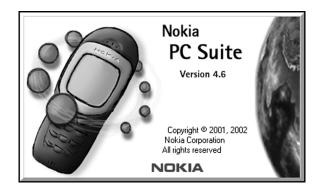
Nokia PC Suite 4.6 User Guide



PC/PDA Connectivity Guide for Nokia 6385/6370 Phones

Legal notices

Part No. 9354445, Issue No. 1

Copyright © 2002 Nokia. All rights reserved.

Nokia, Nokia Connecting People, and Nokia Original accessories logos are trademarks or registered trademarks of Nokia Corporation.

Printed in Canada August, 2002. Electronic document created in United States on April 4, 2003.

Reproduction, transfer, distribution, or storage of part or all of the contents in this document in any form without the prior written permission of Nokia is prohibited.

Nokia operates a policy of continuous development. Nokia reserves the right to make changes and improvements to any of the products described in this document without prior notice.

UNDER NO CIRCUMSTANCES SHALL NOKIA BE RESPONSIBLE FOR ANY LOSS OF DATA OR INCOME OR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR INDIRECT DAMAGES HOWSOEVER CAUSED.

THE CONTENTS OF THIS DOCUMENT ARE PROVIDED "AS IS." EXCEPT AS REQUIRED BY APPLICABLE LAW, NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE MADE IN RELATION TO THE ACCURACY, RELIABILITY OR CONTENTS OF THIS DOCUMENT. NOKIA RESERVES THE RIGHT TO REVISE THIS DOCUMENT OR WITHDRAW IT AT ANY TIME WITHOUT PRIOR NOTICE.

TRADEMARKS

Product names and/or brands mentioned herein are trademarks or registered trademarks of their respective holders.

EXPORT CONTROLS

This product contains commodities, technology or software exported from the United States in accordance with the Export Administration regulations. Diversion contrary to U.S. law is prohibited.

FCC/INDUSTRY CANADA NOTICE

Your phone may cause TV or radio interference (for example, when using a telephone in close proximity to receiving equipment). The FCC or Industry Canada can require you to stop using your telephone if such interference cannot be eliminated. If you require assistance, contact your local service facility. This device complies with part 15 of the FCC rules. Operation is subject to the condition that this device does not cause harmful interference.

Table of Contents

	Introduction	1
	Observe system requirements	1
	Learn about compatible applications	2
	Understand requirements for digital data and fax calls	2
	Print this guide	
	Observe abbreviations	
	Observe safety notes	
	Learn about infrared communications	
2	Nokia PC Suite Installation	5
	Learn about IR for Me and XP users	5
	Install PC Suite	6
	Remove PC Suite	8
3	Nokia Content Copier	9
	Learn about compatible phones	9
	Learn about Content Copier	10
	Learn about other Nokia phones	14
4	Nokia PC Composer	16
	Tour PC Composer	
	Compose a new ringing tone	18
	Learn about other PC Composer views	20
	Save your new ringing tone	21
	Transfer ringing tone to your phone	21
	Create ringing tones from MIDI files	22
	Work with RTTTL ringing tone files	24
5	Nokia PC Sync	25
	Configure PC Sync	25
	Understand the basics of synchronization	29
	Start synchronization	30

	Create a custom contact list	
6	Nokia Phone Editor	35
	Learn about phone memory and PC storage locations	
	Choose the right application for managing contacts	
	Tour Nokia Phone Editor and Contacts window	
	Manage contacts using Phone Editor	
	Edit Profiles and Caller groups	
	Edit Settings	42
	Launch other PC suite applications.	
7	Wireless modem setup.	43
	Learn about digital data	43
	Understand modem software	46
	Connect for the first time using DLR-3P or DKU-6	47
	Connect for the first time using IR (Windows 98, Me)	49
	Create Additional modem installations	51
	Learn about IR and Windows 2000	52
	Connect for the first time: IR (Windows XP Home and Professional)	55
	Learn about IR and Windows NT Workstation 4.0	55
8	Data and fax software configuration	
	Observe the following first	
	Configure your data software	
	Use Microsoft Dial-up Networking for packet data (2G, 3G) and QNC	
	Configure America Online to connect via packet data or QNC	
	Use Microsoft Dial-up Networking-CSD	
	Get connected to America Online (AOL)	
	Learn about other data applications	63
	Configure your fax software	
	Learn about manual selection of incoming calls	66
9	PalmOS configuration	
	Learn about packet data, QNC, and circuit switched data	
	Learn about your phone as a wireless modem	69

	Understand your connection options	70
	Edit connections preferences	72
	Make a dial-up connection	73
10	PocketPC configuration	75
	Learn about packet data, QNC, and circuit switched data	75
	Learn about your phone as a wireless modem	75
	Understand your connection options	76
	Create a modem connection-packet & QNC	77
	Configure a modem connection-CSD	80
11	Macintosh configuration	84
	Learn about special hardware needs	84
	Configur the Macintosh OS	85
	Use other data/fax applications	

1 Introduction

This guide provides you with the following information:

- installation instructions for Nokia PC Suite 4.6
- the Nokia PC Suite 4.6 user guide
- wireless modem installation instructions for your Nokia 6370 or 6385 phone
- how to configure your data/fax software for digital data calls (using your Nokia 6370 or 6385 phone as a wireless modem)
- how to configure your PocketPC or PalmOS handheld device for use with your Nokia phone as a wireless modem

OBSERVE SYSTEM REQUIREMENTS

To install and run Nokia PC Suite 4.6, you need:

- Nokia 6385 or 6370 phone
- an Intel-compatible PC running Windows 98 (First or Second Ed.), Windows Millennium Edition (ME), Windows 2000 Professional, Windows XP (Home or Professional) or Windows NT Workstation 4.0 (SP 5 or greater)
- at least 40 megabytes of free disk space
- an infrared port on your desktop PC or laptop computer and/or the optional serial cable (DLR-3P or DKU-6)
- a compatible PC Personal Information Manager (PIM) application for use with Nokia PC Sync
- Note: Nokia Content Copier (a component of Nokia PC Suite) supports a variety of Nokia phones, some of which make their connection to a PC via serial cable. For a list of compatible phones and connection methods, please see "Learn about compatible phones" on page 9.

LEARN ABOUT COMPATIBLE APPLICATIONS

Nokia PC Sync is compatible with the Personal Information Manager (PIM) applications listed below:

Manufacturer	Application name/version
Microsoft	Schedule+ 7.0, 7.5 Outlook 97, 98, 2000, 2002 Outlook Express (Windows Address Book)
IBM	Lotus Notes 4.5, 4.6, 5.0 Lotus Organizer 97, GS, 5.0, 6.0

UNDERSTAND REQUIREMENTS FOR DIGITAL DATA AND FAX CALLS



Note: This feature is available only if your service provider's network supports digital data calls. Please check with your service provider prior to sending or receiving digital data calls.

Before you can make digital data calls using your Nokia phone as a wireless modem:

- you must subscribe to digital data services with your service provider.
- your phone must be powered up, and digital service must be available.
 Digital data calls are not available when outside of a digital network.
- your phone must be connected to your PC or handheld device via infrared or the optional serial cable (DLR-3P or DKU-6).
- your data or fax software must be running and must be configured to recognize your Nokia phone as the active modem (instructions to follow later in this document).

PRINT THIS GUIDE

If you have the electronic version of this guide only, Nokia recommends you print a copy for use during installation. No other applications should be running during the installation of PC Suite and during wireless modem setup. Therefore, reading this guide using Adobe Acrobat reader during installation is not recommended.

OBSERVE ABBREVIATIONS

For the purposes of this user guide, the following abbreviations are used:

Abbreviation	Description
PC	Refers to both desktop and laptop computers
IR	Infrared
PIM	Personal Information Manager
ISP	Internet Service Provider

OBSERVE SAFETY NOTES

- Do not switch on the phone when wireless phone use is prohibited or when it may cause interference or danger.
- Please make backup copies of all important data to protect against possible loss or alteration.
- When connecting to any other device, read its user guide for detailed safety instructions. Do not connect incompatible products.
- To avoid any potential loss of data, you should not make or receive calls while synchronizing data between the phone and a PC.
- Do not point the IR beam at anyone's eyes or allow it to interfere with other IR devices.
- To disconnect the cable from the phone, hold the connector and remove the cable.

LEARN ABOUT INFRARED COMMUNICATIONS

You may chose to use IR as your connection between phone and PC. The preferable distance between two IR-equipped devices is a range of three inches to three feet maximum. There must be no obstructions between the two devices and the IR ports of the two devices have to be pointing at each other.

Your Nokia phone is a Class 1 Laser Product.

Enable infrared communications

Windows Millennium Edition (ME), Windows 2000, and Windows XP users do not need to enable infrared communications on their PC prior to using this feature. The infrared port is always active.

If you use Windows 98, you can use the Infrared Control Panel to activate or deactivate infrared communications.

To enable infrared communications on your phone, please refer to the infrared section in your phone's user quide.

Interruptions to infrared communications

Windows provides visual and audible notification when it senses an interruption to infrared communications between your phone and PC. Windows allows you to re-establish infrared communications between the two devices so it can re-send the data that was being transferred when the interruption occurred.



TIME-OUT

If the infrared connection between your phone and PC has not been reestablished within 15 seconds, a "time-out" occurs, meaning Windows no longer searches for your phone and terminates the infrared connection.

2 Nokia PC Suite Installation

Nokia PC Suite 4.6 is a collection of powerful tools that you can use to manage your phone's features and data. PC Suite consists of the following components:

- Nokia Content Copier allows you to copy data between two Nokia phones, to back up your phone's data to your PC, and erase data from your phone.
- Nokia Connection Manager allows you to monitor the serial connection between your phone and PC and switch to a different type of connection (cable vs. infrared) when copying data from one phone to another.
- Nokia PC Composer allows you to create new ringing tones for your phone.
- Nokia PC Sync allows you to synchronize contacts, calendar and todo list notes between your phone and PIM applications such as Microsoft Outlook and Lotus Organizer.
- Nokia Phone Editor allows you to edit your phone book and settings from your PC.

LEARN ABOUT IR FOR ME AND XP USERS

Your phone also functions as a wireless modem and is designed to be detected by Windows Plug and Play.

During the PC Suite installation process, you are asked to choose how you want to connect your phone and PC – either via IR or serial cable. If you select IR, you are prompted to enable infrared communications on your phone, then align the infrared ports of the 2 devices.

Plug and Play detection

Because infrared is always active on PCs running ME or XP (including automatic software installation for Plug and Play devices), the Windows Add New Hardware Wizard detects your phone as a new hardware device during the PC Suite installation. This interferes with the PC Suite software installation process.

Before installing PC Suite

Nokia recommends that Windows ME and XP users who want to use IR as their serial connection for PC Suite perform the modem installation prior to installing PC Suite. Please see "Wireless modem setup" on page 43 and perform this task prior to installing Nokia PC Suite. Once you have performed the modem installation, you may continue with the installation instructions below.

INSTALL PC SUITE

PC Suite is provided free of charge, and is available for download from the US products section of http://www.nokia.com.

Please download the setup application to a location on your hard drive. If you downloaded the application in segments, please double-click the first segment's .exe file and follow the instructions to extract the installer application from the segments.



Important: If you use Windows 98 (First or Second Edition) and plan on using IR to connect to your PC, please enable IR communications on your PC *now*.

Once the software download is complete and/or the segments have been rejoined:

- 1 Double-click the installation file PC Suite 4.6.exe that you downloaded to your hard drive.
- 2 Click Next to begin the software installation. Please read the enduser license agreement, then click Yes to accept its terms.
- 3 Review the safety notes, then click Next.

- 4 Click Next to install all PC Suite components (or clear the check boxes of the components you do not want to install).
- 5 Select the language you wish to use with PC Suite, then click **Next**.

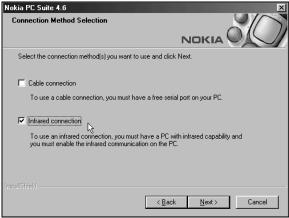


Note: If you use a PIM application (Outlook, Lotus Organizer, etc.) and you want to use it with Nokia PC Sync, it is recommended that you select the same language used by your PIM.

