

ULTRA-RUGGED FIELD PC

Reference Guide



ULTRA-RUGGED FIELD PC

Reference Guide

ActiveSync, Excel, Hotmail, Internet Explorer, Microsoft, MSN, Outlook, PowerPoint, Visual Studio, Windows, Windows Media, Windows Mobile, Windows Mobile Device Center, Windows Vista, and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

The *Bluetooth*[®] word mark is owned by the Bluetooth SIG, Inc. and any use of such marks by Juniper Systems, Inc. is under license. Bluetooth qualified design identification no.: B012161

Acrobat and Reader are registered trademarks of Adobe Systems Incorporated in the United States and/or other countries.

The names of actual companies and products mentioned herein may be the trademarks of their respective owners.

© Copyright 04-2008 Juniper Systems, Inc. All rights reserved.

P/N 14928-04.



WARNING! Text set off in this manner indicates that failure to follow directions could result in serious injury.



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

Contents

1	Introduction	2
	Overview of Windows Mobile® 5.0.....	2
	Using the documentation.....	3
	The anatomy of the Field PC.....	4
2	Getting Started	8
	Step 1: Install the battery pack.....	8
	Step 2: Charge the battery pack.....	9
	Step 3: Establish basic settings on the device.....	9
	Step 4: Install ActiveSync on a desktop computer	11
	Step 5: Create an ActiveSync connection.....	12
3	Using the Hardware	14
	Identifying button functions.....	14
	Customizing button functions.....	15
	Suspending, powering off, resetting, and restoring factory defaults.....	17
	Using the stylus.....	19
	Using the touchscreen.....	20
	Understanding LED signals.....	22
	Replacing the battery pack.....	22
	Using peripheral devices such as CF cards, SD cards, and USB flash drives.....	24
4	Using the Field PC	30
	Understanding the Today screen.....	30
	Using the Start menu.....	31
	Entering information.....	31
	Recognizing status icons.....	33
	Recognizing soft keys.....	33
	Rotating the screen.....	34
	Dimming or turning off the backlight.....	35
	Adjusting the backlight timer.....	35

5	Performing Common Tasks on the Field PC	38
	Suspending the device	38
	Powering off the Field PC.....	39
	Resetting the device	40
	Exploring files	40
	Closing running programs	41
	Switching between running programs.....	42
	Viewing memory allocation for programs.....	42
	Changing settings.....	43
	Using on-device help	43
	Backing up data	44
	Copying data from a peripheral device.....	47
6	Communicating with a Desktop Computer Using ActiveSync®	50
	Reestablishing an ActiveSync Connection.....	51
	Establishing ActiveSync synchronization settings.....	51
	Creating a device name to use with multiple ActiveSync partnerships	52
	Connecting to ActiveSync as a guest.....	53
	Deleting an ActiveSync partnership.....	54
	Transferring files to and from the Field PC using ActiveSync.....	54
	Exploring the Field PC using ActiveSync	55
	Installing new applications on the Field PC using ActiveSync.....	56
7	Getting to Know Programs and Settings	60
	Understanding Start menu programs and utilities	60
	Understanding applications in the Programs menu	62
	Accessing programs on the Getting Started Disc.....	65
	Finding settings.....	66

8	Using the Integrated Bluetooth® Option	70
	Bluetooth drivers and profiles.....	70
	Identify the power status of Bluetooth using Wireless Manager.....	71
	Create a Bluetooth partnership.....	73
	Bluetooth virtual COM ports.....	75
	Set up an outgoing Bluetooth COM port.....	76
	Set up an incoming Bluetooth COM port.....	79
9	Supported Bluetooth® Profiles	82
	Serial Port Profile (SPP).....	83
	Dial-Up Networking (DUN) Profile.....	86
	Human Interface Device (HID) Profile.....	89
	Object Push Profile (OPP) or beaming.....	90
10	Caring for Your Field PC	94
	Storing your Field PC and battery packs.....	94
	Protecting the touchscreen.....	96
	Protecting the Field PC against mechanical shock.....	97
	Battery warnings.....	98
	Equipment warnings.....	99
	Using the Field PC in extreme temperatures.....	99
	Cleaning the Field PC.....	100
	Repairing the Field PC.....	102
	Disposing of the Field PC and battery packs.....	102
11	Troubleshooting and Service Tips	104
	Troubleshooting tips.....	104
	Preparing for a service center call.....	107
12	Information for Software Developers	110
	Programming documentation.....	110
	Software Development Kit (SDK).....	110
	Software development tools.....	110

Appendix A: Product Specifications	114
9-pin serial port pinouts	117
Appendix B: Certifications and Regulatory Information	120
Regulatory information.....	120
CE marking.....	121
Appendix C: Standard Warranty Terms and Conditions	124
Limited Product Warranty	124
Index	130

Additional Section: Installation Instructions for the Extended Caps	153
---	-----

1

Introduction

Overview of Windows Mobile® 5.0

Using the documentation

The anatomy of the Field PC



Introduction

This ultra-rugged Field PC—rock solid and field ready in the most extreme environments—is your reliable field companion. Designed for Microsoft® Windows Mobile® 5.0, your Field PC features a wide variety of application software and accessory choices. Use it to navigate, research, document, and communicate. Depend on it for your field information technology. It is ready for you.

Overview of Windows Mobile® 5.0

Your Field PC runs Microsoft® Windows Mobile® 5.0. This operating system, designed for mobile devices, provides you with familiar Microsoft programs to help you increase your productivity and manage information effectively. For example, Microsoft® Office Outlook® Mobile, similar to Microsoft® Outlook®, allows you to send and receive email, keep track of contacts, manage tasks, and take simple notes.

Many Windows® applications are already compatible with Windows Mobile®. You can use Windows Mobile to access Word, Excel®, and PowerPoint® files on your mobile device, or you can use Windows Mobile® to access your email messages and contacts from your Microsoft® Outlook account.

If you need help, the Field PC offers a variety of information through its fully featured on-device help system. More information about Windows Mobile® 5.0 can be found at:

<http://www.microsoft.com/windowsmobile/5/default.mspx>

Using the documentation

Your Field PC is equipped with several reference tools.

These tools include:

- Quick Start Guide
- Getting Started Disc from Microsoft®
- User Manual
- User Documentation CD (contains Quick Start Guide, Reference Guide, and License Agreement)
- On-device help files

Use the following chart to find the information you need.

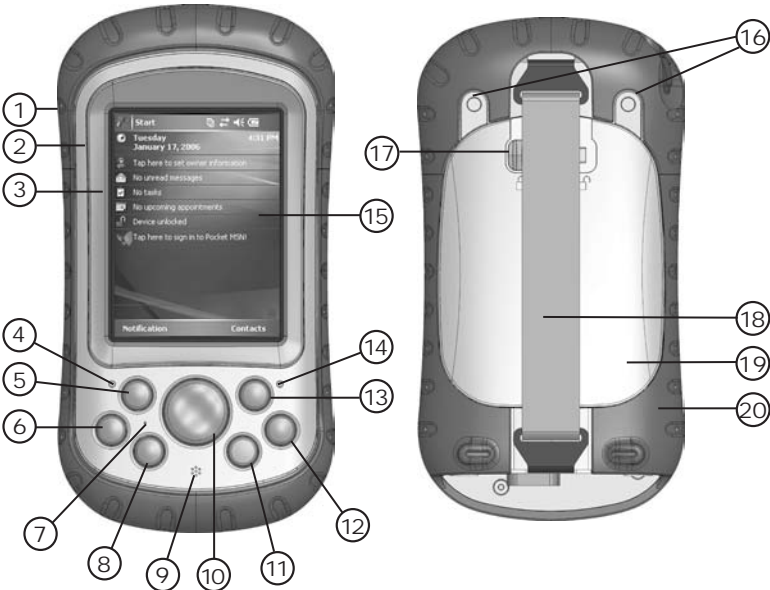
What you want	Where to find it
Instructions for setting up the Field PC	Quick Start Guide, User Manual, this guide
ActiveSync® install for Windows® 2000 and Windows® XP users	Getting Started Disc
Instructions for using external devices with the Field PC	This guide
Instructions for basic tasks such as replacing battery packs, resetting the device, adjusting the backlight, or inserting memory cards	Quick Start Guide, this guide
Instructions for using programs installed on the Field PC	Help files located within individual programs on the Field PC

Note: For a more complete listing of topics in this reference guide, see the index.

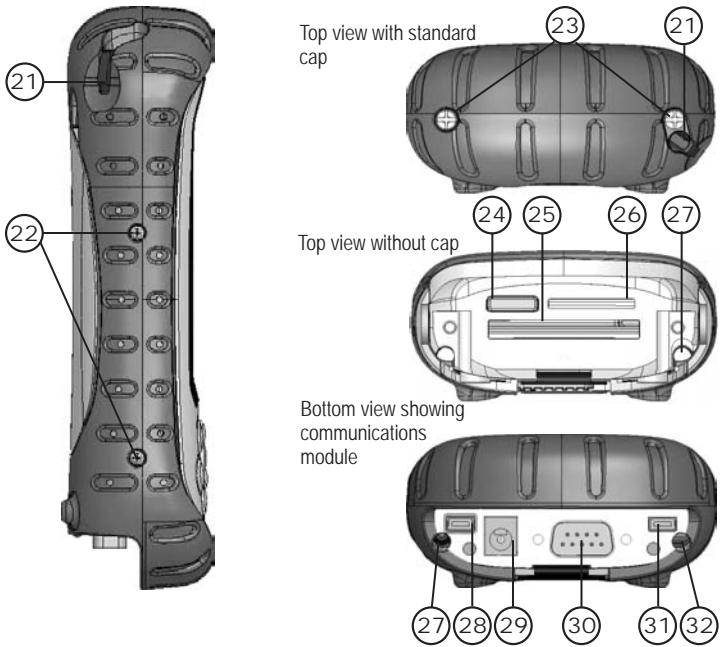
The anatomy of the Field PC

This section illustrates the different parts of the Field PC. For instructions on using the hardware, see Chapter 3. For instructions about caring for or cleaning the different parts, see Chapter 10.

