microsoft Transcriber to write words, letters, numbers, and symbols anywhere on the screen.

1. From any application, tap the up arrow next to the **Input Panel** icon.
2. Tap **Transcriber** to display the **Transcriber Intro** screen.
3. Tap **OK**.
4. Tap **New** at the bottom of the screen.
5. Begin writing on the screen. What you write will be converted to text.

Note: To “teach” Transcriber your style of writing, tap on the “a” icon at the bottom of the screen to display the **Letter Shapes** screen and follow the instructions.

Writing with the Stylus and Block Recognizer

Write letters, numbers, and symbols using the stylus and Block Recognizer. Create words and sentences by writing letters and numbers in specific areas.

1. From any application, tap the up arrow next to the **Input Panel** button.
2. Tap **Block Recognizer**.

3. Write a word, letter, or symbol between the hatch marks.

- ☐ To type text, write a letter between the hatch marks labeled “abc.”
- ☐ To type numbers or symbols, write a number or symbol between the hatch marks labeled “123.”

What you write will be converted to text.



Drawing and Writing on the Screen

Use the stylus as a pen to draw and write on the screen in the Notes program or from the **Notes** tab in Calendar, Contacts, or Tasks.

1. From the **Start** menu, tap **Notes > New**.
2. Draw and write on the screen.
3. Tap the **Pen** icon.
4. Tap **OK**.

Converting Writing to Text

You can convert your writing to text when you write with the stylus in the Notes program or from the Notes tab in:

- Calendar
- Contacts
- Tasks

To convert writing to text:

1. From the **Start** menu, tap **Notes** or tap the **Notes** tab in Calendar, Contacts, or Tasks.
2. Tap a note to open it.
3. Tap **Tools**.
4. Tap **Recognize**.

Note: To convert a particular word or phrase, highlight it before you tap **Recognize**. If a word is not recognized, it will not be converted.

5. Tap **OK**.

Using Security Features

<Exact settings and user interface subject to change. More information to come.>

The widespread use of Pocket PCs has significantly increased employee productivity. However, non-secured or inadequately secured Pocket PCs are creating network security issues for the corporate workplace when they connect to a secure network.

Valuable information is bypassing network security and being stored on inadequately secured Pocket PCs. The HP ProtectTools and Fingerprint Reader security features have on-device security protection so there is no risk of losing sensitive information on your Pocket PC.

Using HP ProtectTools

Note: The following is a brief overview of the HP ProtectTools. For more detailed information, refer to the HP ProtectTools User's Guide located on the Companion CD that came with your Pocket PC.

Configuring Security

There are two ways to protect the privacy of the data on your Pocket PC. They are:

- Lock the Pocket PC whenever it is not in use
- Log off the unit and encrypt the data

A discussion on data encryption comes later in this chapter under the section called “Encrypting Your Data Using Vaults.”

Locking Your Pocket PC

To lock your Pocket PC:

1. From the **Today** screen, tap **Start > Settings > System** tab.
2. Tap **HP ProtectTools** icon > **Lock Device**.

The authentication screen appears and the device is locked until authentication occurs.

Unlocking Your Pocket PC

The authentication method for unlocking your Pocket PC is as follows:

- If you successfully enter your PIN, the device unlocks. If not, you are prompted for a password.
- If you successfully enter your password, the device unlocks. If not, you are prompted to answer the hint question you defined.
- If you successfully answer your hint question, the device unlocks. If not, the device locks and you are forced to perform a hard reset.

Note: After you successfully authenticate, you are prompted to reset any authentication information you didn't enter correctly. For example, if you forgot your PIN, but successfully enter your password, you're prompted to enter a new PIN.

Logging in Using Your PIN

To login using your PIN:

1. From the **Today** screen, tap **Start > Settings > System** tab > **HP ProtectTools**.

The authentication screen appears.

2. Enter your PIN and the device unlocks.

Note: If you do not remember your PIN, you can tap **Forgot PIN** in the lower left corner of the screen to enter your password instead.

- If you enter an incorrect PIN, the message "Invalid PIN entered" appears. Enter your PIN again.
- If you do not enter the correct PIN within three attempts, the password screen appears.

Logging in Using Your Password

To login using your Password:

1. Enter your password and tap **OK**.

A message appears, indicating that you authenticated successfully.

2. Tap **OK**.

If you entered the incorrect PIN, you will be prompted to create a new PIN.

Note: If you do not remember your password, you can tap **Forgot Password** in the lower left corner of the screen to answer your hint question instead.

- If you enter an incorrect password, the message "Invalid Password entered" appears. Enter your password again.
- If you do not enter the correct password within the configured number of attempts, the question/answer screen appears.

Logging in Using a Question

To login using your hint question:

1. Enter the answer to your hint question in the **Answer** field and tap **OK**.

A message appears, indicating that you authenticated successfully.

2. Tap **OK**.

- If you entered the incorrect PIN and password at this point, you will be prompted to create a new ones.
- If you enter an incorrect answer, the message "Invalid answer entered" appears. Enter your answer again.



CAUTION: If you do not enter the correct answer three times, your Pocket PC locks and you are forced to perform a hard reset.

Changing Your Security Information

If you want to change your PIN, password, or question/answer, you can do so easily.

Note: Any time authentication information expires, the Pocket PC prompts you to change your PIN, password, or question.

Changing Your PIN

To change your PIN:

1. From the **Today** screen, tap **Start > Settings > System** tab, and then **HP ProtectTools** icon.
2. Tap **Change PIN** when the Options screen appears.
3. Enter a new 4-digit PIN.
4. Confirm your PIN by entering it again. The message "Your PIN has been successfully updated" appears.
5. Tap **OK**.

Changing Your Password

To change your password:

1. From the **Today** screen, tap **Start > Settings > System** tab, and then **HP ProtectTools** icon.
2. Tap **Change Passwords** on the Options screen.
3. Enter a new password in the Password field.
4. Confirm your password by entering it again, and then tap **OK**. The message "Your password has been successfully updated" appears.
5. Tap **OK**.

Resetting Your Hint Question

To change your hint question:

1. From the **Today** screen, tap **Start > Settings > System** tab, and then **HP ProtectTools** icon. The Options screen appears.
2. Tap **Change Question/Answer**.
3. Enter a new question in the Question field.
4. Enter the answer to the new question in the Answer field.
5. Enter the same new answer in the Confirm field, and then tap **OK**. The message "Your answer has been successfully updated" appears.
6. Tap **OK**.

Encrypting Your Data Using Vaults

Any data that is placed in a vault is automatically encrypted. The HP ProtectTools security application decrypts the information when you view it; however, first you must log on to the Pocket PC.



CAUTION: You must unmount all vaults to be able to back up (or restore) your Pocket PC or the backup/restore will fail.

Creating a Vault

Only eight vaults can be active (or mounted) at once. HP ProtectTools mounts the first eight vaults you select. Although if you insert an external storage card that has one or more vaults already on it, you can have more than eight secure vaults appear in the secure vaults list.

To create a vault:

1. From the **Today** screen, tap **Start > Settings > System** tab, and then **HP ProtectTools** icon.
2. Tap **Manage Secure Vaults**.
3. Tap the **Vault** menu in the lower left corner, and then tap **Add**.
4. Enter a Name for the vault.
5. Select a Location for the vault from the drop-down list box.
6. Select a **Size** for the vault.
7. Tap **OK** and the vault is created.

Unmounting a Secure Vault

You decrypt files by moving or copying them out of the vault to any other location on your Pocket PC, a storage card, or your desktop.

NOTE: Before you remove a storage card from your Pocket PC, unmount all vaults on the card.

To unmount a secure vault: **<need information from Credant to complete.>**

1. From the **Today** screen, tap **Start > Settings > System** tab, and then **HP ProtectTools** icon.
2. Tap **Manage Secure Vaults** and do one of the following:
 - ☐ Tap the **Vault** menu in the lower left corner, and then tap **Unmount All**.

- ❑ Select a vault from the list, tap the **Vault** menu, and then tap **Unmount Selected**.

NOTE: Mounted vaults are identified by a folder icon with a key, while unmounted vaults are identified by a plain folder.

Viewing Vault Properties

To view the properties of a vault:

1. From the **Today** screen, tap **Start > Settings > System** tab, and then **HP ProtectTools** icon.
2. Tap **Manage Secure Vaults** and select the vault in which you want to work.
3. Tap the **Vault** menu, and then tap **Properties**.

Using the Fingerprint Reader

You can increase the security of the data stored in your iPAQ Pocket PC by using the iPAQ Fingerprint Reader. This feature allows you to require a PIN, password, and/or fingerprint be entered before you can log on to your iPAQ Pocket PC.



CAUTION: In the event that an incorrect or unsuccessful PIN, password, and/or fingerprint is repeatedly or incorrectly entered, all data and applications stored in RAM are erased and the iPAQ Pocket PC is returned to the as-shipped configuration. It is recommended that you back up all data frequently when using the security features.

It is recommended that you complete the fingerprint reader training on your iPAQ Pocket PC prior to changing your security settings.

Learning to Enroll a Fingerprint

Fingerprint Reader enrollment training is available on the iPAQ Pocket PC to assist you in proper enrollment of your unique fingerprint. You can access the training in two ways:

- First time you open a **Fingerprint** screen
- Tap the **Training** button from one of the login setup fingerprint screens

To learn to enroll fingerprints:



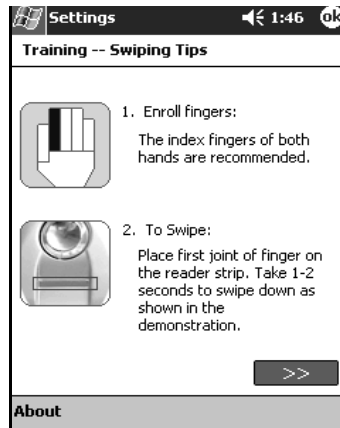
You can tap **OK** at the top of the screen at anytime to exit the training.

1. From the **Today** screen, tap **Start > Settings > Password**.
2. Select **PIN OR fingerprint** from the down arrow list to access training.



3. Tap 4 digits in the **PIN** field.

4. Tap **OK** or **ENTR**.
5. Tap the **Training** button to begin Fingerprint Reader training.



6. Read the swiping tips.
7. Tap the **double arrows** button.

8. Follow the on-screen demonstration to swipe a finger.



If the finger swipe is acceptable, the oval frame turns green and the message “Good. Please continue!” displays. If the finger swipe is unacceptable, the oval frame turns red and the message “Poor quality” or “No image. Try again!” displays.

9. Repeat the finger swiping exercise as prompted until you have completed six out of eight successful swipes.



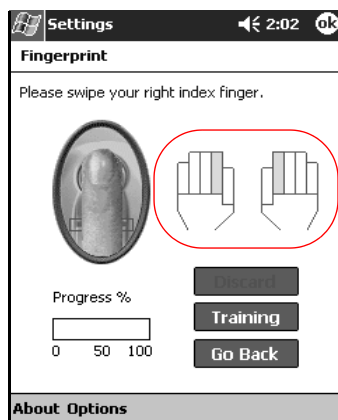
You must perform six acceptable swipes to continue the training.

10. Tap the **double arrows** button to continue the Self-test.
11. Perform eight finger swipes in the Self-test.



You must perform seven acceptable swipes to complete the training.

12. Tap **Finish** to end the training.
13. Tap **OK** to exit or tap a finger to enroll.



Working with Fingerprints

iPAQ Fingerprint Reader suggests fingers for you to use during the swiping activity. You can select a different finger at any time.

It is recommended that you enroll at least two fingers (index fingers are suggested). To enroll a fingerprint, you must take between two and eight quality finger swipes.

Enrolling a Fingerprint

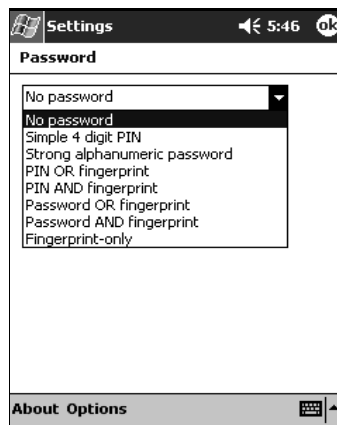
The **Fingerprint** screen uses color coding to display the status of your fingerprint swipe.

Fingerprint Status

If the color around the oval is...	Then...
Blue	No fingerprint has been taken for the finger.
Green	The fingerprint swipe was good quality.
Red	The fingerprint swipe was poor quality.

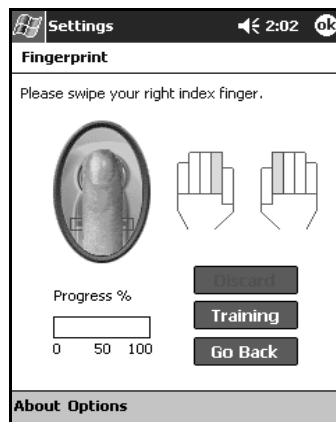
To enroll a fingerprint:

1. From the **Today** screen, tap **Start > Settings > Password**.
2. Select the option from the down arrow list that you choose for your security setting.



3. Enter either your PIN or password, when prompted.
4. On the **Fingerprint** screen, tap the finger on the display you want to enroll.

5. Swipe the selected finger, as instructed.



It is recommended that you gently swipe your finger downward across the sensor. You should begin the swipe at the first joint of your finger and continue downward with a smooth slow motion.

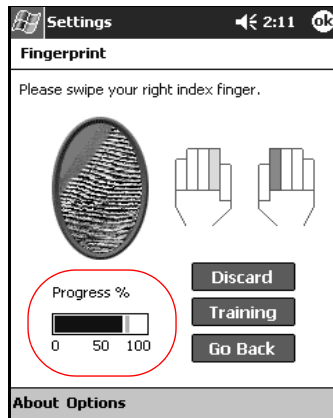
If you need additional assistance at any time, tap the **Training** button.