Select your connection method

During the installation process, you are asked to select how you plan on making a connection to your PC (either infrared or serial cable).

You can only use one method at a time. However, you may want to select both options during installation in the event you want both connection options available at a later time.



- 1 Select the type of connection you want, then click Next.
- 2 Follow the instructions provided on either the Infrared connection or Cable connection screen, then click Next.
- 3 Continue through the installation wizard, then click Finish to restart your PC.



Note: If you plan on using the DKU-6 USB serial cable, please follow the DKU-6's installation instructions and install the cable properly *before* installing Nokia PC Suite.

Change language

The language chosen during installation for PC Suite applies to all of the PC Suite components and Help applications. If you need to change PC Suite to a different language, you must reinstall PC Suite.

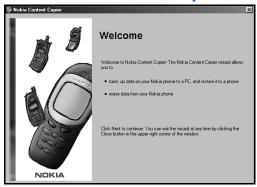
REMOVE PC SUITE

If you need to remove PC Suite (including all components), please use Add/Remove Programs (located in Control Panel). Remember to close any PC Suite applications that are running before you begin.

TO REMOVE PC SUITE 4.6:

- 1 Click Start, point to Settings, then click Control Panel.
- 2 Double-click Add/Remove Programs.
- 3 Scroll through the list of installed applications, then click Nokia PC Suite 4.6.
- 4 Click the Add/Remove button.
- 5 Click Remove from the Nokia PC Suite Setup window, then click Next.
- 6 Follow the on-screen instructions until the setup wizard has completed removing the program.
- 7 Restart your computer to complete the removal process.

3 Nokia Content Copier



Nokia Content Copier is a powerful application that allows you to perform the following tasks:

- Copy data from a compatible phone to your 6385/6370 phone (or between 2 Nokia 6385/6370 phones).
- Back up your phone's data to your PC and then restore the data back to your phone.
- Erase data from your phone.

LEARN ABOUT COMPATIBLE PHONES

One of the most powerful features of this application is its support of other compatible phones. This capability is especially useful if you are upgrading to a new handset and want to transfer data from your old phone to your new one. You can also use this application to transfer information between other 6385/6370 phones in your family.

The table on the following page shows a list of phones compatible with Nokia Content Copier (other than 6370 or 6385), as well as the method of connection to the PC:

Nokia model:	Method of connection:
3320/3360	IR (infrared)
5190	DAU-9P serial cable
6190	DAU-9P serial cable
6340, 6360	DLR-3P serial cable and IR (infrared)
7160, 7190	DLR-3P serial cable and IR (infrared)
8290, 8890	IR (infrared)
8390	IR (infrared)



Important: Content Copier does not support copying data *to* any of the phones listed above. Data can only be read *from* these phones, then copied to a 6385 or 6370 phone.



Note: Nokia Content Copier does not support certain 5100 and 6100 series phones. For more information on specific models of incompatible phones, please see "Learn about other Nokia phones" on page 14.

LEARN ABOUT CONTENT COPIER

Nokia Content Copier uses a wizard-style interface to help you perform the tasks listed above. If you are copying data from one of the



compatible phones above using a cable connection, please make sure the phone is connected to your PC via cable before you begin.

Launch Content Copier from the Start Menu (Start - Programs - Nokia PC Suite 4 - Content Copier), then select the task you would like to perform. Follow the on-screen instructions to complete the task you want to perform.

The following pages contain basic information and tips on using Nokia Content Copier.



Important: Windows ME and XP users who are connecting to a PC via IR should have already performed the wireless modem installation before installing PC Suite. If the Add New Hardware Wizard launches when you establish an IR connection between phone and PC, please click the wizard's Cancel button. Close Content Copier, then proceed to "Wireless modem setup" on page 43 and follow the instructions. You can return to Content Copier once the modem setup has been completed.

Copy information from the source phone

When you select Copy data from a phone to a PC, Content Copier transfers all compatible data types (phone book, calendar, to-do, caller groups, etc.) from the phone containing the data you want to back up or transfer. This phone is called the "source phone" and can



be one of the phones listed on the previous page, or another Nokia 6370 or 6385 phone.

- If you are copying your phone's data and want to save it on your PC,
 Nokia Content Copier guides you through the process of saving the information to your PC's hard drive.
- If you are copying data from a different source to your Nokia 6370 or

6385 phone, the data must first be saved to your PC. Once you have connected your 6370 or 6385 phone ("target" phone) via IR or cable, follow the instructions found below: "Copy information to the target phone".

Save the source phone data



Once the source phone's data has been read, Content Copier allows you to save the information to your PC's hard drive. Click the Save Data button, then navigate to the location on your hard drive where you want the information stored.

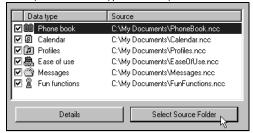
Nokia Content Copier automatically names the files for you, based on the type of data that is read from the source phone.

Copy information to the target phone

Before you can copy information to the target phone, you need to load the information into the PC's memory. You should have already saved the source phone's data to your PC via the Copy data from a phone to a PC option.

- 1 Launch Content Copier, then click Next.
- 2 Click Next, then click Copy data from a PC to a phone.
- 3 Click the Select source Folder button. Locate the directory containing the information you want to use.
- 4 Click Next to begin copying data from your PC to your phone.

Once the source phone's information has been loaded from your PC's hard drive, you are asked to determine the types of information you want copied into your phone. The compatible data types are displayed along with the ability to select the types of data you wish to transfer.



Use the check boxes next to the data types to select or deselect the information you want to copy to your phone, then click **Next**.

Nokia Connection Manager

You may need to use Nokia Connection Manager to select the type of connection you want Content Copier to use during various stages of the process. For example, if you select



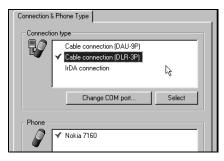
Copy data from one phone to another, and the source phone requires a serial cable, click Content Copier's Connection button to launch Connection Manager. Then select the correct cable option for the source phone.

To switch connection type while using Content Copier:

- 1 Establish the appropriate connection between your phone and PC (via IR, DLR-3P, or DAU9-9P), then click the **Connection** button.
- 2 Click the desired connection type, then click Select.

- 3 Allow Nokia Connection Manager to detect your phone.
- 4 Click **OK** to return to Nokia Content Copier.

If your phone is not detected right away, switch to one of the other connection types, then back to the desired



connection type. This forces Connection Manager to redetect your phone.



Note: If you are copying data from one phone to another and the source phone uses an infrared connection, interrupt the infrared connection between source phone and PC. Allow the Windows warning message regarding interrupted infrared communications to completely time-out before aligning the target phone with your PC's infrared port. By doing so, you allow Connection Manager to detect your phone more quickly.

Nokia Content Copier log

When you have successfully completed one of the Nokia Content Copier tasks, the Finish screen is displayed along with a log of the tasks that were just performed. At the Finish screen, you have the following options:

- Click Save to save the log (.LOG) file to your PC's hard drive.
- Click New Action to return to the beginning of the Nokia Content Copier wizard.
- Click Finish to exit Nokia Content Copier.

LEARN ABOUT OTHER NOKIA PHONES

Due to software and hardware differences between generations of phone technology, the following phones are *not* compatible with Content Copier:

Protocol	Nokia model number
TDMA	5120, 5125, 5160, 5165
	6120/6120i, 6160/6160i/6160m
	6161/6161i, 6162/6162i/6162m, 8260
CDMA	3280, 3285
	5170/5170i, 5180/5180i, 5185
	6180/6180i, 6185/6185i
GSM1900	3390, 3395

4 Nokia PC Composer

Nokia PC Composer allows you to create new ringing tones for your Nokia phone. Once you create a new ringing tone, you can transfer it to your phone via infrared or cable connection.

PC Composer also allows you to open Standard MIDI files (type I) and Ringing Tones Text Transfer Language files. Once opened, you can edit and convert them to ringing tones. You can save your ringing tones as .mid (MIDI), .ott (ringing tone), or .rtttl (RTTTL) file formats on your PC's hard drive

PC hardware setup

PC Composer "plays" the notes as they are written to the music staff. You can also play back the entire composition. Before you begin writing, you must select your PC sound card's MIDI playback device.

- Click Start, point to Programs, point to Nokia PC Suite, then click Nokia PC Composer.
- 2 Click Tools, point to Player Device, then click the option for your sound card's internal MIDI playback device.

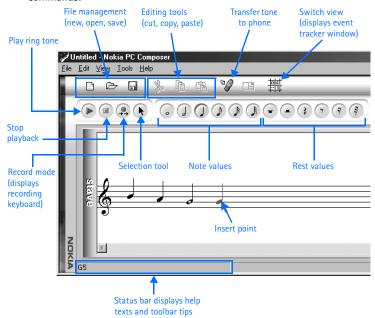


4

Once your MIDI playback device is set, you can hear each note as it is added to the staff or listen to the entire ringing tone (when you click the Play button).

TOUR PC COMPOSER

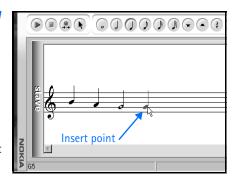
The illustration below introduces you to PC Composer's tools and commands:



You can launch PC Composer without having a connection between the phone and your PC. The connection status indicator displays the status of the connection between your phone and PC.

COMPOSE A NEW RINGING TONE

Your new ringing tone can consist of up to approximately 70 notes and rests. The phone discards any notes or rests beyond 70. Use the note counter to the right of the Status Bar to monitor the length of your new ringing tone.

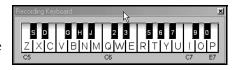


Create a new ringing tone

- 1 Launch Nokia PC Composer (click Start, point to Programs, point to Nokia PC Suite, then click Nokia PC Composer).
- 2 Click the appropriate note (or rest) button.
- 3 Using the insert point, click the desired line or space on the staff (result: the note is placed on the staff, and is played by your PC's sound card).
- 4 Continue entering the desired notes and/or rests until you have completed your new ringing tone.
- 5 Click the Play button to play the ringing tone from the beginning.

Enter notes using the keyboard

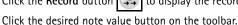
In addition to placing the notes on the staff using the mouse, you can also



4

enter the pitches from your computer keyboard. The Recording Keyboard is displayed and identifies the computer keyboard equivalents to notes on a piano or MIDI keyboard.

1 Click the **Record** button 4 to display the recording keyboard.



- 3 Press the key on your computer keyboard associated with the desired note.
- **Tip:** If you want a longer or shorter note, select the desired note value from the toolbar, then enter the note's pitch from your keyboard. Note values cannot be selected from your computer

Edit a ringing tone

keyboard.

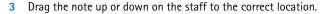
You can edit the pitch or duration of the notes already entered on the music staff.

CHANGE THE PITCH OF A NOTE

1 Click the Selection tool button on the toolbar.



2 Move the cursor over the note you wish to change (result: the arrow cursor changes to a hand)



CHANGE THE DURATION OF A NOTE OR REST

- 1 Click the desired note button (or rest button) on the toolbar.
- 2 Move the cursor over the note or rest you wish to change (result: insert point appears)
- 3 Click the note or rest to replace it with the new note value.



Delete notes and rests

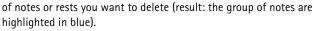
You can delete a wrong note/rest or group of wrong notes/rests at any time.

DELETE A SINGLE NOTE/REST

- 1 Click the Selection tool button on the toolbar.
- 2 Click the note or rest you want to delete, then press your keyboard's Delete (DEL) key.

DELETE MULTIPLE NOTES/ RESTS

- Click the Selection tool button on the toolbar.
- 2 Draw a bounding outline (marquee) with the mouse around the group of notes or rests you want to



3 Press your keyboard's Delete (DEL) key.

LEARN ABOUT OTHER PC COMPOSER VIEWS

In addition to using the standard music staff to compose new ringing tones, the following options are available:

- Tracker displays notes as events on a time line as well as other MIDI and tempo data
- General used to set Song Title, overall tempo, and adjust overall pitch up or down

Click the Switch view button to cycle through the various view options. To view the General information pane, click Tools, then click General

4

SAVE YOUR NEW RINGING TONE

When you are ready to save your new ringing tone, click the Save button on the toolbar. Use the Save as dialog box to set file name and location to save the new file. Default file type for your new ringing tone is .mid (MIDI). However, you need to save your work as ringing tone format (.ott) before sending your new ringing tone to the phone. Use the Save as type drop down box to select the desired file type.