- | | | | |
|----|-----------------------------|----|-----------------------------|
| 1 | Elastomer overmold | 11 | Power button |
| 2 | Magnesium case front | 12 | Context menu button |
| 3 | Display bezel | 13 | Enter button |
| 4 | Charge LED | 14 | Notification LED |
| 5 | Start menu button | 15 | Touchscreen/display |
| 6 | Applications Manager button | 16 | Accessory attachment points |
| 7 | Microphone | 17 | Battery door latch |
| 8 | Today screen button | 18 | Hand strap |
| 9 | Speaker | 19 | Battery door |
| 10 | Four-way directional button | 20 | Body molding |



Chapter 1: Introduction



- 21 Stylus
- 22 Body molding screws
- 23 Standard cap screws (captive)
- 24 Cover for optional Bluetooth® antenna
- 25 Compact Flash card slot
- 26 Secure Digital I/O card slot
- 27 Stylus slot
- 28 USB Client (mini B)
- 29 12V DC jack
- 30 9-pin serial port
- 31 USB Host (mini A)
- 32 Cable routing channel

2

Getting Started

Install the battery pack

Charge the battery pack

Establish basic settings on the device

Install ActiveSync® on a desktop computer

Create an ActiveSync connection



Getting Started

This chapter repeats—with a few more details—the installation instructions that came in the Quick Start Guide and User Manual.

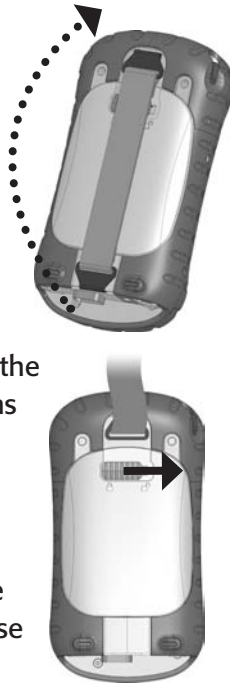
Step 1: Install the battery pack

1. Carefully unhook and lift up the bottom hook of the hand strap, as shown in the first picture.



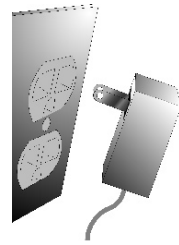
WARNING! *Releasing the hand strap hook too quickly may result in injury or damage to the display. Use caution when undoing the hook or when holding the Field PC by its hand strap.*

2. Press on the battery door and slide the door latch to the right to unlock it, as shown in the second picture.
3. Remove the battery door.
4. Insert the battery pack so battery contacts match up.
5. Insert the tabs on the bottom of the battery door into the case slots. Close the battery door.
6. Press on the battery door. Slide the latch to the left to lock it.
7. Reattach the hand strap.



Step 2: Charge the battery pack

1. Mount the plug onto the wall charger (if it is not already assembled).
2. Plug the wall charger into an outlet.
3. Plug the other end of the wall charger into the DC jack on the Field PC. The device turns on after a few seconds, and a flashing red light signals the device is charging.
4. Charging the Field PC for 4.5 hours charges it up to 95%. Let the device charge for 6 hours to get a full charge. *Note: If the Field PC suspends and the flashing red LED turns off, the device keeps charging.*



Charging temperatures

Only charge your battery pack in temperatures between 32°F and 104°F (0°C and 40°C). For best results, charge the battery pack at room temperature (68°F or 20°C).

Step 3: Establish basic settings on the device

Using the stylus, follow the instructions on the screen to calibrate the device and establish basic settings.

We recommend creating a name for the Field PC so external devices like desktop computers or devices that use Bluetooth® technology can differentiate the Field PC from other devices more easily.

To create a name, follow these steps:

1. Tap *Start* > *Settings*.
2. From the *System* tab, tap *About*. The About window appears.
3. Select the *Device ID* tab at the bottom of the screen.



4. Type in a device name. We recommend using "SN" (serial number) and the device serial number, which can be found by tapping *Start* > *Settings* > *System* and choosing *System Configuration*. An example of a device name appears below.



Your Field PC is now field ready.

Important: Read the following paragraph before moving on to Step 4.

If you have Microsoft Windows® Vista®, you already have basic file synchronization capability with your desktop

computer without installing any additional software. You can skip Steps 4 and 5. To access these basic sync options, connect the Field PC to the desktop computer using a USB cable. For full synchronization support such as Microsoft Outlook® contacts, email, calendar, notes, and tasks, download and install Windows Mobile Device Center through Windows Update on the Start menu of your desktop computer.

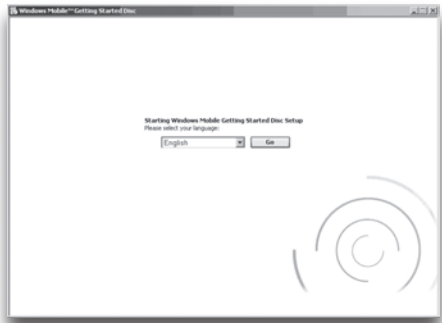
If you have Windows® 2000 or Windows® XP, follow the next steps to install Microsoft® ActiveSync®, which allows you to install programs onto your device using a desktop computer.

Step 4: Install ActiveSync on a desktop computer

Important: If you have Microsoft Windows Vista, read the section above before beginning.

If you use Windows 2000 or Windows XP, Windows Mobile® 5.0 requires that you use Microsoft ActiveSync 4.1 or greater to connect to your desktop computer. The Getting Started Disc installs ActiveSync 4.5 on your desktop computer.

1. Insert the Getting Started Disc into your desktop computer. A window appears on the display, as shown.



2. Select your language.
3. If ActiveSync 4.5 or greater has not been installed on your desktop computer, follow the directions on the screen to install it.

Note: Install ActiveSync before attaching the USB cable to the desktop or Field PC.

Step 5: Create an ActiveSync connection

1. Plug USB Client end (mini B) of the USB communications cable into your Field PC.
2. Plug the USB Host end (full size A) of the USB communications cable into your desktop computer.
3. Establish an ActiveSync partnership by following the instructions on the desktop computer screen.

You are now ready to use your Field PC. See Chapter 6 for more details about using ActiveSync.

3

Using the Hardware

Identifying button functions

Customizing button functions

Suspending, powering off, resetting,
and restoring defaults

Using the stylus

Using the touchscreen

Understanding LED signals

Replacing the battery pack

Using peripheral devices such as
CF cards, SD cards, and
USB flash drives



Chapter 3



Using the Hardware






This chapter teaches you how to use the hardware components of the Field PC. Specifically, you learn how to:

- Identify button functions
- Customize button functions
- Use buttons to suspend, power off, and reset the device
- Use the stylus
- Use the touchscreen
- Replace the battery pack
- Understand LED signals
- Use peripheral devices (CF and SD cards and USB drives) with the device

Identifying button functions

The following chart shows you the names and functions of each button on the keyboard.

Button	Name	Function
	Start menu button	Provides a menu of applications.
	Applications Manager button	Lets you switch between or close running applications; allows you to view memory allocations.

	Home button	Returns you to the Today screen.
	Context menu button	Displays the context menu for the item selected (similar to a right-click on a desktop computer).
	Enter button	Enters the selected soft key or option.
	Power button	Turns the Field PC on and off, resets, suspends. (See more details in the Power button functions section in this chapter.)
	Four-way directional button	Allows you to navigate.

Customizing button functions

Each button performs a specific function. You can customize the function of the following four buttons to open programs or perform shortcuts:

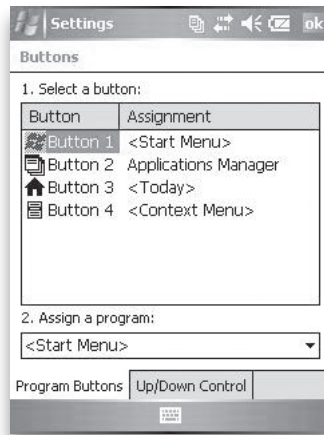
- Start menu button
- Applications Manager button

- Home button
- Context menu button

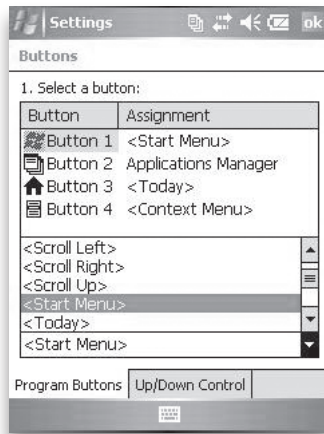
Note: The functions assigned to the Enter button, Power button, and Four-way directional button cannot be customized.

To reassign a program or shortcut to a button, follow these steps:

1. Tap **Start** > **Settings** > **Personal** tab > **Buttons**.
A list of buttons and their current assignments is displayed on the Program Buttons tab.
2. Tap the button you want to reassign, as shown here.



3. In the **Assign a program** box, tap the program or shortcut you want to assign to the button. In the example here, the user has selected **Start Menu**.
4. Tap **OK**.



Suspending, powering off, resetting, and restoring factory defaults

The Power button allows you to suspend, power off, or reset the device. A series of keyboard actions also lets you restore the hard drive, settings, and icons to their original factory defaults. Below are instructions for each action.

Suspending the device. Suspending the Field PC is different from powering it off:

- Suspending the device puts it to sleep, and when it is turned back on, the device remembers where it was. Some battery power is used.
- Powering off the device closes all programs and turns off all of the power. No battery power is used.

We recommend suspending your device if you plan to turn it off for less than two weeks.

To suspend your device, press the Power button briefly and release. To resume the device from suspend mode, press the Power button again.

Note: If you suspend the device while it is charging, the flashing red light disappears. However, the device continues to charge.

Powering off the Field PC. Powering off the device ends all programs and removes power from all system components except for the real-time clock. Unlike suspend mode, the device resets when it is powered on again.