6. Monitor the status to see if your fingerprint was correctly swiped.



If OK, the perimeter of the oval turns green and a message displays indicating the quality was good. If poor quality, the perimeter of the oval turns red and a message displays.

7. Repeat steps 5 and 6 to acquire a sufficient number of quality swipes (notice the progress bar) to enroll the print.



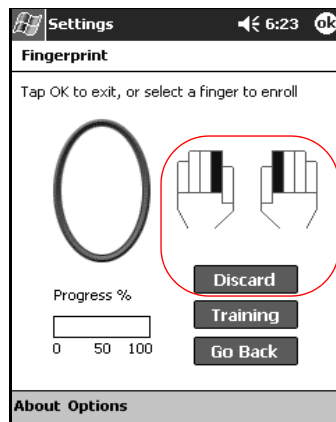
8. Tap **OK**.
9. Tap **Yes**.

Deleting a Fingerprint

You can delete any saved fingerprints.

1. From the **Today** screen, tap **Start > Settings > Password**.
2. Enter your PIN or swipe one of the enrolled fingers.

3. Tap the finger you want to delete, then tap **Discard**.



4. Tap **Yes** to confirm the deletion.

Setting Logon Passwords

You have a variety of options for setting logon passwords. You can select:

- No password (default)
- 4-digit PIN
- Alphanumeric password
- PIN or fingerprint
- PIN and fingerprint
- Alphanumeric password or fingerprint

- Alphanumeric password and fingerprint
- Fingerprint only



If you are using ActiveSync, you must enter a password on your personal computer to begin synchronization.

Setting “No password” for Logon

In this mode, you are not required to enter a PIN, password, or fingerprint to logon.

1. From the **Today** screen, tap **Start > Settings > Password**.
2. Select “No password” from the down arrow list.
3. Tap **OK**.
4. Tap **Yes** to save the changes.

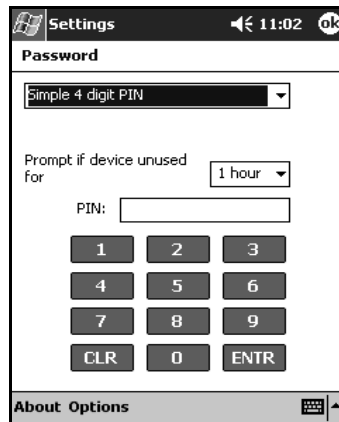


CAUTION: In the event that an incorrect or unsuccessful PIN, password, and/or fingerprint is repeatedly or incorrectly entered, all data and applications stored in RAM are erased and the iPAQ Pocket PC is returned to the as-shipped configuration. It is recommended that you back up all data frequently when using the security features.

Setting “Simple 4 digit PIN” for Logon

In this mode, you are required to enter a 4-digit PIN to logon.

1. From the **Today** screen, tap **Start > Settings > Password**.
2. Select “Simple 4 digit PIN” from the down arrow list.
3. Select from the down arrow list the length of time the iPAQ Pocket PC can remain unused before you must reenter the PIN.
4. Tap 4 digits in the **PIN** field.



5. Tap **OK** or **ENTR**.
6. Tap **Yes** to save the changes.

Setting “Strong alphanumeric password” for Logon

In this mode, you are required to enter a strong password with at least seven characters to logon. This password must contain a combination of upper and lowercase letters, numerals, or punctuation.

1. From the **Today** screen, tap **Start > Settings > Password**.
2. Select “Strong alphanumeric password” from the down arrow list.
3. Select from the down arrow list the length of time the iPAQ Pocket PC can remain unused before you must reenter the password.
4. Enter seven alphanumeric characters in the **Password** field.



Your password must have at least seven characters and contain both upper and lower case letters and numbers. You can use punctuation marks.

5. Repeat step 4 in the **Confirm** field.
6. Tap **OK**.
7. Tap **Yes** to save.

Setting “PIN OR fingerprint” for Logon

In this mode, you are required to enter a 4-digit PIN or fingerprint to logon.

1. From the **Today** screen, tap **Start > Settings > Password**.
2. Select “PIN OR fingerprint” from the down arrow list.
3. Tap 4 digits in the **PIN** field.
4. Select from the down arrow list the length of time the iPAQ Pocket PC can remain unused before you must reenter the PIN.

5. Tap **OK** or **ENTR**.
6. Tap a finger to enroll.
7. Swipe the selected finger, as instructed.



For more information on finger swiping, see the section “Enrolling a Fingerprint” or tap the **Training** button.

8. Tap **OK**.
9. Tap **Yes** to save changes.

Setting “PIN AND fingerprint” for Logon

In this mode, you are required to enter both a PIN and a fingerprint to logon.

1. From the **Today** screen, tap **Start > Settings > Password**.
2. Select “PIN AND fingerprint” from down arrow list.
3. Select from the down arrow list the length of time the iPAQ Pocket PC can remain unused before you must reenter the PIN.
4. Tap 4 digits in the **PIN** field.
5. Tap **OK** or **ENTR**.
6. Tap a finger to enroll.
7. Swipe the selected finger, as instructed.



For more information on finger swiping, see the section “Enrolling a Fingerprint” or tap the **Training** button.

8. Tap **OK**.
9. Tap **Yes** to save changes.

Setting “Password OR fingerprint” for Logon

In this mode, you are required to enter an alphanumeric password with at least seven characters or a fingerprint to logon.



The alphanumeric password must contain a combination of upper and lower case letters, numbers, and punctuation.

1. From the **Today** screen, tap **Start > Settings > Password**.
2. Select “Password OR fingerprint” from the down arrow list.
3. Select from the down arrow list the length of time the iPAQ Pocket PC can remain unused before you must reenter the password.
4. Enter seven alphanumeric characters in the **Password** field.
5. Repeat step 4 in the **Confirm** field.
6. Tap **OK**.
7. Tap a finger to enroll.
8. Swipe the selected finger, as instructed.



For more information on finger swiping, see the section “Enrolling a Fingerprint” or tap the **Training** button.

9. Tap **OK**.
10. Tap **Yes** to save changes.

Setting “Password AND Fingerprint” for Logon

In this mode, you are required to enter both a password with at least seven characters and a fingerprint to logon.



The alphanumeric password must contain a combination of upper and lower case letters, numbers, and punctuation.

1. From the **Today** screen, tap **Start > Settings > Password**.
2. Select “Password AND fingerprint” from down arrow list.
3. Select from the down arrow list the length of time the iPAQ Pocket PC can remain unused before you must reenter the password.
4. Enter seven alphanumeric characters in the **Password** field.
5. Repeat step 4 in the **Confirm** field.
6. Tap **OK**.
7. Tap a finger to enroll.
8. Swipe the selected finger, as instructed.



For more information on finger swiping, see the section “Enrolling a Fingerprint” or tap the **Training** button.

9. Tap **OK**.
10. Tap **Yes** to save changes.

Setting “Fingerprint-only” for Logon

In this mode, you are required to enter a successful fingerprint to logon.



CAUTION: In the event that an incorrect or unsuccessful fingerprint is repeatedly or incorrectly entered, all data and applications stored in RAM are erased and the iPAQ Pocket PC is returned to the as-shipped configuration. It is recommended that you back up all data frequently when using the security features.

1. From the **Today** screen, tap **Start > Settings > Password**.
2. Select “fingerprint-only” from the down arrow list.



If you are using ActiveSync, you must enter a password on your personal computer to begin synchronization.

3. Tap the finger to enroll.
4. Swipe the selected finger as instructed.



For more information on finger swiping, see the section “Enrolling a Fingerprint” or tap the **Training** button.

5. Tap **OK**.
6. Tap **Yes** to save changes.

Logging On Using PIN, Passwords, and Fingerprints

If you have set up a PIN, password, and/or fingerprint for logon, you must enter the correct PIN, password, and/or successfully swipe the correct fingerprint to use your iPAQ Pocket PC.

When you power on your iPAQ Pocket PC, you will be required to enter your logon information on the **PIN, Password** and/or **Fingerprint** screen.



CAUTION: In the event that an incorrect or unsuccessful PIN, password, and/or fingerprint is repeatedly or incorrectly entered, all data and applications stored in RAM are erased and the iPAQ Pocket PC is returned to the as-shipped configuration. It is recommended that you back up all data frequently when using the security features. The default number of attempts is six. You can select the maximum number of attempts.

Logging On with No Password

You do not need to enter a password or fingerprint to use the iPAQ Pocket PC.

Logging On Using a 4-digit PIN

You must enter the 4-digit PIN you entered during setup.

1. Turn on your iPAQ Pocket PC.
2. Tap your 4-digit PIN.
3. Tap **OK** or **ENTR**.

Logging On Using a Password

You must enter the alphanumeric password you entered during setup.

1. Turn on your iPAQ Pocket PC.
2. Enter your password.
3. Tap **OK** or **ENTR**.

Logging On Using a PIN or Fingerprint

You must enter a PIN or swipe the fingerprint you entered during setup. iPAQ Fingerprint Reader remembers your logon preference.

The next time you logon, the **PIN** or **Fingerprint** window corresponding to your last logon will be displayed.

1. Turn on your iPAQ Pocket PC.
2. Enter your 4-digit PIN or tap the **Fingerprint** tab to swipe your enrolled finger.



If your fingerprint was of poor quality, iPAQ Fingerprint Reader will ask you to swipe it again. If the quality was good, but there was not a match, the message “No match” will be displayed.

Logging On Using a PIN and Fingerprint

You must enter both a PIN and swipe the fingerprint you entered during setup.

1. Turn on your iPAQ Pocket PC.
2. Enter your 4-digit PIN.
3. Swipe your enrolled finger.

Logging On Using a Password or Fingerprint

You must enter a password or swipe the fingerprint you entered during setup.

1. Turn on your iPAQ Pocket PC.
2. Enter your password or swipe your enrolled finger.



To type letters, numbers, or punctuation, tap the **Keyboard** button at the bottom right corner of the screen. If you do not enter the correct password, you will be prompted to try again.

3. Swipe your fingerprint if you did not enter your password.

Logging On Using a Password and Fingerprint

You must enter both a password and swipe the fingerprint you entered during setup. iPAQ Fingerprint Reader remembers your logon preference.

The next time you logon, the **Password** or **Fingerprint** screen corresponding to your last logon will be displayed.

1. Turn on your iPAQ Pocket PC.
2. Enter your password.



If you do not enter the correct password, you will be prompted to try again.

3. Tap **OK**.
4. Swipe your enrolled finger.

Logging On Using a Fingerprint Only

You must successfully swipe the fingerprint you entered during setup.



CAUTION: In the event that an incorrect or unsuccessful fingerprint is repeatedly or incorrectly entered, all data and applications stored in RAM are erased and the iPAQ Pocket PC is returned to the as-shipped configuration. It is recommended that you back up all data frequently when using the security features. The default number of attempts is six. You can select the maximum number of attempts for your security needs.

1. Turn on your iPAQ Pocket PC.
2. Swipe your enrolled finger.

Setting Security Options

You can set the Fingerprint Reader security on your iPAQ Pocket PC to one of three levels:

- Regular (default)
- High
- Extra High

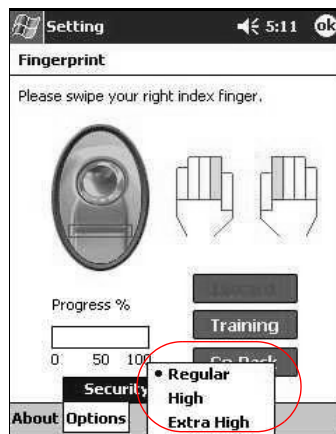
It is recommended that you use the **Regular** security setting.



CAUTION: In the event that an incorrect or unsuccessful PIN, password, and/or fingerprint is repeatedly or incorrectly entered, all data and applications stored in RAM are erased and the iPAQ Pocket PC is returned to the as-shipped configuration. It is recommended that you back up all data frequently when using the security features.

Setting the Security Level

1. From the **Today** screen, tap **Start > Settings > Password**.
2. In the **Fingerprint** screen, tap **Options > Security Level**.
3. Select your preferred security level.



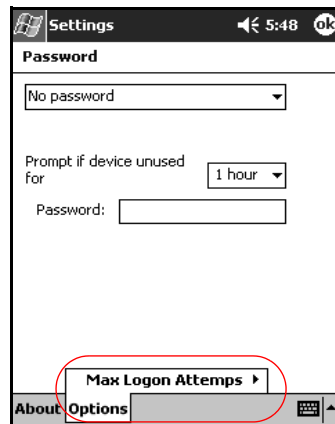
4. Tap **OK**.

You can set the maximum number of attempts allowed for logging on to your iPAQ Pocket PC.

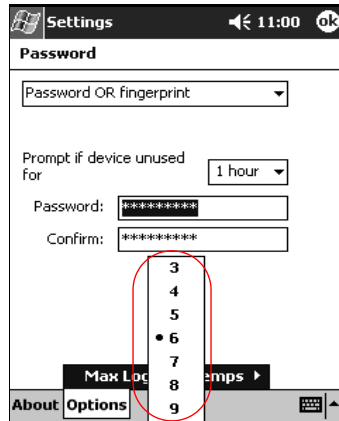
Setting the Maximum Number of Attempts

 **CAUTION:** It is important to consider the maximum number of attempts. If you unsuccessfully enter your PIN, password, or fingerprint the maximum number of attempts, you will lose all data and applications in the RAM and your iPAQ Pocket PC will be returned to an as-shipped configuration.

1. From the **Today** screen, tap **Start > Settings > Password**.
2. When using a PIN or password, tap **Options > Max Logon Attempts**.



3. Select the maximum number of attempts.



4. Tap **OK**.

7

Applications

Many applications come preinstalled on your new Pocket PC. Listed below are a few of those applications. In this chapter we discuss each application's function and general use.

