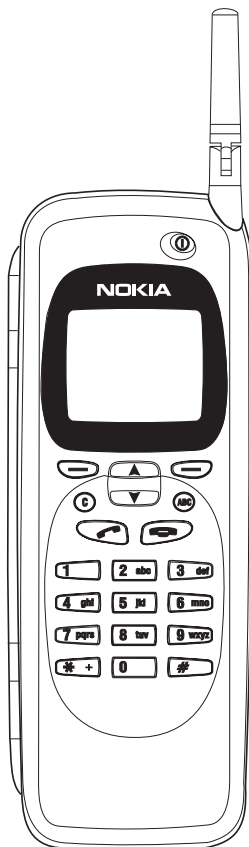


User's Manual



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Issue 2 EN

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FOR YOUR SAFETY Read these simple guidelines. Breaking the rules may be dangerous or illegal. More details are included in chapter 16 "Important safety information" on page 16-1.



ROAD SAFETY COMES FIRST Don't use the communicator while driving; park!



SWITCH OFF IN HOSPITALS Follow any regulations or rules. Switch off near medical equipment.



USE SENSIBLY Use only in the normal position (to ear). Don't touch the antenna unnecessarily.



SWITCH OFF WHEN REFUELLING Don't use the phone interface at a refuelling point.



SWITCH OFF NEAR BLASTING Always follow special regulations. Don't use near chemicals, fuel, etc.



MAKING CALLS VIA THE PHONE INTERFACE Close the cover and switch on the phone interface. Enter the phone number, including the area code, then press . To end a call press . To answer a call press .



SWITCH OFF PHONE INTERFACE IN AIRCRAFT Mobile phones can cause interference. Using them in an aircraft is illegal.



QUALIFIED SERVICE FACILITY Only qualified service personnel should repair or install equipment. Use only approved accessories and batteries.



INTERFERENCE All mobile phones may get interference which could affect performance.



EMERGENCY CALLS Close the device cover. If the phone interface is not on, switch it on (press the key). Hold briefly to clear the display. Enter the emergency number, then press . Give your location and mobile number. Do not end the call until told to do so.



MAKE BACKUP COPIES Remember to make backup copies of all important data.



INFRARED PRECAUTIONS Do not point the IR beam at anyone's eye or allow it to interfere with other IR devices.



CONNECTING TO OTHER DEVICES When connecting the communicator to any other device, read its user's guide for detailed safety instructions. Do not connect incompatible products.

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1. Introduction

Congratulations on purchasing the Nokia 9000i Communicator. The Nokia 9000i Communicator is a versatile communications tool: it is a mobile phone, messaging device, access terminal and a palmtop organiser in one compact package.

This chapter helps you understand how the Nokia 9000i Communicator operates. The following "Getting started" chapter helps you begin using the Nokia 9000i Communicator, as it explains the start-up procedure and outlines the special features. The rest of this manual deals with the communicator interface applications and the phone interface.

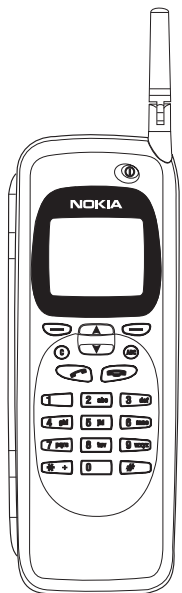


Figure 1-1

If you are an experienced mobile phone and mobile office user, read at least this introductory chapter and the "Getting started" chapter. Basic information about the communicator applications is always available in the context sensitive help, which can be activated by pressing the Help button on the communicator interface keyboard.

The Nokia 9000i Communicator has two interfaces, the phone interface (see figure 1-1) and the communicator interface (see figure 1-2). The phone interface is on the device cover and the communicator interface is under the cover.

The word "interface" emphasises the fact that both of these two aspects of the Nokia 9000i Communicator use the same resources and work closely together - they are not separate devices. For example, the phone interface uses the names and phone numbers stored in the communicator interface's Contacts directory, and the communicator interface uses the phone interface for communicating with the "outside world" (for

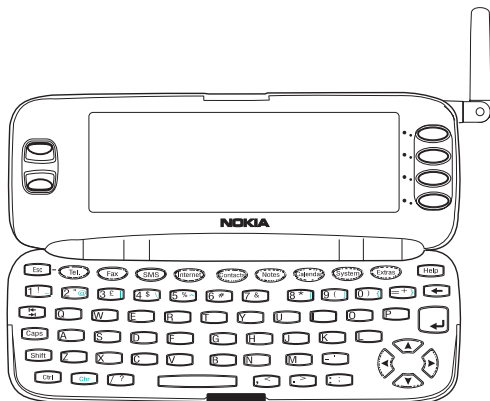


Figure 1-2

example, when sending or receiving faxes and connecting to remote computers).

The phone interface is designed for making and receiving calls quickly. It looks and operates like other Nokia mobile phones (except that the ear-piece and microphone are on the backside of the device). The phone interface is switched on and off by pressing the **①** button on the cover.

IMPORTANT! Do not switch on the phone interface when mobile phone use is prohibited or when it may cause interference or danger.

The communicator interface has many organisational and communication applications. The QWERTY keyboard, command buttons and large display make using the applications easy. The communicator interface has no power on/off button – the communicator interface activates itself when you open the cover and deactivates when you close the cover.

Things to remember

Services

In order to utilise the communication capabilities of the Nokia 9000i Communicator, you may have to subscribe to certain services separately. If the service requires a separate phone number or specific settings, they must be stored in the communicator's settings. For example,

- Fax sending and receiving requires that fax service is supported by the network you are using and activated for your SIM card.
- Using the communicator as a fax modem requires that data service is supported by the network you are using and activated for your SIM card.
- Internet access also requires that data service is supported by the network you are using and activated for your SIM card. In addition, to access the Internet, you must have obtained an Internet access point from an Internet service provider (contact your dealer for details).

Document outbox

To help with cellular data transmission (see chapter 16 "Important safety information: Facts about cellular data transmission" on page 16-3), the communicator has an outgoing communications manager called the Document outbox. When you send faxes, short messages and mail, they always go first to the Document outbox. The outbox prepares your fax, short message or mail and then sends it through the phone interface. If the phone interface is off or the cellular signal

strength is inadequate, the document will not be sent until the phone interface is switched on and the signal strength is sufficient. You do not have to worry about whether the phone or fax called might be off or busy: after the first attempt, the Document outbox tries to send the document nine more times.

The Document outbox can be accessed in the Fax, SMS, Mail and Notes applications' main views, where it is shown at the bottom of the folders list. The Document outbox is discussed in more detail in chapter 12 "Document outbox" on page 12-1.

There is no document inbox. When you receive faxes, short messages or fetch mail, they go directly in their own received document folders. Each application shows a received document folder containing documents that can be viewed in that application. For example, the Fax application shows the Received faxes folder and the Mail application shows the Received mail folder.

Access codes

The communicator uses several access codes to protect against unauthorised use of your communicator and the SIM card. You can make changes to the access codes in the settings of the Security application (see chapter 10 "System: Security" on page 10-2) or in the phone interface (see chapter 13 "Phone interface: Menus - Security options (Menu 5)" on page 13-11).

For access codes that can be changed and are used by both interfaces, you can make the changes via either interface.

The communicator interface's Internet applications use passwords and user names to protect from unauthorised use of the Internet and Internet services. These passwords are changed in the settings of the Internet applications.

The access codes you need most often are the lock code (provided in the sales package) and the Personal Identity Number (PIN) code (provided with the SIM card). The access codes are described in more detail in chapter 10 "System: Security" on page 10-2. See also chapter 13 "Phone interface: Menus - Security options (Menu 5)" on page 13-11.

Contact information

All contact information (names, addresses, phone numbers, E-mail addresses, etc.) you store goes into the Contacts directory. Each application and interface has its own view of the Contacts directory. The information shown depends on the information the selected application can

use. For example, when you are making a call via the phone interface, you can view the name and the phone number(s) of the contact - possible fax numbers, E-mail addresses, job titles, etc., are not shown.

You can customise your contact information according to your preferences, see chapter 3 "Contacts: Contact cards - Customising contact cards" on page 3-2. Customising only affects new contact information; existing contacts will not be affected. If you customise your contact card template in an early phase, you will not have to edit your contact cards manually.

Texts

With the communicator interface's text editor, you can create new texts in many applications (Notes, Fax, SMS, Mail, Calendar). The editor, however, works in each application in a way that corresponds to the sending format of that application. For example, because short messages cannot contain text formattings, the SMS editor removes text formattings. For this reason, the text editor is called Note editor in the Notes application, Mail editor in the Mail application, and

2. Getting started

When you open the sales package, check that it contains the following:

- Nokia 9000i Communicator.
- This User's Manual and the combined Quick Guide and Accessories Guide.
- High Power Battery, see the Accessories Guide.
- Adapter, see the Accessories Guide.
- AC charger, see the Accessories Guide.
- RS-232 Adapter Cable, see the Accessories Guide.
- Software for PC connectivity and a list of AT commands on a diskette (see chapter 10 "System: Connecting to a PC" on page 10-5).
- CD-ROM with software developed for the Nokia 9000i Communicator.
- A sticker with the communicator's serial number and the lock code (see chapter 10 "System: Security" on page 10-2).

For information about other Nokia 9000i Communicator accessories, see the Accessories Guide.

This chapter covers the following topics:

- How to personalise your communicator, see "First start-up" on page 2-1.
- How to install a valid SIM card, see "SIM card" on page 2-2.
- How to supply power to the communicator, see "Connectors" on page 2-4 and "Battery" on page 2-4.
- How the communicator operates, see "Communicator interface" on page 2-6 and "Communicator applications" on page 2-8.
- For information about the common features of the applications, see "Special features" on page 2-11.

Note: In this User's Manual, the command names appear in **bold** and settings, options and values shown on the application area are in *italics*.

First start-up

When you activate the communicator interface after having removed and replaced the battery, you will always see first a welcome screen while the device performs a self-test. The following steps, however, will be shown only during the first, personalisation, start-up.

- ① If you have not already installed your SIM card, install it, as described in "SIM card" on page 2-2, and switch on the phone interface. If you do not have a SIM card yet, go to the next step (see the section "SIM card contents"

on page 2-2).

Although you do not need a SIM card to use the communicator interface, a SIM card is required to send and receive calls and documents.

- ② Open the cover.
- ③ Select your home country from the list by scrolling the selection frame over it with the scroll keys on the left of the display. Press the button on the right of the display next to the command **OK**. The capital of your home country will be set as your home city. You can

change your home city later in the Clock application, see chapter 11 "Extras: Clock" on page 11-3.

- ④ Accept or change the date shown and press **OK**. If you change the date, use the format *dd.mm.yy* (for example, 24.08.97). You can later change the date format in the System settings. (Time and date can be changed in the Clock application's settings.)
- ⑤ Accept or change the time shown and press **OK**. If you change the time, use the 24-hour format *hh:min* (for example, 17:25). You can later change the time format in the System settings.
- ⑥ Enter user data and press **OK**. You can later change the information in the System application's User data view.