Note: You can create and save as many new ringing tones as you have space on your hard drive. However, your phone can only hold up to five new ringing tones at any given time.

TRANSFER RINGING TONE TO YOUR PHONE

Once you have created a new ringing tone and have saved it to your PC, you can transfer the tone to your phone.

When your phone receives the new ringing tone, it displays the message **New ringing tone received**. Press the **Options** key and scroll to the following options:

- Playback plays the new ringing tone
- Save tone- saves the ringing tone to your phone
- **Discard** discards the new tone and returns you to the Start screen.

Transfer via infrared or cable

Before transferring the ringing tone to your phone, make sure you have established a connection between your phone and PC. Check the status indicator in the lower right corner of the PC Composer window to verify the status of your connection.



Important: Make sure to enter a name for your new ringing tone in the **General** pane. If you fail to do so, your new ringing tone appears unnamed in your phone's list of ringing tones.

To transfer your ringing tone, click the **Update to Phone** button on the toolbar (or select **Update to Phone** from the **Tools** menu).



CREATE RINGING TONES FROM MIDI FILES

Nokia PC Composer allows you to open Standard MIDI files, then convert the data to ringing tone format. Now you can carry your favorite PC MIDI file as a ringing tone in your phone!

About Standard MIDI files

Standard MIDI files of popular music frequently consist of multiple instruments (bass, drums, organ, etc.). Typically, there is also a track dedicated to the song's melody. There are two types of Standard MIDI files:

- Type 0 files 1 track of MIDI data containing all the various instruments; each instrument assigned to different MIDI "channel."
- Type 1 files each instrument has its own dedicated track and MIDI channel. Track/instrument names are embedded in the file as text information

PC Composer's interface interprets the multiple track information and allows you to choose the correct track or instrument.

Before you begin

If the MIDI sequence you want to use contains too many notes, the following error message is displayed when trying to open the file:



Nokia PC Composer processes MIDI notes in octave 5 and 6 of the MIDI keyboard. If your MIDI sequence contains notes outside this range, the following error message is displayed when opening the file:

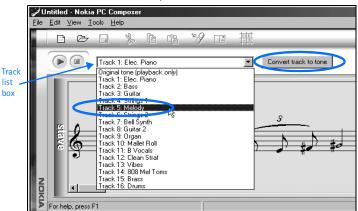


4

OPEN A STANDARD MIDI FILE

To open a MIDI file:

- 1 Click the Open button (or select Open from the File menu).
- 2 Locate the MIDI file you want to use as a ringing tone, then click Open.
- 3 Use the Track list box's drop-down arrow and locate the desired track.



4 Click the Convert track to tone button to convert MIDI information to ringing tone format.

Edit and save

You may need to edit the converted MIDI information (adjust note lengths, remove extra rests, etc.) so that the tune plays correctly. For more information on editing a ringing tone, please refer to "Edit a ringing tone" on page 19.

When you have completed editing the ringing tone, you can save your work in ringing tone (.ott) format, then send the new tone to your phone. For more information on saving, please refer to "Save your new ringing tone" on page 21. For more information on sending a ringing tone to your phone, please refer to "Transfer via infrared or cable" on page 21.

WORK WITH RTTTL RINGING TONE FILES

Ringing Tones Text Transfer Language (RTTTL) files are text files that contain various types of information that make up a ringing tone. When your phone receives a ringing tone over the air, your phone is actually receiving the information in RTTTL format. The RTTTL file includes song title, scale and tempo indications, and the actual note information.

An RTTTL formatted ringing tone may appear as follows:



Use RTTTL data from the Internet

The Internet has become a popular source for sharing ringing tones in RTTTL format. If you find a ringing tone Web site displaying the RTTTL data, you can create your own RTTTL files by pasting the data into Notepad, then save it using the .txt file extension.

PC Composer can open (and save) ringing tones in RTTTL format. Songs you compose in PC Composer can be saved as RTTTL files, then shared with family and friends via e-mail (for example).

Open an RTTTL file

- 1 Click the Open button (or select Open from the File menu).
- 2 Click the File of type drop down arrow, then select RTTTL files (*.txt) from the list of available file types.
- 3 Locate the RTTTL file on your hard drive or other removable disk drive, then double-click the file name to open.
- 4 Click the Convert track to tone button.

You can now send the ringing tone to your phone, edit the ringing tone (as needed) and/or save the ringing tone as .ott (ringing tone) format on your hard drive.

5

5 Nokia PC Sync

Nokia PC Suite allows you to synchronize the contact and calendar information in your PC's Personal Information Manager (PIM) software and your Nokia mobile phone. You can use Nokia PC Sync to keep information up-to-date in both locations.

PC Sync supports a variety of PIM applications, including Microsoft Outlook, Outlook Express (using Windows Address Book), and Lotus Organizer. PC Sync also offers a wide variety of synchronization options so that you can personalize the way you want your information managed.



Warning: To avoid any potential loss of data, you should not make or receive calls while synchronizing data between the phone and your PC. Nokia PC Sync cannot be used while a data call is in progress. Likewise, you cannot initiate a data call while synchronizing data with PC Sync.

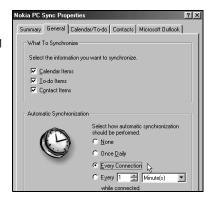


Important: Remember to make backup copies of all important data to protect against possible loss or alteration.

CONFIGURE PC SYNC

The first time you run Nokia PC Sync, you must configure PC Sync to work with your PIM application. Once you have customized PC Sync, you can proceed with synchronizing your PIM data with your phone.

- Establish a connection between your phone and PC.
- 2 Launch Nokia PC Sync



(click Start, point to Programs, point to Nokia PC Suite 4, then click Nokia PC Sync).

- 3 Select your PIM application from the drop-down list, then click **OK**.
- 4 Click the More button to view a summary of current/default settings.

Set General synchronization properties

- 1 Click the **General** tab, then select the information you want to synchronize.
- 2 Click the desired option for automatic synchronization (for example: Every connection).
- 3 Click the Advanced button to specify additional options, including resolving synchronization conflicts (see below)

SYNCHRONIZATION CONFLICTS

A synchronization conflict occurs when you change or edit a contact or reminder in both your phone and PIM between synchronization sessions. By default, PC Sync resolves the conflict by treating your phone as the correct information source.

To change conflict resolution properties, click the option associated with your PIM application.

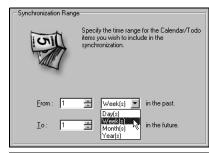


Set Calendar and Contacts properties

Your PIM application's storage capabilities are much more extensive than those of your phone. Use the Calendar and Contacts tabs to define the kinds and amount of information synchronized.

For more information about the capacity of your phone's phone book and reminder list, please refer to the technical specifications section of your phone's user guide.

- Click the Calendar/Todo tab.
- 2 Use the drop-down lists to define the range of time PC Sync uses during synchronization.



- 3 Click the Contacts tab.
- 4 Select the details you want synchronized with your phone.

CONTACT DELETIONS

By default, contacts deleted from your phone are not deleted from your PIM when you synchronize. If you accidentally delete a contact from your phone,



you can restore it by synchronizing again.

Deselecting the **Ignore contact deletions** option instructs PC Sync to permanently delete the corresponding contact in your PIM. Choose this option *only* when you are certain you want PC Sync to delete the PIM contact (and all details) associated with the deleted phone book entry.

Warning: This action cannot be undone!

Set PIM properties

The last properties tab is labeled with the name of your PIM application. Use this properties tab to modify how PC Sync communicates with your PIM's resources. For example, if the number of contacts in your PIM application exceeds the phone's memory, you should consider creating a

subset of your main contact database folder. Use this folder to store those names, numbers, and text information you want to appear in your phone book.

Then, use the PIM properties tab to select the location of the new folder containing the set of contacts you have defined for use with your phone.

Synchronizing for the first time

Once you have customized PC Sync for your uses, you are ready to synchronize your phone and PIM.

- 1 Click the Summary tab
- 2 Click the Synchronize Now button.
- 3 Observe the synchronization status indicator.



4 Click the **OK** button when synchronization is complete.

Important: Please refer to the PC Suite Troubleshooting document in the event synchronization is not successful or if PC Suite notifies you of errors. A link to this document can be found in the Nokia PC Suite 4 Program Group.

UNDERSTAND THE BASICS OF SYNCHRONIZATION

Nokia PC Sync remains running in the background after you synchronize for the first time. PC Sync places an icon in the **Task Bar** tray, indicating that the application is running. The colors of the icon change, depending on the status of the infrared connection between your phone and PC. Please refer to the example below:



Exit PC Sync

Once setup and first synchronization is complete, you can either leave the program running in the background, or you can exit PC Sync. To exit PC Sync:

• right-click the PC Sync tray icon , then click Exit.

Start PC Sync

You have two options for launching Nokia PC Sync:

- as-needed from the Start menu
- automatically upon startup

TO ENABLE PC SYNC ON STARTUP

- 1 Establish a connection between your phone and PC.
- 2 Launch PC Sync from the Start menu.
- 3 Right-click the PC Sync tray icon, then click Enable on startup



View other PC Sync options

There are several other options available from the PC Sync options menu (from the tray icon). With the phone connected to your PC via infrared, right-click on the tray icon, then click any of the following options:

- About to view information about the PC Sync program
- **Connection** to check the status of the infrared connection
- Properties to modify current PC Sync settings (change frequency of synchronization, types of data synchronized, etc.)
- Synchronize to initiate synchronization of data
- View Last Report to view information about the last synchronization attempt
- Help to launch the on-line Help files

To disable the auto start features, right-click on the PC Sync icon, then click Enable On Startup again.

START SYNCHRONIZATION (2)



PC Sync starts synchronization between your phone and PC when you launch the program from the Start menu. To resynchronize your data while the program is still running, right-click the PC Sync tray icon, then click Synchronize.

USE THE NEW SYNCHRONIZATION COMMAND

If at some point you change PIM applications or upgrade to a newer version of your current PIM, you must reconfigure PC Sync to work with the new application. Select New Synchronization from the Nokia PC Suite program group, then follow the instructions on page 25.

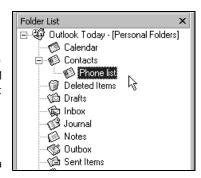


Important: Do not use **New Synchronization** to launch PC Sync and initiate synchronization between your phone and PC.

?[X]

CREATE A CUSTOM CONTACT LIST

Users who have more than 500 names and numbers in their PIM should create a custom contact list or subset of their master contact list. Depending on the PIM application you use, you may need to create a new contact database file or create a new folder to store the custom contact list.



Outlook users

Outlook users can create folders and sub-folders in their Outlook database files. To create a custom contact list, first create a new folder to store contacts. Then copy the desired contact information from your main contacts folder to the new folder. PC Sync allows you to synchronize your phone with the Outlook contacts folder of your choosing.

Create New Folder

CREATE A NEW FOLDER FOR PHONE CONTACTS

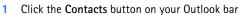
To create a new sub-folder for a custom contact list:

- Click File, point to Folder, then click New Folder.
- Type the name of your new folder (example: Phone list).
- 3 Click the Folder contains drop-down arrow, then click Contact Items.



4 Select a location for your new folder (for example: click Contacts to make Phone list a sub-folder of your main Contacts folder). 5 Click **OK** to confirm your selection.

COPY CONTACTS TO CUSTOM PHONE LIST





- 2 Select the contacts you want to appear in your custom list (Hold the CTRL key, then click to select multiple contacts that are not adjacent to each other).
- 3 Click Edit, then click Copy (or press CTRL + C).
- 4 Select your custom folder from the Folder List (example: Phone list), or press CTRL + Y to display Go to Folder dialog box.
- 5 Click Edit, then click Paste (or press CTRL + V) to paste copies of the selected contacts into the new folder.