Note: For a complete list of the software preinstalled on your PC, refer to Chapter 1, in section “Getting to Know Your iPAQ Pocket PC.”

- DockWare
- iPAQ Image Zone
- iPAQ Backup
- Pocket Informant
- Pocket Panel Lite
- iTask
- HP ProtectTools
- HP Mobile Printing

Note: For more detailed information for using these programs, refer to the Help files located on your iPAQ Pocket PC. To access these Help files, from the **Start** menu, tap **Programs > Help** and select a program.

Installing Applications

To install more applications on your Pocket PC:

1. Use the HP iPAQ cradle to connect your Pocket PC to your personal computer.
2. Follow the instructions in the Installation Wizard provided with the program you want to install.
3. Check the screen on your Pocket PC to see if any further steps are necessary to complete the program installation.

Removing Applications

To remove applications on your Pocket PC:

1. From the **Start** menu, tap **Settings > System tab > Remove Programs**.
2. Select the checkbox for the programs you want to remove, and then tap **Remove**.

Note: By removing any application from your Pocket PC, you increase storage memory (used to store data and document files) and program memory (used to run programs) on the unit.

Using DockWare

DockWare is a personalized desk clock, calendar, and screensaver for your Pocket PC. You can select preinstalled pictures to be used as a slideshow in the background or you can add your own personal pictures.

Starting DockWare

The DockWare program settings are turned on by default on your Pocket PC. After 5 minutes of inactivity, the screen goes into “DockWare” mode. The software displays the current calendar and a large display of the current time along with running a slideshow of pictures in the background.

Also, you can start DockWare immediately by tapping on **Start > Programs > DockWare** icon. Using the stylus, tap and hold anywhere on the screen to view the DockWare options.

Stopping DockWare

The application stops as soon as you touch the screen or push any button on the Pocket PC, with the exception of scrolling up or down to view a picture. Also, DockWare stops running if an alarm or any other popup window appears.

Be aware of the following:

- If your Pocket PC is running on battery power, this application does not automatically start.
- If DockWare is running and you take your Pocket PC out of the cradle, the application continues to run on battery power until you stop it.

To disable DockWare, tap and hold anywhere on the screen, and then uncheck **Starts Automatically** from the popup menu. This menu item acts as a toggle switch to start and stop the DockWare software program. Therefore, if you want to start DockWare again you need to select this option again.

Adding Pictures

DockWare comes with preinstalled pictures which can be found in the \My Documents\My Pictures folder. To add your own pictures to display:

1. Connect your Pocket PC to the desktop PC where the pictures are located.
2. Run ActiveSync to synchronize both computers. Refer to Chapter 2, “Synchronizing with Your Computer,” for instructions on running ActiveSync.
3. Go to **Start > Explore > Mobile Device** and open the Mobile Device window.
4. Open the folder found under \My Documents\My Pictures.
5. Copy your pictures to this location.

Note: DockWare lists bitmap files with the .bmp extension and lists JPEG files with either the .jpg or .jpeg extension.

Note: For more information on using DockWare, tap **Start > Programs > DockWare > Help**.

Using iPAQ Image Zone

When you use iPAQ Image Zone you can review and share images from your iPAQ Pocket PC. Also, you can print, send, record and e-mail images directly from your Pocket PC, or create slideshows to share your pictures with friends and family.

Viewing Pictures

1. From the **Start** menu, tap **Programs > iPAQ Image Zone**.

Note: The viewer opens in Browse mode by default. Browse mode displays thumbnail view of the pictures in the current folder.

2. Tap a thumbnail to select the picture. A preview of the picture and information about it is displayed.

To view images in a different folder:

1. Tap **File > Change Folder**.
2. Select the desired folder.
3. Tap **OK**.

Viewing a Picture Full-Screen

To view a picture full-screen, and to be able to zoom in or out:

1. Select the picture by tapping on its thumbnail.
2. Tap **View > Image**, or tap on the preview window.
3. Zoom in or out using the toolbar buttons. If the picture is too large to fit on the screen, you can display other parts of the picture by dragging the stylus on the screen, or by using the Navigation buttons.

Recording Sound With a Picture

You can record sound for each picture. When the picture is displayed, the associated sound is played. Pictures with sound have a speaker icon in their thumbnails.

To add sound to a picture:

1. Select the picture by tapping on its thumbnail.
2. Tap the **Cassette** icon on the menu bar.
3. Tap the **Record** button on the **Recording** toolbar.
4. Speak into the microphone or record the sound.
5. Tap the **Stop** button on the **Recording** toolbar.

To change audio options:

1. Tap **File > Options > Audio** tab.
2. Select your audio options.
3. Tap **OK**.

Viewing a Slideshow

You can view a slideshow of the images in the current folder. To start the slideshow, tap **View > Slideshow**.

During the slideshow, tap anywhere on the screen to display the on-screen controls which you can use to move forward or backward through the slides, or to end the slideshow. You can also use the Navigation buttons to move forward or backward through the slides.

You can control display options such as:

- Sequence
- Delay
- Rotation
- Transition Effect

To change slideshow settings:

1. Tap **File > Options > Slideshow** tab.
2. Select the settings and effects you want to use in your slideshow.
3. Tap **OK**.

Printing Pictures

You can print pictures from iPAQ Image Zone if HP Mobile Printing has been installed from the Companion CD.

To print a picture:

1. Select the picture to be printed by tapping on its thumbnail.
2. Tap **File > Print**.

Note: For more information on using iPAQ Image Zone, tap **Start > Programs > iPAQ Image Zone > Help**.

E-mailing Pictures

Using iPAQ Image Zone, you can e-mail pictures to all of your family and friends. To send pictures as e-mail attachments:

1. From the **Start** menu, tap **Programs > iPAQ Image Zone**.
2. Tap the e-mail icon located at the bottom of the screen.
3. Tap **E-mail Attachment**, and then **Next**.
4. Enter the e-mail address, and then tap **Send**.

Note: Instant Share is not supported on the HP iPAQ hx4700 series Pocket PC.

Using iPAQ Backup to Backup/Restore

Use iPAQ Backup or Microsoft ActiveSync Backup to back up and restore information on your iPAQ Pocket PC.

Note: Your iPAQ Pocket PC came preinstalled with iPAQ Backup. However, you must install ActiveSync on your computer before using ActiveSync Backup.

To help reduce the chance of losing information, you should back up information on a regular schedule.

iPAQ Backup saves your data in a backup file. You can designate a file name and a location for the file to be saved. iPAQ Backup performs a back up to a memory card, main memory, or the iPAQ File Store folder. Close all programs on your iPAQ Pocket PC before backing up or restoring your information.

CAUTION: Restoring your information replaces the current information on your iPAQ Pocket PC with the information saved in your backup.

To backup/restore using iPAQ Backup:

1. From the **Start** menu, tap  or tap **Programs > iPAQ Backup**.
2. Tap the **Backup** tab or the **Restore** tab.
3. Select the files and folders to be backed up or restored.
4. Select file location for backed-up data.
5. Set backup or restore options and press **OK**.
6. Press the **Backup** or **Restore** button, and then press the **Start** button on the next screen.

Using ActiveSync To Backup/Restore

Close all programs on your iPAQ Pocket PC before backing up or restoring your information.



CAUTION: Restoring your information replaces the current information on your iPAQ Pocket PC with the information saved in your backup.

To backup/restore using ActiveSync:

1. Connect the iPAQ Pocket PC to your computer.
2. From your computer, open **Microsoft ActiveSync**.
3. From the **Start** menu, tap **Programs > Microsoft ActiveSync**.
4. From the **Tools** menu, click **Backup/Restore**.
5. Click the **Backup** or **Restore** tab, and select your options.
6. Click **Backup Now** or **Restore Now**.

Using Pocket Informant

Pocket Informant (PI) is a complete utility for managing your appointments and tasks. It enhances your built-in Contacts, Calendar, and Tasks applications with more powerful tools on your Pocket PC, while still allowing you to synchronize with ActiveSync.

Note: Pocket Informant is turned on by default the first time you use your Pocket PC.

If you do not want to use Pocket Informant:

1. From the **Start** menu, tap **Programs > Pocket Informant**.
2. Tap the Support menu, and then **Support > Override System PIM Shortcuts**.

Note: Once you have selected to turn off Pocket Informant, you must perform a soft reset for the change to take effect.

Pocket Informant Toolbar

The five main components that are available on the Toolbar, just above the Command bar, are Calendar, Notes, Tasks, Contacts, and Search.

Component	Function
Calendar	A scheduling feature fully integrated with contacts and other features. You can view the calendar by the agenda, day, week, or month.
Notes	A written or recorded reminder (memo) to yourself.
Tasks	A personal or work-related errand (or job) you want to track through completion. A task can occur once or repeatedly (a recurring task).

Component Function *(Continued)*

Contacts	A list of people, inside or outside of your organization, about whom you can save several types of information, such as street and e-mail addresses, telephone and fax numbers, etc.
Search	A comprehensive filter which provides wildcard support, date spans (duration), and specific category filter support.

Menus and Options

Pocket Informant provides the following menus and options located at the bottom of the screen:



- **New** button enters new or edit existing data.
- **Support** menu changes color schemes, view options, take screenshots, import/export calendars, manage your PI data, and turn on the infrared beam to exchange data.
- **Go to Today** button goes directly to the current date in the calendar view.
- **Toolbar** button provides the option of changing between three possible toolbars: Filter, New Entry, or ABC (used for Contacts) located at the top of the screen.
- **Calendar Preferences** menu -- used to switch calendar views such as the Agenda, Day, Week, or Month View or any other frequently changed options.

Note: For more information on Pocket Informant, tap **Start > Programs > Help** on your Pocket PC or go to the more extensive help file located on the Companion CD.

Using Pocket Panel Lite

This feature allows you to manage battery power and adjust the Pocket PC backlight. Pocket Panel Lite displays on the Today screen for easy accessibility. In addition to using the Today screen shortcut (plug-in), you can access the Pocket Panel Lite application by selecting the **Start** menu, then tap **Programs > Pocket Panel Lite**.

Note: For more information on Pocket Panel Lite, tap **Start > Programs > Help <?>** on your Pocket PC. *<Where does the user go for more information?> It's not in EVT v41.*

Using iTask

The iTask application, sometimes called iPAQ Task Manager, allows you to quickly access the most frequently used features on your iPAQ Pocket PC.

From iTask you can manage tasks that are already running, launch new programs, and more. Each task that is currently running on the Pocket PC shows up in a list.

Tap on a task to bring the current program into the foreground or tap and hold to bring up the Task Menu.

To start iTask, from the **Start** menu, tap **Programs > iTask**.

HP ProtectTools

This security application comes preinstalled on your Pocket PC and offers on-device security protection with the use of encrypting passwords and data. For more information on the security application, encrypting data and creating vaults, refer to Chapter 6, "Using Security Features."

HP Mobile Printing

HP Mobile Printing enables you to print directly from your Pocket PC to Bluetooth, infrared, and network printers. For complete setup and installation instructions, refer to HP Mobile Printing located on the Companion CD.

Using Wi-Fi

<Exact settings and user interface subject to change. More information to come.>

Getting Acquainted

With wireless access, you do not need to use cables to connect your HP iPAQ to the Internet. Instead, access points transmit data to and from your wireless device. Your HP iPAQ can connect to an 802.11b WLAN or connect directly to other WLAN-enabled devices. With Wi-Fi, you can:

- Access the Internet
- Send and receive e-mail
- Access corporate network information
- Use virtual private networks (VPNs) for secure remote access
- Use hotspots for wireless connectivity

Note: Use of dial-up and wireless Internet, e-mail, corporate networks, and other wireless communications, such as Bluetooth-enabled devices, may require separately purchased additional hardware and other compatible equipment, in addition to a standard Wi-Fi infrastructure and a separately purchased service contract. Check with your service provider for availability and coverage in your area. Not all web content may be available. Some web content may require installation of additional software.

Getting Started with Wi-Fi

Use this section to learn how to use Wi-Fi, automatically connect to a network, manually enter new network settings, and search for networks.

Powering Wi-Fi On or Off

To use Wi-Fi on your HP iPAQ, you need to turn on Wi-Fi and set up your device.

Note: The Wi-Fi antenna for the HP iPAQ is located in the top of the unit. If you cover up the top of the HP iPAQ after you have turned on Wi-Fi, signal strength diminishes.

To turn the Wi-Fi on or off:

1. From the **Today** screen, tap the **iPAQ Wireless** icon () in the Command bar located at the bottom of the screen.
2. Tap the **Wi-Fi** button.

When Wi-Fi is powered on, the **Wi-Fi** icon on the iPAQ Wireless screen turns from gray to to amber to green and the Wi-Fi light-emitting diode (LED), located on the top left corner of the unit, is solid blue indicating one or more radios are on.

Note: Even though the indicator is blue to indicate Wi-Fi is turned on, it does not necessarily mean a connection has been established with another device or access point.

If Wi-Fi is off, the **Wi-Fi** icon turns from green to gray.

Battery Saving Tip: Turn Wi-Fi off when you are not using it. When Wi-Fi is on, be sure one of the Wi-Fi power saving modes is selected. Refer to [“Changing Wi-Fi Power Saving Modes”](#) in Chapter 3, [“Managing the Battery”](#) for more information.

Note: Some Access Points and networks do not support one or more of the power saving modes that are available. If you cannot connect with a particular wireless network, try turning off the Wi-Fi Power Save modes.

Automatically Connecting to a Network

1. If one or more broadcast networks are present, the **Network Indicator** icon () appears in the Navigation bar. Tap the network you want to connect to, and then tap whether the network connects to the Internet (does not use proxy settings) or Work (uses proxy settings).
2. If you are prompted for a Network Key (WEP), enter it and tap **Connect**. If you are not sure, contact your network administrator.