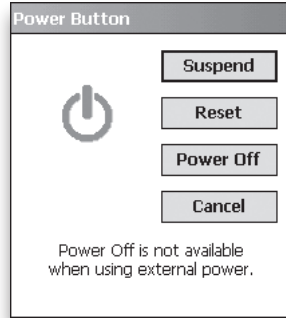
To preserve battery power, we recommend you power off the device if it will be left unused for two weeks or longer.

To power off the Field PC,

1. Save your open files and close any running programs. (For instructions on backing up files, see *Backing up data* in Chapter 5.)

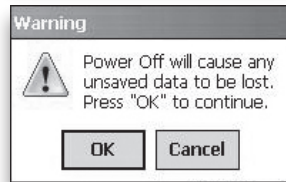
2. Press the Power button until the Power Button menu appears, as shown here.

Note: The device cannot be powered off while it is plugged into the wall charger.



3. Tap **Power Off**. A warning dialog appears, as shown in the second picture. Tap **OK**.

Note: The keyboard backlight stays on for a few seconds after the device shuts off. The device cannot be powered back on until the keyboard backlight turns off.



To power on your Field PC, hold down the Power button until you see the green notification light appear.

Resetting the device. Some programs require you to reset your device during the installation process. Follow the steps below to reset the Field PC:

1. Save your open files and close any running programs. (For instructions on backing up files, see *Backing up data* in Chapter 5.)
2. Press the Power button until the Power Button menu appears.
3. Choose **Reset**.

If your device locks up, you can reset the device by pressing the Power button for 10 seconds or until the screen goes dark. After a few seconds, the device turns on again.

Restoring the device to its factory state. Follow the steps below to restore the user storage, settings, and icons on your Field PC to their original factory defaults.



WARNING! Restoring the Field PC to its original factory state will permanently erase data saved on the Field PC, any software you installed, and any changes you made to the Field PC, including settings changes.

1. Reset the device from the power button menu or by holding down the power button until the display goes dark.
2. When the green notification LED light appears on the front of the Field PC, simultaneously press and hold the following buttons for several seconds: the Home button, the up arrow on the Four-way directional button, and the Context menu button.
3. Hold the buttons until the Ultra-Rugged Field PC splash screen appears and then disappears. Factory settings are restored automatically.



Using the stylus

The stylus is stored in an open slot at the top of the device. A hole in the stylus end allows you to attach a lanyard.

Like the left button on a desktop computer mouse, the stylus is a tool that lets you select or deselect items

and enter data. Like the right button, the stylus lets you perform shortcuts like cutting and pasting. Instructions for these tasks are listed in the chart below.

To do this . . .	Follow these steps
Select an item	Tap once.
Enter data	See <i>Entering Information</i> , a section in the next chapter about data entry options.
Open an item or file	Tap the item or file.
Cut or copy	<ol style="list-style-type: none"> 1. Tap and hold until the context menu appears. 2. Select <i>Cut</i> or <i>Copy</i>.
Paste	<ol style="list-style-type: none"> 1. Tap and hold the area where you want to paste. 2. Select <i>Paste</i> from the context menu that appears.
Open a context menu for an item	Tap and hold the item. The context menu appears.
Drag and drop	<ol style="list-style-type: none"> 1. Tap and drag the item to the destination. 2. Lift up the stylus.
Select multiple items	Drag the stylus over the items.

For instructions on using the transcriber program on your Field PC, see *Entering Information* in Chapter 4.

Using the touchscreen

This section explains how to protect, clean, and calibrate the touchscreen.

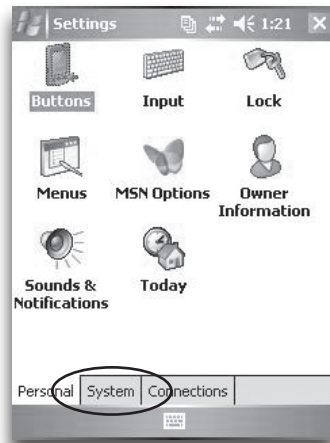
Protecting and cleaning the touchscreen. The touchscreen is sealed to protect your device against water and dust. To protect your touchscreen, we recommend that you apply a touchscreen protector to the screen. For instructions about applying a touchscreen protector or cleaning your touchscreen, see *Chapter 10: Caring for your Field PC*.



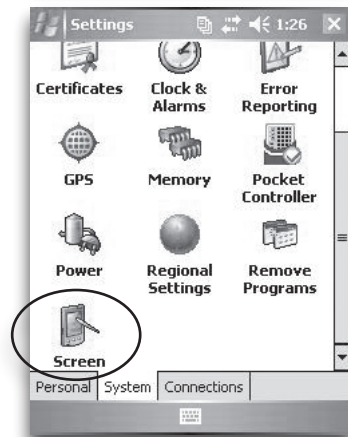
CAUTION: Be sure to replace the screen protector as often as the screen protector packaging directs.

Calibrating the touchscreen. If the touchscreen is not responding accurately to stylus taps, try calibrating the touchscreen manually using the following steps:

1. Tap *Start* > *Settings*.
The Settings window appears, as shown here.
2. Select the *System* tab at the bottom of the display.



3. Scroll down and tap on the Screen icon, shown at right.
4. When the Screen window appears, tap *Align Screen*.
5. Follow the directions on the display to calibrate the touchscreen.



6. After you calibrate the touchscreen, the Screen window appears again. Tap *OK* to exit the screen.

Understanding LED signals

The Field PC signals events and processes using a charge LED and a notification LED.

Charge LED. This red light appears to the left of the Start menu button. A flashing light signals that the battery is currently charging; a solid light signals that the wall charger is connected but that the battery is fully charged. *Note:* When the device is suspended or powered off, the charge LED does not appear.

Notification LED. Appearing on the right side of the Enter button, the green notification LED appears briefly when you power on the unit after the device is reset or restored to factory defaults.

Replacing the battery pack

To replace the battery pack, follow these steps:

1. Close all running programs.
2. Suspend the device.



CAUTION: *The device only stays on for about five seconds without a power source. Always suspend your device before replacing the battery pack.*

3. Carefully unhook and lift up the bottom hand strap hook.

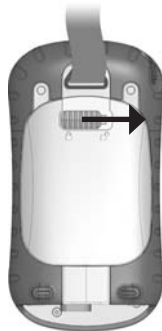


CAUTION: *Releasing the hand strap hook too quickly may result in injury*



or damage to the display. Use caution when undoing the hook or when holding the Field PC by its hand strap.

4. Press on the battery door about 1/4" beneath the door latch and slide the door latch to the right.



5. Remove the battery door. *Note: The door may make a noise while it is being removed, caused by the door scraping against the battery. The sound is normal; no damage is done when you hear this sound.*

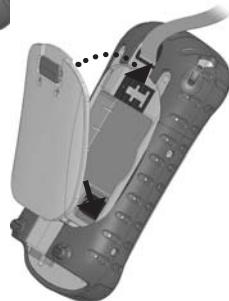


6. Remove the old battery pack.
7. Make sure the battery contacts of the charged battery pack are clean and dry.

8. Insert the charged battery pack, lining up the battery contacts with the Field PC contacts.



9. Insert the tabs on the bottom of the battery door into the case slots.
10. Close the battery door, making sure the door latch is in the unlock position as the door meets the case.



11. With the door latch in the unlock position, press on the battery door just below the door latch and slide the latch to the left to lock it.
12. Reattach the hand strap.

Note: If you remove the battery pack from your device and the device is still attached to the wall charger, the battery icon still appears on the display. When the battery is replaced, charging resumes.



For instructions on installing or charging a battery pack, see *Chapter 2: Getting Started*. For instructions on maintaining and caring for your battery pack, see *Chapter 8: Caring for your Field PC*.

Using peripheral devices such as CF cards, SD cards, and **USB flash drives**

The Field PC accepts several peripheral devices. The USB Host (mini A) accepts devices like USB flash drives and keyboards; the Compact Flash (CF) and Secure Digital (SD) card slots accept memory cards and IO (Input/Output) cards such as GPS, modem, and Bluetooth cards.

Note: If your Field PC has integrated Bluetooth® technology, see Chapters 8-9 for more details about using peripheral devices with the Field PC. If you are using an extended cap for larger peripheral devices, see the extended cap installation instructions at the end of this guide.

This section explains how to:

- Install and operate USB accessories on the Field PC
- Remove the standard cap to access CF and SDIO card slots
- Install CF and SD cards
- Replace CF and SD cards
- Copy files from a CF or SD card or USB drive
- Reattach the standard cap

Installing and operating USB devices on the Field PC. The USB Host accepts several USB devices, including keyboards and USB flash drives.

Note: To be compatible with Windows Mobile® 5.0, some USB serial devices require drivers. Refer to your USB device's manual or contact the manufacturer to determine compatibility.

To install a USB device, plug the mini end of a USB communications cable into the USB Host (labeled A on your device). You may need to use a USB mini-to-full size adapter.

Removing the standard cap to access CF and SDIO card slots. The removable standard cap on the Field PC is designed to protect peripheral devices (e.g., CF cards) when they are inserted into the Field PC and to protect the Field PC when no peripheral device is inserted.

To remove the standard cap, follow these steps:

1. Remove the stylus.
2. Unscrew the top screws until you can slide off the standard



cap. The screws are designed to stay attached to the standard cap.

3. Pull off the standard cap.
4. Insert the CF or SD card.

Note: For instructions on replacing the standard cap, see the section in this chapter called Reattaching the standard cap.

Installing a CF or SD card. To operate a card, insert the card into the appropriate card slot, located under the standard cap of the Field PC. (See the instructions in the previous section for removing the standard cap.) The system should automatically detect and use the card. However, if the card is not recognized, try the following:

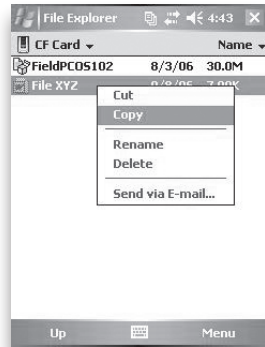
1. Install an appropriate driver by following the directions on the device screen.
2. Operate the card by consulting the user's guide that came with the card.