Important: If you decide to drag-and-drop contacts between your main Contacts folder and the new custom folder, make sure to hold the CTRL key while dragging, then release the mouse button first. Failure to use the CTRL key during drag-and-drop *moves* all selected contacts to the new folder.

UPDATE PC SYNC'S OUTLOOK SETTINGS

To update PC Sync's settings to synchronize with your custom list:

- 1 Establish an infrared connection between your phone and PC.
- 2 Launch Nokia PC Sync from your PC's Start menu.
 If you have PC Sync enabled on startup, right-click the PC Sync tray icon, then click Configuration.
- 3 Click the Microsoft Outlook tab.
- 4 Click the Contacts browse button ..., then select your custom folder. Click OK to confirm your selection.



5

5 Click the Summary tab, then click Synchronize Now to synchronize your phone and custom phone list.

Other PIM applications

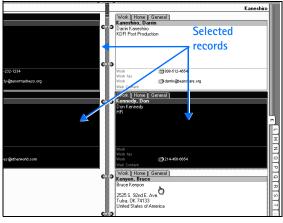
Other PIM applications (such as Lotus Organizer) require that you create a completely new database file for your custom contacts list. Once you create a new database file, copy the desired contact information from your main contacts file to the new contacts file. PC Sync allows you to synchronize your phone with the contacts file of your choosing.

CREATE A NEW DATABASE FILE (FOR EXAMPLE: LOTUS ORGANIZER)

- 1 With Lotus Organizer running, click File, then click New.
- 2 Click File, then click Save As.
- 3 Enter a name for your custom phone list (for example: Phone list).

COPY CONTACTS TO CUSTOM PHONE LIST

- 1 From File Manager, open your default Organizer database (c:\lotus\work\organize\<filename>)
- 2 Click the **Contacts** tab, then click the desired alphabet tab.
- 3 Select the desired contacts for your custom list.





Tip: Hold the CTRL key to select multiple contacts that are not adjacent to each other.

- 4 Continue by clicking subsequent alphabet tabs and selecting the desired contacts.
- 5 Click the Copy button (or press CTRL + C).
- 6 Use the Windows Task Bar to switch back to your new contacts list, then click the Contacts tab.
- 7 Click the Paste button (or press CTRL + V) to paste copies of the selected contacts into the new list.

UPDATE PC SYNC'S LOTUS ORGANIZER SETTINGS

- 1 Establish an infrared connection between your phone and PC.
- 2 Launch Nokia PC Sync from your PC's Start menu.
 If you have PC Sync enabled on startup, right-click the PC Sync tray icon, then click Configuration.
- 3 Click the Lotus Organizer tab.
- 4 Click the Contacts
 browse button ...,
 then select your
 custom folder. Click OK to confirm your selection.



5 Click the Summary tab, then click Synchronize Now to synchronize your phone and custom phone list.

6 Nokia Phone Editor

Nokia Phone Editor is a program that allows you to edit and manage various functions of your phone from the keyboard of your PC. Phone Editor consists of the following components:

- Contacts used to manage phone book entries. Also used to store contact information on your PC
- Profiles used to edit profile and caller group settings from your PC
- Settings used to view and modify various system and message settings. Also used to store configure your personal business card information

Before you begin

Make sure you establish a connection between your phone and PC before using Phone Editor. If your phone is not connected to your PC, you cannot edit and manage your phone's information and settings.



Important: Phone Editor cannot be used during active digital data or fax calls (and vice versa). Do not try to use these two features simultaneously.

LEARN ABOUT PHONE MEMORY AND PC STORAGE LOCATIONS

Phone Editor uses your phone's memory and your PC (RAM memory and hard drive storage) to store your phone's data and settings:

Each time you launch Phone Editor, phone numbers, text messages and various phone settings are read into Phone Editor's memory. When you terminate the PC connection or exit the program, your phone's information is stored on your PC. The next time you use Phone Editor, the information stored on your PC is updated.

If you don't already use a PIM application like Microsoft Outlook or Lotus Organizer, Nokia Phone Editor's **Contacts** application is the perfect choice for editing and managing your contacts. Phone Editor creates a direct connection to you phone's memory and allows you to add or modify your phone book quickly and easily.

Nokia Phone Editor limitations

Nokia Phone Editor can only manage contacts with one number per name. However, your phone's memory is capable of storing multiple phone numbers and text fields (e-mail addresses, Web addresses, etc.) per entry.

You cannot use Phone Editor to create or manage phone book entries with multiple names per number. Nor can you create or add text fields to any contacts you create in Phone Editor.



Note: When more than one number per name exists, Phone Editor displays the **Mobile** or **General** number you stored. For more information on number types and assigning or modifying number types, please see your phone's user guide.

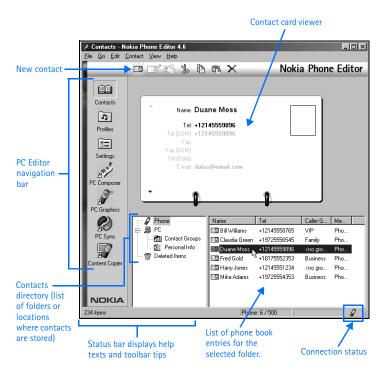
Use Nokia PC Sync

If you have multiple numbers and/or text fields per phone book entry you can still manage your phone book from your PC. This can be done easily by using a PIM application, along with Nokia PC Sync. For more information about Nokia PC Sync, please see page 25.



- 1 Launch your PIM application (for example: Microsoft Outlook).
- 2 Locate the contact in your PIM that corresponds with the phone book entry you wish to edit (or create a new contact in your PIM).
- 3 Add or modify the contact information as necessary, then save your work.
- 4 Launch Nokia PC Sync and synchronize your PIM and phone.

TOUR NOKIA PHONE EDITOR AND CONTACTS WINDOW



MANAGE CONTACTS USING PHONE EDITOR

Once you launch Nokia Phone Editor, click the **Phone** folder the contacts directory. A list of all phone book entries is displayed in the pane to the right of the contacts directory.



Many of the Phone Editor commands are available from the program's shortcut menu. Select a phone book entry to edit, then right-click to display a list of the menu options available from the shortcut menu. Select the command you wish to perform from the list.

You can also find the same commands in the program's **Contact** and **Edit** menus, or you can use the available toolbar buttons.

Add a new contact

- 1 Click the New Contact button on the toolbar (or select New Contact from the shortcut menu).
- 2 Enter the name of the new contact, then press TAB.
- 3 Enter the phone number, then press ENTER to save your work.

EDIT CONTACT INFORMATION

- Select the contact to edit from the list, then click the contact's name (or number) in the contact card viewer.
- 2 Make the necessary changes, then press ENTER to save your changes.

Delete a contact

Click the contact you want to delete from the list, then click the

Delete button on the toolbar. -OR-

 Right-click the contact you want to delete, then click Delete on the shortcut menu.

Copy and move contacts

Your PC's hard drive offers you virtually unlimited storage space for names and numbers. You can copy phone book entries to the Phone Editor's PC folder PC to back up your data. Or you can move entries to the PC folder, making more memory available for other entries.

To copy or move contacts:

- 1 Click the folder containing the contacts you want to copy or move (for example: Phone Phone).
- 2 Click the contact you wish to copy or move (or hold CTRL, then click to select multiple contacts).
- 3 Click the Copy button to copy (or click the Cut button to move).
- 4 Click the folder where you want the contacts stored (for example: PC folder PC).

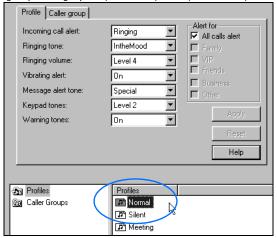
Add a contact to a caller group

You can use Phone Editor to assign phone book entries to one of the available caller groups. If you are unfamiliar with the caller group feature, please see your phone's user guide.

- Right-click the contact you wish to assign to a caller group, then click Caller Group.
- 2 Click the drop-down arrow, then click the desired caller group.
- 3 Click **OK** to change the caller group assignment.

EDIT PROFILES AND CALLER GROUPS

You can use Nokia Phone Editor's **Profiles** application to view your profiles and caller groups settings at a glance. You can edit profile and caller group settings quickly and easily from your PC's keyboard.



Edit a profile 🔊

- 1 Click the **Profiles** button on the Phone Editor's navigation bar.
- 2 Click the name of the profile you want to edit from the list.
- 3 Use the drop-down arrows to modify the various profile settings.
- 4 Click **Apply** to apply the changes you make to your phone's memory.

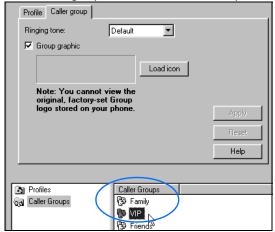
If you change the Alert for settings to one of the caller groups listed, your phone uses the profile you're editing to notify you of callers assigned to that caller group.

RENAME THE SELECTED PROFILE

- 1 Click Edit, then click Rename.
- 2 Type the new name, then press ENTER to save your changes.

Edit caller groups

1 Click the Caller group tab (or click the Caller Groups folder).



- 2 Click the name of the caller group you want to edit from the list.
- **3** Use the drop-down arrow to select a new ringing tone for the selected caller group.

ADD/CHANGE GROUP GRAPHIC

- 1 Click the Location button, then navigate to the location of the graphic you want to use.
- 2 Select the caller group logo file, then click **Open**.
- 3 Click Apply to send the updated settings to the phone.

RENAME THE SELECTED CALLER GROUP

- Click Edit, then click Rename.
- **2** Type the new name, then press **ENTER** to save your changes.

• EDIT SETTINGS

6



You can use Nokia Phone Editor's Settings application to view and edit a variety of phone settings, as well as configure how Phone Editor handles items you delete. The Settings application divides all of the settings into three properties tabs, as described below:

- General used to specify how you want Phone Editor to process deleted items
- User used to edit and store your user information

LAUNCH OTHER PC SUITE APPLICATIONS

The PC Editor navigation bar contains buttons that can be used to launch the other PC Suite applications. Use these buttons while in Phone Editor to launch PC Composer, PC Sync, or Content Copier.

7 Wireless modem setup

Your phone can function as a wireless modem when connected to your PC. Once your phone is installed and configured properly, your phone works in conjunction with your existing data software, allowing you to connect to a corporate network, the Internet, or check e-mail wherever you are.



Important: This feature is available only if your service provider's network supports 1XRTT or circuit-switched data (CSD) digital data and fax services. A subscription to these services may also be necessary. Please check with your service provider prior to making or receiving digital data and fax calls.



Important: If you wish to connect your phone and PC using IR, make sure that your PC's IR port is functioning properly and that there are no device conflicts. Windows cannot detect your phone if the IR port is not functioning properly.

LEARN ABOUT DIGITAL DATA

Circuit Switched Data (CSD)

Until now, your only wireless data option has been your service provider's Circuit Switched Data (CSD) network. Using CSD, you create a "virtual circuit" between your phone (as a wireless modem) and your Internet service provider (ISP), corporate network, or a fax machine.

As long as a digital data or fax call is active, you are typically being billed for the air time (whether you are transmitting/receiving data or not). In addition, the fastest CSD data rate available is 14.4k bps.

Quick Net Connect (QNC)

A Quick Net Connect (QNC) digital data call allows you to connect to the Internet more quickly than a traditional CSD call. This is achieved because your wireless service provider supplies the local connection to the Internet (vs. your local ISP's dial-up number).

Like CSD calls, you are typically being billed for the air time (whether you are transmitting/receiving data or not). In addition, the fastest CSD data rate available is 14.4k bps.

1XRTT (1X)/packet data

Your Nokia phone is the first in a new generation of phones to take advantage of a new higher-speed data protocol called 1XRTT (1X). The benefits to you include:

- Higher data transfer rates up to 153.6k bps over the wireless network.
- Data on-demand data is transmitted only when requested. You pay only for the amount of data you transfer (vs. air time).

1X packet data services work much the same way as a PC connected to a corporate network. Information is sent in "bursts" and "packets" only when there is a request for information. Otherwise, the PC or phone remains in an idle state.