Manually Entering New Network Settings

A wireless network can be added either when the network is detected (the **Network Indicator** icon is showing in the Navigation bar) or manually by entering setting information. To manually add a wireless network:

1. Be sure Wi-Fi is on.
2. Tap the **Connections** icon ( or ) > **Settings** > **Advanced** tab > **Select Networks** button.
3. Enter or select the network name (or tap **New**) you want to use to either connect to the Internet using an ISP or a Virtual Private Network (VPN) for work. Tap **OK** once completed.
4. Set up your **Dialing Rules** and **Exceptions** and press **OK**.

The next step is to setup your network interface cards.

5. From the **iPAQ Wireless** screen, tap > **Settings**.
6. Select **Add New ...** in the list box on the **General** tab to start configuring wireless networks.

Note: If a network was detected in step 3, the SSID is automatically entered and cannot be changed.

7. Enter a SSID into the **Network Name** box.
8. In the **Connects to:** box, select where your network connects to (**The Internet** or **Work**).
9. If you want to connect to an ad-hoc connection, tap the **This is a device-to-device (ad-hoc) connection** checkbox.
10. If authentication information is needed, from the **Configure Wireless Network** screen, tap the **Network Key** tab.

Note: To determine whether authentication information is needed, see your network administrator.

11. To configure the type of network authentication to use, select:
 - a. To use Shared Key authentication, tap the **Authentication (Shared mode)** listbox. Type the network key in the **Network Key:** box.
 - b. To use data encryption, tap the **Data encryption (WEP enabled)** listbox.
 - c. If a network key is provided by your network automatically, tap the **The Key is provided for me automatically** checkbox.
12. For increased security, tap **802.1x** tab and select the **Use IEEE802.1x network access control** checkbox. You should only check this option if it is supported by your network environment. Ask your network administrator if you are unsure.

13. Select EAP type (PEAP or Smart Card/Certificate) from the listbox.
14. Once you have completed entering the network settings, tap **OK** and **OK** again to exit this menu.

Searching for Networks to Access

Networks that you have already configured are preferred networks and can be found on the **iPAQ Wireless** screen > **Settings** > **Wireless Networks** list box. You can choose whether to connect only to preferred networks or to have your HP iPAQ search for and connect to any available network (preferred or not).

1. From the **iPAQ Wireless** screen, tap > **Settings** > **Wireless** tab.
2. In the **Networks to access** box, tap the type of network you want to connect to (**All Available**, **Only access points**, or **Only computer-to-computer**).
3. To connect only to networks that have already been configured, clear the **Automatically connect to non-preferred networks** checkbox.

Note: If you check the **Automatically connect to non-preferred networks** checkbox, your HP iPAQ detects any new networks and provides you the opportunity to configure them.

Managing Wireless Network Settings

In managing your wireless networks, sometimes it is necessary to change network settings. In the next two sections, learn how to view, edit and delete available wireless network settings.

Viewing or Editing a Wireless Network

To view or edit an existing or available wireless network:

1. Be sure Wi-Fi is on.
2. From the **iPAQ Wireless** screen, tap > **Settings** > **Wireless** tab.
3. In the **Wireless networks** box, tap the desired network name.
4. Edit the existing settings as necessary, and then tap **OK** to save the changes.

Deleting a Wireless Network

To delete an existing or available wireless network:

1. Be sure Wi-Fi is powered on.
2. From the **iPAQ Wireless** screen, tap > **Settings** > **Wireless** tab.
3. In the **Wireless networks** box, tap and hold the network you want to delete.
4. Tap **Remove Settings**.

Monitoring Signal Strength and Status

To view the signal strength between your HP iPAQ and an access point Wi-Fi connection:

1. Tap the **Connections** icon ( or ) > in the Navigation bar.
2. When the **Connectivity** box displays, you will be able to view the type of network the HP iPAQ is connected to (for example, Work or Internet) and an icon displaying the signal strength.

Note: The **Signal Strength** icon will not be displayed if a connection is not present.

3. To make changes to the connection settings, tap **Settings**.
4. To exit the **Connectivity** box, tap the **Hide** button.

Advanced Network Settings

Use the next few sections to learn how to set up and change network configuration settings so your HP iPAQ can communicate with other networks.

Advanced Wi-Fi Terms

It is recommended that you become familiar with the following terms as you begin to use Wi-Fi technology.

Term	Definition
Encryption (WEP) or IEEE 802.1X	A set of security services used to protect 802.11 networks from unauthorized access.
Device-to-computer or ad-hoc	The mode that does not use access points. It is used in peer-to-peer network communications.
Domain Name System (DNS)	The way that Internet domain names are located and translated into IP addresses. It is an easy to remember name for an Internet address. (For example, www.horseshow.com instead of the IP address: xxx.xxx.xxx.xxx).
Hotspots	Public or private areas where there is a wireless access point available. This wireless connection could be located, for example, at a library or cyber cafe.
Infrastructure	This connection mode uses wireless access points to connect to networks.
Internet Protocol (IP) Address	A number that identifies each sender or receiver of information (sent in packets) across the Internet.

Term	Definition <i>(Continued)</i>
SSID or Network Name	SSID is the acronym for the service set identifier. This identification number uses a maximum number of 32 characters and is case sensitive.
Transmission Control Protocol/ Internet Protocol	The basic communication language (protocol) of the Internet.
Wireless Access Point	The access point provides a wireless connection to a network (additional hardware).
Windows Internet Naming Service (WINS)	A way of managing the association of workstation names and locations with IP addresses.

Looking Up an IP Address

To find the IP address the wireless network is using:

1. Be sure Wi-Fi is on.
2. Connect to a network by tapping the **Connections** icon ( or ) > **Settings** > **Advanced** tab > **Select Networks** button.
If you have already connected to a network, skip to step 5.
3. Select the network name you want to use to either connect to the Internet using an ISP or a Virtual Private Network (VPN) for work. If you need to change or create a new network management name, tap the **Edit...** or **New...** button. Tap **OK** once you have completed this step.
4. From the **Connections** screen, set up your **Dialing Rules** and **Exceptions** and press **OK**.
5. From the **iPAQ Wireless** screen, tap the **Wi-Fi Settings** button > **Network Adapters** tab.
6. Tap the appropriate adapter to modify the settings. The IP address appears in the **IP Address** box.

Changing TCP/IP Settings

Note: Most Internet Service Providers (ISPs) and private networks now use dynamically-assigned IP addresses. You will not need to change the Transmission Control Protocol/Internet Protocol (TCP/IP) settings unless your ISP or private network does not use dynamically-assigned IP addresses. If you are not sure if your ISP or private network use dynamically-assigned IP addresses, check with your network administrator.

To change TCP/IP Settings:

1. Contact your ISP or network administrator to determine your IP address, subnet mask, and/or default gateway (if needed).
 2. Be sure Wi-Fi is on.
 3. From the **iPAQ Wireless** screen, tap > **Settings** > **Network Adapters** tab.
 4. In the **My network card connects to...** dropdown box, tap either **The Internet** or **Work**.
-

Note: If you are connecting to your ISP at home, tap **The Internet**. If you are connecting to a private network, such as a corporate network at work, tap **Work**.

5. In the **Tap an adapter to modify settings** box, tap **HP iPAQ Wi-Fi Adapter**.
6. Tap the **IP Address** tab.
7. Tap **Use specific IP address** and enter the requested information.
8. Tap **OK** to save your settings.

Changing DNS and WINS Settings

Note: Most Internet Service Providers (ISPs) and private networks now use dynamically-assigned IP addresses. You will not need to change Domain Name System (DNS) and Windows Internet Naming Service (WINS) settings unless your ISP or private network does not use dynamically-assigned IP addresses. If you are not sure, check with your network administrator.

Servers that require an assigned IP address may also require a way to map computer names to IP addresses. Your HP iPAQ supports two name resolution options:

- DNS
- WINS

To change server settings:

1. Contact your ISP or network administrator to determine which name resolution to use, obtain the specific server address, and determine whether alternate addresses are available.

Note: An alternate address may enable you to connect when the primary server is unavailable.

2. Be sure the Wi-Fi is on.
3. From the **iPAQ Wireless** screen, tap > **Settings** > **Network Adapters** tab.
4. In the **My network card connects to...** dropdown box, tap either **The Internet** or **Work**.

Note: If you are connecting to your ISP at home, tap **The Internet**. If you are connecting to a private network such as a corporate network at work, you should tap **Work**.

5. In the **Tap an adapter to modify settings** box, tap **HP iPAQ Wi-Fi Adapter**.

6. Tap the **Name Servers** tab and enter the requested information.
7. Tap **OK** to save your settings.

Setting Up VPN Server Connections

A VPN connection enables you to securely connect to servers, such as a corporate network, via the Internet. To set up a VPN server connection:

1. Contact your network administrator for your user name, password, domain name, TCP/IP settings, and host name or IP address of the VPN server.
2. Tap the **Connections** icon ( or ) in the Navigation bar > **Settings** > **Task** tab on the **Connections** screen.
3. Under **My Work Network**, tap **Add a new VPN server connection**.
4. Follow the instructions on the **Make New Connection** screen.

Note: For online Help for any screen in the New Connection wizard or while changing settings, tap the **?**.

Changing VPN Server Connections

1. Be sure Wi-Fi is on.
2. Tap the **Connections** icon ( or ) > in the Navigation bar, and then **Settings** > **Task** tab.
3. Under **My Work Network**, tap **Manage existing connections** > **VPN** tab.
4. Tap the VPN connection you want to change, and then tap **Edit**.
5. In the **Name** box, enter new name for the connection (for example, your company's name).

6. In the **Host name/IP** box, enter the VPN server name or IP address.
7. Next to **VPN type**, tap the type of authentication to use with your device (**IPSec/L2TP** or **PPTP**). If you aren't sure which option to choose, ask your network administrator.
8. Tap **Next**.
9. If you selected **IPSec/L2TP** on the previous screen, tap the type of authentication. If you select **A pre-shared key**, enter the key provided by your network administrator, and then tap **Next**.

Note: If you selected **PPTP** in the previous screen, this step is skipped.

10. Enter the user name, password, and domain name provided by your network administrator.

Note: If a domain name was not provided, you may be able to connect without entering one.

11. To change advanced settings, tap the **Advanced** button.

Note: You will not need to change advanced settings unless:

- The server to which you are connecting does not use dynamically-assigned IP addresses and you need to enter your TCP/IP settings,
or
 - You need to change server DNS or WINS settings.
-

12. Tap the **Finish** button to save the changes.

Starting VPN Server Connections

To start a connection through a VPN server, be sure Wi-Fi is powered on, and then select the VPN network. Your HP iPAQ will automatically begin connecting.

Setting Up Proxy Server Settings

If you are connected to your ISP or private network during synchronization, your HP iPAQ should download proper proxy settings from your computer. If these settings are not on your computer or need to be changed, you will need to set them up manually. To set up proxy server settings:

1. Contact your ISP or network administrator for the proxy server name, server type, port, type of Socks protocol used, and your user name and password.
2. Be sure Wi-Fi is on.
3. Tap the **Connections** icon ( or ) > in the Navigation bar, and then **Settings** > **Task** tab.
4. Under **My Work Network**, tap **Edit my proxy server** > **Proxy Settings** tab.
5. Tap the **This network connects to the Internet** and **This network uses a proxy server to connect to the Internet** checkboxes.
6. In the **Proxy server** box, enter the proxy server name.
7. If you need to change port number or proxy server type settings, tap the **Advanced** button and change the desired settings.
8. Tap **OK**.

Wi-Fi Security Protocol Utilities

Your HP iPAQ supports the IEEE 802.1X standard for wireless encryption for customers whose network supports this feature. Contact your company's IT Administrator to set up the following features.

802.1X Certificate Enroller

This utility allows you to request a user certificate from a certificate server. Once the certificate has been received and stored on your HP iPAQ, you can access the network using one of the 802.1X protocols. Refer to [“Manually Entering New Network Settings”](#) earlier in this chapter for information on selecting one of these protocols.

To retrieve a certificate:

1. Be sure your HP iPAQ has an ActiveSync connection to a computer on the same network as the certificate server.
2. Tap **Start > Settings > System tab > Certificates**.
3. Complete the on-screen certificate request form by entering your name, password, and the server in which you want to retrieve the certificate.
4. Tap the **Retrieve Certificate** button to download the certificate from the server. The status box at the bottom of the screen will indicate whether the attempt to retrieve the certificate was successful.

Note: The enrollment tool is specifically designed to interact with Microsoft Certificate Servers. Alternate Certificate Authority servers will require a custom enrollment application which can be developed using the Embedded Visual C 4.0 tool and the Software Development Kit for Windows Mobile 2003-based Pocket PCs.

LEAP Registration Utility

Cisco Lightweight Extensible Authentication Protocol (LEAP) is an 802.1X authentication protocol that uses a username and password pair to authenticate access by a wireless client to a wireless router.

Use of the LEAP registration utility is required to log on to a LEAP-authenticated network. Most of the other types of secure networks are set up automatically by the HP iPAQ Wi-Fi connection software. However, accessing a LEAP-authenticated network requires initial registration using this utility. Once you have authenticated and accessed this type of network, a connection can take place automatically whenever you access the LEAP-authenticated network.

To register the LEAP utility:

1. Tap **Start > Programs > LEAP**.
2. Tap **New** to create a LEAP profile. A LEAP profile must contain the following information:
 - ☐ SSID
 - ☐ Username
 - ☐ Password
 - ☐ Domain
 - ☐ Authentication type required by the LEAP server
3. Tap **Modify** to make changes to the selected LEAP profile from the Wireless LEAP list. Changes to the LEAP profile can also be made by tapping on an entry in the Wireless LEAP list.
4. Tap **Delete** to delete the selected LEAP profile from the Wireless LEAP list.