The personalisation procedure is now completed.

SIM card contents

After the personalisation procedure, if the installed SIM card contains stored names or numbers, you will be asked if you want to copy the

SIM card contents into the communicator's memory (Contacts directory). If the phone interface is switched off, the question will be asked the next time the phone interface is on and you activate the communicator interface.

If you want to do the copying later, you can answer no, and do it manually via the phone interface, see chapter 13 "Phone interface: Menus - Memory functions (Menu 8)" on page 13-13.

After start-up, the communicator (or "B") memory is selected automatically as the active memory. If you want, you may later set the phone interface to use the SIM card ("A") memory instead of the communicator memory. The communicator interface applications, however, will always use the communicator memory. Also, the communicator memory can hold much more information than the SIM card memory.

All phone numbers copied from the SIM memory to the Contacts directory will go to the *Tel* field of the contact cards. Therefore, you must move all mobile phone numbers manually into the correct field. See chapter 3 "Contacts: Contact cards" on page 3-1.

SIM card

A valid miniature plug-in SIM (Subscriber Identity Module) card is required for making and receiving calls. The card is supplied by your network operator or service provider.

The SIM card contains all information the cellular network needs for identification of the network user. The network operator or service provider may prevent the use of the communicator with any other but the operator's or provider's own SIM cards. If an unacceptable SIM card

is inserted, the message **INVALID SIM CARD** will be displayed. Should this happen, contact your dealer or network operator.

Note: Keep all miniature SIM cards out of small children's reach.

Before installing the SIM card, close the device cover and switch off the phone interface (press ①).

- ① Remove the battery: press the catch (1) at the bottom of the battery (2) and lift away the battery (figure 2-1).

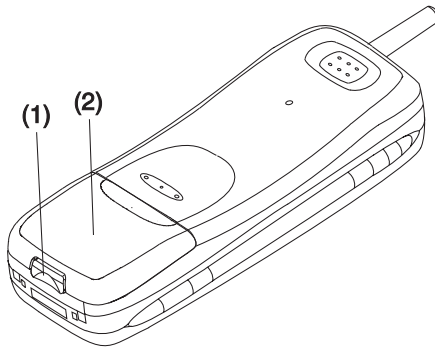


Figure 2-1

- ② Slide the card into the SIM card slot (figure 2-2). Make sure that the gold contacts of the SIM card are facing down and the bevelled corner of the card is on the right side.

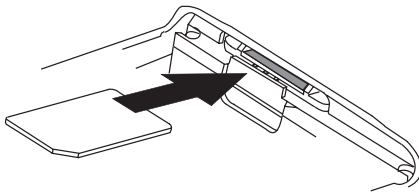


Figure 2-2

When the SIM card is properly inserted into the SIM card slot, the bevelled corner will remain visible (figure 2-3).

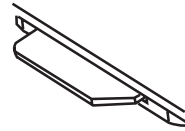


Figure 2-3

When you are sure that the SIM card is correctly installed, replace the battery:

- ① Insert the battery in the communicator so that the side with the four golden connector plates goes in first (figure 2-4).

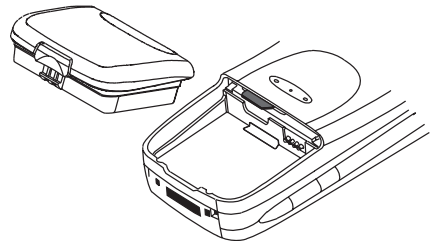


Figure 2-4

- ② Push the battery down towards the catch until it clicks into place. Make sure the battery is properly installed before switching on the power.

Note: The battery does not fit into place if the SIM card is not correctly installed. Do not force the battery into place! Check that you have inserted the SIM card into the slot as described above.

Connectors

(1) IrDA-SIR infrared port for connecting to a PC or a printer (figure 2-5). For more information on infrared connections, see chapter 10 "System: Connecting to a PC" on page 10-5.

(2) Antenna connector for car installation (figure 2-5).

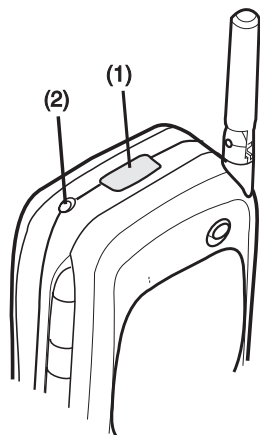


Figure 2-5

(3) System connector for car installation and for the adapter (figure 2-6)

(4) Adapter for connecting the charger and the RS-232 cable to the communicator. The connector on the left side (5) of the adapter is for the RS-232 cable plug and the one on the right (6) is for the charger plug (figure 2-6).

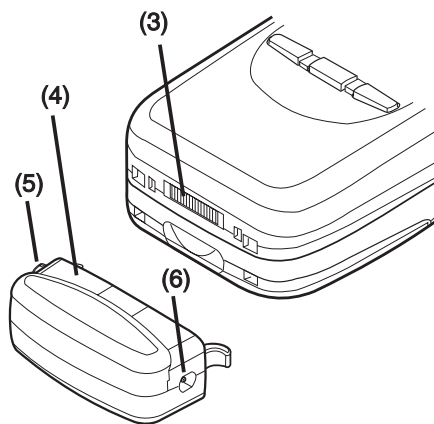


Figure 2-6

Battery

Your Nokia 9000i Communicator is powered by a rechargeable Lithium-Ion battery. The High Power Battery provides up to three hours of talk/fax/terminal time or 35 hours of standby time. Use only batteries approved by the communicator manufacturer.

Charging the battery

Use only chargers approved by the communicator manufacturer for charging a Lithium-Ion battery.

The communicator can be used during charging.

To charge a battery with the adapter and a charger:

- ① Install the battery.
- ② Attach the adapter to the bottom of the communicator as shown in figure 2-7. Insert the curved pin into the right-hand side aperture at the end of the communicator. Push the left side of the adapter gently towards the com-

municator until the left locking pin engages. (If you try to force the adapter into place upside down, you may accidentally break off the curved guiding pin.)

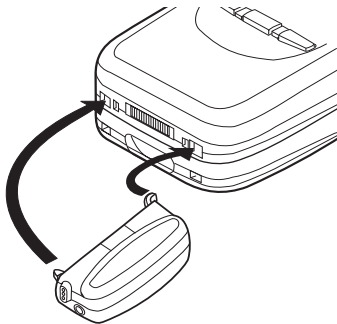


Figure 2-7

- ③ Connect the charger lead to the adapter, as shown in figure 2-8.

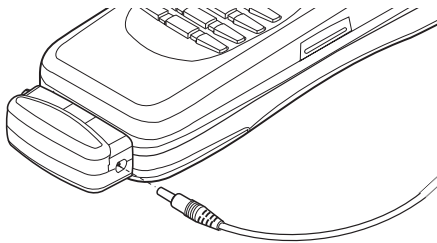


Figure 2-8

- ④ Connect the charger to an AC wall outlet. If the phone interface is switched on, the CHARGING message appears on the display and segments of the battery indicator bar on the right side of the phone interface display will start scrolling. (Charging information is also shown on the communicator interface display, see "Indicators" on page 2-9.)
- ⑤ When the battery is fully charged (the bars stop scrolling and five bars are displayed), you may remove the adapter from the communicator: Hold down the release button on the left side of the adapter (see figure 2-7), and turn the adapter away from the communicator.

When the charge is low and only a few minutes of operation time remain, a warning tone will be heard, and the message BATTERY LOW will be repeated at regular intervals on the display. When the charge level becomes too low for operation, the RECHARGE BATTERY message will be displayed, accompanied by a warning tone. If you do not connect the communicator to a charger, the communicator automatically switches itself off.

Note: If the tones have been switched off (see chapter 4 "Telephone: Telephone settings - Ringing settings" on page 4-6), only the display messages will appear.

Using the battery

Use only batteries approved by the communicator manufacturer. With approved chargers and accessories, the battery can be charged continuously.

The battery need not be fully discharged before recharging. When a charger is not in use, disconnect it from the power source.

The battery can be charged and discharged hundreds of times, but it will eventually wear out. When the operation time (talk-time and standby time) is noticeably shorter than normal, it is time to buy a new battery.

Temperature extremes will affect the ability of your battery to charge: it may require cooling or warming first.

Battery operation time is affected by the following: whether both interfaces are on, radio signal strength, various phone settings, and the length of the communicator interface's screen blanker period (set in System application's settings, see chapter 10 "System: System settings" on page 10-1).

It is recommended always to keep a charged battery in the communicator. Keeping the battery charged maximises the lifetime of the backup battery supplying power to the communicator's real-time clock. In case the backup battery is drained, it may be replaced by qualified personnel.

Always close the device cover before removing the battery. Closing the cover will save all data.

Note:

- Use the battery only for its intended purpose.
- Never use any charger or battery that is damaged or worn out.
- Do not short circuit the battery. Accidental short circuiting can occur when a metallic object (coin, clip or pen) causes direct connection of the + and - terminals of the battery, for example, when you carry a spare battery in your pocket or purse. Short circuiting the terminals may damage the battery or the connecting object.
- Leaving the battery in hot or cold places, such as in a closed car in summer or winter conditions, will reduce the capacity and lifetime of the battery. Always try to keep the battery between +15° C (+59° F) and +25° C (+77° F). A communicator with a hot or cold battery may temporarily not work, even when the battery is fully charged. Li-Ion batteries' performance is particularly limited in temperatures below 0° C (+32° F).
- Dispose of used batteries in accordance with local regulations. Recycle! Do not dispose of batteries in a fire!

Communicator interface

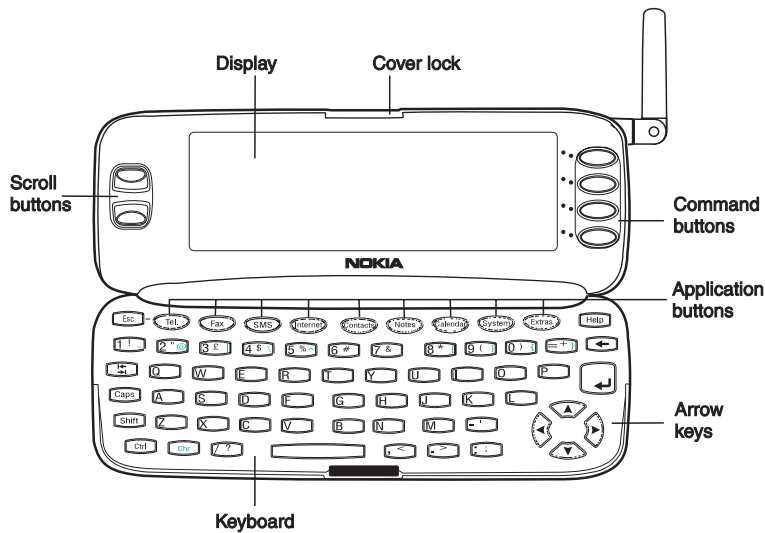


Figure 2-9

The communicator interface is activated by pressing the cover lock catch and opening the cover (see figure 2-9).