Internet access using your service provider

Your wireless service provider now becomes your *Internet* service provider when you use your phone as a wireless modem and use packet data or QNC. You no longer have to configure your laptop computer or handheld device for connection to your normal ISP when you want to browse the Web or check your e-mail.

Access corporate network/e-mail using a VPN

Virtual Private Network (VPN) services provide an encrypted communications "tunnel" through the Internet, creating a secure connection between your PC and corporate network using a high-speed or broadband Internet connection.

If you plan on using 2G or 3G packet data services to access your corporate network's e-mail system, Intranet, or LAN, your corporate network must have VPN services available. In addition, your network administrator must grant you permission to access the corporate network through the VPN.

Additional software on your PC (or modification of your PC's current network settings) may also be required. For more information on VPN services, please contact your network administrator.



Important: Likewise, some ISPs may not permit access to certain services from Internet connections outside of your ISP's domain (for example: checking or sending e-mail, newsgroup access). Therefore you may not be able to use 2G or 3G packet data in conjunction with some of your home ISP's services. Please contact your ISP for more information on accessing services from outside their domain.

Determine type of data services to use

Your phone is capable of functioning as a wireless modem for both types of data services. There are times when it may be advantageous or appropriate to use one type of data service over another.

3G PACKET DATA

You may consider using 3G packet data when:

- you have large amounts of data to transfer and time/speed is a factor
- you are traveling and want to surf the Web or check e-mail wirelessly.
 Because your service provider is your Internet access point, you don't have to search for your regular ISP's local dial-up number.

QNC OR 2G PACKET DATA

You may consider using QNC data or 2G packet data when you are traveling and want to surf the Web or check e-mail wirelessly. Because your service provider is your Internet access point, you don't have to search for your regular ISP's local dial-up number.

CIRCUIT SWITCHED DATA

You may need to use CSD data when:

- sending a fax to a machine connected to a traditional phone line
- you do not have VPN access to your corporate LAN, Intranet, or e-mail system
- your ISP does not allow use of services from outside your ISP's domain

UNDERSTAND MODEM SOFTWARE

During the modem installation process, Windows looks for software specific to the new device being installed. The modem software ("driver") for your phone must be downloaded from the Nokia 6385 or 6370 phone's product section of:

http://www.nokia.com

Since the Add New Hardware Wizard for all Windows operating systems searches the A:\ drive for software or device drivers first, Nokia recommends that you download this file and save it to a floppy diskette.



Note: If you choose to save the file to your hard drive, please make note of the path to the file as this information is required to complete the installation successfully. Depending on your operating system, locating this file on your hard drive may add additional steps to the installation process.

The Nokia Web site contains the modem software for your phone:

nmp6385.inf

Choose the correct type of digital data

When installing this software, you are prompted for the type of digital data services you want to use, as well as the method of connection to your PC (IR or cable):

- Nokia 6385 2G Packet Data Modem used for 2G packet data (see your service provider for more information and availability of 2G packet data)
- Nokia 6385 3G Packet Data Modem used for 1X packet data (see your service provider for more information and availability of 3G packet data)
- Nokia 6385 Data Fax Modem used for CSD and QNC digital data and fax calls (see your service provider for more information and availability of CSD and QNC data services)

Multiple modem installations



Important: Windows 2000 Professional users who wish to connect to a PC using IR, please see "Learn about IR and Windows 2000" on page 52 for more information on modem setup for your operating system.

To provide yourself with the option of using either the serial cable or infrared to make your connection, you must perform the modem installation process for each type of serial connection (IR or cable) and digital data type desired.

Example: You have chosen IR as your connection method, yet you cannot find a flat work surface so you can align the IR ports of the two devices. You decide to connect using the DLR-3P cable instead. However, you cannot modify your existing IR modem configuration and change the serial connection to DLR-3P. To use the serial cable option, you must already have an additional modem installation using the driver for the serial cable.

You may also want to perform additional modem installations in the event you want to use more than one type of digital data. For example, if you want to use 1X packet data for Web browsing and e-mail, create a modem installation and select 1X data. However, if you also want the ability to send faxes, you need to create an additional modem installation where CSD is the data bearer.

CONNECT FOR THE FIRST TIME USING DLR-3P OR DKU-6



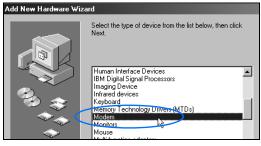
Important: If you are using the DKU-6 USB cable, you must follow the DKU-6 installation instructions (found in the DKU-6 sales package) prior to completing the steps below.

- 1 Make sure your computer's power is turned off.
- 2 Connect the cable to your PC (COM1 or USB port).

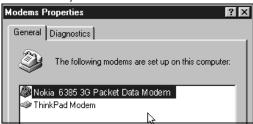
- Note: If your mouse is connected to COM1, you need to purchase a RS232-to-PS/2 adapter and move your mouse to an available PS/2 port, or purchase a PS/2 mouse. Check with your local computer dealer for these accessories.
- 3 Connect the cable to your Nokia phone. Your phone displays a message indicating you have connected the data cable successfully, then returns to the Start screen.



- 4 Turn on your computer's power.
- 5 Allow your computer to boot up completely; enter any logon passwords (when applicable).
- 6 Observe the "New Hardware Detected" screen that appears when your phone is detected.
- 7 Insert the floppy diskette containing the modem driver file when the Add New Hardware Wizard screen appears.
- 8 Click Next as necessary and select the "Display a list of all the drivers..." option.
- Note: Windows Me users must first select the "Specify the location of the driver..." option, then proceed with the instructions above.
- 9 Select Modem from the list of devices, then click Next.



- 10 Click the Have Disk button, then click Next.
- 11 Select A:\ or the floppy drive option (as necessary), then click Next.
- 12 Select the correct modem for the type of data you plan on using (for example: Nokia 6385 3G Packet Data Modem for 1X packet data), then click Next.
- 13 The Wizard may indicate that the software you have chosen is not appropriate for your phone. Click Yes to override this warning and continue the installation.
- 14 Click Yes if the Wizard indicates Digital Signature Not Found.
- **15** Click **Next** as necessary to finalize the installation.
- 16 Click Finish when Windows informs you that it has installed the device successfully.



17 Verify that your Nokia phone connected using the cable appears in the list of modems.

Complete the process by configuring your data software to work with the new infrared modem configuration. For more information, refer to "Data and fax software configuration" on page 56.

CONNECT FOR THE FIRST TIME USING IR (WINDOWS 98, ME)

Before you can make or receive digital data and fax calls, you must do the following:

- 1 Establish an infrared connection between your PC and your phone.
- 2 Install your phone as a wireless modem connected via infrared.
- 3 Configure your data software to use your phone as the active modem for data and fax calls

Establish an infrared connection

The preferable distance between the two devices making an infrared connection is a range of three inches (7.5 cm) to three feet (.9 m) maximum. There must be no obstructions between the two devices, and the IR ports of the two devices must be pointing at each other.

ENABLE INFRARED COMMUNICATIONS ON YOUR PC AND PHONE

 Double-click the Infrared icon in the Control Panel (Windows 98 only). Windows ME users, please go to step 4).





Tip: Windows 98 users can also launch the Infrared Monitor by double-clicking



- the Infrared Monitor icon in the system tray.
- 2 Click the Options tab, then select Enable infrared communication. Verify that the install software option for Plug and Play devices is selected.
- 3 Click Apply, then click the Status tab.
- 4 On your phone, press Menu, scroll to Infrared, then press Select.
- 5 Align the infrared ports of both devices.
- 6 When a successful infrared connection has been made, the infrared monitor indicates that your phone has been found.



Modem installation

The Windows Add New Hardware Wizard launches immediately after the infrared monitor displays the connection status between phone and PC.

To complete modem installation, please follow the instructions as detailed on page 48, beginning with step #7.

Complete the process by configuring your data software to work with the new infrared modem configuration. For more information, refer to "Data and fax software configuration" on page 56.

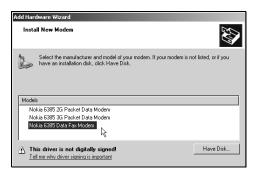
CREATE ADDITIONAL MODEM INSTALLATIONS

If you plan on using more than one type of digital data, you must perform additional modem installations so Windows can make the appropriate type of data connection.

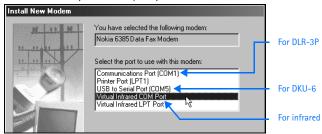
For example, if you want to use 1X packet data for Web browsing and email, you should select Nokia 6385 3G Packet Data Modem the first time you perform the modem installation. If you also want the ability to send faxes, you need to create an additional modem installation and select Nokia 6385 Data Fax Modem for circuit-switched data services.

ADD A MODEM MANUALLY

- 1 Insert the floppy diskette that has the modem driver (nmp6385.inf) into your disk drive.
- 2 Double-click the Modems (or Phone and Modems Options) icon in the Windows Control Panel.
- 3 Click Add (2000/XP users, click the Modems tab, then click Add). If prompted for the type of modem, click Other then click Next.
- 4 Select the "Don't detect my modem" option, then click Next.
- 5 Click **Have disk**, then click **OK** to install the software from your disk.
- Select the modem option that corresponds with the type of digital data you want to use (for example: Nokia 6385 Data Fax Modem), then click Next (please see illustration on the following page).



- 7 Accept any messages (as needed) regarding the software not being appropriate for your phone or digital signatures, then click Next.
- 8 Select the COM port where your phone is connected, then click Next.



9 Click Finish to complete the installation.

LEARN ABOUT IR AND WINDOWS 2000

Microsoft redesigned its implementation of infrared services with the release of Windows 2000 Professional. To make an IR serial connection between IR-equipped Nokia phones and IR-equipped PCs running Windows 2000, you must download and install the following Microsoft software update: Security Update, August 19, 2001

Learn about Windows 2000 SRP1

Microsoft recently released the Windows 2000 Security Rollup Package 1 that provides a cumulative package of security updates offered since the release of Windows 2000 Service Pack 2 (SP2). The Security Update, August 19, 2001 software appears to be incorporated into SRP1. However, Nokia has determined that the Security Update, August 19, 2001 software is still required in addition to SRP1.

Locate Security Update, August 19, 2001

To locate the necessary software:

- 1 Point your Web browser to: http://www.microsoft.com/windows2000/downloads/
- Using the site's search utility, locate the Microsoft Security Bulletin: MS01-046.
- 3 Click the link to access Security Update, August 19, 2001, located in the list of search results.



4 Follow the instructions for downloading the software to your PC's hard drive.

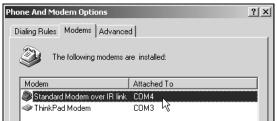
Windows 2000 Modem Setup instructions

- 1 Download and install the security update from Microsoft's web site, then reboot your PC.
- 2 Enable infrared communications on your phone.
- 3 Align the infrared ports on your phone and PC.

When a successful infrared connection has been made, the infrared monitor indicates that your phone has been found. Windows 2000 installs your Nokia phone as **Standard Modem over IR link** (please see illustration on the following page).



Confirm successful installation of your phone via the **Phone and Modem Options** Control Panel.



Modify Standard Modem installation

If you plan on using IR as the primary connection to your PC, you must use the **Standard Modem over IR link** driver for all digital data/fax calls. Because you cannot have multiple installations of this standard modem driver, you need to modify the existing modem properties so your phone can make the correct type of data connection.

ADVANCED PROPERTIES

Your phone can configure itself for the correct type of data through the use of standard Hayes-compatible AT commands. Please make a note of the following AT command strings:

Type of data:	Initialization string:
CSD and QNC	AT+CRM=0;+CSO=12
2G packet data	AT+CRM=1;+CSO=15
3G packet data	AT+CRM=1;+CSO=33

Before making a digital data or fax call, make sure the correct initialization string appears in the Extra Initialization commands field, located in Standard Modem over IR link's Advanced Properties screen:



- 1 Establish an IR connection between your phone and PC.
- 2 From the list of installed modems, click Standard Modem over IR link, then click Properties.
- 3 Click the Advanced tab.
- 4 Enter the initialization string for the type of data call you wish to make, then click OK.