Using Bluetooth

Your iPAQ Pocket PC comes with built-in Bluetooth technology that allows short-range connections and provides fast, reliable, and secure wireless communication.

With Bluetooth powered on, you can send information or perform the following tasks wirelessly between two Bluetooth devices, within a range of approximately 10 meters (30 feet):

- Exchange contacts, calendar items, and tasks
- Send or exchange business cards
- Transfer files
- Synchronize with a computer through an ActiveSync connection
- Partner with a Bluetooth-enabled cell phone and use the cell phone as a wireless modem
- Connect to other Bluetooth devices (Virtual COM port)

- Print to a Bluetooth printer
- Create a personal area network (PAN) to chat, play games, etc.

Note: Use of dial-up and wireless Internet, e-mail, corporate networks, and other wireless communications, such as Bluetooth-enabled devices, might require separately purchased additional hardware and other compatible equipment, in addition to a standard Wi-Fi infrastructure and a separately purchased service contract. Check with your service provider for availability and coverage in your area. Not all Web content may be available. Some Web content might require installation of additional software.

Getting Acquainted with Bluetooth

Before you start using Bluetooth to establish wireless connections, take a few minutes and familiarize yourself with:

- Terms used in this chapter
- Supported Services
- Bluetooth Settings
- Bluetooth Manager

Note: For more detailed help, refer to the Help files installed on your iPAQ Pocket PC. From the **Start** menu, tap **Programs > Help > Bluetooth**.

Understanding Terms

The following Bluetooth terms are used throughout this chapter.

The Term...	Means...
Authentication	Verification of a numeric passkey before a connection or activity can be completed.
Authorization	Approval of a connection or activity before it can be completed.
Bonding (Paired devices)	Create a trusted connection between your device and another. After a bond is created, the two devices become paired. A paired device does not require authentication or authorization.
Device address	Unique electronic address of a Bluetooth device.
Device discovery	Location and recognition of another Bluetooth device.
Device name	Name that a Bluetooth device provides when discovered by another device.
Data Encryption	A conversion process that is used for protecting data.
Link key	Code used to securely pair devices.
Passkey	Code you enter to authenticate connections or activities requested by other devices.
Personal Information Manager (PIM)	Collection of programs used to manage daily business tasks (for example: Contacts, Calendar, and Tasks).
Profiles	Collection of Bluetooth settings.
Service discovery	Determination of which programs you have in common with other devices.

Supported Services

The functions that Bluetooth supports are called services. You can communicate only with Bluetooth devices that support at least one of the following services:

- Basic Printer profile (BPP)
- Dial-up Networking (DUN) profile
- Facsimile (Fax)
- File Transfer Protocol (FTP)
- Generic Access Profile (GAP)
- Hard Cable Replacement Profile (HCRP)
- LAN Access Profile (LAP)
- Object Exchange (OBEX) Protocol
- Object Push Protocol (OPP)
- Personal Area Network (PAN) profile
- Serial Port Profile (SPP)
- ActiveSync -- Uses SPP to connect to ActiveSync on a computer

Working with Bluetooth Settings

From the tabs in **Bluetooth Settings**, you can:

- Turn Bluetooth on and off
- Enter or change your iPAQ Pocket PC Bluetooth name
- Set your connection preferences
- Enable Bluetooth services
- Specify security settings
- Define settings for sharing and connecting

- Select a user profile
- View software and port information

Use the arrows to the right to scroll through the tabs.

Turning On/Off Bluetooth

To turn on Bluetooth:

1. From the **Today** screen, tap the **iPAQ Wireless** icon located in the Navigation bar at the bottom of the screen.
2. On the iPAQ Wireless screen, tap the **Bluetooth** icon.

When Bluetooth is turned on, the **Bluetooth** LED on the front of your Pocket PC is blue.

To turn off Bluetooth, tap the **Bluetooth** icon again. When Bluetooth is turned off, the Bluetooth LED turns off and no incoming or outgoing Bluetooth connections are possible.

Battery Saving Tip: Turn Bluetooth off when you are not using it.

Opening Bluetooth Settings

1. From the **Today** screen, tap the **iPAQ Wireless** icon in the Command bar.
2. On the iPAQ Wireless screen, tap **Bluetooth > Settings** button.

NOTE: Bluetooth must be powered on to enable the Bluetooth Settings button. You cannot access the settings if you press the Bluetooth Settings button while in a disabled state. For this reason, tapping the Bluetooth button is included in all following instructions. If Bluetooth is already powered on when you are performing the tasks, do not tap the Bluetooth button again. Tapping the Bluetooth button when it is already on will turn it off.

Setting Accessibility Properties

Before your Pocket PC interacts with other Bluetooth devices, you need to enter or change the accessibility properties to define how you want your Pocket PC to interact.

To access the Accessibility screen:

1. From the **Today** screen, tap the **iPAQ Wireless** icon in the Command bar.
2. On the iPAQ Wireless screen, tap **Bluetooth > Settings > Accessibility** tab.
3. Highlight the name in the **Name** field and enter your new Device ID name. The device name is what other devices see on their screen when they locate your device.
4. Select **Allow other devices to connect**.
5. Select either **All devices** or **Paired devices only**.



CAUTION: Selecting **All devices** allows any device, even those unknown to you, to connect to your Pocket PC. After they are connected, security settings for specific services apply as specified in the Bluetooth Settings. Selecting **Paired devices only** allows only devices that you trust to connect to your Pocket PC.

NOTE: Paired devices share and exchange an internally generated secure Link Key before connecting.

6. Select **Other devices can discover me** if you want to allow other devices to search and locate your Pocket PC. Otherwise, leave this box unchecked.

NOTE: If another device has your device's address and you have selected **Other devices can discover me**, that device may be able to locate and connect to your device even though you did not select for it to be discovered.

7. Tap **OK** to save your changes.

Enabling Bluetooth Services

You can use any of the following security options when transferring files, creating a serial port connection, exchanging business card information, configuring dial-up networking, and joining a personal network.

Automatically Enabling Services

To automatically enable services:

1. From the **Today** screen, tap the **iPAQ Wireless icon** in the Command bar.
2. Tap **Bluetooth > Settings > Services** tab.
3. In the **Services** box, select the service you want to enable: **File Transfer, Information Exchange, Serial Port, Personal Network Server, Hands free, or Dial-up Networking Server**.
4. The **Service settings** automatically enable the service and authentication settings. Tap on the appropriate checkbox to change these settings to your preference.
5. Tap **OK** to return to the iPAQ Wireless Screen if you enabled **Personal Network Server** or **Dial-up Networking Server**.

If you enabled **File Transfer, Information Exchange, Serial Port, or Hands free**, tap the **Advanced...** button and follow the directions below for the appropriate service setting.

File Transfer Advanced Settings

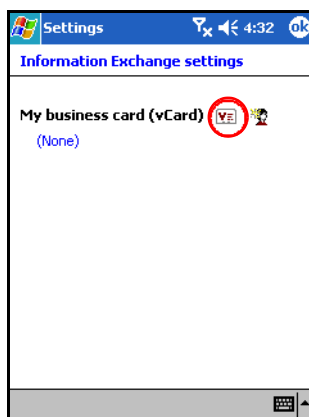
When you enable File Transfer, you need to set a shared folder from which to transfer outgoing or in which to receive incoming files.

1. Tap the folder icon and locate a desired file folder.
2. Tap **OK** to save the settings and exit the screen.
3. Tap **OK** again to return to the iPAQ Wireless screen.

Information Exchange Advanced Settings

If you selected Information Exchange and tapped the Advanced button, the following screen displays.

1. Tap the **My business card (vCard)** icon.



2. Select your business card information from the Contact Information List and tap **OK** to save the settings.
3. Tap **OK** again to return to the iPAQ Wireless screen.

NOTE: To create a new business card, tap the **Contacts** icon next to the vCard icon and create a new business card. Tap **OK** when you are finished.

Serial Port Advanced Settings

If you selected Serial Port and tapped on the Advanced button:

1. Change the Inbound COM Port and Outbound COM Port numbers if they are incorrect.
2. Tap **OK** to save the settings and exit the screen.
3. Tap **OK** again to return to the iPAQ Wireless screen.

Hands Free Advanced Settings

If you selected Hands Free and tapped on the Advanced button:

The hands-free settings are automatically set.

1. Tap the checkboxes to select or deselect any settings.
2. Tap **OK** to save the settings and exit the screen.
3. Tap **OK** to return to the iPAQ Wireless screen.

Requiring Authorization to Access Services

If you elect to require authorization to access services, you must authorize each connection. Your Pocket PC will then always ask you if the connection should be permitted.

To require authorization to access services:

1. From the **Today** screen, tap **iPAQ Wireless > Bluetooth > Settings > Services** tab.
2. Tap the tab for the service you want to enable: **File Transfer, Information Exchange, Serial Port, Dial-up Networking, Personal Network Server, or Audio Gateway**.
3. Select **Authorization required**.
4. Tap **OK**.

Secure Connections using a Passkey or Bond

To establish a secure connection with another device, you can use the passkey feature or an established bond. You can also add data encryption to this type of security.

A passkey is a code you enter to authenticate connections requested by other devices. The passkey must be known and used by both parties or the connection will not be allowed.

To require a passkey or bond:

1. From the **Today** screen, tap **iPAQ Wireless > Bluetooth > Settings > Services** tab.

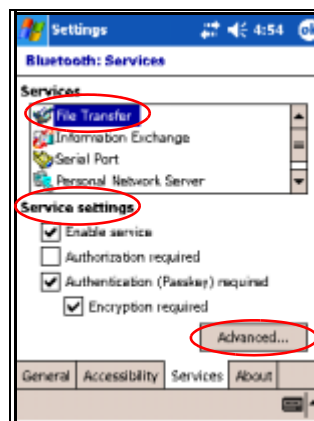
2. Tap the tab for the service you want to enable: **File Transfer, Information Exchange, Serial Port, Personal Network Server, Hands free, or Dial-up Networking Server.**
3. Select **Authentication (Passkey) required.**
4. Select **Encryption Required** if you want to require all data exchanged between the devices to be encrypted.
5. Tap **OK.**

Setting a Shared Folder

You can determine the folder that other devices access when they connect to your Pocket PC.

To select a shared folder:

1. From the **Today** screen, tap the **iPAQ Wireless** icon > **Bluetooth** > **Settings** > **Services** tab.
2. Under **Services**, tap **File Transfer.**
3. Under **Service Settings**, select your preferred settings.
4. Tap the **Advanced** tab.



5. Tap the **Folder** icon and locate a desired file folder.
6. Tap **OK.**

Understanding Profiles

Use profiles to quickly enable selected personal settings in multiple environments.

Creating a Profile

To create a profile:

1. From the **Today** screen, tap the **iPAQ Wireless** icon in the Command bar.
2. Tap **Bluetooth > Settings > General** tab > **Profile** icon.
3. Tap the **New** button.
4. Enter a descriptive name.
5. Select an existing profile to use as a template.
6. Tap **OK**.

Activating a Profile

When a new profile is created, you will need to activate it.

To activate a profile after creating it:

1. From the **Today** screen, tap the **iPAQ Wireless** icon in the Command bar > **Bluetooth > Settings**.
2. From the **General** tab, select it from the **Current Profile** down arrow list.
3. Tap **OK**.

Saving Bluetooth Configuration Settings in a Profile

To save the Pocket PC Bluetooth configuration settings to any profile:

1. From the **Today** screen, tap the **iPAQ Wireless** icon in the Command bar > **Bluetooth > Settings**.
2. From the **General** tab, tap the **Profile** icon.

3. Select a profile from the **Add/Delete Profiles** list or create a new one.
4. Tap **OK**.
5. Set up your Pocket PC. You should specify the desired connection, sharing, and security settings in all **Bluetooth Services** selections.
6. Tap **OK** to close **Bluetooth Services**. The changes are automatically saved.

Renaming a Profile

1. From the **Today** screen, tap the **iPAQ Wireless** icon in the Command bar > **Bluetooth** > **Settings**.
2. From the **General** tab, tap the **Profile** icon.
3. Select a profile from the **Add/Delete Profiles** list.
4. Tap the **Rename** button.
5. Enter a new descriptive name.
6. Tap **Enter**.
7. Tap **OK**.

Deleting a Profile

1. From the **Today** screen, tap the **iPAQ Wireless** icon > **Bluetooth** > **Settings**.
2. From the **General** tab, tap the **Profile** icon.
3. Select a profile from the **Add/Delete Profiles** list.
4. Tap the **Delete** button.
5. Tap **Yes** to confirm you want to delete the profile.
6. Tap **OK**.

Working with Bluetooth Manager

Use Bluetooth Manager to:

- Establish connections
- Exchange business cards
- Control the on-screen display
- Display shortcuts

Opening Bluetooth Manager

From the **Today** screen, tap the **iPAQ Wireless** icon in the Command bar > **Bluetooth** > **Manager**.

The first screen that displays is **My Shortcuts**.

NOTE: Bluetooth must be powered on to enable the Bluetooth Manager button. You cannot access Manager if you press the Manager button while in a disabled state. For this reason, tapping the Bluetooth power-on button is included in all following instructions. If Bluetooth is already powered on when you are performing the tasks, do not tap the Bluetooth button again. Tapping the Bluetooth button when it is already on will turn it off.

Locating and Selecting a Device

Several tasks require you to locate a device and connect to it. When you are required to locate a device, the Bluetooth browser assists by searching for your desired function that supports other Bluetooth devices.

Pairing Devices

You can pair devices so they must exchange a computer generated security key prior to each connection. It is generated from a unique Bluetooth device address, a random number, and a user-defined password.

After two devices are paired, they have a trusted relationship with each other. No additional input is needed from the user. Therefore, connections and activities can be performed between the paired devices without constant authorization from the user.