The applications are run in the middle of the display. The indicators (see figure 2-10) show application and system-related information (see

"Indicators" on page 2-9). The commands always relate to the column of four command buttons on the right side of the display cover.

Whenever the selection frame is shown, you can select items by moving the selection frame with

the scroll buttons or the up/down arrow keys (see

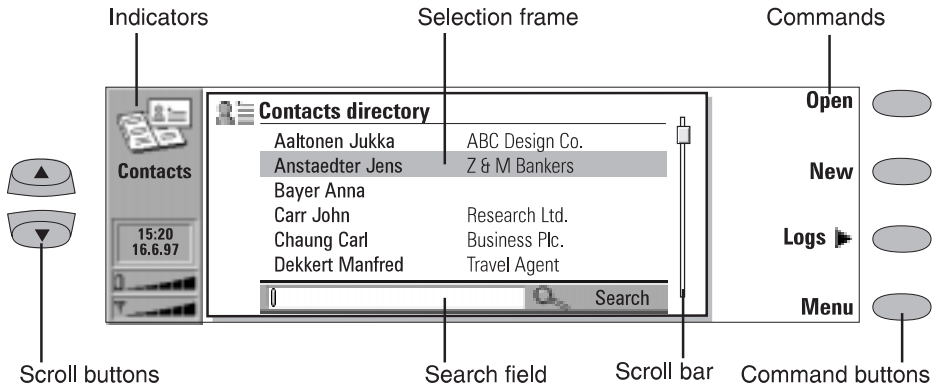


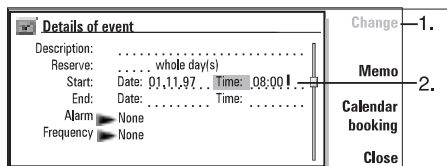
Figure 2-10

"Keyboard" on page 2-10). When the search field appears at the bottom of the display, you can search for items by entering text into the search field with the keyboard.

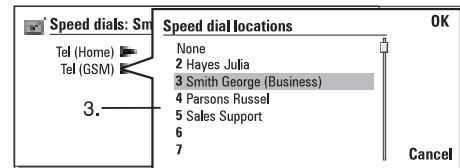
After the correct item has been selected, press the command button corresponding to the command you wish to apply to the item, for example, **Open**.

The following figures illustrate certain communicator interface conventions:

1. When a command appears dimmed, the command cannot be used (see the figure below).
2. When a value appears on a dotted line with a cursor, enter a new value manually via the keyboard.



3. A pop-up box. Choose an item and press **OK** or **Cancel** (see the figure below).



When a setting with ► next to it is selected, pressing **Change** toggles the value or opens a pop-up box. See the figure above. When a setting with ➡ next to it is selected, pressing **Change** opens a new settings view. When you press a command with ► next to its name, as in **Logs ►** in figure 2-10, only the command set changes.

Communicator applications

The coloured application buttons on the communicator interface keyboard are used to start the corresponding applications (described in the following chapters of this manual).

Tel. — Telephone is used for managing voice calls.

Fax — Fax enables you to send any of your own documents as a fax. Received faxes can be read or forwarded.

SMS — Short Message Service enables you to send short messages. Received short messages can be read, forwarded or replied to.

Internet — Internet applications include Internet and modem-based applications: Mail, World Wide Web, Telnet and Terminal (VT100 compliant).

Contacts — Contacts is used for managing your contact information: names, numbers and addresses. You can exchange contact information as business cards via the SMS application.

Notes — Notes is used for text editing, printing and document management. You can also send documents as short messages, fax or mail in the Notes application.

Calendar — Calendar contains an appointment book and a to-do list. You can set alarms and attach memos to events.

System — System contains desktop connectivity, security and other system related applications.

Extras — The Extras application group includes Text Web, Calculator, Clock, Composer, Converter, and Wireless data backup.

Using the applications

When the cover is opened, the application that was active when you closed the cover, appears in the same state. However, if you have made or answered a voice call via the phone interface and switch to the communicator interface by opening the device cover, the Telephone application activates automatically.

To switch to another application, press the corresponding application button. You can do this even during an active call.

Note: You need not "exit" any application before starting another. All inactive applications are run in the background until they are activated again. However, if the battery is removed or completely discharged, all data will be saved, but the applications return to their default states.

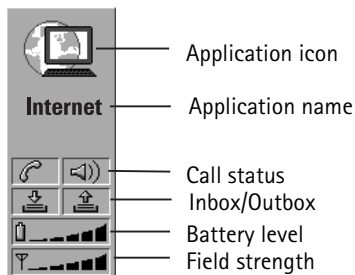
Note: Information need not be specifically saved (there is no "Save" command). Nokia 9000i Communicator saves all data automatically.

To send or receive calls or messages with any of the communications applications, remember that the phone interface must be switched on and in a service area with adequate cellular signal strength.

Indicators

The application icon and the application name show the currently active application, i.e., the application you are in at the moment.

The icons that appear on the Call status and Inbox/Outbox indicator rows, change according to the application and current situation. The battery level and field strength indicators are the same as are shown on the phone interface display when the phone interface is on (see chapter 13 "Phone interface: Display indicators" on page 13-2).



Call status



– You have a voice call and the hands-free loudspeaker and microphone are on. In handsfree use, you can talk to the phone from a short distance. See chapter 4 "Telephone: Audio control" on page 4-1.



– A voice call with the handsfree off (the loudspeaker and microphone are muted).



– An open data connection, see chapter 7 "Internet" on page 7-1.



– The communicator is receiving or sending a fax, see chapter 5 "Fax" on page 5-1.



– The communicator is connected to a PC, see chapter 10 "System: Connecting to a PC" on page 10-5.

MODEM

– The communicator is being used as a fax modem, see chapter 10 "System: Fax modem" on page 10-6.

SILENT

– The communicator is being used in the silent service mode, see chapter 4 "Telephone: Telephone settings" on page 4-6.

FLIGHT

– The communicator is in flight mode, see chapter 4 "Telephone: Telephone settings" on page 4-6.



– The communicator is trying to establish an infrared connection, see chapter 10 "System: Connecting to a PC" on page 10-5.



– An infrared connection has been established.



– The infrared connection is obstructed.

Inbox/Outbox



– Inbox (left half). You have received a fax, short message or mail (if your remote mailbox is capable of sending this information). Received faxes and short messages go in the application's received documents folder. To fetch new mail, you must connect to your remote mailbox, see chapter 7 "Internet: Reading mail" on page 7-9.






– Outbox (right half), the sending buffer, contains all unsent messages, see chapter 12 "Document outbox" on page 12-1.




– Time and date are shown when the Call status and Inbox/Outbox rows are empty. Time and date can be adjusted within Clock, see chapter 11 "Extras: Clock - Clock settings" on page 11-5.

Battery level

-  – Battery is low. The battery should be recharged.
-  – Battery is charging (the bar scrolls until it is fully charged). The outlet plug icon indicates that the communicator is connected to an external power source (usually a wall outlet).
-  – Battery is fully charged (five bars displayed).

Field strength

-  – The communicator is connected to a cellular network. When all five indicator bars are shown, radio signal reception is good. If the signal strength is not good, you can try to improve reception by moving the phone slightly or by using the communicator in the handsfree mode.
- NO SERVICE** – The phone interface is on, but the communicator is outside of a network coverage area.
- PHONE OFF** – The phone interface is off. The communicator cannot send or receive calls or messages (via either interface).

Keyboard

In addition to the normal character and number keys, the keyboard has several special keys, as shown in figure 2-11.

1. Application buttons

The row of buttons at the top of the keyboard (starting from Tel.) activate the corresponding applications.

2. Escape (ESC)

To cancel an action, you can either press **Cancel**

or the escape key. The escape key can only be used when **Cancel** is among the available commands. All information notes shown on the display can also be dismissed with the escape key (instead of pressing the **OK** command).

3. Tabulator

In editors, the tabulator key moves the cursor to the next tabulator stop. In settings etc., the tabulator key can be used to move to the next field.

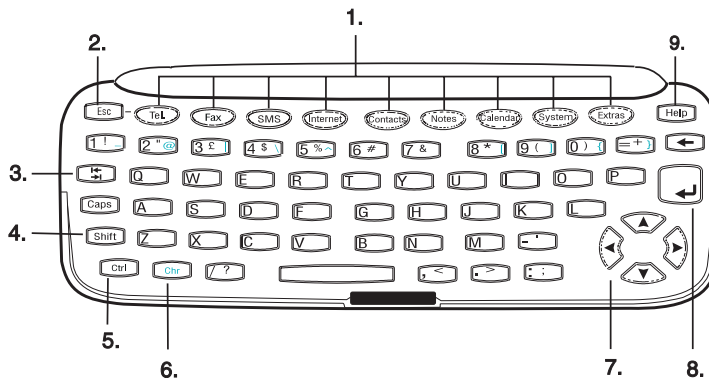


Figure 2-11

4. Shift

When you press the Shift key and then a letter key, an uppercase letter is inserted in front of the cursor. The Shift key does not need to be held down when pressing a key – once you have pressed Shift, the next key press always generates a shifted character. In most text editors, the Shift and arrow keys (7.) can be used to select text, see "Special features: Shortcuts" on page 2-12.

5. Control (Ctrl)

Pressed together with certain keyboard keys, the control key generates shortcut commands which can be used in most viewers and text editors.

6. Character (Chr)

The character key is used to generate characters not on the communicator keyboard. A single press of the character key opens the special character table. Some special characters are also printed on the keyboard as the third (green) character. These, and certain other, characters can be generated by pressing and holding the character key while pressing the corresponding key, see chapter 8 "Notes: Editing - Special characters" on page 8-2.

7. Arrow keys

The arrow keys can be used to move the cursor or the selection frame (in the same way as the scroll keys). In some applications, the arrow keys have special functions, see "Special features: Shortcuts" on page 2-12.

8. Enter

When the cursor is shown, pressing Enter moves the cursor to the beginning of the next line or adds a new line. The Enter key can also be used to select contacts and contact information in the Contacts directory and to open folders and documents. When information notes are shown, you may press Enter instead of the **OK** command. In options and settings, when a value can be toggled, you may press Enter instead of **Change**.

9. Help

Pressing the Help button activates a context-sensitive help. See "Special features: Help" on page 2-13.

Special features

Received communication note

When you open the cover of the communicator and have new received faxes, short messages, unsent documents or missed calls, a note will be shown (figure 2-12). The note can be dismissed

by pressing **Cancel**. The same note is shown only once.

To read the received documents or to check who has made the missed calls, select the corresponding item on the list and press **View**.