CONNECT FOR THE FIRST TIME: IR (WINDOWS XP HOME AND PROFESSIONAL)

Wireless modem support using IR with Windows XP is similar to that of Windows 2000 with the security update applied. To install your phone as a wireless modem using infrared, please see "Windows 2000 Modem Setup instructions" on page 53, but begin with step #2.

Please also read "Modify Standard Modem installation" on page 54, as this information applies to Windows XP as well.

LEARN ABOUT IR AND WINDOWS NT WORKSTATION 4.0

Microsoft does not support infrared for Windows NT Workstation 4.0.

8 Data and fax software configuration

Before you can use your phone to send and receive digital data and fax calls, you must configure your data software so that it uses your phone rather than your existing modem. You may consider creating a separate set of dialing properties to use when your phone is connected to your computer, rather than changing any existing settings.

The following pages are designed to help you configure some of the more popular applications to be used with your Nokia phone

OBSERVE THE FOLLOWING FIRST

- You must subscribe to digital data and fax services with your service provider.
- Your phone must be powered up, and you must be in a digital network. Do not switch the phone on when wireless phone use is prohibited or when it may cause interference or danger.
- Your PC's infrared port must be configured properly (internal or external port) if using an IR connection.
- You must establish a connection between your PC and your phone.
- Your data software must be running and configured to recognize your Nokia phone as the active modem.

CONFIGURE YOUR DATA SOFTWARE



Before you can use your phone as a wireless modem, you must configure your data software to use your phone as the active modem (vs. your existing modem). The following pages are designed to help you configure some of the more popular applications for digital data and fax calls.

USE MICROSOFT DIAL-UP NETWORKING FOR PACKET DATA (2G, 3G) AND QNC

You can use Microsoft's Dial-up Networking feature to connect to the Internet through your wireless service provider's access point. However, instead of dialing a traditional phone number, the dialing string to access the packet data network or QNC network is (for example):

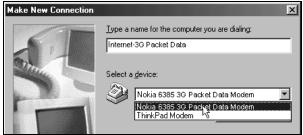
#777

Please check with your wireless service provider for the exact dialing string needed, and for your username and password (if required).

Create a new connection-packet data/QNC



- 1 Double-click the My Computer icon, then double-click the Dial-up Networking folder.
 - Windows 2000 and Windows ME users: Click Start, point to Settings, then click Dial-up Networking.
- 2 Double-click the Make New Connection icon.
- 3 Type a name for your new connection (for example: Internet-3G Packet Data).
- 4 Click the drop-down arrow and select your Nokia phone as the modem to use, then click Next.



5 Enter the packet data or QNC network access code (for example: #777), then click Finish.

Connect to the packet data or QNC network

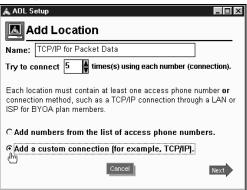
- 1 Establish a connection between your phone and PC.
- 2 Double-click the new connection (for example: Internet-3G Packet Data).
- 3 Supply user name or password (as needed), then click Connect.

Your phone displays **Creating packet data connection** while establishing a connection. Once a successful connection has been made, the **...** status indicator appears in the upper left corner of the phone's screen.

Note: Your Windows operating system displays its normal series of authentication messages while the connection is being established.

CONFIGURE AMERICA ONLINE TO CONNECT VIA PACKET DATA OR ONC

You can use the packet data network to access your America Online (AOL) account. However, instead of using the AOL dial-up number, you connect using AOL's TCP/IP connection.



To configure AOL for TCP/IP access:

1 From the AOL Sign On screen, click SETUP.

- 2 Click Expert Setup, then click the Locations tab.
- 3 Click the Add Location button.
- 4 Enter a name for this location (for example: TCP/IP for packet data).
- 5 Click the Add a custom connection option, then click Next.
- 6 Enter a name for this type of connection in the Add number (Connection) screen (for example: 1X).
- 7 Verify that TCP/IP is the type of connection selected, then click OK.
- 8 Click Close to close the Connection Setup window.

Connect to AOL

- 1 Double-click the **Dial-up Networking** configuration for packet data (for example: **Internet-packet data**).
- 2 Click Connect and establish a connection to the Internet.
- 3 Launch the America Online program.
- 4 Select the TCP/IP location option on the Sign On screen (for example: TCP/IP for packet data), then click SIGN ON.

AOL should now connect using your wireless service provider's Internet access.

USE MICROSOFT DIAL-UP NETWORKING-CSD

You may be using Microsoft's Dial-up Networking feature to connect to your Internet service provider, or to make a remote connection to your corporate network (including corporate e-mail server using Microsoft Outlook, or Lotus cc:Mail).

Rather than altering the existing configurations you use when dialing with your existing modem, consider creating a new connection exclusively for use with your Nokia phone (as detailed below).

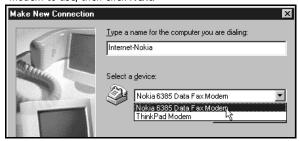
GATHER CONFIGURATION INFORMATION

You need the phone number for your Internet service provider or for your company's remote access server. When testing the new connection, you also need your user name and password.

Create a new connection



- 1 Double-click the My Computer icon, then double-click the Dial-up Networking folder (Windows 2000 and Windows ME users: Click Start, point to Settings, then click Dial-up Networking).
- 2 Double-click the Make New Connection icon.
- 3 Type a name for your new connection (for example: Internet-Nokia phone).
- 4 Click the drop-down arrow and select your Nokia phone as the modem to use, then click Next.



- 5 Enter the area code, telephone number, and country code (if necessary), then click Next.
- 6 Click Finish to save the new configuration in your Dial-up Networking folder.
- 7 Make sure to configure any necessary network parameters for this connection prior to dialing (IP address of DNS or WINS, etc.).
- Note: For more information on configuring your network connection, please consult your Internet service provider or your company's help desk.

Connect to the network

Make sure you establish a connection between your phone and PC (using the serial cable or IR) before making a digital data call.

- 1 Double-click the new connection (for example: Internet-Nokia).
- **2** Enter your user name and password, then click **Connect.**
- 3 Your phone displays Connecting... while establishing a connection. Once a successful connection has been made, Data call appears on the phone's screen.
- **Note:** Your Windows operating system displays its normal series of messages while the connection is being established and verified.
- **Note:** Your wireless service provider must support digital data for this feature to work. Contact your service provider to verify that this service is available in your area.

GET CONNECTED TO AMERICA ONLINE (AOL)

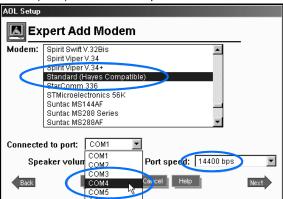
Your America Online software can be configured to use your Nokia phone as a wireless modem.

MODEM SETUP

To add your Nokia phone as a new modem to AOL's connection setup:

- 1 From the Sign On screen, click SETUP.
- 2 Click Expert Setup, then click the Devices tab.
- 3 Click the Expert Add button.
- 4 Verify that Modem (telephone line connection) is selected as the type of connection device you want to add, then click Next.
- 5 Select the generic modem option (for example: Standard (Hayes Compatible)) from the list of modems.
- 6 Select the COM port assigned to your PC's infrared COM port, or the hardware COM port where the DLR-3P is connected.

7 Set the port speed to 144000 bps, then click OK.



Modify "Locations"

Now that your Nokia phone is configured for use by the AOL software, you need to modify your **Locations** settings to use your Nokia phone as the active modem.

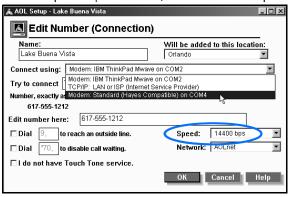
LOCATIONS SETUP

To modify an existing location:



- 1 From the Connection Setup screen, click the Locations tab.
- 2 Double-click the number for the location you wish to use with your Nokia phone.
- 3 Click the Connect using drop-down arrow, then click Modem: Standard (Hayes compatible) on COMnn (where nn is COM port for your PC).

4 Click the Speed drop-down arrow, then click 144000 bps.



5 Click OK to confirm your changes, then click Close to return to the Sign On screen.

Notes about data calls

- Do not terminate digital data/fax calls by pressing your phone's key. This action may cause your data application to lock up temporarily and could cause loss of data.
- Data calls cannot be initiated using your phone's keypad. All data calls must be initiated using the data software.
- Any touch tones (DTMF tones) needed for calling cards, special longdistance access numbers, etc. must be programmed into the dialing string.

LEARN ABOUT OTHER DATA APPLICATIONS

There are several other types of telecommunications applications that can be used with your Nokia phone and your computer. Some of these include:

 Terminal Programs – used to connect to BBS services (bulletin board system) and mainframe or mini-mainframe computers. Quarterdeck's Procomm Plus, Microsoft Works (Communications Module), R-Link, and P-Term are just a few examples of this type of program.

- Remote Administration used to remotely access your home or
 office computer for file sharing or remote control. Symantec's
 PCAnywhere, McAfee's Remote Desktop and Reach Out, Farallon's
 Timbuktu, Claris' Apple Remote Access, and Attachmate's EXTRA!
 are a few examples of this type of program.
- On-line Services used to access the Internet, or discussion and information forums within the service. On-line services provide their own proprietary software interface for accessing their service. America Online, CompuServe, MSN (Microsoft Network), and Prodigy are just a few on-line service providers that use their own proprietary software.



Important: These examples are provided for your information only. Nokia does not endorse or provide support for any of the above applications or services.

REMINDERS!

Before you can use your Nokia phone with ANY data program, you must first do the following:

- Establish a connection between your phone and PC using either IR or serial cable.
- Use the data program's setup menu to set your Nokia phone as the active modem. Consult the program's User Guide or Help menu for more information.
- Review the information, "Understand requirements for digital data and fax calls" on page 2.

CONFIGURE YOUR FAX SOFTWARE

Before you can use your phone to send and receive fax calls, you must configure your fax software so that it uses your phone as the active modem (rather than your existing modem).

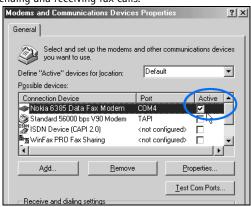
Many of the most popular fax programs should support multiple modems connected to a PC or laptop computer, including Symantec *WinFax Pro*, Smith Micro Software *HotFax (version 3.02 or newer)*, Castelle *FaxPress*, etc.



Note: Data or fax calls using your Nokia phone are possible only if your service provider supports digital data and fax service. You may be required to subscribe to these services. Check with your service provider before attempting to send or receive faxes.

Select the correct modem

Each fax application typically has a setup menu that can be used to alter the settings for your modem, as well as define how and when calls are to be received (for example: immediately, on the third ring, etc.). This menu may also provide you with a list of available modems that you can use when sending and receiving fax calls.



Use your fax program's settings menu to select your Nokia phone as the active fax modem.

Hardware setup

Use the modem properties dialog box of your fax software to confirm the following settings:

- Communications port COMn (where n= the COM port number assigned to your phone)
- Initialization 19200 bps
- Modem type Class 2.0
- Flow control Hardware



Note: You may need to add the following initialization string to your fax software, even though the program provides a drop-down list or checkbox for setting the fax mode/class:

AT+FCLASS=2.0

LEARN ABOUT MANUAL SELECTION OF INCOMING CALLS

You can receive digital data or fax calls with your PC using your Nokia phone the same way that you would using your existing modem.

However, certain service providers require that you "preset" your phone to receive incoming data or fax calls, rather than having the phone automatically detect the type of incoming call.



Note: Your service provider may have special requirements for inbound data and fax calls. Check with your service provider to see if "pre-arrangement" of incoming data and/or fax calls is necessary.

Pre-arranged data and fax call settings in your data/ fax software

Before you can successfully receive a digital data call or fax transmission in this situation, your phone must receive a special command from your data or fax software. This command tells your phone that the next call it receives is a data call or fax transmission.