To pair devices:

1. From the **Today** screen, tap the **iPAQ Wireless** icon in the Command bar > **Bluetooth > Manager**.
2. Tap **Tools > Paired devices**.
3. Tap **Add**.
4. Tap the **Lookup**  icon.
5. Tap a device.
6. Enter a password in the **Passkey** field.
7. Tap **OK**.
8. Enter the same password into the other device.

NOTE: Some devices, such as mobile phones, need to be placed in a mode to accept a bond from another device. Refer to that device's user instructions for more information.

Unpairing Devices

You can remove a paired relationship between devices.

1. From the **Today** screen, tap the **iPAQ Wireless** icon in the Command bar > **Bluetooth > Manager**.
2. Tap **Tools > Paired devices**.
3. Tap a device name.
4. Tap **Remove**.
5. Tap **Yes** to remove the pairing.

Connecting to Other Devices

Use ActiveSync, serial and dial-up connections to communicate with other Bluetooth devices. Establish a partnership with a cell phone and set up the Bluetooth services it offers.

Identifying the Communications Port

You can identify the virtual COM ports used to create a **serial port** connection. You may need to identify these COM ports for activities such as printing.

Use the inbound COM port when other devices initiate a serial connection. Use the outbound COM port when you initiate a serial connection to another device.

To identify the communications port:

1. From the **Today** screen, tap **iPAQ Wireless > Bluetooth > Settings > Services** tab.
2. Under Services, tap **Serial Port** and tap the **Advanced...** button.
3. Note the names of your inbound and outbound COM ports.
4. Tap **OK**.

Establishing an ActiveSync Connection

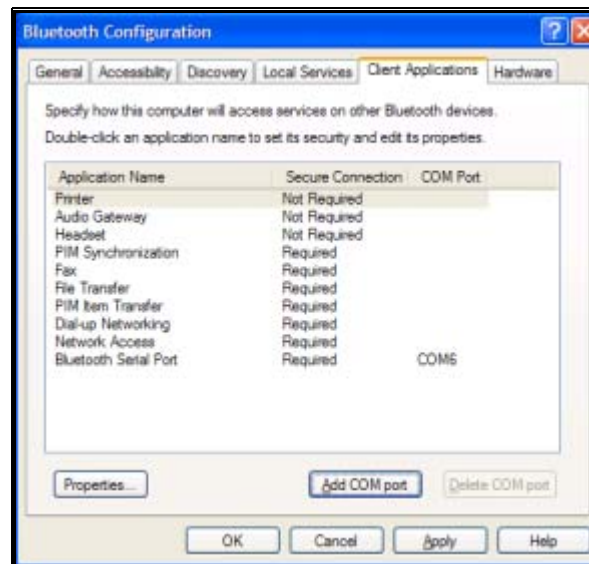
You can set up an ActiveSync partnership with a Bluetooth-enabled computer by first setting up your computer, then setting up your Pocket PC.

If you own an HP Evo Notebook or Desktop computer, you can use the Bluetooth Multiport Module presinstalled on that computer with your Pocket PC.

If you are using other Bluetooth modules or cards on your computer, refer to the Bluetooth Configuration Manager or Settings for similar setup procedures, then skip to [“Setting Up an ActiveSync Partnership on Your Pocket PC.”](#)

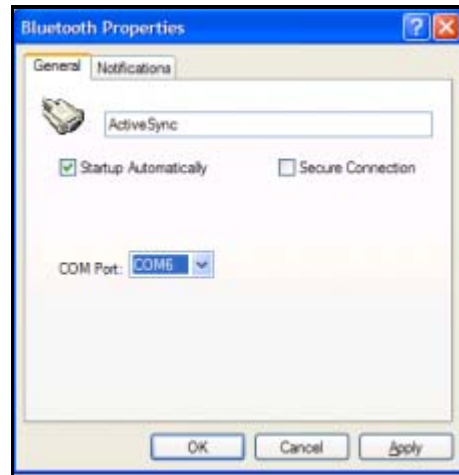
Using the HP Bluetooth Multiport Module for Evo Notebooks and Desktops

1. Remove your Pocket PC from the USB Synchronization Cradle.
2. Turn on Bluetooth on both the Pocket PC and the Evo computer.
3. Right-click the Bluetooth icon in the system tray on your computer, then click **Advanced Configuration**.
4. Select the **Client Applications** tab, then write down the COM port number listed next to **Bluetooth Serial Port**.



5. Select **Bluetooth Serial Port**, then click on the **Delete COM Port** button.
6. Click on the **Local Services** tab, then click **Add Serial Service**.
7. Type a name for the serial service, then select **Startup Automatically**.

8. Remove the checkmark from the **Secure Connection** box, then select the COM port that is the same as the one you wrote down earlier. Click **Apply** > **OK** > **OK**.

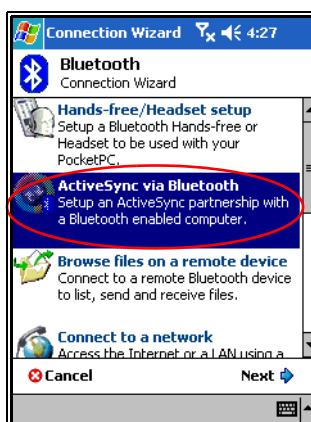


9. Open ActiveSync on your computer, then click **File** > **Connection Settings**.
10. Check the **Allow Serial Cable or Infrared Connection to this COM Port** box.
11. Select the COM port that is the same as the one you wrote down earlier, then click **OK**.

Setting Up an ActiveSync Partnership on Your Pocket PC

To establish an ActiveSync connection:

1. From the **Today** screen, tap **iPAQ Wireless > Bluetooth > Manager**.
2. Tap **New > ActiveSync via Bluetooth > Next**.



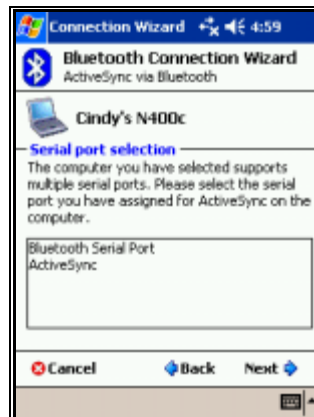
3. Follow the connection wizard instructions.

NOTE: Be sure the ActiveSync COM port setting on your Pocket PC is the same as the COM port setting used for Bluetooth on your computer.

4. From the **Bluetooth Browser** screen, select the computer you want to synchronize with. Tap **Next**.

5. Under **Serial Port Selection**, select the name of the serial port for the computer selected above, and then tap **Next** > **Finish**.

NOTE: If you are setting up the ActiveSync partnership with an Evo Notebook or Desktop computer, select the name you typed in Step 7 of “[Using the HP Bluetooth Multiport Module for Evo Notebooks and Desktops.](#)”



Establishing a Serial Connection

Use the wireless Bluetooth serial port connection just as you would a physical serial cable connection. You must configure the application that will use the connection to the correct serial port.

To establish a serial connection:

1. From the **Today** screen, tap the **iPAQ Wireless** icon > **Bluetooth** > **Manager**.
2. Tap **New** > **Explore a Bluetooth device** > **Next**.
3. Follow the connection wizard instructions.

Dial-Up Networking

When you use dial-up networking (DUN), the remote device providing the dial-up networking service and the remote computer to which you are connecting must both have telephone access.

Devices that can provide dial-up networking include Bluetooth:

- Mobile phones
- Desktop computers
- Modems

Using Dial-Up Networking

To connect to a device that provides modem access:

1. From the **Today** screen, tap **iPAQ Wireless > Bluetooth > Manager**.
2. Tap **New > Connect to a Network > Next**.
3. Follow the connection wizard instructions.

NOTE: After you create the dial-up networking shortcut with a device, tap and hold the shortcut icon in the **My Shortcuts** tab of the **Bluetooth Manager**, and tap **Connect**.

4. Tap **New Connection**.
5. Tap **OK**.
6. Enter a name in the **Connection Name** field.
7. Enter a phone number. You must sometimes enter the country code and area code, depending on where you are calling.
8. Tap **OK** to begin dialing.

NOTE: Some mobile phones require a bond between devices (see the section [“Pairing Devices”](#)).

To connect to the Internet and use Pocket Internet Explorer, you must first connect to a Bluetooth phone from Bluetooth Manager. To make this connection the default dial-up connection for Pocket Internet Explorer:

IMPORTANT: All Bluetooth default connections are made using the following procedure. Default connections cannot be made through Bluetooth Settings on the iPAQ Wireless screen.

1. From the **Today** screen, tap **Start > Settings > Connections** tab.
2. Tap the **Connections** icon > **Advanced** tab.
3. Tap **Select Networks**.
4. Enable **Bluetooth Settings** from the dropdown list.

NOTE: The Bluetooth modem connection you created can be viewed only from the Bluetooth Settings on the Connections Task page.

Joining a Personal Area Network

Connect two or more Bluetooth devices to share files, collaborate or play multiplayer games.

To establish a Personal Area Network connection:

1. From the **Today** screen, tap **iPAQ Wireless > Bluetooth > Manager**.
2. Tap **New > Join a personal network > Next**.
3. Follow the Connection Wizard instructions.

Working with Files

You can exchange information with a connected device and use the Bluetooth File Explorer to:

- Navigate through the directories.
- View files and folders.

- Create new folders.
- Send and receive files from a remote device.
- Delete and rename files on a remote device.

Creating a File Transfer Connection

1. From the **Today** screen, tap **iPAQ Wireless > Bluetooth > Manager**.

The first screen that displays is **My Shortcuts**.

2. Tap **New > Browse files on a remote device > Next**.
3. Follow the connection wizard instructions.

NOTE: The remote device must have Bluetooth turned on and set up to allow discovery before the connection can occur.

Sending Files

1. Tap and hold the file transfer shortcut icon, and tap **Connect**.
2. Tap **File > Send a File...**
3. Locate the file(s) to send.
4. Tap the file(s) to send it.
5. Tap **OK**.

Creating a Folder on a Remote Device

1. Tap and hold the file transfer shortcut icon, and tap **Connect**.
2. Navigate to the location you want for the new folder.
3. Tap **File > Create a folder**.
4. Enter a folder name while **New Folder** is selected, and tap **Enter**.
5. Tap **OK**.

Receiving a File from a Remote Device

1. Tap and hold a file transfer shortcut icon, and tap **Connect**.
2. Navigate to the file location on the remote device.
3. Tap the file.
4. Tap **File > Get**.
5. Tap **OK**.

Deleting a File from a Remote Device

1. Tap and hold a file transfer shortcut icon, and tap **Connect**.
2. Navigate to the file location on the remote device.
3. Tap the file.
4. Tap **File > Delete**.
5. Tap **Yes** to verify you want to delete the selected file.
6. Tap **OK**.

Using Business Card Exchange

Using the business card exchange, you can:

- Set up your own business card
- Send a business card to one or more devices
- Request a business card from one or more devices
- Exchange business cards with one or more devices

You must establish a default contact name to send or exchange business card information.

You must first specify your default business card on the **Information Exchange** tab in **Bluetooth Settings**. This name becomes the default for business card transfers.

Setting Up Your Business Card Information

To set up your business card information:

1. Create a contact in the **Contacts** program that includes your name, title, and other relevant information.
2. From the **Today** screen, tap **iPAQ Wireless > Bluetooth > Settings > Services** tab.
3. Under Services, select **Information Exchange**.
4. Tap the **Advanced...** button.
5. Tap the **My business card (vCard)** icon.
6. Choose your contact from the list.
7. Tap **OK**.

Sending Business Cards

1. From the **Today** screen, tap the **iPAQ Wireless** icon in the Command bar > **Bluetooth > Manager**.
2. Tap **Tools > Business Card Exchange**.
3. Tap the **Send** icon.
4. Tap the device where you want to send your business card.
5. Tap **OK**.

NOTE: Be sure the receiving device has been enabled to accept the transfer.

Requesting Business Cards

1. From the **Today** screen, tap the **iPAQ Wireless** icon in the Command bar > **Bluetooth > Manager**.
2. Tap **Tools > Business Card Exchange**.
3. Tap the **Request** icon.

4. Tap the device from which you want to request a business card.
5. Tap **OK**.

Exchanging Business Cards

You can exchange business card information with another device. If available, the device's information will be sent directly into your **Contacts** list in **Pocket Outlook**.

To exchange business cards:

1. From the **Today** screen, tap the **iPAQ Wireless** icon in the Command bar > **Bluetooth** > **Manager**.
2. Tap **Tools** > **Business Card Exchange**.
3. Tap the **Exchange** icon.
4. Tap the device with which you want to exchange your business card.
5. Tap **OK**.

Opening a Connection

1. From the **Today** screen, tap the **iPAQ Wireless** icon in the Command bar > **Bluetooth** > **Manager**.
2. Tap and hold the **icon or list name**, and then tap **Connect**.
3. Tap **OK**.

Viewing Connection Status

You can view:

- Connection's name
- Device's name
- Connection status
- Length of connection
- Signal strength

To view the connection status:

1. From the **Today** screen, tap the **iPAQ Wireless** icon in the Command bar > **Bluetooth** > **Manager**.
2. Tap and hold an **active connection icon or list name**, and then tap **Status**.
3. Tap **OK**.

Closing a Connection

1. From the **Today** screen, tap the **iPAQ Wireless** icon in the Command bar > **Bluetooth** > **Manager**.
2. Tap and hold the **connection icon or list name**.
3. Tap **Disconnect** from the menu.
4. Tap **OK**.

Viewing Connection Information

1. From the **Today** screen, tap the **iPAQ Wireless** icon in the Command bar > **Bluetooth** > **Manager**.
2. Tap and hold the **connection icon or list name**.
3. Tap **Properties** from the menu.
4. Tap **OK**.