Reinserting or changing a CF or SD card. Whenever you remove or change a CF or SD card on the Field PC, wait at least 6 seconds before inserting another card into the slot. The Field PC needs this short time delay to properly identify and use the newly inserted card. If a card is re-inserted too quickly, the Field PC may need to reset. To avoid this problem, close all programs before changing or re-inserting a card.

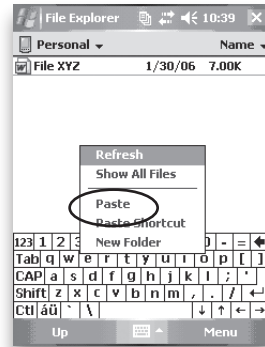
Copying data from a CF card, SD card, or USB drive. You can run or copy data from a peripheral device onto your Field PC by following these steps:

1. On the Field PC, tap *Start > Programs > File Explorer*.

2. Tap and hold the file you want to copy to your Field PC. A pop-up menu appears, as shown here. *Note: If you want to copy multiple files, tap and drag the stylus over the files. Once the files are selected, tap and hold the stylus on the files until a pop-up menu appears.*



3. Select *Copy*.
4. Open the destination folder where you want to place your copied file.
5. Tap and hold the stylus on the white space below the existing files until the pop-up menu appears again.
6. Select *Paste*. The file is copied and its name appears on the screen.



Reattaching the standard cap.

To reattach the standard cap, follow these steps:

1. Make sure the hand strap is attached to its top latch.
2. Place the standard cap over the case.
3. Use a screwdriver to turn the standard cap screws until they are firmly in place.



CAUTION: Do not overtighten the screws. Tightening the screws over 12-in-lbs (1.36 N-m) could result in a failure. The torque specs for the standard cap are 2-in-lbs (0.23 N-m).



CAUTION: When the standard cap is removed, the Field PC is not sealed. Avoid exposing the Field PC

to moisture when the standard cap is removed, and tighten the standard cap screws firmly after you replace the standard cap. Failure to replace the standard cap properly may void your warranty.

4

Using the Field PC

Understanding the Today screen

Using the Start menu

Entering information

Recognizing status icons

Recognizing soft keys

Rotating the screen

Dimming or turning off the backlight

Adjusting the backlight timer



Using the Field PC

Focusing on the interface elements of the Field PC, this chapter shows you how to:

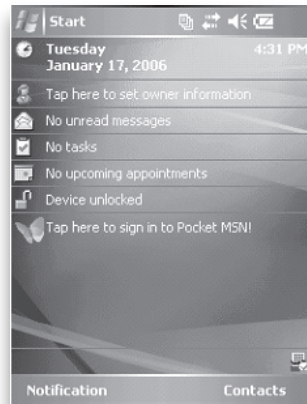
- Understand the Today screen (the default display screen)
- Use the Start menu
- Enter information with the stylus
- Recognize status icons
- Recognize soft keys
- Change settings
- Rotate the screen
- Dim or turn off the backlight to save battery power
- Adjust the backlight timer

Understanding the Today screen

The Today screen is the default screen you see when your device powers on. From the Today screen you can view or select

- Today's date
- Owner information
- Messages
- Tasks
- Upcoming appointments


The Today screen also allows you to lock or unlock your device. Locking the device disables your screen for easy cleaning.

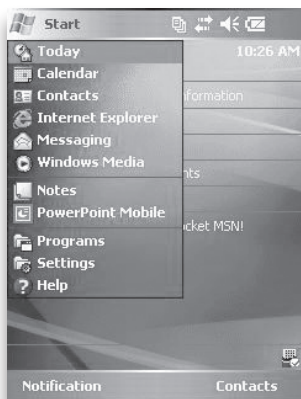


To lock the device, simply tap on the words “Device unlocked.” To unlock the device, tap on the word “Unlock” on the two screens that appear.

Using the Start menu


The Start menu is the main access point to all programs in Windows Mobile®. It allows you to access files, programs, or system settings.

To access the Start menu, tap the Start menu icon in the top left corner of your screen or press the Start menu button on the keypad. The  Start menu appears, giving you links to programs, settings, and menus.



Note: For a description of each item on the Start menu, see Chapter 7: Getting to Know Programs and Settings.

Entering information

At the bottom of the display is a data entry icon.  Tapping on the icon allows you to enter information using the stylus. Specifically, you can choose to:



Select alphanumeric characters from the on-screen Keyboard utility (the default input method).



Use *Letter Recognizer*. This input method recognizes character strokes and gestures.



Enter text using *Block Recognizer*. This utility recognizes letters from single strokes.

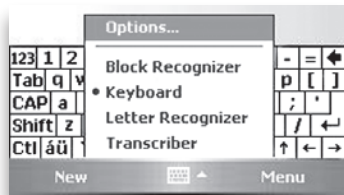


Use *Transcriber*, a program that allows you to enter data using cursive, print, or mixed handwriting.

Note: For more details about using each input method, go to Start > Settings > Input and choose the input method from the Input window. For ideas about how to use the transcribing program more effectively, we recommend Frank McPherson's book, How to Do Everything with Windows Mobile, published by McGraw-Hill Osborne Media.





When you are ready to enter text, you can switch from the default input method (keyboard) by following these steps:

1. On the bottom center of the screen, tap the arrow next to the input method icon (shown).
If the input selector arrow is not displayed, tap the input method icon.
2. The input method menu appears, as shown here. Tap the input method you want from the list of options.
3. Using the selected input method, enter your text.



Recognizing status icons

Status icons show the status of operations on the Field PC. Status icons and their functions are listed in the following chart.

Icon	Name	Function
	Charge indicator	Tells you when the device is charging.
	Speaker	Tap to control volume.
	Remaining battery capacity	Tap to see how much battery power remains.
	Applications Manager	Tap to switch or close running programs.

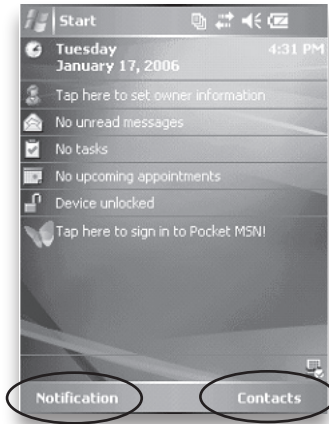
For an additional list of icons and their functions, follow these steps:

1. Tap *Start > Help*.
2. Select *Overview of the Today screen*.
3. Tap on *What do those status icons indicate?*

Recognizing soft keys

These context-sensitive keys appear as words, buttons, or tabs on the menu bar. Tap on these keys to perform

actions or open menus. Here you see soft keys on the Today screen.



Rotating the screen

The Field PC can show information in portrait or landscape view. Change the orientation by following these steps:

1. Select *Start* > *Settings* > *System* > *Screen*.
2. Choose from three screen orientations: Portrait, Landscape (right-handed), or Landscape (left-handed). The four-way directional button automatically adjusts for the screen orientation.



Dimming or turning off the backlight

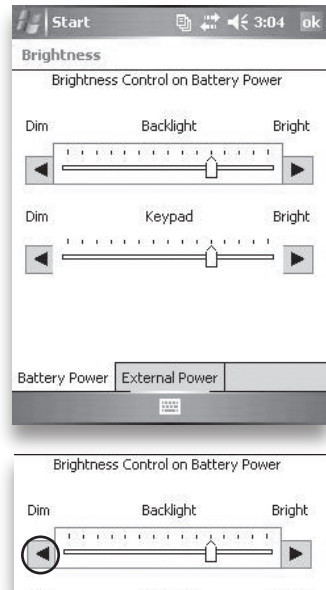
Dimming or turning off the display backlight saves battery power when the device is running on a battery pack. To dim or turn off the backlight, follow these steps:

1. Tap *Start* > *Settings* > *System* > *Brightness*.

2. Select the Battery Power tab if it is not already selected. The Brightness window for battery power appears, shown here.

3. Drag the backlight slider slightly to the left to dim the backlight, or drag the slider all the way to the left to turn the backlight off.

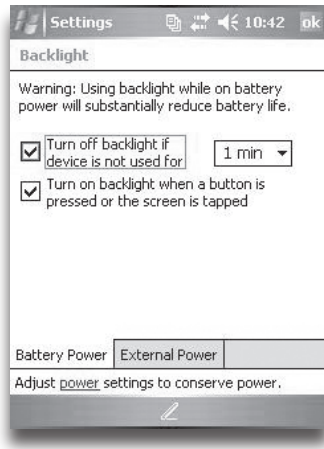
Note: If the backlight does not turn off completely, tap on the arrow to the left of the Backlight slider, as shown in the second picture.



Adjusting the backlight timer

By default, the display and keypad backlights are set to turn off after one minute of inactivity. To adjust the time when your backlight turns off, follow these steps:

1. Tap *Start* > *Settings* > *System* > *Backlight*. The Backlight window appears. To change the timer for external power, tap the External Power tab.
2. Select or deselect the two options.
3. If you selected the first checkbox, choose the length of time before the backlight turns off.



5

Performing Common Tasks on the Field PC

Suspending the device

Powering off the Field PC

Resetting the device

Exploring files

Closing running programs

Switching between running programs

Changing settings

Using on-device help

Backing up data

Copying data from a peripheral device



Chapter 5

Performing Common Tasks on the Field PC

This chapter teaches you how to perform the following common tasks:

- Suspend the device
- Power off the device
- Reset the device
- Explore files
- Close programs that are running
- Switch between running programs
- Change settings
- Use on-device help
- Back up data
- Copy files from peripheral devices

Suspending the device

Suspending the Field PC is different from powering it off. During suspend mode, the device sleeps but remembers where it was when it is turned on again; when you power off the Field PC, it does a basic reset. We recommend suspending your device if you want to resume your task or if you plan to use the device on a daily basis.

To suspend your device, press the power button briefly and release. To resume the device, press the power button again briefly.