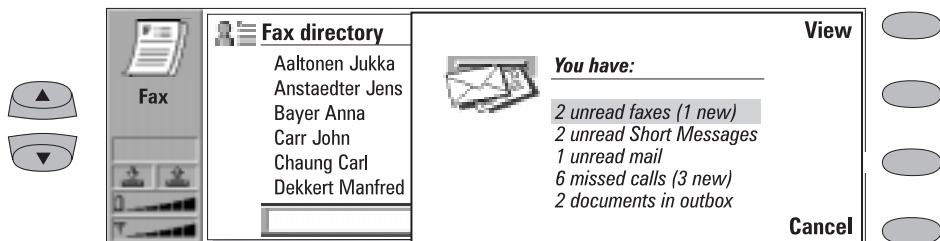


Figure 2-12

Settings and Menus

Most applications have **Settings** as one of the main view commands. The values of these settings will be used as defaults for that application. Options chosen elsewhere affect only the document, card or item that is active or being sent.

Most applications also have **Menu** as one of the commands. When you press **Menu**, a pop-up box opens listing a number of new commands which depend on the application you are in.

Multiselection

Where multiselection is available, you can select several items at once. The commands you use affect all the selected items. Multiselection works in most lists; for example you can select several contacts and delete them at once in the Contacts directory, or select several documents and transfer them to PC at the same time in the File transfer application.

There are two ways to select several items:

1. Scroll to the item and press Ctrl-Space bar, or
2. Press and hold Shift and move up or down the list with the arrow keys to the last selected item.

To remove an item from the selection, scroll to the item and press Ctrl-Space bar again.

If you want to select every item in a list, press Ctrl-A. If you want to remove the selection, press Ctrl-A again or the ESC button.

Naming a document

Every time you close a new document for the first time, you will be asked to enter a name for the document in the input field. The highlighted name in the input field is the communicator's suggestion for the name.

Shortcuts

There are several shortcuts you can use in the document applications (SMS, Fax, Notes, Mail). The following table lists the available shortcuts:

Shortcut	Function
Ctrl-C (copy)	Copies selected text
Ctrl-X (cut)	Cuts selected text
Ctrl-V (paste)	Pastes selected text
Ctrl-Z	Cancels the most recent operation
Ctrl-B	Applies bold
Ctrl-I	Applies italics
Ctrl-U	Applies underlining
Ctrl-T	Adds current time
Ctrl-D	Adds current date
Ctrl-M	Adds user's name
Ctrl-H	Moves the cursor to the beginning or the end of the document
Ctrl-E	
Chr-(left arrow)	Moves the cursor to the beginning or end of the line
Chr-(right arrow)	
Chr-up or down arrow	Scrolls the list or document view up or view down
Shift-(up/down/right/left arrow)	While Shift is held down, each press of an arrow key selects one text character or line
Shift-Chr-up or down arrow	Selects text page by page inside a document
Ctrl-Space bar	Multiselection
Ctrl-A	Select all

Help

Help is activated by pressing the Help button on the communicator interface keyboard. The application icon in the indicator area (on the left side of the screen) remains in view, reminding you of the application where help was requested.

The help texts deal with issues relating to the view that was on the display when help was activated. If no special help is available for the current view, a list of available application topics is shown instead.

To view the list of all help topics for the current application, press **Application topics**. The following commands become available:

To open the selected topic, press **Open**.

To show common help topics, press **General topics**.

To return to the active application, press **Close**.

To view the list of general communicator topics, press **General topics**. The following commands become available:

To open the selected topic, press **Open**.

To return to the active application's help topics list, press **Application topics**.

To return to the active application, press **Close**.

If the help topic that you wanted was not among the help topics of the current application or General topics, close the help, start the correct application and press Help again.

Useful settings information

The following chart contains settings information for various features of your communicator. All paths take you from the main view of the application. Following the conventions of this manual, the command names appear in **bold**, and settings, options and values shown in the application area are in *italics*.

How to ...	Application key	Path
Set voice mailbox number	Tel.	Settings , <i>Other settings</i>
Set ringing tones and volume	Tel.	Settings , <i>Ringing settings</i>
Set calling card number and access code	Tel.	Settings , <i>Calling card settings</i>
Activate flight mode	Tel.	Settings , <i>Other settings</i>
Set font, margins, etc. for Fax	Fax	Write fax , Style
Set message centre number ¹ (to send SMS messages)	SMS	Settings , <i>Message centre number¹</i>
Set fields to be included when sending business cards via SMS	SMS	Business cards, Open , Options
Define contact card template	Contacts	Menu , <i>Settings</i> , <i>Contact card template</i>
Define Internet access point ²	Internet	Settings , <i>Internet access</i> , New² , <i>(Advanced settings²)</i>
Define remote mailbox information ³	Internet	Mail, Settings , <i>Remote mailbox settings³</i>
Create folders	Notes	(open any folder), Menu , <i>Create folder</i>
Set own information in User data	System	User data
Set distinct ringing tones for individual applications	System	Settings , <i>System sounds</i> , <i>Application tones</i>
Set time and date format	System	Settings , <i>Preferences</i>
Set time and date	Extras	Clock, Settings
Reset home country	Extras	Clock, Settings

1. You may obtain this information from your network service provider.

2. You may obtain this information from your Internet service provider.

3. You may obtain this information from your remote mailbox provider (either an Internet service provider, or your own company).

3. Contacts

The Contacts application is used for:

- Creating, editing, and managing all contact information, such as phone numbers, addresses and speed dials.
- Viewing logs of all incoming and outgoing calls (voice, data and fax calls and SMS messages), see "Logs" on page 3-3.

Telephone, Fax, SMS and Mail applications all use information found in the Contacts application.

You will find the Nokia HelpLine contact cards in the Contacts directory. The HelpLine answers questions and offers instructions over the phone.

Contact cards

Contacts main view shows the Contacts directory, which is a list of all contact cards. The contact cards are listed in alphabetical order according to the name in each contact card's *Name* field.

To create a new contact card, press **New** in the Contacts main view.

To open an existing contact card, locate the contact card you want to open and press **Open**. A contact can be located in two ways:

1. Scrolling the contact list — Move the selection frame with the scroll buttons until the contact you are searching for is shown within the selection frame.
2. Using the search field — Enter text into the search field. The search looks for matches in the *Name*, *Company* and *Address* fields. The search results can be cleared by deleting characters one by one from the search field with the backspace key.

Pressing **Menu** in the Contacts directory opens a new set of commands:

Delete — Erases selected card.

Copy card — Creates a duplicate card.

Directory info — Shows the amount of con-

tact data.

Settings — Allows you to change the following settings:

Contact card template — The contact card template defines which fields are included in all new contact cards you create. You can modify the contact card template as described in "Editing contact cards" below. Changes made to the template affect all new, but not existing contact cards. You cannot enter text into the template's fields.

Log length — With *Log length*, you can define how recent contacts will be listed in the General and Individual logs. The possible values are: *Zero / 10 days / 30 days* (default) / *1 year / User defined: days* (0 – 365 days).

Editing contact cards

When you have opened a contact card, you can enter new and edit existing contact information in the various fields. To move from one field to another, use the scroll or arrow keys. You can add

ter key. To return to the Contacts directory, press **Close**.

Contact card

Name:

Company:

Job title:

Address:

Tel: 0 Tel(GSM):

Fax: Fax(GSM):

Mail:

Fields **Speed dials** **Menu** **Close**

Figure 3-1

When entering phone numbers into the *Tel* fields, by storing a + character in front of the country code, you can use the same phone number abroad. You can enter numbers and the following characters in the *Tel*, *DTMF* and *Fax* fields (for information on the functions of these characters see table 3-1):

Tel field: +, #, *, p, w, -, [space]

DTMF field: #, *, p, w, -, [space]

Fax field: +, -, [space]

When storing phone numbers or DTMF sequences, you can use hyphens and spaces to arrange the appearance of the strings. This will not affect the way the numbers or DTMF tones will be dialled.

Customising contact cards

If you want to remove or add fields, or edit the field labels of the currently opened contact card, press **Fields** in the contact card view (see figure 3-1). If you want to modify the field settings of all future contact cards, you must edit the contact card template, see "Contact cards" on page 3-1.

To add new fields to the contact card:

- ① Press **Add field**. A pop-up box opens, listing the available fields.
- ② Select a field and press **OK**. There can only be one *Name*, *Job title*, *Company* and *Note* field.

Note: The *Tel*/*Fax* field is for alternating calls (see chapter 4 "Telephone: Managing calls - Alternating calls" on page 4-5). The *Password* field is for the booking password (see chap-

ter 9 "Calendar: Calendar booking - Booking password" on page 9-4).

To customise the label of the selected field:

- ① Select the field and press **Change label**.
- ② Select one of the predefined labels or scroll down to the field with a dotted line and write the label text, e.g., *Cottage* or *Modem*, and press **OK**.

To delete the currently selected field:

Press **Delete field**. The *Name* field cannot be deleted.

Note: You can only send short messages to mobile phone numbers stored in the *Tel*(*GSM*) or *Tel*(*PCN*) fields.

If you press **Menu** in an opened contact card, the following commands become available:

Copy card — Creates a copy of the current card.

Copy contents — Copies the contents of the card to a clipboard. You can add this information to faxes, notes and other documents by pressing **Ctrl-V**.

Delete card — Deletes the opened card.

Next card and *Previous card* — Opens the next and the previous card in the list respectively.

Copy to hotlist — Copies the URL field of the contact card to the WWW hotlist (see chapter 7 "Internet: Hotlist" on page 7-12).

Speed dials

The **Speed dials** command (see figure 3-1) lets you assign speed dials to eight phone numbers

(number 1 is reserved for calling your voice mailbox, see chapter 4 "Telephone: Telephone settings" on page 4-6). For information on how to use the speed dials, see chapter 13 "Phone interface: Using memory – Dialling shortcuts" on page 13-5.

To set speed dials:

- ① Press **Speed dials** in an opened contact card. All phone number fields of the contact card are shown.
- ② Select a field to which you want to assign a speed dial and press **Change**. Select a location and press **OK**.

To change or remove speed dials:

- ① Select the speed dial you want to change or remove and press **Change**.
- ② Move the selection frame to the location you want to use and press **OK**. If you want to remove a speed dial location, choose *None*.

Storing DTMF tones

The Dual Tone Multi Frequency (DTMF) tones allow you to communicate with voice mailboxes, computerised telephony systems, etc. For information on how to send DTMF tones, see chapter 4 "Telephone: Managing calls – Sending DTMF tones" on page 4-5, or chapter 13 "Phone interface: Sending DTMF tones" on page 13-3.

- If you only communicate with the contact using DTMF tones, create a contact card for the DTMF contact.
- If you need both a voice and a DTMF phone number for the contact, add a new field to an existing contact card. The DTMF sequence can be stored either in the *Tel* field, after the telephone number, or separately, in a *DTMF* field. If you store the sequence in a *Tel* field, the phone number and the DTMF sequence must be separated by one of the DTMF special characters. Label the field (with **Change label**) so you can identify the DTMF sequence.