Working with Connections

You can create shortcuts to open and view status information for all connections.

Creating a Shortcut

Creating a shortcut to one or more services does not establish a connection. It only places a shortcut to that service on the **Shortcut** tab of the **Bluetooth Manager**.

To create a shortcut:

1. From the **Today** screen, tap the **iPAQ Wireless** icon in the Command bar > **Bluetooth > Manager**.
2. Tap **New**, and then a type of service, and tap **Next**.
3. Follow the connection wizard instructions.

NOTE: Paired devices are designated by a checkmark.

Deleting a Shortcut

1. From the **Today** screen, tap the **iPAQ Wireless** icon > **Bluetooth > Manager**.
2. Tap and hold the **connection icon or list name** to be deleted.
3. Tap **Delete** from the menu.
4. Tap **Yes** to verify the selected shortcut should be deleted.
5. Tap **OK**.

Viewing Shortcuts

You can view shortcuts as icons or in a list format.

1. From the **Today** screen, tap the **iPAQ Wireless** icon > **Bluetooth > Manager**.
2. Tap **View**.
3. Tap **List** or **Icon**.
4. Tap **OK**.

Connecting to the Internet

Use your iPAQ Pocket PC to connect to the Internet or your Work network.

To send and receive e-mail with Inbox and to view Web sites with Pocket Internet Explorer, you must set up a remote connection with devices such as a Secure Digital Input/Output (SDIO) modem card, ethernet card, or the wireless 802.11b internal radio. Another option is to use a Bluetooth-enabled device such as a phone or LAN Access point.

Note: Use of dial-up and wireless Internet, e-mail, corporate networks, and other wireless communications, such as Bluetooth-enabled devices, might require additional hardware and other compatible equipment that can be purchase separately, in addition to a standard Wi-Fi infrastructure and a separately purchased service contract. Check with your service provider for availability and coverage in your area. Not all Web content may be available. Some Web content may require installation of additional software.

Note: For more information on this subject, refer to the Help file on your iPAQ Pocket PC by tapping **Start > Help > Connections**.

Connecting to a Private Network

1. Before you start, be sure to have your server phone number, user name, and password. This information can be obtained from your network administrator.
2. Tap **Start** > **Settings** > **Connections** tab > **Connections** icon.
3. In **My Work Network**, follow the instructions for each type of connection. For more information on Bluetooth connections, see Chapter 9, “[Using Bluetooth](#).” For more information on Wi-Fi connections, see “[Setting Up VPN Server Connections](#)” or “[Setting Up Proxy Server Settings](#)” in Chapter 8, “[Using Wi-Fi](#).”

Entering an Internet Address

With Pocket Internet Explorer and a connection to the Internet, you can view Web sites on your iPAQ Pocket PC by typing an address or Uniform Resource Locator (URL) in the **Address** bar.

Note: Web sites that use Hypertext Markup Language (HTML) 4.0, Dynamic HTML (DHTML), animated Graphic Interchange Format (GIF) images, and Java applets might not work correctly in Pocket Internet Explorer without additional software.

To enter an Internet address (URL) on your iPAQ Pocket PC:

1. From the **Start** menu, tap **Internet Explorer** > **Address Bar**.

Note: If the Address Bar is not visible, tap the **View** tab > **Address Bar** to turn it on.

2. Enter the Internet address (URL) into the Internet Explorer **Address** bar.
3. Tap the **Go** icon.

This is the common way to access a web site on the Internet.

Using a Favorites List

With Pocket Internet Explorer and a connection to the Internet, you can view Web sites on your iPAQ Pocket PC by selecting one from your **Favorites** list.

To select a Web site from your **Favorites** list:

1. From the **Start** menu, tap **Internet Explorer**.
2. Tap the **Favorites** icon and the Web site you want to view.

Expansion Cards

You can expand the memory and connectivity of your iPAQ Pocket PC. Use optional expansion cards for:

- Expanding the memory of your iPAQ Pocket PC by using a Compact Flash (CF) card
- Adding functionality such as a Secure Digital Input/Output (SDIO) camera
- Viewing the content of Secure Digital and Multimedia Memory Cards (SD/MMC)

Note: Expansion cards must be purchased separately and are not included with your iPAQ Pocket PC.

To locate information about expansion cards, visit the following HP Web site: www.hp.com/go/ipaqaccessories.

Installing a Secure Digital (SD) Expansion Card

Note: You install a SD card the same way you install a CF card into the expansion slot.

To install a Secure Digital (SD) card into the expansion slot on the iPAQ Pocket PC:

1. Locate the slot on the top of the iPAQ Pocket PC.
2. Remove the protective plastic card.
3. Insert the expansion card into the expansion slot and push the connection edge of the card firmly into the expansion slot.



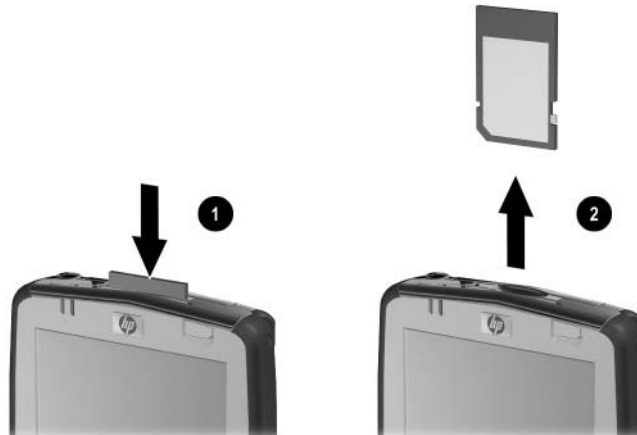
Note: If your expansion card is not recognized, follow the card manufacturer's instructions to install it.

Removing a Secure Digital (SD) Expansion Card

Note: You remove a SD card the same way you remove a CF card into the expansion slot.

To remove a Secure Digital (SD) expansion card from the expansion slot on the iPAQ Pocket PC:

1. Close all applications that are using the expansion card.
2. Remove a card from the Secure Digital expansion slot by **slightly pushing down on the card ①** to unlock it.
3. When the card disengages and pops up ②, pull it from the expansion slot.



CAUTION: SD cards must first be unlocked before removal.

Installing a Compact Flash (CF) Expansion Card

Note: You install a CF card the same way you install a SD card into the expansion slot.

To install a CF card into the expansion slot on the iPAQ Pocket PC:

1. Locate the CF Type II slot on the top of the iPAQ Pocket PC.
2. Remove the protective plastic card.
3. Insert the expansion card into the expansion slot and push the connection edge of the card firmly into the expansion slot.

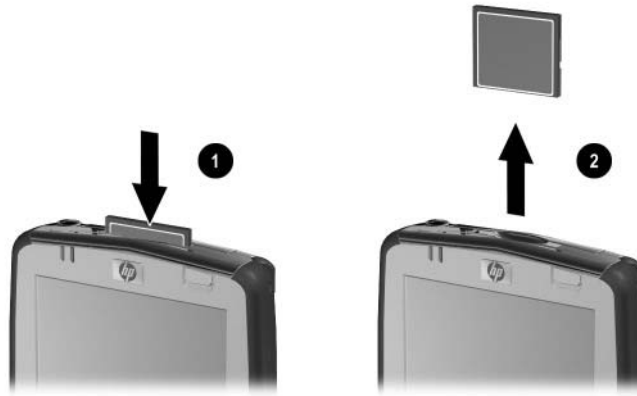


Note: If your expansion card is not recognized, follow the card manufacturer's instructions to install it.

Removing a Compact Flash (CF) Expansion Card

To remove a CF expansion card from the Compact Flash Type II expansion slot on the iPAQ Pocket PC:

1. Close all applications that are using the expansion card.
2. Pull on the CF card lip to remove the card from the CF expansion slot.



Viewing the Content of Memory Cards

Use File Explorer to view the files that are located on your optional Secure Digital card.

1. From the **Start** menu, tap **Programs > File Explorer**.
2. Tap the root directory of **My Device**, and select the Storage Card folder to see a list of files and folders.

12

Troubleshooting

Use the following suggestions to troubleshoot problems with the iPAQ Pocket PC.

Common Problems

Problem	Solution
I cannot see anything on the screen.	■ Be sure the iPAQ Pocket PC is powered on. ■ Be sure the iPAQ Pocket PC is connected to the AC Adapter and the Desktop Cradle. ■ Reset the device by using the stylus to lightly press the Reset button. ■ Remove and replace the battery.
I cannot keep my battery charged.	■ Always keep the iPAQ Pocket PC connected to the AC Adapter when you are not using it. ■ In the backlight settings, adjust the bar to a lower level to conserve more battery power. ■ Turn off Bluetooth and Wi-Fi when not in use.
The backlight keeps turning off.	■ In Backlight Settings, increase the amount of time the backlight stays on if not in use. ■ Select the option to turn on the backlight when you touch the screen or push a button.

(Continued)

Problem	Solution
I want to travel with my iPAQ Pocket PC.	■ Back up your information. ■ Take a copy of your backup with you on a SD memory card. ■ Disconnect all external devices. ■ Take the AC Adapter and Charger Adapter with you. ■ Keep your iPAQ Pocket PC in a protective case and keep it in your carry-on luggage.
I want to travel internationally with my iPAQ Pocket PC.	Be sure you have the plug adapter appropriate for the country you are visiting.
I want to turn off Bluetooth and Wi-Fi for air travel.	To turn off all wireless features, from the Today screen, tap Start > iPAQ Wireless , and then ALL OFF button at the bottom of the screen.
I want to ship my iPAQ Pocket PC to a repair facility.	1. Back up your information. 2. Disconnect all external devices. 3. Pack your iPAQ Pocket PC and any external devices requested by Customer Support in protective packaging. Include any additional documentation or items as instructed by Customer Support.

(Continued)

Problem	Solution
I cannot connect to a network.	■ Be sure you have added the necessary server information. ■ Be sure the network you are attempting to connect to is not busy. ■ If you are using an SDIO Ethernet card, be sure the proper drivers for your card are installed. ■ Be sure your user name and password are correct. ■ Tap Start > Settings > Connections tab > Connections and check your connection settings. Tap OK when you are finished to save your changes. ■ Be sure the WEP key is correct. ■ Be sure the IP Address is correct. ■ Be sure the hardware you are using with your iPAQ Pocket PC is properly configured and operational. ■ Reset the device by using the stylus to lightly press the Reset button.
When I try to open the Inbox, I receive an error or the application hangs.	Limit the number of e-mail services you create.
I get an error when I try to record a note in Calendar or in Tasks.	Try using a more compressed recording format in Calendar or Tasks (8,000 Hz, Mono [8 KB/s] is the most compressed format available). To switch to a more compressed recording format, from the Today screen, tap Start > Settings > Input > Options tab.
I want to see the current date.	The current date is displayed at the top of the Today screen.
I cannot see all my appointments.	Be sure the appointment you created is in the selected category.

(Continued)

Problem	Solution
I cannot find the document or workbook I saved.	Pocket Word and Excel recognize and display documents in only one folder below My Documents. For example, if you created another folder in the Personal folder in My Documents, the documents in that folder will not be shown. To find your document or workbook, from tap Start > Programs > File Explorer . Open the folder you created, and then tap the file in which you are looking.
My device is always asking me for a password.	Tap Start > Settings > Personal tab > Password to be sure the password settings are configured as you want.
I cannot find files sent to me by another device.	Check My Documents, which is the default save location used to receive files.

ActiveSync

Use the following suggestions to troubleshoot problems with ActiveSync on your iPAQ Pocket PC. For more detailed information on Microsoft ActiveSync, refer to Chapter 2, [“Synchronizing with Your Computer.”](#)

Problem	Solution
I cannot connect to my computer using the Desktop Cradle.	■ Be sure you have installed Microsoft ActiveSync 3.7 or higher on your host computer before connecting your iPAQ Pocket PC to it. ■ Be sure your iPAQ Pocket PC is connected to the Desktop Cradle, and that the cradle is connected to your computer. ■ Be sure your iPAQ Pocket PC is securely seated in the cradle and is making contact with the cradle connector. ■ Be sure you are running Microsoft Windows 98SE, Me, 2000, or XP and that you have installed Microsoft ActiveSync 3.7.1 or a later version on your computer. Also be sure you are connecting directly to a USB port on your computer and not through a USB hub. ■ Uninstall and reinstall ActiveSync. ■ If you are running personal firewall software, try disabling it. If you are then able to synchronize, contact the software vendor to information on configuring the required exclusions to eliminate this problem.
I connected my iPAQ Pocket PC before installing Microsoft ActiveSync.	1. Disconnect the iPAQ Pocket PC from your computer. 2. In Windows 98 or 2000, click Start > Settings > Control Panel > System. The Device Manager opens automatically. Locate and select the “unknown” USB device record and click Remove (Uninstall in Windows 2000). 3. Restart your computer and allow it to detect the USB device. 4. Install Microsoft ActiveSync 3.7.1 or higher. 5. Reconnect the iPAQ Pocket PC to the computer.

(Continued)

Problem	Solution
Microsoft ActiveSync cannot locate my iPAQ Pocket PC when I synchronize.	■ Be sure the device is on. ■ Be sure all cables are securely connected. ■ Remove your iPAQ Pocket PC from the HP iPAQ Cradle or disconnect it from the Autosync Cable, power on the unit by pressing the Power button, then put it back in the synchronization cradle or connect it to the cable. ■ Reset the device by using the stylus to lightly press the Reset button. ■ Check Connection Settings in ActiveSync on your computer to ensure the communications port you are using is active.
I cannot open e-mail in the Inbox after I restore using Microsoft ActiveSync.	Use Microsoft ActiveSync to synchronize your iPAQ Pocket PC with your computer. For more information, refer to the “Synchronizing with Your Computer” section in Chapter 2.
I tried to synchronize a workbook and the file is unresolved in Microsoft ActiveSync.	Pocket Excel does not support all Excel formatting; therefore, Microsoft ActiveSync cannot synchronize the file.