Note: If you suspend the device while it is charging, the flashing charge LED disappears. However, the device continues to charge.

Powering off the Field PC

Powering off the device ends all programs and removes power from all system components except for the real-time clock. Powering off your device saves power without draining the battery.

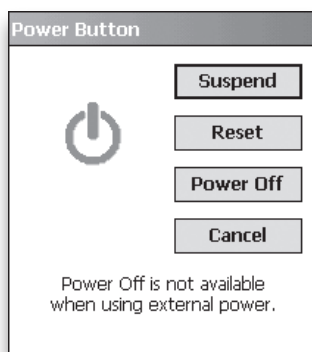
We recommend powering off the mobile device if it will be inactive for more than one week.

To power off the Field PC, follow these steps:

1. Save and close all applications. (For instructions on backing up your files, see the section in this chapter called *Backing up data*.)
2. Press the Power button until the Power Button menu appears, as shown here.
3. Tap *Power Off*, then *OK*.

Note: The keyboard backlight stays on for a few seconds after the device shuts off.

Until the keyboard backlight turns off, the device cannot be powered on again.



To power on the device, hold the power button until the green notification LED appears. The device is now booting. This process takes about a minute.

Resetting the device

Some programs require you to reset your device when you install them. Follow the steps below to reset the Field PC:

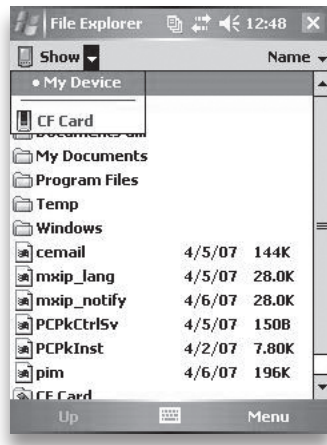
1. Back up your files and close any open applications.
(For instructions on backing up files, see *Backing up data* in this chapter.)
2. Press the power button until the power button menu appears.
3. Choose *Reset*.

Note: If your device locks up, you can reset the device by pressing the power button for 10 seconds or until the screen goes dark. The device resets itself automatically after a few seconds.

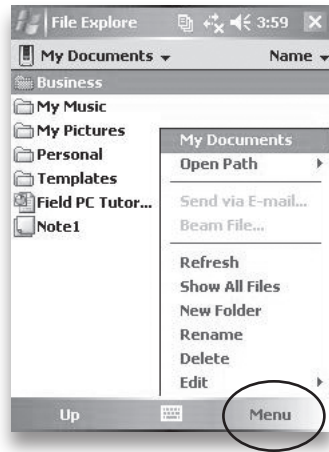
Exploring files

To explore files stored on the Field PC, follow these steps:

1. Tap *Start > Programs > File Explorer*. The File Explorer window appears.
2. If the drive you want does not already appear, tap on the drop-down menu arrow to select it, as shown here.
3. Navigate the file directory by tapping on the folders and files you want. If you want to go up a level, tap on the Up soft key at the bottom of the screen.



4. Use the Menu soft key at the bottom of the screen to manipulate files.





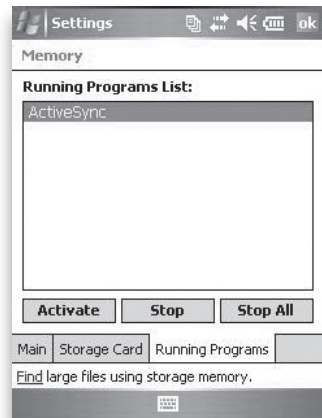
Closing running programs

Closing programs that are not being used frees memory and allows the device to run faster. We recommend closing any programs you are not using.

Note: Tapping on the X in the top right corner of a program only minimizes the program; the program continues to run in the background.


To close one or more running programs, follow these steps:

1. Tap on the Applications Manager icon  at the top of the screen or press the Applications Manager button . The screen at the right appears.
2. Select the program(s) you want to close.
3. Tap *Stop*.





Switching between running programs

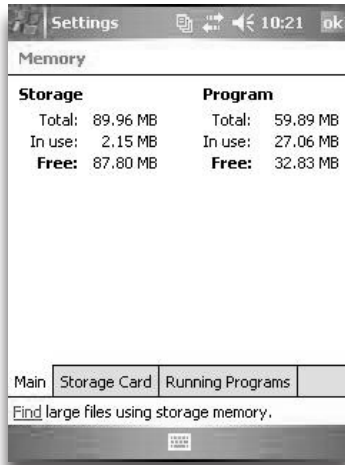
To switch between programs running on your Field PC, follow these steps:

1. Tap on the Applications Manager icon  or press the Applications Manager button.
2. Select the program you want to switch to.
3. Tap *Activate*. The program comes to the forefront.

Viewing memory allocation for programs

To see how much memory is available for programs and storage on the Field PC, follow these steps:

1. Tap on the Applications Manager icon or press the Applications Manager button. A new window appears, as shown in the following image.  



2. Select the Main tab if it is not already selected. Available memory for storage and programs appears.

Changing settings

To change settings on your device, follow these steps:

1. Tap *Start* > *Settings*. The Settings window appears.
2. Choose one of the tabs at the bottom of the screen.
Note: See Chapter 7 for a complete list of settings and their locations.
3. Tap on the setting you want to change.
4. Adjust the setting controls.

Using on-device help

You can access electronic help files on your Field PC from each screen. Windows Mobile® provides help information that is context-sensitive; the help information that appears on the help screen is directly related to what you are doing on the device.

To access help files, follow these steps:

1. Tap *Start* > *Help*.
2. Select an option from the help menu that appears.

Note: If the topic you want is not listed, try one of these options:

- **Option 1:** Choose *Contents* at the bottom of the screen. A table of contents appears. Tap on the item you want.
- **Option 2:** Choose *Search* at the bottom of the screen. Search allows you to search for specific topics within boundaries you set.
- **Option 3:** If you want help about a certain program on your mobile device, open the program first, then tap *Start* > *Help*. The help menu items that appear are directly related to the application program.

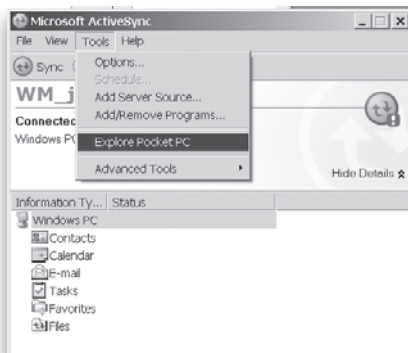
Note: If you need more assistance than a help file provides, visit Microsoft's website at www.microsoft.com/mobile or see Chapter 11: Troubleshooting and FAQs.

Backing up data

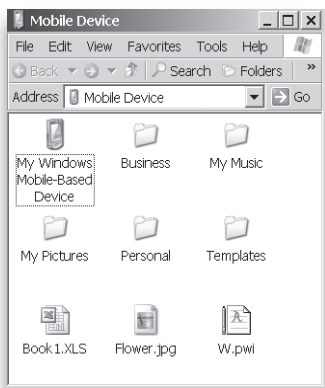
Your Field PC is designed to protect your data. However, it is still a good idea to back up your data regularly by saving information to a desktop computer or to a Compact Flash (CF) or Secure Digital (SD) card.

Backing up to a desktop computer. To copy files from your Field PC to a desktop computer, follow these steps:

1. If you have Windows® 2000 or Windows® XP, re-establish an ActiveSync® connection (see Chapter 6 for instructions) and continue with Steps 2-6.
Note: If you have Microsoft® Windows Vista™, we recommend installing Windows Mobile Device Center™ on your desktop computer from the Microsoft website or by selecting Start > Programs > Microsoft Update on your desktop computer. You can then sync your Field PC with your desktop computer. For more instructions about using Windows Vista, visit Microsoft's website.
2. In the ActiveSync window on your desktop computer, click *Tools > Explore Pocket PC*, as shown here.

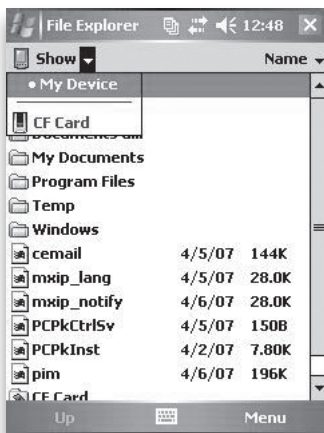


3. A new window opens, showing the file directory for the Field PC.
4. Select the files on the Field PC you want to copy.
5. Copy the files by choosing *Edit > Copy* or by right-clicking and choosing *Copy*.
6. Paste the files onto the desktop computer.

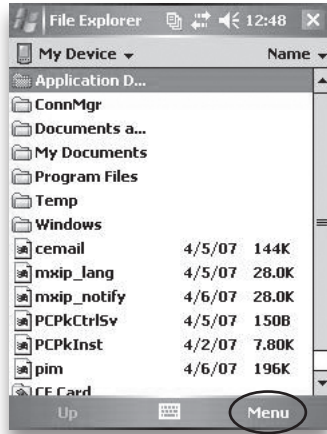


Backing up to a CF or SD card. To save information to a card, follow these steps:

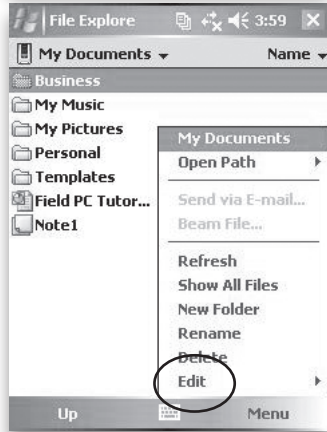
1. Select *File Explorer* from the Start menu. The File Explorer window appears.
2. If *My device* does not already appear as the current directory, tap on the arrow next to the directory that appears, as shown in this image. When a drop-down menu appears, select *My device*.