The DTMF special characters are listed in the following table:

Character	Function
* and #	May be used if the DTMF service requires them.
p (pause)	Inserts a pause of 2.5 seconds in front of, or between, DTMF digits.
w (wait)	When the "w" character is stored in a sequence, the rest of the sequence is not sent until you press Send again in the Telephone application.

Table 3-1

Logs

The Contacts application shows all communication events as two logs:

- General log shows all (or certain types of) communication events in chronological order, see figure 3-2.
- Individual log shows a list of all communication events relating to the selected contact.

To access the logs:

- ① Press **Logs** in the Contacts main view. The command set changes.

- ② Select the desired log type by pressing either **Individual log** or **General log**.

To erase the contents of the log:

- ① Press **Clear list**. A pop-up box opens to let you define which contacts will be deleted (measured in days). The clearing procedure reflects on the other log, as well.

To create a new contact card:

- ① Open the General log.

- ② Select a log event and press **Create card**. If the contact card already exists, the command is dimmed.

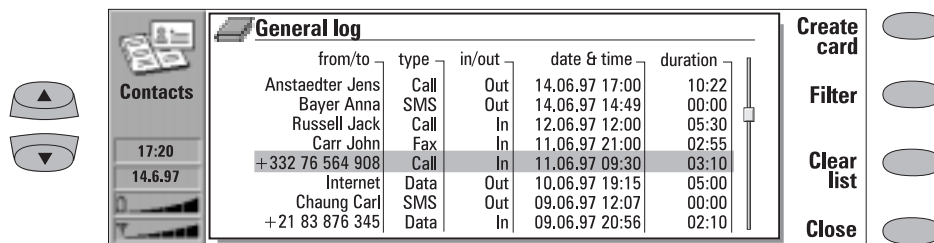


Figure 3-2

To view only certain communication types:

- ① Open the General log and press **Filter**.
- ② Select the communication type you want to view and press **OK**.

Note: Remote mailbox, Terminal and Internet connections are logged as data calls.

Contacts directory and the phone interface

Copying contact information between the interfaces is possible only via the phone interface (see chapter 13 "Phone interface: Menus - Memory functions (Menu 8)" on page 13-13, except when a new SIM card is inserted into the communicator and you open the communicator interface. In that case, you will be prompted to confirm the copying of the SIM memory contents into the Contacts directory, as described in chapter 2 "Getting started: First start-up - SIM card contents" on page 2-2.

When the memory contents of a SIM card are copied to the directory, the Contacts application will create the same number of new contact cards as the number of memory locations in use on the SIM card. The numbers in the SIM card memory locations are inserted in the *Tel* field of the contact card.

When contact information is copied from the Contacts directory to the SIM card, the contact names may not fully fit in the SIM card's memory.

Entering contact information via the phone interface

Entering new or editing existing contact names and phone numbers via the phone interface will create a new contact card in the Contacts directory. See chapter 13 "Phone interface: Using memory - Storing information via the phone interface" on page 13-5.


Note: When you store or copy phone numbers from the phone interface to the Contacts directory, the phone numbers go to the *Tel* field, not to the *Tel(GSM)* or *Tel(PCN)* field. Sending SMS messages requires, however, that the recipient's mobile phone number is stored in the *Tel(GSM)* or *Tel(PCN)* field.

Check that the phone numbers are in the correct fields in the contact card.

4. Telephone

In order to make phone calls, the following requirements must be met:

- An activated SIM card must be inserted.
- The phone interface must be switched on.

For a description of the phone interface keys and especially the  button, see chapter 13 "Phone interface" on page 13-1.

Note: The phone interface keys are not functional when the device cover is open.

The Telephone application is started by pressing the Tel. application button on the keyboard. Some of the telephony operations explained here

can be made in many ways, for example, via the phone interface.

Note the following Telephone features:

- Opening or closing the cover does not affect active phone calls.
- If you have made a voice call via the phone interface and you open the cover, the Telephone application starts automatically. You can continue the call after activating the handsfree mode (see "Audio control").
- When you make a call via the communicator interface (with the Telephone application), the handsfree mode is activated automatically.

Audio control

The audio control enables you to adjust the volume level and to activate the communicator's loudspeaker for handsfree operation. The audio control is available only when you have an active call.

In the handsfree mode, you can speak and listen to the phone from a short distance away when the cover is open. This function is not available when the cover is closed (except in a car installation). The Telephone setting *Audio when cover opened* (in the settings group *Other settings*, see

"Telephone settings" on page 4-6), determines whether the handsfree mode is activated automatically after you open the cover. To activate the handsfree mode manually, press the **Audio on** command button.

After audio has been activated, the command changes to **Audio control**. Pressing **Audio control** lets you adjust the speaker volume or turn audio off. The indicator in the audio control view shows the chosen volume level.

Making a call

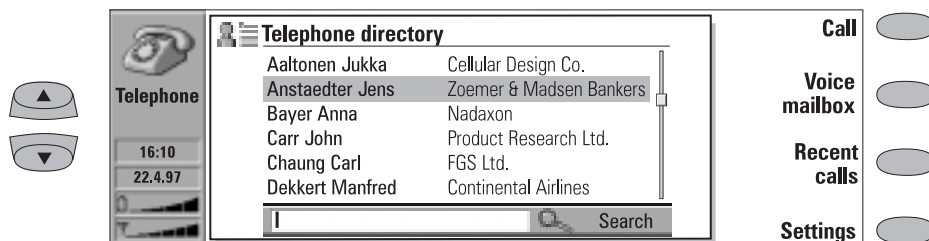


Figure 4-1

There are three ways to make a call:

1. Make the call manually:

Write the telephone number to the search field and press **Call**.

2. Call the selected contact using the Telephone directory:

When you have no active voice calls, the Telephone main view shows the Telephone directory (figure 4-1). Contact cards that do not contain any phone numbers appear dimmed in the Telephone directory and cannot be selected. (Phone numbers can be added to the contact cards in the Contacts application.)

Choose a contact in the Telephone directory, either by scrolling or by searching (type text in the search field), and press **Call**.

If the contact has more than one phone number, a pop-up box opens, listing all phone numbers. Choose a number from the list and press **Call**.

3. Call a number in the Recent calls list:

- ① Press the **Recent calls** command button.
- ② Select one of the recent calls lists (dialled, received or missed calls) and press **Open**.
- ③ Select a number from the list and press **Call**.

Once you have made the call, you can close the cover and continue the call in the phone interface, unless you want to use the handsfree mode.

Note: If you press **Clear all lists** in the Recent calls view, all the information in the lists is removed. When you open one of the lists and select a contact, **Copy number** copies the phone number to a clipboard where it can be copied to documents by pressing Ctrl-V.

Calling card call


A phone calling card is a credit or debit card especially for phone charges. A calling card may be useful when making long distance calls while travelling, to benefit from the discounted rates offered by certain calling card companies.

Define the calling card information in the Calling card settings (see "Telephone settings: Calling card settings" on page 4-7).

To make a call with a calling card:

- ① Select a contact from the Telephone directory, or enter the number in the search field.
- ② Press **Call** for more than three seconds until the command changes into **Calling card call**.
- ③ Release the button, wait for a tone and then press **OK**.


You can also make a calling card call from the phone interface:

- ① After entering the phone number, press the  key for three seconds.
- ② Wait for the tone and then press **OK**.

Answering a call

When you receive a call while having the communicator cover open, a note about the incoming call is shown on the screen. If you are called by a person who has a contact card (as in figure 4-2), the caller is identified by his/her name (if supported by the network).

To answer the call:

Close the device cover and answer the call via the phone interface (by pressing ).

Or, alternatively,

When you receive the incoming call note, press **Answer**.

Note: You cannot have two active calls at the same time: the previous active call is automatically put on hold when you answer a waiting call (the network service Call waiting must be activated).

If you do not want to take the voice call, press **End call**. The caller will hear the alerting tone change to a "line busy" tone.

Managing calls

When you have made a call, information about the call(s) is shown on the display within a frame (see figure 4-2). In addition to the active call, you can have a held call and a waiting call at the same time. The conference call, which can contain up to five remote participants, is handled as a single call.

To switch between multiple calls, use the scroll or arrow keys. The command buttons change according to the selected call's status. For example

the held call can be changed into an active call by pressing **Activate**.

Call information may include the following:

- The name or phone number of the caller (if available).
- Call status shows whether the current call is active, on hold, or waiting, and whether the audio is off.

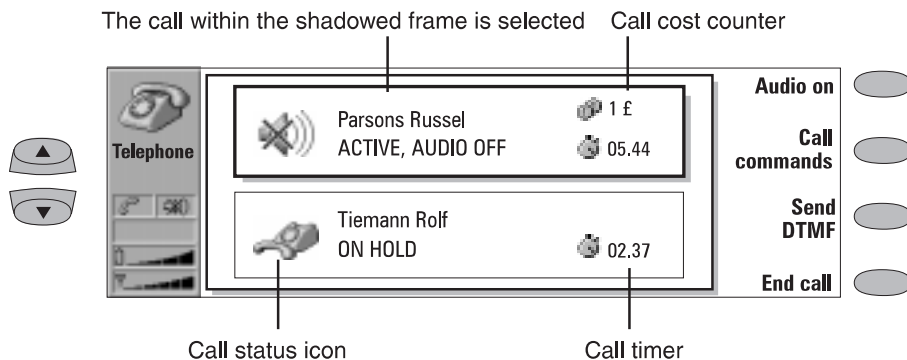


Figure 4-2

- Call timer displays how much time has expired since the beginning of the call. The timer also counts time spent on hold (see figure 4-2).
- Call cost counter shows the cumulative cost of the call, if this network service is available and the call cost setting is on. The call costs are calculated according to the settings determined in the phone interface (in currency or charging units). See chapter 13 "Phone interface: Menus – Duration and cost (Menu 6)" on page 13-12.

To end a call, select the call you want to end and press **End call**.

Making a new call

When you already have one active call, the **New call** command is shown in the Telephone main view. To make a new call, press **New call** and make the new call normally, or press **Cancel** to cancel the new call.

If you already have an active and a held call, you cannot make new calls before either dropping a previous call or merging them into a conference call.

Conference call

The conference call is a network service; contact your network operator to check if this service is available. In a conference call, you and up to five remote persons can hear each other simultaneously.

To create a conference call:

- ① Make the first call normally.
- ② Once this person has answered, make a call to the second participant by pressing **New call**.
- ③ Wait until the second person answers the call.
- ④ To join the first participant in the call, press **Call commands** and choose the *Conference call* option from the pop-up box. If you want to include a new person in the conference call, repeat this operation. When all participants have been included in the conference call, the best voice quality is achieved by closing the cover and continuing the call via the phone interface.