Expansion Cards

Use the following suggestions to troubleshoot problems with expansion cards on your iPAQ Pocket PC. For more information on expansion cards, refer to Chapter 11, [“Expansion Cards.”](#)

Problem	Solution
I cannot get my iPAQ Pocket PC to recognize the expansion card.	■ Be sure you have firmly pushed the expansion card down into the iPAQ Pocket PC. ■ Be sure you have inserted the appropriate card into the appropriate slot. ■ Be sure to install any third party drivers.
I cannot insert my card.	■ Be sure the label is facing the front of the unit. ■ Be sure you are not inserting the card at an angle. ■ Be sure you insert the connection area first.
I cannot remove my SD card.	Push the SD card in to release the locking mechanism. The card will pop out slightly and then can be easily removed.
My iPAQ Pocket PC cannot recognize my card.	■ Be sure you have loaded any drivers that came with the expansion card you purchased. ■ Reset the device by using the stylus to lightly press the Reset button.

Bluetooth

Use the following suggestions to troubleshoot problems with Bluetooth on your iPAQ Pocket PC. For more information on Bluetooth, refer to Chapter 9, “Using Bluetooth.”

Problem	Solution
I cannot discover another device.	■ Be sure Bluetooth is turned on. ■ Move closer to the device. ■ Be sure you have not limited your ability to see devices. ■ Be sure the device you are attempting to connect to is on and allows access to being discovered by other devices.
I can see other devices, but I cannot connect or exchange data with them.	■ Be sure Bluetooth is turned on. ■ Move closer to the device. ■ Be sure the other device has not restricted your access. ■ Try initiating pairing from the other device. Some Bluetooth-enabled device can only initiate pairing and cannot respond to pairing requests from other devices.
Other devices cannot find or connect to my device.	■ Be sure Bluetooth is turned on. ■ Move closer to the device. ■ Be sure you have not restricted other devices from finding yours. ■ Check your Bluetooth settings to ensure you have allowed your device to be discovered and others to connect.

(Continued)

Problem	Solution
Other devices do not receive my correct business card information.	■ Be sure you have correctly set up your business card information in Bluetooth Settings. ■ Check Bluetooth Settings to be sure you have not restricted this function.
The iPAQ Pocket PC cannot find my Bluetooth-enabled Mobile phone.	■ Be sure your mobile phone is in discoverable mode. ■ Contact your mobile phone manufacturer and ask if there is a firmware upgrade.

Wi-Fi

Use the following suggestions to troubleshoot problems with Wi-Fi issues and your iPAQ Pocket PC. For more information on Wi-Fi, refer to Chapter 8, “Using Wi-Fi.”

Problem	Solution
I cannot connect to an access point.	■ Be sure the Wi-Fi is on. ■ Be sure the device identified the network you want to connect to. ■ Be sure you provided any necessary authentication keys if prompted by the system. ■ Be sure your iPAQ Pocket PC is within range of the access point.
I am connected to an access point, but I cannot browse the Internet.	If the wireless network you are connected to connects to Work, the network may require a proxy. To set up the proxy: 1. Ask your network administrator for the proxy settings. 2. From the Today screen, tap Start > Settings > Connections tab > Connections icon > Set up my proxy server. 3. Refer to Chapter 8, in section “Setting Up Proxy Server Settings” for more information.
I do not see my wireless network on my iPAQ Pocket PC.	Your wireless network could be a non-broadcasting network. 1. From the Today screen, tap Start > Settings > Connections tab > Connections icon > Settings. 2. Tap the Advanced tab > Select Networks. 3. Follow the instructions on the screen.
My data transfer rate is too low.	■ If Bluetooth is on, turn it off. ■ Turn off the Power Save modes for Wi-Fi. Refer to “Changing Wi-Fi Power Saving Modes” in Chapter 3, “Managing the Battery” for more information.

(Continued)

Problem	Solution
I cannot connect to an available network that shows in the list of networks without a name.	It is likely that the network is a “hidden” or non-SSID broadcast network. You must know the network name (SSID) to be able to connect. 1. Tap Start > Settings > Connections tab > Connections > Advanced tab > Network Card. 2. Select Add New Settings. 3. Enter the network name (SSID). 4. Select the appropriate values in the Connects to: box. 5. If WEP settings are required, tap the Authentication tab and enter them.
I cannot connect reliably to an available network or connections are frequently dropped.	■ Be sure there is ample signal strength available in the area. ■ If you are using one of the Wi-Fi Power Save modes, try changing modes or turning off Power Save. Refer to “Changing Wi-Fi Power Saving Modes” in Chapter 3, “Managing the Battery,” for more information. ■ If you are using Extended Power Save mode, turn off Bluetooth.

Regulatory Notices

Federal Communications Commission Notice

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. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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 communications. 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 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 or television technician for help

This PDA has been tested and demonstrated compliance when Bluetooth and WLAN are transmitting simultaneously. This PDA must not be co-located or operating in conjunction with any other antenna or transmitter.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Hewlett-Packard Company may void the authority to operate the equipment.

Cables

Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods in order to maintain compliance with FCC Rules and Regulations.

Declaration of Conformity for products marked with the FCC logo—United States only

This device complies with 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.

For questions regarding your product, contact:

Hewlett-Packard Company
P. O. Box 692000, Mail Stop 530113
Houston, Texas 77269-2000

Or, call 1-800-652-6672

For questions regarding this FCC declaration, contact:

Hewlett-Packard Company
P. O. Box 692000, Mail Stop 510101
Houston, Texas 77269-2000

Or, call (281) 514-3333

To identify this product, refer to the Part, Series, or Model number found on the product.

Canadian Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Avis Canadien

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Japanese Notice

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

Korean Notice

B급 기기 (가정용 정보통신기기)

이 기기는 가정용으로 전자파적합등록을 한 기기로서
주거지역에서는 물론 모든 지역에서 사용할 수 있습니다.

European Regulatory Notice

Radio product for indoor use in Home and Office environment
operating in the 2.4 GHz band – Wireless LAN.



Declaration of Conformity

This product complies with the following EU Directives:

- Low Voltage Directive 73/23/EEC
- EMC Directive 89/336/EEC
- R&TTE Directive 1999/5/EC

CE Compliance of this equipment is valid only if powered with an HP-provided and CE marked AC adapter.

Compliance with these directives implies conformity to the following European Norms (in parentheses are the equivalent international standards and regulations):

- EN 55022 (CISPR 22) – Electromagnetic Interference
- EN 55024 (IEC 61000-4-2, 3, 4, 5, 6, 8, 11) - Electromagnetic Immunity
- EN 61000-3-2 (IEC 61000-3-2) – Power line harmonics
- EN 61000-3-3 (IEC 61000-3-3) – Power line flicker
- EN 60950 (IEC 60950) – Product safety
- EN 300 328-2 – Data transmission equipment operating in the 2.4 GHz ISM band and using 2.4 GHz radio equipment using spread spectrum techniques
- EN 301 489-1, -17 – General EMC requirements for radio equipment

The radio functionality of this equipment may be used in the following EU and EFTA countries:

Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and United Kingdom.

Notice for Use in France and Italy

Italy:

E' necessaria una concessione ministeriale anche per l'uso del prodotto. Verifici per favore con il proprio distributore o direttamente presso la Direzione Generale Pianificazione e Gestione Frequenze.

License required for use. Verify with your dealer or directly with General Direction for Frequency Planning and Management (Direzione Generale Pianificazione e Gestione Frequenze).

France:

L'utilisation de cet équipement (2.4GHz Wi-Fi) est soumise a certaines restrictions: Cet équipement peut être utilisé à l'intérieur d'un bâtiment en utilisant toutes les fréquences de 2400 à 2483.5MHz (Chaîne 1-13). Pour une utilisation en environnement extérieur, vous devez utiliser les fréquences comprises entre 2454-2483.5MHz (Chaîne 10-13). Pour les dernières restrictions, voir <http://www.art-telecom.fr>.

Battery Warning



WARNING: This computer contains a lithium ion rechargeable battery. To reduce the risk of fire or burns, do not disassemble, crush, puncture, short external contacts, or dispose of in fire or water.



CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.



CAUTION: Use only an HP approved battery for your iPAQ Pocket PC. Inserting a battery that does not comply with HP requirements might cause the Pocket PC to malfunction.

Because of the type of battery used in your iPAQ Pocket PC, follow local regulations regarding the safe disposal of the battery. Your vendor can advise you on local regulations, and/or the existence of any battery disposal programs in operation.



Batterij niet
weggoien,
maar inleveren
als KCA.



廢電池請回收

Equipment Warning



WARNING: To reduce the risk of personal injury, electrical shock, fire or damage to the equipment:

- Plug the AC Adapter into an electrical outlet that is easily accessible at all times.
- Disconnect power from the equipment by unplugging the AC Adapter from the electrical outlet or unplugging the Synchronization cable from the host computer.
- Do not place anything on the AC Adapter cord or any of the other cables. Arrange them so that no one may accidentally step on or trip over them.
- Do not pull on a cord or cable. When unplugging from the electrical outlet, grasp the cord by the plug or, in the case of the AC Adapter, grasp the AC Adapter and pull out from the electrical outlet.
- Do not use converter kits sold for appliances to power your iPAQ Pocket PC.

Airline Travel Notice

Use of electronic equipment aboard commercial aircraft is at the discretion of the airline.

Wireless Notices

In some environments, the use of wireless devices may be restricted. Such restrictions may apply aboard airplanes, in hospitals, near explosives, in hazardous locations, etc. If you are uncertain of the policy that applies to the use of this device, please ask for authorization to use it prior to turning it on.

U.S. Regulatory Wireless Notice



WARNING: Exposure to Radio Frequency Radiation

The radiated output power of this device is below the FCC radio frequency exposure limits. Nevertheless, the device should be used in such a manner that the potential for human contact during normal operation is minimized. To avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna should be minimized.

Canadian Regulatory Wireless Notice

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Japanese Regulatory Wireless Notice

この機器の使用周波数帯では、電子レンジ等の産業・科学・医療用機器のほか工場の製造ライン等で使用されている移動体識別用の構内無線局（免許を要する無線局）及び特定小電力無線局（免許を要しない無線局）が運用されています。

- 1 この機器を使用する前に、近くで移動体識別用の構内無線局及び特定小電力無線局が運用されていないことを確認して下さい。
- 2 万一、この機器から移動体識別用の構内無線局に対して電波干渉の事例が発生した場合には、速やかに使用周波数を変更するか又は電波の発射を停止した上、下記連絡先にご連絡頂き、混信回避のための処置等（例えば、パーティションの設置など）についてご相談して下さい。
- 3 その他、この機器から移動体識別用の特定小電力無線局に対して電波干渉の事例が発生した場合など何かお困りのことが起きたときは、次の連絡先へお問い合わせ下さい。

連絡先：日本ヒューレット・パッカード株式会社 TEL：0120-014121

2.4 FH 1



Brazilian Regulatory Wireless Notice

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

Specifications

System Specifications

Note: Not all models described are available in all regions.

For more information on specifications for your specific model, on your iPAQ Pocket PC, tap **Start > Settings > System** tab > **HP Asset Viewer**.

System Feature	Description
Processor	316-624Mhz Intel Bulverde technology-based processor
RAM (Random Access Memory)	64-128 MB SDRAM (55 MB main memory)
ROM (Read Only Memory)	64 MB ROM (Up to ? MB in the iPAQ File Store)
iPAQ File Store (nonvolatile memory)	? MB Storage
SD I/O slot	SD/SDIO/MMC card support
CF slot	Type II Compact Flash card support
Display	4.0 inch transfective type VGA TFT color, 480 x 640 pixels, 64K-color support, LED backlight with power save mode.
LED Backlight	Automatic multi-level brightness adjustment

System Feature	Description
Audio	Integrated microphone, speaker, 3.5 mm stereo audio jack, MP3 stereo through audio jack
Infrared (IrDA and SIR/FIR)	IrDA, data transfer up to 4 Mb per second
External Power	10 watt maximum output AC Adapter
<i>(Continued)</i>	
Bluetooth	Class II device; typical 10 meters (30 feet) range
Indicators (Left LED)	Radio LED indicator: LED off = all radios are off Blue solid = one or more radios on <Could be blinking or solid; final answer to come>
(Right LED)	Charge/Notification LED indicator: 4-mode alarm notification: LED off = not charging and no notifications Amber flash = charging Green flash = one or more notification events have occurred Amber solid = charging complete
Battery	Slim Series: Removable/rechargeable 920-1440 mAh, 3.6 Volt, Lithium ion battery with internal backup battery to maintain data during main battery replacement. Extended Series: Removable/rechargeable ? mAh, 3.6 Volt, Lithium ion battery with internal backup battery to maintain data during main battery replacement.

Physical Specifications

Note: Weight varies on different models.

	US	Metric
Length		
without flip cover	4.69 in	119.0 mm
with flip cover	4.69 in	119.0 mm
Width		
without flip cover	3.02 in	76.6 mm
with flip cover	3.17 in	80.5 mm
Depth		
without flip cover	.64 in	16.3 mm
with flip cover	.79 in	20.1 mm
Weight		
without flip cover	6.65 - 7.19 oz	188.5 - 201.8 g
with flip cover	7.21 - 7.68 oz	204.5 - 217.8 g

Operating Environment

Environment

		US	Metric
Temperature	Operating	32° to 104° F	0° to 40° C
	Nonoperating	-4° to 140° F	-20° to 60° C
Relative Humidity	Operating	up to 90%	up to 90%
	Nonoperating	above 90%	above 90%
Maximum Altitude	Operating	15,000 ft	0-4572 m
	Nonoperating	40,000 ft	0-12,192 m