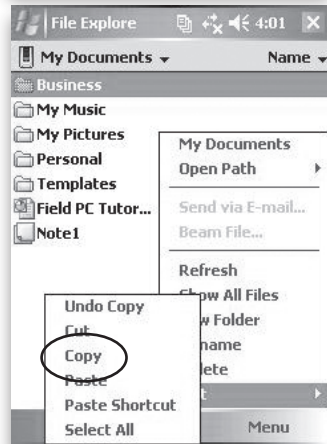
4. A list of files appears. Highlight the files you want to back up and tap on *Menu* in the lower part of the display. A menu of options appears.



5. Tap and hold the stylus on the *Edit* option, as shown here.



6. Choose *Copy* from the menu that appears.

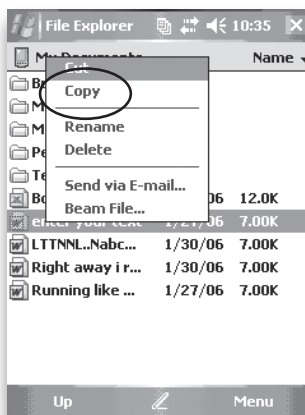


7. Select the CF or SD card from the file directory.
8. To paste the files from your Field PC to the CF or SD card, tap the *Menu* soft key and choose *Edit > Paste*.
9. You can now remove the card.

Copying data from a peripheral device

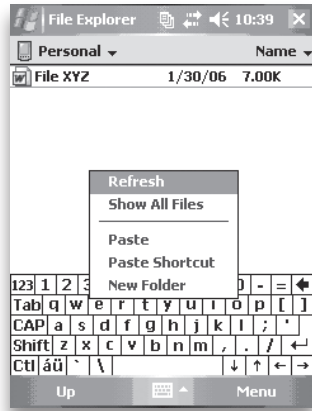
You can copy data from a CF card, SD card, or USB flash drive onto your Field PC by following these steps:

1. On the Field PC, tap *Start > Programs > File Explorer*.
2. Tap and hold the file you want to copy to your Field PC. A pop-up menu appears, as shown here. *Note: If you want to copy multiple files, tap and drag the stylus over the files. Once the files are selected, tap and hold the stylus on the files until a pop-up menu appears.*
3. Select *Copy* from the pop-up menu.

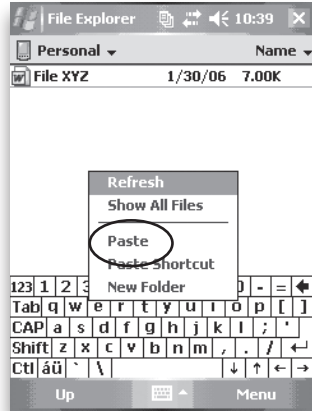


4. Open the destination folder where you want to place your file. (To copy the file to the device drive, select *My device*.)

5. Tap and hold the stylus on the white space below the list of existing files until a pop-up menu appears.



6. Select *Paste*. The copied file appears in the folder.



6

Communicating with a Desktop Computer Using ActiveSync®

Reestablishing an ActiveSync connection

Establishing ActiveSync synchronization settings

Creating a device name to use with multiple ActiveSync partnerships

Connecting to ActiveSync as a guest

Deleting an ActiveSync partnership

Transferring files to and from the PC using ActiveSync

Exploring the Field PC using ActiveSync

Installing new applications on the Field PC using ActiveSync



Communicating with a Desktop Computer Using ActiveSync®

Note: If you have Windows® 2000 and Windows® XP on your desktop computer, Microsoft® ActiveSync® allows you to synchronize your Field PC and your desktop computer.

If you have Windows Vista™, install the full version of Windows Mobile Device Center™ by going to <http://www.microsoft.com/windowsmobile/devicecenter.msp>. Instructions for using Windows Mobile Device Center are available from Microsoft.

In Chapter 2, you learned how to create an ActiveSync partnership between your Field PC and your desktop computer. In this chapter, learn how to—

- Reestablish an ActiveSync connection
- Establish ActiveSync synchronization settings
- Create a device name to use with multiple ActiveSync partnerships
- Connect as a guest
- Delete an ActiveSync partnership
- Transfer files to and from the Field PC using ActiveSync
- Explore your Field PC from a desktop computer
- Install programs to your Field PC using ActiveSync

Reestablishing an ActiveSync Connection

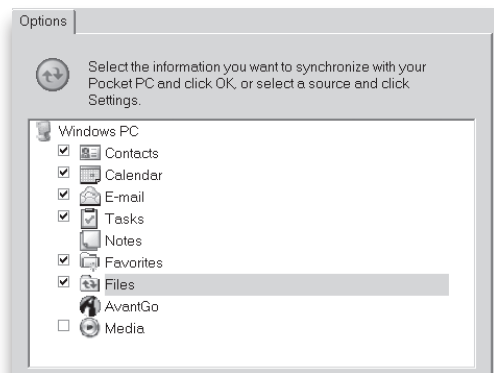
You learned how to create an initial ActiveSync connection in Chapter 2. To re-establish an ActiveSync connection, follow these steps:

1. If you plan to charge the Field PC while it is establishing an ActiveSync connection, plug the wall charger into the Field PC now.
2. Plug USB Client end (mini B) of the USB communications cable into your Field PC.
3. Plug the USB Host end (full size A) into your desktop computer. ActiveSync automatically establishes a connection between the Field PC and the desktop computer.
4. Follow the instructions on the desktop computer screen.

Note: Microsoft ActiveSync version 4.1 or later is required to connect to the Field PC.

Establishing ActiveSync synchronization settings

If you are installing ActiveSync on a desktop computer for the first time, a synchronization wizard appears. Follow the



instructions on the screen to set up the synchronization settings.

Note: If Microsoft Outlook® is installed on the desktop computer, you can set ActiveSync to synchronize Files, Contacts, Notes, Calendar, Email, Tasks, and Favorites on the Field PC every time ActiveSync makes a connection.

If you have already installed ActiveSync on the desktop computer, you do not have to reconnect; the device reconnects automatically.

Creating a device name to use with multiple ActiveSync partnerships

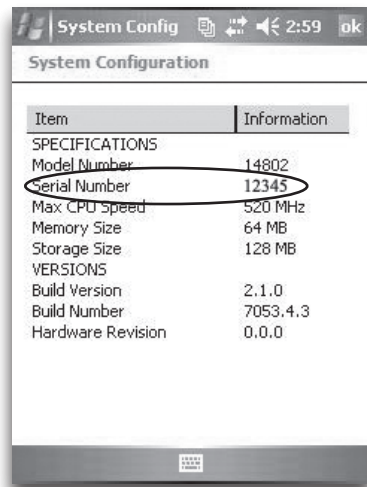
We recommend that you create a name for your device so ActiveSync can differentiate your Field PC from other devices.

To create a name, follow these steps:

1. Tap **Start > Settings**.
2. From the System tab, tap **About**. The About window appears.
3. Select the Device ID tab at the bottom of the screen.
4. Type in a device name. We recommend using "SN" (serial number) and the device serial number, which can



be found by tapping *Start > Settings > System* and choosing *System Configuration*. The serial number appears on the System Configuration screen, shown here.



Connecting to ActiveSync as a guest

In some cases, you may want to set up your device as a guest. For example, you may want to connect your device to a computer only to browse files, copy a file, move a file, or install programs.

To connect the Field PC to a desktop computer as a guest, follow these steps:

1. Connect your device to the desktop computer. The Sync Setup wizard starts automatically.
2. On the first page of the wizard, click *Cancel*. The ActiveSync wizard recognizes your device as a guest.

Note: A guest device is only a temporary relationship with a desktop computer. The next time the device connects to the desktop, you need to set up a new relationship as a guest or a partner.

Deleting an ActiveSync partnership

If your Field PC fails to synchronize completely or if you would like your Field PC to communicate with another desktop computer, you can delete the existing ActiveSync partnership on your desktop computer.

To delete a partnership, follow these steps:

1. Disconnect the Field PC from your desktop computer.
2. Open ActiveSync on the current desktop computer.
3. Double-click *File* from the ActiveSync window, choose *Mobile Devices*, and select the partnership to delete.
4. Double-click *File* again, and select *Delete Mobile Device*.

When you connect your Field PC to this desktop computer after you have deleted an ActiveSync partnership, you are asked to create a new partnership. To do this, follow the instructions on the desktop screen.

Transferring files to and from the Field PC using ActiveSync

You can copy or transfer files between the Field PC and a desktop computer using ActiveSync. *Note: Files created in programs like Microsoft® Excel®, Word®, and PowerPoint® are designed to be compatible between the Field PC and a desktop computer. They convert automatically.*

To transfer files between your desktop computer and your Field PC, follow these steps:

1. Establish an ActiveSync connection. Once connected, the Field PC acts like a new drive called “Mobile Device” on the desktop computer.
2. To access the new “Mobile Device” drive (Field PC) from the desktop computer, click *Tools > Explore Pocket PC* in the ActiveSync window on your desktop computer, as shown in the previous screen. To view the file directory of the desktop computer, open File Explorer on the desktop computer.
3. In the Mobile Device directory, highlight the files and folders you want to copy to or from the Field PC, right-click on one of the items, and select *Copy* from the pop-up menu.
4. Navigate to the folder on the desktop computer or Field PC where you want to place the copied files.
5. Drag and drop files between directories or right-click on a blank area of the folder and select *Paste* from the pop-up menu.

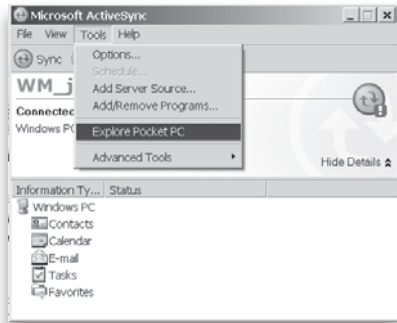
Exploring the Field PC using ActiveSync

You can explore and manipulate files on the Field PC from the desktop computer using ActiveSync.