To end the call with a conference call participant:

- ① Press **Conference commands**.
- ② Select one caller from the list of participants (figure 4-3) and press **Drop**. To return to the previous view, press **Close**.

To talk privately to one of the conference call participants:

- ① Press **Conference commands**.
- ② Select a participant from the list and press **One to one**. The conference call is now split into two calls: the conference is on hold and the one-to-one call is the active call.
- ③ Once you have finished the private conversation, you can add the person back into the conference call by pressing **Conference call**.

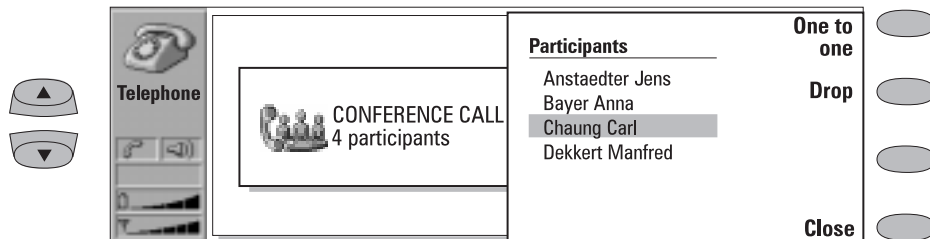


Figure 4-3


Voice call transfer

The voice call transfer is a network service which

enables you to connect two voice calls together and disconnect yourself from both calls.

Note: The transfer operation can be made only if you have one held call and one active call; all calls are voice calls (fax or data calls cannot be transferred); and none of the calls is a conference call.

There are two ways to transfer voice calls from the phone interface:

1. Press **4** followed by , or
2. Press and hold the **Menu** key for a second. Choose the *Transfer* option in the menu and press **OK**, or press **Quit** to cancel.

Calls can also be transferred from the communicator interface. When you have one call on hold and another call active, press **Call commands** and choose the option *Transfer call*. Press **OK**.

Answering a waiting call

Call waiting is a network service which must be activated before you can use it (see "Telephone settings" on page 4-6).

When Call waiting is active, and you receive a new call while you already have an active voice call, you will see a note informing you of this.

A waiting call is answered, like any call, by selecting the waiting call and pressing **Answer**. The previous call will be put on hold.

Sending DTMF tones

The Dual Tone Multi Frequency (DTMF) tones allow you to communicate with voice mailboxes, computerised telephony systems, etc. Besides the numbers 0 - 9, you can also use the characters **p**, **w**, ***** and **#** (for information on the functions of these characters, see chapter 3 "Contacts: Contact cards - Storing DTMF tones" on page 3-3).

To send a DTMF sequence when you have an ac-

tive call:

- ① Key the digits from the communicator interface keyboard. Each keystroke will generate a DTMF tone which will be transmitted directly.

Or alternatively,

- ① Press **Send DTMF**. A list of stored DTMF sequences is shown (for information on how to store DTMF sequences, see chapter 3 "Contacts: Contact cards - Storing DTMF tones" on page 3-3).
- ② Select a DTMF sequence. You can edit the sequence, or, if there are no stored sequences, you can enter the DTMF string manually into the field.
- ③ Press **Send** to send the DTMF sequence shown in the input field, at the bottom of the display.

Note: You cannot access the DTMF view during a conference call. However, you can send DTMF tones during a conference call by entering the digits from the keyboard.

Alternating calls

Alternating calls can be made to a fax box, for example: you initiate the call as a voice call, but it changes into a fax call when your fax box starts to send you your faxes.

To make alternating calls you need to add a special *Tel/Fax* field to the contact cards of the recipients of your alternating calls (see chapter 3 "Contacts: Contact cards - Customising contact cards" on page 3-2).

You can also change the mode of the call from voice to fax manually by pressing **Change mode**.

Alternating calls cannot be put on hold or incorporated into a conference call.

Incoming faxes, short messages and data

Faxes, short messages and incoming data are received automatically, provided that the phone

interface is on and within cellular coverage area. While a data/fax connection is active (check the call status indicator), you cannot make calls.

If you want to make a voice call, you can either wait until the data/fax call ends, or you can ter-

minate the data/fax call by starting to make a call normally. When you press **Call**, you will be asked if you want to terminate the data call. Press **Terminate** to confirm.

Telephone settings

Press **Settings** in the Telephone main view to open a list of several settings groups:

Ringing settings, Voice call diverting, Voice call barring, Voice call waiting, Calling card settings, Single number settings, Other settings.

To change the settings:

- ① Select a group and press **Change** to open it.
- ② Select a setting and press **Change**. The current value of the setting is displayed after the setting name, unless the setting is one the network services: call diverting, barring or waiting. See the following sections.

Ringing settings

All sounds — Sets the incoming call alert and all other alarms to *Ring*, *Beep*, *Silent* or *Silent for*.

Silent for lets you set the length of time you want the silent mode to be active. You may want to use this setting in order not to forget to turn the ringing tone back on after a meeting, for example. Enter the time in the format *hh:mm*.

When sounds are set to *Beep*, *Silent* or *Silent for*, the call status indicator shows the text **SILENT**. This setting affects both interfaces. Whatever the chosen setting, an incoming call is always indicated by a note.

Ringing volume — Adjusts the ringing volume (1 is the lowest, 5 the highest).

Ringing tone — Determines the ringing tone. To compose your own ringing tones, go to the Extras application and start the Composer. For more information about composing, see chapter 11 "Extras: Composer" on page 11-5.

Changing the settings of network services

The network services call diverting, call barring and call waiting, may not be supported by all operators, or you may have to subscribe to them.

Information about the status of these services is stored in the network. Therefore, the current settings are not shown until you request the information from the network by pressing **Get status**.

While the communicator is making a request to the network, a query note is shown on the display. After a successful request, the new status now appears on the settings list.

When a divert is active and you make a call, a text is shown on the phone interface display, reminding you that your incoming calls will be diverted to another phone number. The text will appear only if your network operator supports this feature.

To cancel all call diverts or barrings, press **Cancel call diverts** or **Cancel call barrings**.

Voice call diverting

The voice call diverting network service allows you to direct your incoming voice calls to another phone number (fax diverting is activated via the Fax application's settings).

The network will store the number to which your calls are diverted, even if you cancel the diverts.

Choose a divert mode:

Divert all calls — All incoming calls are diverted.

Divert when phone is busy— Incoming calls are diverted only when the phone interface is busy.

Divert when not answered— Incoming calls are diverted when you do not answer them.

Divert if not reachable— Incoming calls are diverted when the phone interface is switched off or outside of the network service area.

After pressing **Change**, the following options become available:

To . . . — Enter the number to which you want to divert the calls.

To voice mailbox— Calls will be diverted to your voice mailbox. The phone number of the voice mailbox must be set in Other settings.

Off— Calls are not diverted.

Voice call barring

The voice call barring network service allows you to place restrictions on outgoing and incoming voice calls (fax barring is activated in the Fax application's settings and data barring is activated in the Internet application's settings). Activating call barring or changing the barring settings requires the barring password, which you obtain from the operator. Once you have the barring password, you can change it in the Security settings (the Security application is found in the System main view).

The available modes are:

All outgoing calls— Calls cannot be made.

All international calls— Calls cannot be made to foreign countries.

International except home country— When abroad, calls can be made only within the current country and to your home country, i.e., the country where your home network operator is located.

All incoming calls— Calls cannot be received.

Incoming calls when abroad— Calls cannot be received when you are outside your home country.

Note: When calls are barred, calls may be possible to certain emergency numbers in some networks (e.g., 112 or other official emergency number).

Voice call waiting

When the network service voice call waiting is set on, the network will notify you of a new incoming voice call while you have a call in progress. If your network allows you to view the caller's phone number, the caller's phone number (or name) and the text WAITING will be displayed.

Calling card settings

If you want to change the calling card settings, you need to enter your lock code first.

Card in use— Allows you to determine which card you want to use.

Calling cards— Allows you to edit or delete existing cards or add new ones.

Single number settings

In some networks you have the same phone number for all your voice, fax and data calls. If you want to receive any calls, you must set your phone to some answering mode. The available modes are *Voice*, *Fax*, *Data* and *Voice/Fax*.

Other settings

Call cost display— This setting turns the call cost counter on or off. The counter is shown only if the network operator supports this feature.

Audio when cover opened— When you have a voice call and this setting is *Off* (default), each time you open the cover, you must press the **Audio on** command before you can use the communicator in the handsfree mode. If you change this setting to *On*, the handsfree mode is activated automatically after the cover is opened.

Flight mode— The flight mode (see figure 4-4) prevents you from accidentally turning on your phone interface in an aircraft.


IMPORTANT! Never use the phone interface when in an aircraft. If the aircraft personnel allow use of the communicator interface, you **MUST** activate the flight mode. The flight mode will allow use of the communicator interface only and will prevent use of the phone interface.

Be aware that all communications applications (Telephone, Fax, SMS, Mail, Internet) require use of the phone interface.

With the flight mode active, you may read previously downloaded mail, write mail, notes, short messages, faxes, or update your calendar. Once you have left the aircraft, you can turn off the flight mode by pressing **Exit flight mode**, turn

on the phone interface by pressing ①, and your short messages, faxes and mail will be sent automatically.


When the communicator is in the flight mode, emergency calls must be made from the phone interface:

- ① Press ①. The phone interface will read **FLIGHT MODE ACTIVE**.
- ② While the **FLIGHT MODE ACTIVE** text is visible (for approximately five seconds) you can enter the emergency number (e.g. 112).
- ③ Press .

Voice mailbox number— Set a new or change the current voice mailbox phone number.

To call your voice mailbox: press **Voice mailbox** in the Telephone main view.

You can also call your voice mailbox from the phone interface:

1. Press **1** and then , or:
2. Go to Menu 2 1 (Listen to voice messages) and press **Select**.

Note: Your network operator may be able to update your voice mailbox number via a special SMS message. Contact your network operator for details.

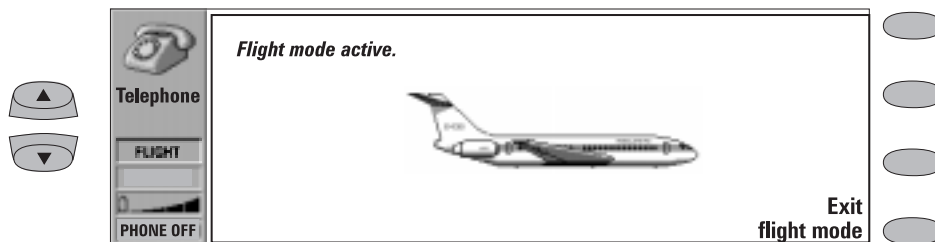


Figure 4-4

5. Fax

Fax is activated by pressing the Fax application button on the communicator interface keyboard.

To send and receive faxes the following requirements must be met:

- The phone interface must be on.
- The network you are using must support fax calls.
- This service is activated for your SIM card.

Contact your service provider for details.