Your data or fax programs should allow you to send additional commands to the modem when the program is launched, or when the fax software instructs the modem to receive a call. Use your software's modem configuration menu to send the following special initialization string to the modem:

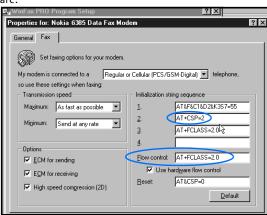
TO PRESET YOUR PHONE TO RECEIVE A DATA CALL:

AT+CSP=1

TO PRESET YOUR PHONE TO RECEIVE A FAX CALL:

AT+CSP=2

The following is an illustration of one fax program's modem settings dialog box, and is provided as an example of how to configure your software:



You should only have to make this modification once; the modem configuration is usually saved as a part of your data or fax program's settings. Please refer to your program's documentation or online help files for more information.

Pre-arranged data and fax call settings from phone menu options

Your phone contains a menu option that should be used to configure your phone for inbound data and fax calls. This option uses the phone's menu to pre-arrange inbound data and fax calls, rather than entering customized modem initialization strings into your data or fax software.

USE YOUR PHONE'S MENU

- 1 From the Start screen, press Menu 9-2-1 (Mobile link > Data/fax calls > Incoming data/fax call selection).
- 2 Scroll to highlight the desired type of inbound call (Data calls only, Fax calls only).
- 3 Press Select to confirm your choice.
- 4 Press to return to the Start screen.

Phone display

When the software has sent the proper command to your phone, the phone should display Ready for data reception or Ready for fax reception momentarily, along with either a d or f status indicator at the Start screen.

Once your phone is preset for either data or fax reception, you cannot receive incoming voice calls. You must either remove the data cable, interrupt the IR connection, or turn the phone's power off and back on to restore normal voice call reception. However, it is still possible to place calls with the phone and PC connected while in pre-arranged data/fax call mode.

9

9 PalmOS configuration



Important: The following instructions are based on PalmOS (operating system) software 3.3 and those devices that can run this version of the operating system (or newer versions). For more information, please visit:

http://www.palmos.com/

LEARN ABOUT PACKET DATA, QNC, AND CIRCUIT SWITCHED DATA

Before you can use your phone as a wireless modem with your data or fax software, there are a few things you need to know about recent developments in the wireless data technology. Once you understand more about the different types of digital data and fax services available to you, you can configure your data or fax software for the right type of service.

Please read "Learn about digital data" on page 43 for more information about digital data services before trying to configure your PalmOS device.

LEARN ABOUT YOUR PHONE AS A WIRELESS MODEM

It is possible to make a serial connection between your phone and your PalmOS device and use it as a wireless modem to perform HotSync operations with your PC.

In addition, third-party software is also available that allows you to browse the Web, send and receive faxes, and send or receive e-mail directly to your PalmOS device. Check your owners manual or the Palm web site for more information on third-party software.

http://www.palm.com/

Important: To access the Internet using CSD, you must have an existing dial-up account with a full-service Internet provider or dial-up access to a corporate network. Connection to on-line services such as CompuServe or Prodigy are not available at this time.

Note: America Online provides a software program that allows you to check your AOL E-mail from your handheld device. For more information, type AOL keyword: PDA.

UNDERSTAND YOUR CONNECTION OPTIONS

You can create a connection between your PalmOS device and your phone using either the DLR-3P cable or IR.

DLR-3P cable connection

Most PalmOS devices come with a serial cable used to connect your device with a desktop PC or laptop computer. This cable has either a USB male or an RS-232C female connection at one end and a special connector that plugs into the handheld device (either directly or via a docking cradle).

- If your PalmOS device's serial cable has the standard RS-232C connector, you need only the DAN-1 (null modem adapter with RS-232C connectors on each end) supplied in the DLR-3P accessory sales package.
- If your PalmOS device's serial cable has a USB connector, you need to
 purchase an additional serial cable with the standard RS-232C
 connector. The manufacturer of your PalmOS device sells this cable as
 an accessory. You also need the DAN-1 (null modem adapter with RS232C connectors on each end) supplied in this sales package.

DAN-1

This adapter is used to join your device's serial cable to the DLR-3P cable (as shown in the figure on the following page).



Note: Macintosh PalmOS device users do not need to use the RS232 - DB9 adapter.

Important: If you are unable to order the RS-232C serial cable as an accessory, you may be able to purchase a USB-to-RS-232C adapter. This device may be available at your local computer retailer, or via the Internet. Or you may consider using IR as your connection method.

IR (infrared) connection

Your PalmOS device should be equipped with an infrared port. You may find it more convenient to connect your phone and PalmOS device using IR, especially if you prefer to leave your serial cable or docking cradle attached to your PC.

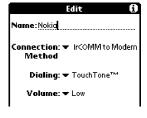
Before dialing, make sure you enable infrared communications on your PalmOS device, then align the IR ports of the two devices. The preferable distance between the two devices in an infrared connection is a range of three inches to three feet maximum. There must be no obstructions between the two devices and the IR ports of the two devices have to be pointing at each other.

Your Nokia phone is a Class 1 Laser Product.

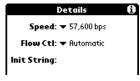
EDIT CONNECTIONS PREFERENCES

Before you can make data calls using your PalmOS device and your Nokia phone as a wireless modem, you need to create a new connection device in the Connections preferences folder.

- 1 Tap the Applications icon, then tap Prefs
- Tap the Categories drop-down menu, then tap Connection.



- 3 Tap New. Enter the name of the new connection device (for example: Nokia).
- 4 Click the Connection Method drop-down arrow, then click IrCOMM to Modem (IR) or Serial to Modem (DLR-3P).
- 5 Click Details. Set speed to 57,600 bps and flow control to Automatic. Click OK when finished, then click OK to close the Edit window.



6 Your new Nokia phone configuration should now appear in the list of Connection options, and is available to all applications that support a modern connection.



9

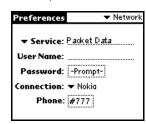
MAKE A DIAL-UP CONNECTION

Once you have a modem configuration for your Nokia phone, you can use that configuration with any existing TCP/IP or network preferences, as well as any stand-alone 3rd party E-mail, Web browser, or fax programs.

Packet data/QNC data connection

Now that your Nokia phone is configured as a wireless modem for use with your PalmOS device, you need to create a dial-up network service configuration to connect you to the packet data and/or QNC network.

- 1 Tap the **Applications** icon, then tap **Prefs**.
- 2 Tap the Categories drop-down menu, then tap Network.
- 3 Tap the menu button, then tap New.
- 4 Enter a name for this service (for example: Packet Data). Enter user name and password (if required).



- 5 Tap the Connection drop-down arrow, then tap the name of the connection device (for example: Nokia).
- 6 Enter the packet or QNC network access code (for example: #777) in the Phone field.

The setup is now complete.

CONNECT TO THE NETWORK

To connect to the packet data network:

- 1 Establish a connection between your phone and PalmOS device.
- 2 Tap Connect.
- 3 Tap the Applications menu, then launch the desired application (Web browser, e-mail).

CSD data connection

Once your Nokia phone is configured as a wireless modem for use with your PalmOS device, you need to modify your existing Windows RAS configuration to use your phone as the active modem.

- 1 Tap the Applications icon, then tap Prefs.
- 2 Tap the Categories drop-down menu, then tap Network.
- 3 Tap the Services drop-down arrow, then tap Windows RAS.
- 4 Tap the Connection drop-down arrow, then tap the name of the connection device (for example: Nokia).

Your existing Windows RAS connection is now configured to dial using your Nokia phone as a wireless modem.

10 PocketPC configuration

LEARN ABOUT PACKET DATA, QNC, AND CIRCUIT SWITCHED DATA

Before you can use your phone as a wireless modem with your data or fax software, there are a few things you need to know about recent developments in the wireless data technology. Once you understand more about the different types of digital data and fax services available to you, you can configure your data or fax software for the right type of service.

Please read "Learn about digital data" on page 43 for more information about digital data services before trying to configure your PalmOS device.

LEARN ABOUT YOUR PHONE AS A WIRELESS MODEM

You can use your Nokia phone as a wireless modem with Pocket PC devices, then use these devices to check e-mail or browse the Web.

You may also be able to send and receive faxes from your Pocket PC device. However, this may require additional software from another manufacturer. Check your device's user guide, Web site, or the Microsoft Pocket PC Web site for more information on available software:

http://www.microsoft.com/mobile



Important: To access the Internet using CSD, you must have an existing dial-up account with a full-service Internet provider or dial-up access to a corporate network. Connection to online services such as CompuServe and Prodigy is not available at this time.



Note: America Online offers a software program that allows you to check your AOL e-mail from your handheld device. For more information, go to keyword: **PDA**.

UNDERSTAND YOUR CONNECTION OPTIONS

You can create a connection between your PocketPC device and your phone using either the DLR-3P cable or IR.

DLR-3P cable connection

Most PocketPC devices come with a serial cable used to connect your device with a desktop PC or laptop computer. This cable has either a USB male connection or an RS-232C female connection at one end, and a special connector that plugs into the handheld device (either directly or via a docking cradle).

- If your PocketPC device's serial cable has the standard RS-232C connector, you need only the DAN-1 (null modem adapter with RS-232C connectors on each end) supplied in the DLR-3P accessory sales package.
- If your PocketPC device's serial cable has a USB connector, you need
 to purchase an additional serial cable with the standard RS-232C
 connector. The manufacturer of your PocketPC device sells this cable
 as an accessory. You also need the DAN-1 (null modem adapter with
 RS-232C connectors on each end) supplied in this sales package.

DAN-1

This adapter is used to join your device's serial cable to the DLR-3P cable (as shown in the figure on the following page).





Important: If you are unable to order the RS-232C serial cable as an accessory, you may be able to purchase a USB-to-RS-232C adapter. This device may be available at your local computer retailer, or via the Internet. Or you may consider using IR as your connection method.

IR (infrared) connection

Your PocketPC device should be equipped with an infrared port. You may find it more convenient to connect your phone and PocketPC device using IR, especially if you prefer to leave your serial cable or docking cradle attached to your PC.

Before dialing, make sure you enable infrared communications on your PocketPC device, then align the IR ports of the 2 devices. The preferable distance between the two devices in an infrared connection is a range of three inches to three feet maximum. There must be no obstructions between the two devices and the IR ports of the two devices have to be pointing at each other.

Your Nokia phone is a Class 1 Laser Product.

CREATE A MODEM CONNECTION-PACKET & QNC

The procedure for creating a new modem connection for use with your Nokia phone is similar to that found in the various Windows desktop operating systems.



Important: You may need to first disable your Pocket PC's option that automatically begins synchronization when a connection is detected. For more information on this task, please consult your device's user quide.

Create a modem connection

To create a new modem connection for use with your wireless service provider's packet data or QNC data network:

1 Tap the **Start** icon , then tap **Settings**.

- 2 Tap the Connections tab, then tap Modem.
- 3 Tap New Connection, then enter a name for the connection (for example: Internet-Packet).

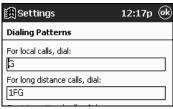


- 4 Click the modem selection drop-down arrow, then select the IrCOMM or Generic IrDA (IR) or Hayes Compatible on COM1 (DLR-3P).
- 5 Set the baud rate to 57600, then tap Next.
- 6 Enter the 1X or QNC data network access code (for example: #777) in the Phone number field, then click Next.

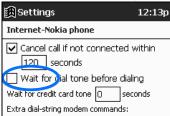




Important: You may need to click the **Dialing** tab and modify the way Pocket PC dials to connect to the packet data or QNC data network. For more information on dialing patterns, consult your handheld device's documentation.



7 Tap Wait for dialtone to deselect this option, then tap Finish.



Your new dialing configuration is now visible in the **Modem Connections** list.

Use your new packet data modem connection

To connect to your Internet service provider or corporate network:

- 1 Tap the Start icon tap Programs.
- 2 Tap Connections, then tap your new modem connection (for example: Internet-Packet).
- 3 Enter user name and password (if required).



4 Verify that the packet data or QNC network access number is displayed correctly, then click Connect

When you have successfully logged on to the network, the Pocket PC's status screen will show the message **Device Connected**.

5 Launch your browser or e-mail application.



Before you make a digital data call

Before initiating the digital data call from your Pocket PC device, make sure you establish a connection between your phone and PocketPC device (IR or DLR-3P).

Please also see "Understand requirements for digital data and fax calls" on page 2.