To explore the Field PC, follow these steps:

1. Connect the Field PC to the desktop computer with Microsoft ActiveSync using the instructions in this chapter called *Reestablishing an ActiveSync Connection*.
2. In the ActiveSync window on your desktop computer, choose *Explore Pocket PC* from the Tools menu, as shown in the following image. A list of folders appears, similar to File Explorer.

Note: From the list of folders that appears, you can delete files, and you can transfer files to and from the desktop computer. For more details about transferring files between the desktop computer and the Field PC, see the section in this chapter called Transferring files to and from the Field PC using ActiveSync.



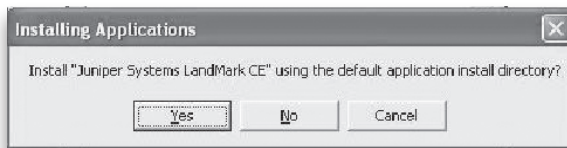
Installing new applications on the Field PC using ActiveSync

Below are some general instructions for installing software on your Field PC. *Note: Please refer to the user documentation provided by the software vendor for complete installation instructions.*

To install a new application, follow these steps:

1. Connect the Field PC to the desktop computer with Microsoft ActiveSync using the instructions in the section called *Reestablishing an ActiveSync Connection* in this chapter.
2. Download the software from the Internet or insert the software application CD.
3. Run the program. If you inserted a CD and the software setup program runs automatically, skip to Step 6.

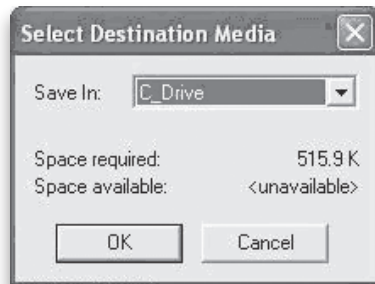
4. Locate the file on your desktop computer and double-click on the file to run the setup program.
5. Follow the instructions on the desktop computer screen to run the setup program.
6. While the setup program is running, a sub-window appears asking if you want to install the software application using the default application install directory.



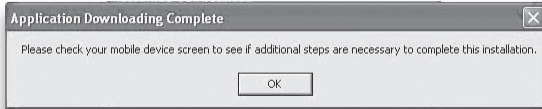
If you click *Yes*, the software installs itself to the internal drive of the Field PC. Skip to Step 8.

If you click *No*, a *Select Destination Media* window appears, asking where you want to install the application.

7. In the *Select Destination Media* window, click on the *Save In* drop-down menu to select an install location.
8. Click *OK*. The application downloads and installs to the device.
9. When the *Application Downloading Complete* window appears, check the display of the Field PC to see if any instructions appear. If instructions appear, follow them. If nothing appears on the device, the installation is complete.



10. Click the *OK* button on the *Application Downloading Complete* window on the desktop computer, and finish any steps remaining in the software application setup program.



11. To make sure the software application is installed successfully on the device, tap *Start > Programs* on the Field PC. Look for an icon or title associated with the software application, and tap on the icon or title to run the application.

7

Getting to Know Programs and Settings

Understanding Start menu programs and utilities

Understanding applications in the Programs menu

Accessing programs on the Getting Started Disc

Finding settings



Chapter 7

Getting to Know Programs and Settings

This chapter describes

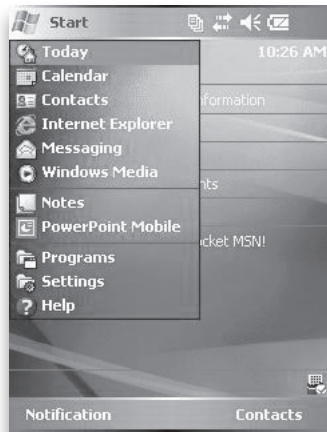
- Programs and utilities on the Start menu
- Applications on the Programs menu
- Programs available on the Getting Started Disc
- How to find settings on the Field PC

Understanding Start menu programs and utilities

The Start menu is the main access point to all programs in Windows Mobile®. It allows you to access files, programs, or system settings.

To access the Start menu, tap the Start flag icon or press the Start menu button on the keypad. The Start menu appears, shown at right. A description of each Start menu option follows.

- **Today screen.** The default display of the Field PC. For a detailed description of this screen, see Chapter 4.



- **Calendar.** The Calendar tool shows the date and any appointments you scheduled for the day, week, or month. Use Calendar to enter your appointments and notify you of upcoming events.
 - **Contacts.** Use this program to store the contact information of your associates.
 - **Microsoft Internet Explorer®.** Internet browser.
 - **Messaging.** This email client allows you to send and receive emails from Microsoft® Outlook® using ActiveSync® on your desktop computer. If you have a direct Internet connection on your Field PC, you can adjust Messaging to send emails directly from the Field PC.
 - **Windows Media® Player.** Use this program to play audio and video files.
 - **Running programs.** If a program is running, it is listed on the Start menu. For example, in the picture of the Start menu shown, Notes and Microsoft® Office PowerPoint® Mobile are running on the Field PC, so they are listed in the Start menu. Tap on the program name to open the application.
 - **Programs.** Tapping on *Programs* opens the Programs menu window. The Programs menu allows you to view and access any installed programs. For more details about Programs, see the next section, *Programs Menu Options*.
 - **Settings.** Options for settings are divided between three main menus:
 - *Personal settings*
 - *System settings*
 - *Connections settings*
- Note: For more details about settings, see the section in this chapter called Finding settings. To change your settings, see Chapter 4: Using the Field PC.*

- **Help.** On-device help files are context-sensitive; the help information that appears on the help screen is directly related to what you are doing on the device.
Note: For more instructions on using help, see Chapter 5: Performing Common Tasks.

Understanding applications in the Programs menu

The Programs menu lists applications installed on your Field PC. To access the Programs menu, tap *Start > Programs*. Applications in the Programs menu are described below in the order they appear.

For on-device help instructions on how to use a program or for a more detailed description of a program, follow these steps:

1. Open the program.
2. Tap *Start > Help*.

For more detailed instructions about using on-device help, see the section called *Using on-device help* in Chapter 5.

Applications comprise the following:

- **Games.** Choose from Bubble Breaker or Solitaire.
- **ActiveSync®.** Use this program to synchronize your Field PC with a desktop or laptop computer. You can also use ActiveSync to explore your Field PC and synchronize your contact information, calendar information, emails, and more.
- **Calculator.** This program simulates a calculator.

- **Download Agent.** Download Agent automates the process of downloading Field PC software updates directly to your Field PC. If you are connected through ActiveSync to a PC with an Internet connection or if you are connected to the Internet through a modem card such as a dial-up, Ethernet, Wi-Fi, cellular, or Bluetooth card, Download Agent automatically displays available updates to the Field PC. You must have a Microsoft Exchange Server set up to send software downloads to the Download Agent on a Field PC.
- **Microsoft® Office Excel® Mobile.** View and create charts using this program. Microsoft Excel and Excel Mobile are designed to be compatible. For example, you can open and edit a chart you created on your desktop computer using Microsoft Excel in Microsoft® Excel® Mobile on your Field PC.
- **File Explorer.** This utility lets you view, expand, and collapse the Field PC directory folders so you can locate files.
- **Modem Link.** Modem Link allows you to connect your Field PC to the Internet or computer network through Compact Flash (CF) and Secure Digital (SD) adapters (e.g., 56K dial-up modem or Ethernet adapters).
- **Notes.** Use this program to enter personal notes into the system or use the Voice Recorder option to record voice clips. Create stand-alone voice recordings or attach them to notes.
- **Pictures & Videos.** This viewer allows you to preview a picture or video without opening it.

- **Pocket MSN®.** This customizable program gives you quick access to your MSN Hotmail® Inbox and your MSN Messenger account.
- **Microsoft® Office PowerPoint® Mobile.** This viewer lets you view or rehearse PowerPoint presentations built on a desktop computer.
- **Search.** The search function helps you find files or programs.
- **Tasks.** Use this application to enter new tasks or to view and modify existing tasks.
- **Terminal Services Client.** Using this program, you can log on to a PC that is on your network or connected using a VPN (virtual private network) and that has Remote Desktop connections enabled. Using this program, you can also use all of the programs available on that PC from your mobile device. For example, instead of running Word Mobile, you can run the desktop computer version of Word and access all of the .doc files on that PC from your device.

For instructions on how to connect using Terminal Services Client, visit the following website: <http://www.microsoft.com/windowsxp/using/mobility/getstarted/remotefintro.aspx>.

- **Microsoft® Office Word Mobile.** Use this program to create and edit documents with graphics while maintaining document formatting. Microsoft Word and Word Mobile are compatible. For example, you can open and edit a file you created on your desktop computer using Microsoft Word in Word Mobile on your Field PC.

Note: For more details about using Windows Mobile® 5.0, we recommend Frank McPherson's How to Do

Everything with Windows Mobile®. Copyright 2006.
Published by McGraw-Hill Osborne.

Accessing programs on the Getting Started Disc

The Getting Started Disc that came with your Field PC provides an install to ActiveSync and links to purchase Voice Command and Pocket MSN from Microsoft.

Note: The Field PC already comes installed with Pocket MSN.

You learned how to install ActiveSync on your desktop computer in *Chapter 2: Getting Started*.

To purchase and install Voice Command, follow these steps:

1. Insert the Getting Started Disc into your desktop computer. The CD runs automatically.



2. Select *Add new programs to my device* from the main menu.

3. Make sure the *Download from Web* tab is selected.
4. Click on the word *Download* by the program you want to install. Your computer will be directed to a download site.
5. Locate the program on the site and follow the instructions for downloading the program to your Field PC. (For further help, visit Microsoft's website, www.Microsoft.com/mobile.)

Finding settings

To locate settings, tap *Start > Settings*. The Settings window appears, showing three menu tabs: *Personal*, *System*, and *Connections*. Use the following chart to identify the location of specific settings.