When a fax is being sent or received, the FAX indicator appears in the display's indicator row.

The Fax main view shows:

- Own texts folder – Contains all created faxes, short messages, memos, notes and mail stored on the communicator.
- Received faxes folder – Contains all received faxes.

- Document Outbox – See chapter 12 "Document outbox" on page 12-1.

Both folders, Own texts and Received faxes, have **Menu** as one of the commands. **Menu** provides the following options:

Write fax – This option is available only inside Own texts folder.

Rename – You can rename the selected subfolder or document.

Copy – You can choose a folder into which the document is copied.

Move – You can select a folder into which the document is moved. Memos cannot be moved.

Create folder – You can make a new subfolder.

If any of these commands is not available, the command will be dimmed.

Sending faxes

Faxes can be sent in the Fax, Notes (see chapter 8 "Notes: Sending" on page 8-3) and Calendar applications (see chapter 9 "Calendar: Daily schedule – Memos" on page 9-3). You can send any previously created (or received) document as a fax, or you can create a new one.

To write a new fax:

- ① Press **Write fax** in the Fax main view.
- ② Write the fax in the opened editor.

- ③ Press **Recipient**. The Fax directory opens.

To send your own text as a fax:

- ① Select the Own texts folder in the Fax main view and press **Open**.
- ② Select a document and press **Open**.
- ③ Press **Recipient** to access the Fax directory.

To forward a received fax:

- ① Select the Received faxes folder in the Fax

- ② Select a fax and press **Open**.

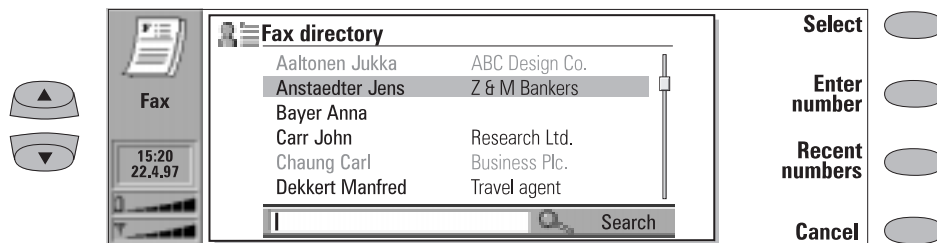


Figure 5-1

- ③ Press **Forward** to access the Fax directory. By forwarding the fax to the nearest fax machine, you can use this option to get a printed copy of the fax.

Note: **Forward options** allows you to select the specific pages you want to send (*All pages, This page, or Pages*). Choose *Pages* to enter the page numbers (first through last, e.g. 3-5) that you want to forward.

Fax directory

To choose a recipient in the Fax directory, select a contact (by scrolling or searching) and press **Select** (see figure 5-1). The names of contacts who have no fax number are dimmed and cannot be selected (switch to the Contacts application to edit stored contact information).

- If a contact has several fax numbers, a pop-up box opens. Choose a number from the list and press **Select**. The fax cover page opens.

- To enter the information manually, press **Enter number**. The fax cover page opens.
- To fetch the information from the Recent fax numbers list, press **Recent numbers**. The list contains the fax numbers with which you have recently had contact. Choose a number and press **Select**. The cover page opens.

Note: If you press **Clear both lists** in the recent numbers view, all the information in the lists is removed. When you open one of the lists and select a contact, **Copy number** copies the fax number to a clipboard where it can be copied to documents by pressing Ctrl-V.

Fax cover page and send options

The fax cover page contains three information fields (see figure 5-2). You can edit the entries in all cover page fields. The *From* field is always filled automatically according to the information

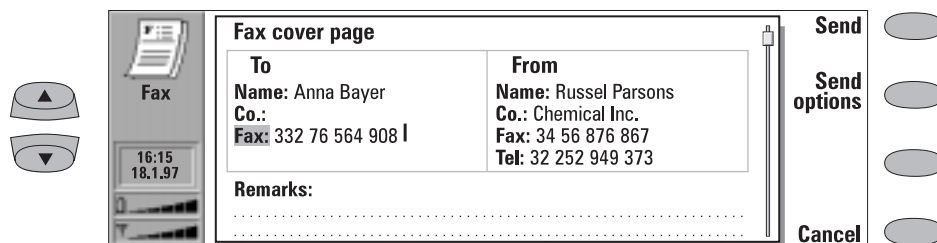



Figure 5-2


- To send the fax, press **Send**. The fax is handed over to the Document outbox, which will send the fax as soon as possible.
- To adjust fax sending options, press **Send options**. The send options are: *Cover page*,

Send resolution, *Logo file*, *Signature file*, *Begin sending*, and *Resend pages*. For more information about these, see "Fax settings" on page 5-4. To change these, select one of the options and press **Change**.

Received faxes

Faxes are received automatically, provided that this service is available and that the phone interface is on and within cellular coverage area. All received faxes go to the Received faxes folder.

If you do not wish to receive the fax, close the cover and press  on the phone interface.

When a new fax has been received, you will hear a tone (unless the system is set to silent service mode) and an information note is shown on the screen. Unread faxes in the Received faxes folder are marked with .

To delete the selected fax, open the Received faxes folder and press **Delete**.

There are two ways to read a received fax:

1. When you receive a note informing that you have received a fax, press **View**. To read the fax later, press **Cancel**.
2. Select the Received faxes folder and press **Open**. Select the fax and press **Open**. The fax viewer opens (figure 5-3).

You can use the scroll or arrow keys to scroll the fax up or down. The left and right arrow keys can be used for horizontal scrolling when the fax page is being zoomed.

To delete the viewed fax, press **Delete**.

To zoom the viewed fax, press **View**. A new set of commands becomes available:

- Each press of **Zoom in** enlarges the view of the document on the screen. The view can be scrolled horizontally with the left and right arrow keys.
- Each press of **Zoom out** reduces the image.
- Each press of **Rotate** rotates the viewed fax 90 degrees clockwise with each press of the command button.

Note: A list of shortcuts for viewing faxes (and other operations) can be found in chapter 2 "Getting started: Special features – Shortcuts" on page 2-12.

To return the previous commands, press **Back**.

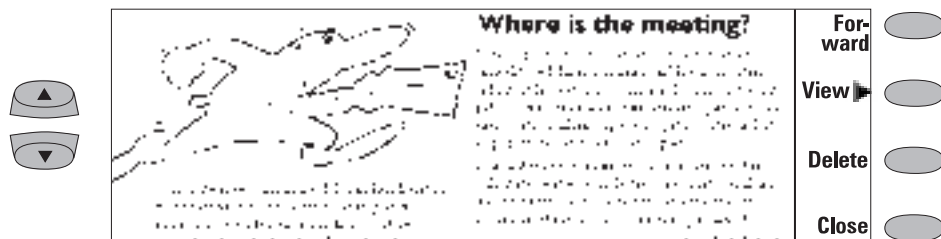


Figure 5-3

Fax settings

Press **Settings** in the Fax main view to change the default sending options of all your faxes.

- **Cover page** — Provides you with the following options:
 - Header* — The cover page contents will be attached to the beginning of the first document page.
 - Separate page* — Only the cover page contents are shown on the first page of the fax.
 - None* — No cover page information will be attached to the fax. The first page of the document will be the first fax page.
- **Begin sending** — Lets you choose when the fax is sent:
 - Immediately* — The fax is sent right away.
 - At [time]* — You can determine the time when the fax is sent. Use the time format *hh:mm*. This option enables you to take advantage of cheaper calling times.
- **Receive resolution:**
 - Standard* — The fax will be received using 200 (width) x 100 (height) dots per inch (dpi) resolution.
 - Fine* — (200 x 200 dpi). Receiving faxes with fine resolution will take longer and requires approximately twice as much memory as with standard resolution.
- **Send resolution:**
 - Standard* — 200 x 100 dpi.
 - Fine* — (200 x 200 dpi). Sending faxes with fine resolution takes longer and temporarily requires more free memory than when using standard resolution.
- **Logo file** — Enables you to add for example your company's logo to the fax cover page (the logo is not shown in the Cover page view).
 - None* — No logo is attached to the fax.
 - [File name]* — All the available gif and jpg files in the Downloaded files folder are listed in the pop-up box. Select the one you want to attach to the fax.

- **Signature file** — Allows you to add your signature to the fax cover page. The signature is placed under the *Remarks* field.
 - None* — No signature is attached to the fax.
 - [File name]* — All the available gif and jpg files in the Downloaded files folder are listed in the pop-up box. Select the one you want to attach to the fax.
- **Fax barring and Fax diverting** — These are supplementary services, like normal voice call barring and diverting.
 - Fax barring* — You can place restrictions on outgoing and incoming faxes.
 - Fax diverting* — You can divert incoming faxes to another fax. For more information and instructions on how to change diverting and barring settings, see chapter 4 "Telephone: Telephone settings" on page 4-6.
- **Resend** — Allows you to choose which pages will be sent again if the fax sending has failed and the Document outbox tries to send the fax again.
 - All pages* — All pages are resent.
 - Missed pages* — Only the pages which were not sent completely are resent.
- **ECM in reception** — When the Error Correction Mode is *On*, any faxes containing errors are automatically received again until the defects are corrected. This may prolong the fax call.
- **Fax polling** — Some networks provide this service which allows you to make a fax call to a number specified by the network, then receive certain information by fax. Contact your network service provider for further details.

Note: When you set *Fax polling* to *On*, **Fax polling** becomes one of the commands in the Fax main view.

- **Alternate fax receiving** — As default, this setting must be set to *As fax*. If you need to receive alternate voice/fax calls, you must set this to *As voice/fax*. This setting applies also to the Fax modem application.

6. Short messages

The Short Message application is activated by pressing the SMS application button on the communicator interface keyboard.

To send and receive short messages the following requirements must be met:

- Short Message Service (SMS) must be supported by the network you are using.
- SMS must be activated for your SIM card.
- You must store the SMS message centre number in the SMS application's settings.

Contact your home service provider for details.

The Short Message Service enables you to send and receive short alphanumeric text messages of up to 160 characters over the digital cellular network. If the message is longer, it will be sent as several short messages.

The advantages of short messages are: sending is practically instantaneous, messages can be sent or received even during a voice or data call and messages can be read in any mobile phone that has the capability. The SMS message centre will take care of delivering the message even if the receiving phone is off at the time of sending.

The SMS main view shows the following folders:

- Own texts – Texts that you have written.
- Received messages – Messages that you have received.

- Standard messages – Predefined message templates (see "Standard messages" on page 6-5).
- Business cards – All contact cards in the Contacts directory (see "Business cards" on page 6-4).
- Info service – Informative messages sent by the network.
- Delivery reports – Information about the status of sent messages (see "SMS settings" on page 6-5).
- Document outbox – See chapter 12 "Document outbox" on page 12-1.

Note: You can only send short messages to phone numbers stored in the *Tel(GSM)* or *Tel(PCN)* fields of contact cards.