CONFIGURE A MODEM CONNECTION-CSD

The procedure for creating a new modem connection for use with your Nokia phone is similar to that found in the various Windows desktop operating systems. However, before you can configure your PocketPC for a CSD data call, you need to obtain the required setup information from your ISP or corporate network's Helpdesk.

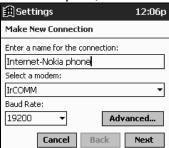


Important: You may need to first disable your Pocket PC's option that automatically begins synchronization when a connection is detected. For more information on this task, please consult your device's user quide.

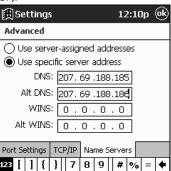
CREATING A MODEM CONNECTION

To create a new modem connection to your Internet service provider or corporate network:

- 1 Tap the **Start** icon [1], then tap **Settings**.
- 2 Tap the Connections tab, then tap Modem.
- 3 Tap New Connection, then enter a name for the connection (for example: Internet-Nokia phone).



- 4 Click the modem selection drop-down arrow, then select the IrCOMM or Generic IrDA (IR) or Hayes Compatible on COM1 (DLR-3P).
- 5 Tap Advanced to access additional configuration properties for Port Settings, TCP/IP, and Name Servers (if required by your corporate network or ISP).



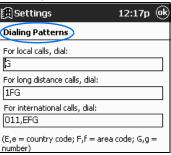
- 6 Tap **OK** to close the **Advanced** properties window, then tap **Next**.
- 7 Enter the area code (if necessary) and phone number, then click **Next**.

8 Tap Wait for dialtone to deselect this option, then tap Finish.



Your new dialing configuration is now visible in the **Modem Connections** list.

You may need to click the **Dialing** tab and modify the way Pocket PC dials local, long distance, and international numbers. For more information on dialing patterns, consult your handheld device's documentation.



Use your new CSD modem connection

To connect to your Internet service provider or corporate network:

- 1 Tap the **Start** icon , then tap **Programs**.
- 2 Tap Connections, then tap your new modem connection (for

example: Internet-Nokia phone).



3 Enter your user name, password, and domain (if necessary).



- 4 Click Connect. When you have successfully logged on to the network, the Pocket PC's status screen will show the message Device Connected.
- 5 Launch your browser or e-mail application.
- Note: For information on how to configure your device's browser or e-mail software, please consult your device's documentation.

Before you make a digital data call

Before initiating the data call from your Pocket PC device, make sure you establish a connection between your phone and handheld device (IR or DLR-3P).

11 Macintosh configuration

It is possible to connect your phone to Macintosh computers (PowerPC, G3, G4, PowerBook iMac and iBook computers) and use these devices to send and receive faxes, check E-mail or browse the Web. Your phone acts as an external modem, and works in conjunction with your existing data and fax applications.

• LEARN ABOUT SPECIAL HARDWARE NEEDS

Before you can make such a connection, special hardware is required to connect the DLR-3P to the Macintosh serial port.

PalmPilot adapter (required)

This adapter is readily available from 3com, and is a part of the MacPac connection kit. This kit was originally designed to connect a PalmPilot to your Macintosh computer. The adapter (pictured below) is used to connect your DLR-3P cable to the Macintosh serial port.



USB (Universal Serial Bus) connection

The new generation of Macintosh computers no longer have the traditional Macintosh serial ports used to connect printers and modems. If your Macintosh is only equipped with a USB port, you should purchase a serial to USB cable or adapter.

CONFIGUR THE MACINTOSH OS

If you are already using your existing modem (either built-in or PCMCIA card) to connect to your company's network, the Internet, or to send and receive faxes, you will have to use the **Modem** control panel to switch the active modem to your Nokia phone each time you need to use it.

Nokia recommend you download and install the freeware configuration utility, FreePPP from your favorite shareware site (www.download.com, www.hotfiles.com, etc.). FreePPP allows you to store and recall multiple configurations for various services (corporate network, mail server, Internet service provider), including which modem to use.

FreePPP setup

Once FreePPP is installed properly, a new icon appears in the upper right corner of your screen (to the left of the MultiFinder menu). Click and hold the mouse on the phone icon, then select



Open FreePPP Setup...

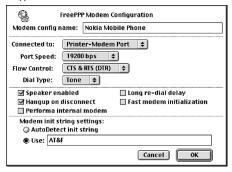
When the setup screen displays, the details of the configuration may be hidden. Click the arrow on the left side of the screen to display all of the configuration properties.



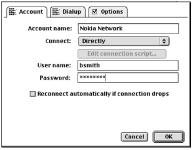
CONFIGURING A NEW MODEM

- 1 Click the Modems tab, then click New.
- 2 Enter a name in the Modem config name field to identify your Nokia phone.
- 3 Use the pull-down menus to configure as follows:
 - Connected to -Printer-Modem Port

- Port Speed 19200 bps
- Flow Control CTS & RTS (DTR)
- Dial type Tone

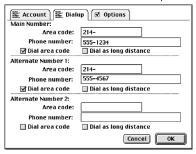


- 4 In the Modem init string settings section, click the Use: option and enter the following init string:
 ATHE
- 5 Click **OK**, then click the **Accounts** tab.
- 6 Click New. Enter a name to identify the new account.

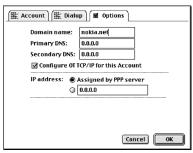


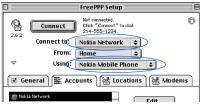
- 7 Enter your username and password, then click the **Dialup tab**.
- 8 Enter the phone number (and area code, if necessary) in the Main

Number section. Click the Dial area code option if needed.



- 9 If there is an alternate dial-up number, enter the information in the Alternate Number 1 section. Click OK to complete this section.
- 10 Click the **Options** tab, and enter the necessary configuration information (see your internet service provider's setup and configuration information, or consult your company's helpdesk for the setup information). Click **OK** to complete this section.
- 11 Use the pull-down menu to select your Nokia modem, and the account to which you wish to connect. Click the **Connect** button to dial the phone.





Follow these steps to create configurations for your existing modem and any other Internet or corporate dial-up accounts you have. Use the **Open FreePPP Setup** option to switch between modems or accounts, or **Open FreePPP Connection** (from the menu) to dial the last configuration.

USE OTHER DATA/FAX APPLICATIONS

You can use your Nokia phone with your favorite fax application to send and receive faxes. Please read the section, "Data and fax software configuration" on page 56 for more information on configuring your fax software to be used with your Nokia phone.

Index

Numerics	infrared 4
1X (1XRTT) 44	interruptions to IR 4
1XRTT	Compatible applications 2
make a data call (PocketPC OS) 79	Compose a ringing tone 18
	Configure data software 56
Palm OS configuration 69, 75	Configure fax software 65
1XRTT (1X) 44	Configure PC Sync 25
1XRTT data	Connect to a network/Internet 58, 61
Dial-up Networking <i>57</i>	Connect to Palm devices 69
٨	Connection Manager 13
A	Connection preferences (Palm) 72
Abbreviations 3	Connection to PocketPC devices 75
About MIDI files 22	Contacts
Add contact to caller group 39	custom contact lists 31
Add new contact 38	deleting-settings 27
Add New Hardware Wizard 51	Content Copier 9
America Online	basics 10
GRPS settings 58	compatible phones 9
AOL	log 14
CSD modem setup 61	saving data 12
Applications	3
compatible 2	source phone 11
	target phone 12
C	unsupported phones 14
Caller groups	Copy contacts 39
add contact 39	Copy data to target phone 12
add/change group graphic 41	Create a new connection 57, 60
edit 41	CSD
	AOL settings 61
rename 41	data call (PocketPC OS) 82
Change note duration 19	dial-up connection for PalmOS 74
Change ringing tone pitch 19	modem setup (PocketPC OS) 80
Changing connection type 13	when to use 45
Changing PIM applications 30	CSD (Circuit Switched Data) 43
Circuit Switched Data (CSD) 43	Custom contact list 31
Communications	
distance between devices 4, 71,	D
<i>77</i>	Data applicatons 63
enable IR 1	Data applicatolis 00

configure data software 49, 51 establish IR connection 50	GPRS
modem installation <i>51</i> Data call notes <i>63</i>	dial-up connection for PalmOS 73 modem setup (PocketPC OS) 77
Data calls	when to use 45
Manual selection 66	GPRS data
Prearranged 66	AOL settings <i>58</i>
Delete contact 38	11
Delete notes and rests 20	Н
Deleting contacts-settings 27	Hardware setup
Dial-up connection	PC Composer 16
PalmOS 73	1
Dial-up Networking 57, 59	I
Digital data	Ignore contact deletions 27
before you begin 56	Infrared 4
Digital data call reminders 64	Installation
Digital data call requirements 2	change language of installation 8
Download modem driver 46	language selection <i>7</i>
Е.	note to Windows ME users 5
E	PC Suite 5
Edit a ringing tone	uninstall PC Suite 8
basics 18	Internet access
delete notes/rests 20	wireless service provider 44
save <i>21</i>	Introduction 1
Edit caller groups 41	IR 3
Edit Profiles 40	enable IR on PC 50
Edit ringing tone	establishing a connection 50
change duration 19	Windows 2000 update 52
change note duration 19	Windows NT Workstation 4.0 55
change pitch 19	
Edit settings 42	M
_	Modem driver
F	download 46
Fax	Modem installation 51
configuring software 65	Windows 2000 52
modem selection 65	Modem setup 43
Fax calls	configure data software 56
Manual selection 66	Dial-up Networking <i>57</i> , <i>59</i>
Prearranged 66	Palm <i>72</i>

PocketPC (CSD) 80	basics 29
PocketPC (GPRS) 77	changing PIM applications 30
Modem software 46	exit application 29
Move contacts 39	New Synchronization 30
NI	options 30
N	starting application 29
New contact list	supported PIMs 25
Lotus Organizer 33	synchronize for the first time 28
Other 33	task bar icon 29
Outlook 31	PC Sync configuration
New modem connection 57, 60	calendar and conacts 26
New Synchronization 30	general 26
Nokia Modem Setup (Windows 2000)	PIM properties 27
53 Note consoits, 10	resolving conflicts 26
Note capacity 18 ringing tone 18	Phone Editor
Notes on data calls 63	add/delete contacts 38
NT Workstation 4.0 55	change group graphic 41
NT Workstation 4.0 and Infrared 55	Contacts window 37
THE Profestation 1.5 and initiated 55	edit caller groups 41
0	edit profiles 40
Open Standard MIDI file 23	limitations 36
Other data applications 63	managing contacts 37
	rename caller groups 41
P	PIM 3
Palm(tm) connectivity 69	PocketPC
PalmOS	1X digital data call 79
GPRS configuration 69, 75	CSD data call 82
PC 3	modem setup 75
PC Composer 16	PocketPC OS
launching <i>16</i>	modem setup (CSD) 80
overview of window 17	Prerequisites
PC Suite	digital data/fax calls 56
Content Copier 9	Profiles
featured components 5	edit <i>40</i>
installation 5	D
PC Composer 16	R
PC Sync 25	Rename caller groups 41
PC Sync 25	Requirements
automatic startup 29	digital data calls 2

system 1 Resolving synchronization conflicts 26 Ringing tone edit 19 PC Composer 16 playback 18 ringing tone 18 Ringing tones from MIDI files 22 RTTTI Using with PC Composer 24 Safety notes 3 Save new ringing tone 21 Saving phone data 12 Send ringing tone options 21 Sending ringing tone to phone 21 Settings edit 42 Sound card setup 16 Source phone 11 Standard MIDI File edit 23 Standard MIDI file open 23 save 23 Standard MIDI files (about) 22 subset of phone book 31 Synchronization conflicts 26 System requirements 1 Target phone 12 Time-out 4 Types of data applications 63 Ш Using PocketPC modem connection

79

Using PocketPC modem connection (CSD) 82

W

Windows 2000 Infrared 52
Windows ME installation note 5
Windows XP installation note 5
Wireless modem
make a data call (1XRTT) 79
make a data call (CSD) 82
overview (PalmOS) 69
overview (PocketPC OS) 75
Wireless modem installation 51
Wireless modem setup 43