Setting	Personal	System	Connections
About		X	
Backlight		X	
Beam			X
Bluetooth			X
Buttons	X		
Brightness		X	
Certificates		X	
Clock and Alarms		X	
Connections			X
Error Reporting		X	
Input	X		

Setting	Personal	System	Connections
Lock	X		
Memory		X	
Menus	X		
MSN® options	X		
Network cards			X
Owner Info	X		
Power		X	
Regional settings		X	
Remove programs		X	
Screen		X	
Sounds and notifications	X		
Today	X		

For instructions on changing settings, see the on-device help.

8

Using the Integrated Bluetooth® Option

Bluetooth® drivers and profiles

Identify the power status of Bluetooth

Create a Bluetooth partnership

Bluetooth virtual COM ports

Set up an outgoing Bluetooth COM port

Set up an incoming Bluetooth COM port



Chapter 8

Using the Integrated Bluetooth® Option

This section explains what you need to know about using integrated *Bluetooth* wireless technology with your Field PC. Learn how to—

- Identify the power status of Bluetooth
- Make the Field PC discoverable to other devices that use Bluetooth
- Determine the status of Bluetooth
- Create a Bluetooth partnership
- Set up an outgoing Bluetooth virtual COM port
- Specify a COM port within an application
- Set up an incoming Bluetooth virtual COM port

If your Field PC does not have integrated Bluetooth, you need an external Bluetooth card to use Bluetooth. See the instructions associated with the card for details.

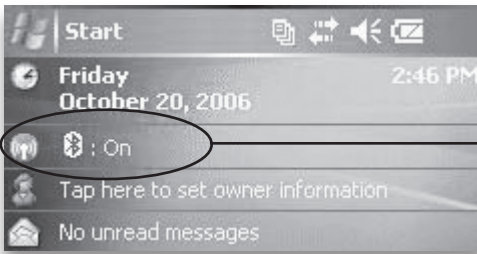
Note: If you have a device with integrated Bluetooth, the Field PC does not recognize a Bluetooth card.

Bluetooth drivers and **profiles**

Microsoft Bluetooth drivers are loaded onto your Field PC at the factory. These drivers support the following profiles: serial devices, ActiveSync, object exchange (OBEX), dial-up networking, and human interface devices (e.g., keyboard or mouse). Profiles not supported include network access point and audio. Supported profiles are described in the next chapter.

Identify the power status of Bluetooth using Wireless Manager

A line on the Today Screen indicates whether *Bluetooth* is powered on or off, as shown here.



Tap here to access the *Wireless Manager*

By tapping this line, you open *Wireless Manager*, a utility that controls *Bluetooth*. The default screen in *Wireless Manager* shows the power status, the Done soft key, and the Menu soft key (see the following figure).



Bluetooth toggle bar

Done soft key

Menu soft key

The Bluetooth bar acts as a toggle switch, allowing you to turn the device on or off easily. If you make the device discoverable, the toggle switches between *Off* and *Discoverable*. Tapping on the *Done* soft key closes the Wireless Manager screen.

Tapping on the *Menu* soft key takes you to the Bluetooth Settings screen, shown in the next image. From here, you can adjust Bluetooth settings, such as turning Bluetooth on or off and creating a Bluetooth partnership. See the following sections for more details.



Turn Bluetooth on and off

1. Tap *Start > Settings > Connections* tab.
2. Tap *Bluetooth*.
3. Select or clear the *Turn on Bluetooth* check box.
Selecting it turns *Bluetooth* on; clearing it turns it off.

Note: By default, Bluetooth is turned off. If you turn Bluetooth on and then suspend the device, Bluetooth turns off while the Field PC is suspended to save

battery power. When you resume (turn on) the Field PC, Bluetooth turns on automatically.

Make the Field PC discoverable to another device

To allow other devices that use Bluetooth wireless technology to detect the Field PC and communicate with it, you must make your device discoverable or establish a partnership with the other device.

Follow these steps to make your device discoverable:

1. Tap *Start > Settings > Connections* tab.
2. Tap *Bluetooth*.
3. Select the *Turn on Bluetooth* checkbox, and then select the checkbox to *Make this device discoverable to other devices*.

Tip: If you do not want the Field PC to be discoverable to other devices, deselect (clear) the Make this device discoverable to other devices checkbox.

Create a Bluetooth partnership

A partnership is a relationship you create between the Field PC and another device that uses *Bluetooth* wireless technology to help exchange information securely.

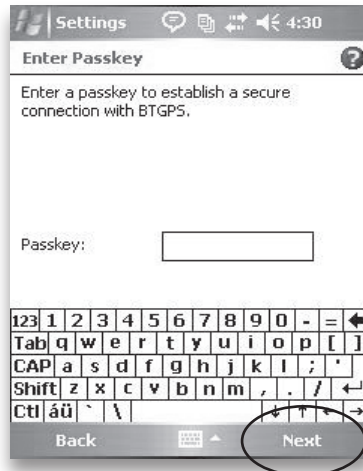
Follow the steps below to create a partnership between the Field PC and another device that uses *Bluetooth* technology:

1. Make sure the two devices are turned on, discoverable, and within at least 30 feet of one another.
2. Tap *Start > Settings* and then tap the *Connections* tab.
3. Tap *Bluetooth > Devices* tab > *Add New Device*. Your device searches for other devices with Bluetooth

capabilities and displays them in the list, as shown here.



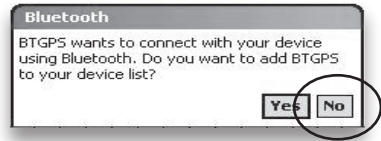
4. The name of the Bluetooth device appears. Tap the name, then tap *Next*.
5. If the Bluetooth device has an assigned a passkey, enter the number. If the device has not already been assigned a passkey but requires one, enter an alphanumeric passkey on the Field PC between 1 and 16 characters in the Passkey option. Tap *Next*.



Note: If you are unsure whether your device requires a passkey and whether

one has already been assigned to your Bluetooth device, see the user documentation that came with the device.

Important: If the Bluetooth device does not use a passkey, leave the passkey blank and tap *Next*, as shown in the first image below. A message appears, asking if you want to add the device to the device list. Choose *No* and skip to step 7.



Note: It is important to choose No when you are asked whether you want to add to the device to the device list; choosing Yes sends you back to the passkey screen.

6. Enter the same passkey on the other device.
7. In the Partnership Settings screen on the Field PC, you can assign a new name to the device in the *Display Name* option.
8. Select the service you want to use from the Services box, then tap *Finish*.

Bluetooth virtual COM ports

Some application programs connect using a virtual COM port (serial port) when making a Bluetooth connection. To make a connection possible for such programs, you must first set up a virtual COM port on the Field PC. Once created, this virtual port can be used like any other COM port. For example, you can use a virtual COM port for programs that connect to a GPS receiver. You can

also use it to connect to a printer that is enabled with Bluetooth technology.

When setting up a virtual COM port, you must specify if the COM port is an outgoing COM port or an incoming COM port.

- An outgoing COM port means that the Field PC initiates communication with the other device. For example, when you are using a Bluetooth GPS receiver, the Field PC initiates the request for data; thus, the virtual COM port connecting with the receiver would be an outgoing COM port.
- An incoming COM port means that the other device is initiating the communication with the Field PC. For example, a desktop computer might initiate a Bluetooth ActiveSync connection with the device via the virtual COM port.

For more details about setting up outgoing and incoming COM Ports, read the following sections.

Set up an outgoing Bluetooth COM port

Use this option if you want to assign the virtual COM port as an outgoing COM port (*i.e.*, you want to use the Field PC to initiate communications with another device).

Follow the steps below to set up an outgoing Bluetooth COM port.

1. Make sure you have paired with the serial port device you want to communicate with. To do this, follow the steps in the section called *Create a Bluetooth partnership* in this chapter.

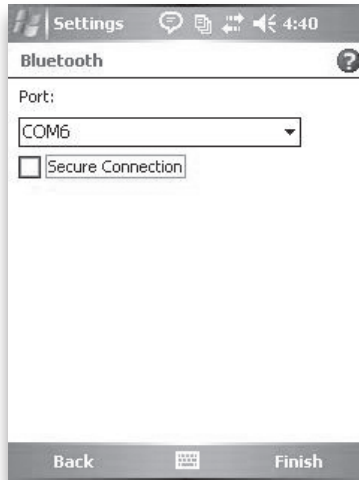
2. Select the COM Ports tab.
2. Tap *New Outgoing Port*, the second option shown in the following figure.



3. The *Add a Device* screen appears. Tap on the name of the device you want to set up as an outgoing port, as shown in the following image.



4. Select a numbered COM port from the list of ports that appear. If the port cannot be created, it is in use. Select a different numbered port.



5. **Important:** Deselect the *Secure Connection* option below the list of COM ports, as shown above. Deselecting this option ensures that the device disconnects its Bluetooth connection only when you tell it to.
6. Tap *Finish*.

Once the virtual COM port is assigned using the outgoing Bluetooth COM port, specify the COM port assignment within your application as explained in the user documentation for the application. An example follows.

Suppose you are using a Bluetooth-enabled GPS receiver with the device and a navigation program on the Field PC. In this example, assume you have set up a virtual COM port between the Field PC and the GPS receiver and that you assigned the outgoing COM port as COM 6.

To assign the COM port in your navigation program, you would then follow these steps:

1. Locate the place in the navigation program where the COM port is chosen.
2. Select COM Port 6 as the COM port for the Bluetooth GPS receiver.

Set up an incoming Bluetooth COM port

Use this option if you want to assign the virtual COM port as an Incoming COM port (i.e., you want another device to initiate communications with the Field PC). If you are connected with a Bluetooth device that supports serial communications, follow these steps to set up the incoming Bluetooth COM port:

1. Press the *COM Ports* tab.
2. Tap on *New Incoming Port*.
3. Select a numbered COM port from the list.
Note: If the port cannot be created, it is in use. Select a different numbered port.
4. **Important:** Deselect (clear) the *Secure Connection* checkbox, as shown here. Deselecting this option ensures that the device disconnects its Bluetooth connection only when you tell it to.
5. Tap *Finish*.

For more information about using Bluetooth to connect to other devices, see the next chapter, *Supported Bluetooth Profiles*.