One of the commands inside each folder is **Menu**. When you press **Menu** a pop-up box opens with the choices:

Write message
Rename
Copy
Move
Create folder

For more information on these options, see chapter 5 "Fax" on page 5-1.

If any of these choices is not possible, the choice will be dimmed.

Sending messages

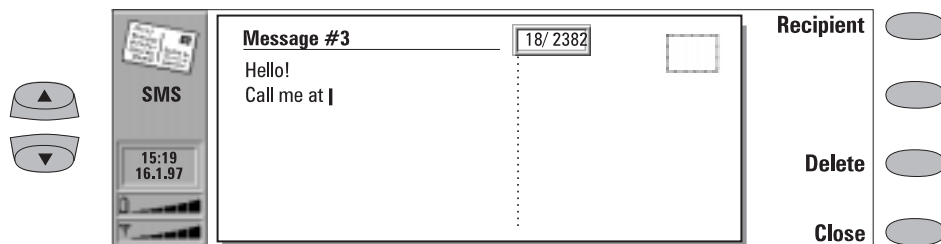


Figure 6-1

Short messages can be created and sent in the SMS, Notes (see chapter 8 "Notes: Sending" on page 8-3) and Calendar applications (see chapter 9 "Calendar: Daily schedule - Memos" on page 9-3).

To create a new short message:

- ① Press **Write message** in the SMS main view to open the short message editor.

A short message in the editor resembles a postcard. A character counter showing how many characters you have typed and how many are still available appears at the top of the editor, see figure 6-1.

In received messages, the stamp on the right half of the message is postmarked, and the time and date the message was sent are shown below the sender's name or number.

- ② When the message is ready to be sent, press **Recipient**. The Short Message directory opens, see "Sending messages: SMS directory" on page 6-2.

To send a previously created document:

- ① Select the Own texts, Standard messages or Business cards folder and press **Open**.
- ② Select a document and press **Open**. When you open a text containing formatting, you will be asked whether you wish to make a copy of the text (press **Copy**), or edit the original text (press **Edit**). Editing will lose the formatting of the original text.

- ③ When the message is ready to be sent, press **Recipient**. The SMS directory opens.
- ④ Select a recipient, press **Select**, and send the message by pressing **Send**.

Note: If your message is longer than 160 characters, it will be sent as two or more short messages.

SMS directory

The SMS application supports three ways to select a recipient:

1. Select a contact in the SMS directory:
Select a contact (by scrolling or searching) and press **Select**. The contact must have a phone number in the *Tel(GSM)* or *Tel(PCN)* contact card field. Once the address of the message has been selected, the sending view opens.
2. Enter the phone number manually:
Press **Enter number**. The sending view opens. Enter the destination number.
3. Use the address information in the recent contacts list:
Press **Recent numbers** to get a list of recent short message numbers (sent and received), open one of the lists, select a contact, and press **Select**.

To send the message to several recipients, use multiselection (see chapter 2 "Getting started: Special features – Multiselection" on page 2-12).

When the message is ready to be sent, press **Send** to hand the message over to the Document outbox which sends the message as soon as possible (see chapter 12 "Document outbox" on page 12-1).

Note: If you press **Clear both lists** in the Recent numbers view, all the information in the lists is deleted. When you open one of the



lists and select a contact, **Copy number** copies the phone number to a clipboard where it can be copied to documents by pressing Ctrl-V.

To adjust the sending options for the current message, press **Send options**. Press **Change** to set a new value for the current message. The send options (*Reply via same centre*, *Validity period*, *Message conversion* and *Request delivery report*) are the same as in the SMS settings, see "SMS settings" on page 6-5.

Received messages

Short messages are received automatically, provided that this service is available and that the phone interface is on and within cellular coverage area. All received short messages go in the Received messages folder.

When a new short message has arrived, a tone will sound (unless the system is set to silent service mode) and an information note is shown on the display.

A received short message can be a normal short message, business card (see "Business cards" on page 6-4), service card (see "Received service cards" on page 6-4) or notification of a voice message in your voice mailbox. Unread received messages are marked with  and unread received business cards are marked with .

There are two ways to read a received message:

1. When you receive a note informing you about a received short message, press **View** to read the message.
2. To read the short message later, press **Cancel** to dismiss the note. You can then open the Received messages folder, select the message and press **Open**.

To reply to a received message:

- ① Select the Received messages folder and press **Open**.

- ② Open the selected document and press **Reply**. The contents of the received message are not included in the new message automatically. If you want to include them, press **Menu** and choose the *Reply (include text)* option.

To forward a received message:

- ① Select the Received messages folder and press **Open**.
- ② Open the selected document, press **Menu** and choose the *Forward* option. The contents of the received message are included in the new message.
- ③ Press **Recipient** and select a recipient in the SMS directory.
- ④ To send the message, press **Send**.

When you press **Menu** in an opened received message, you can also use the following commands:

Use number – You may make a phone call to the sender of the message as well as call a number in the message.

- ① Open the received message, press **Menu** and choose the *Use number* option.
- ② If the message contains phone numbers both in the text and the *From* field, press **Next number** to toggle between these numbers and to select one of them.
- ③ To call the selected number, press **Call**.

Copy URL — If the message you have received contains a URL address, you can add it to the WWW hotlist (see chapter 7 "Internet: Hotlist" on page 7-12).

Received service cards

A DTMF service provider may send DTMF sequences to its subscribers in the form of a service card that can be stored as DTMF contact cards. For more information on Dual Tone Multi Frequency (DTMF) tones, see chapter 13 "Phone interface: Sending DTMF tones" on page 13-3.

Business cards

The business card is a special short message containing personal information about a contact, just like a normal business card. You can send your own business card or any contact card as a business card.

Business cards sent from a device that supports the Nokia 9000i Communicator contact card format can be saved directly as new contact cards in the Contacts directory:

- Press **Menu** in an opened received business card and select *Create card*.
- The option *Use number* allows you to make a phone call to any phone number in the business card (see "Received messages" on page 6-3).

When you have received a business card, press **Reply** to send your own business card to the sender.

To send a contact card as a business card:

- ① Open the Business cards folder. Select a business card and press **Open**.
- ② Press **Options** to define which fields to include (and show) in the business card (figure 6-2). **Change** toggles the fields on or off. The message can be up to 160 characters in length.
- ③ Press **Recipient** to select a recipient for the business card. Send the message normally, as described in the section "Sending messages" on page 6-2.

CellularWare 1.0 note: When a business card you send is received with the Nokia CellularWare 1.0 software, the label texts of *Tel* fields are added to the phone numbers. The label texts must be removed before the phone numbers can be used.



Figure 6-2

Standard messages

You can store frequently used short messages as standard messages, and send them instead of writing a new message every time. Standard messages are stored in the Standard messages folder.

When a standard message has been opened in the short message editor, the text STANDARD MESSAGE on the right top half of the card distinguishes between a normal message and a standard message.

When you open the Standard messages folder and press **Menu**, you can write a new standard message. The commands in a new standard message are:

Recipient— Opens the SMS directory, as described in "Sending messages: SMS directory" on page 6-2.

Rename — Opens a box where you can enter a new name for the current standard message.

Delete — Removes the selected standard message from the Standard messages list.

SMS settings

Press **Settings** in the SMS application main view to change the default settings. The settings you define here are used until you change them again.

Reply via same centre: Yes / No (default) — This network service allows the recipient of your short message to reply using your short message centre. By setting this option to Yes, you allow the recipient to reply to your message, even if the recipient does not subscribe to the Short Message Service (provided that the recipient has the means to type a reply message).

Validity period: 1 h / 6 h / 24 h (default) / One week / Maximum — If the recipient of a message cannot be reached within the set validity period, the message is deleted from the message centre. If *Maximum* is chosen, the validity period is set to the maximum value allowed by the message centre.

Message conversion: None (send as a normal short message, default) / Fax / X.400 / Paging / E-mail / ERMES / Speech (message synthesised from a short message) — In order to receive a converted message, the recipient must have an appropriate

terminal device available. For example, if you choose the *Fax* format, the recipient must have a telefax machine or similar device connected to the number.

Message centre number — In order to be able to send short messages, you must enter the SMS message centre number here.

Note: Your network service provider may be able to set the message centre number to your communicator via a special SMS message. Contact your service provider for details.

Request delivery report: Yes/No (default) — When this is set to *Yes*, the status of the sent message (*Delivered, Pending, Failed*) is shown in the Delivery reports folder.

Receive info messages: Yes/No/View index — If your network supports this feature, it will send you information about various topics. If you choose *View index*, the network will send you a list of topics, and you can select on what kind of topics you want to receive information.

Info service mode: Display and save/ Display only/ Save only — If this is set to *Display and save*, messages are displayed and saved in the Info service folder. If you select *Save only*, info messages are not displayed but saved in the folder. If you select *Display only*, messages are displayed but not saved.

Info service topics — Message topics vary according to the operator. You can define here what type of messages you want to receive.

For more information about Info service, contact your service provider.

7. Internet

The Internet applications are used to access computerised information services via a data call. To obtain access to the Internet, the following requirements must be met:

- Data calls must be supported by the network you are using.
- Data service must be activated for your SIM card (contact your network service provider for details).
- You have obtained an Internet Access Point (IAP) from an Internet service provider. Contact your dealer for details.

- You have entered the proper Internet settings.

Your service provider will give you instructions on how to configure the Internet settings. Follow the instructions carefully.

Activate the Internet application by pressing the Internet button on the communicator interface. From the Internet main view, select an application by scrolling and press **Select**.

With one Internet application active, you can quickly switch to another by pressing the Internet button.

To close an active application, press **Close**.

Internet applications

Mail – An electronic mail application which lets you send and receive messages all over the world using the Internet.

World Wide Web (WWW) – A hypertext-based system for finding and accessing resources on the Internet.

Telnet – Allows your communicator to connect to computers that provide terminal services through the Internet.

Terminal – Allows your communicator to connect to computers, such as mainframe computers, that provide direct dial-in terminal services.

Both the Telnet and Terminal applications emulate the VT100 terminal.

Note: Depending on the network configuration and load, establishing an Internet connection may take up to one minute (or even longer).

When you want to disconnect, press **Hang up**.

When you disconnect from the Internet, a note will be shown on the display and the data call indicator will disappear.

Internet glossary

Cookies

Cookies are little pieces of information, given by the server to you, to store session informa-

tion between the times you visit the same web site. When you accept cookies, the server is able to store and use information about your actions on the visited web site.

Domain name and Host name

Terms "domain name" and "host name" are sometimes, slightly inaccurately, used as synonyms. In a fully qualified domain name (e.g., *www.club.nokia.com*), the first part of the name is the name of the host and the following parts are names of domains to which the host belongs. Each host name corresponds to a certain IP address (see below). Host names are used because they are easier to remember than IP addresses.

Hypertext Markup Language (HTML)

A language used to define WWW documents' appearance and content.

Hypertext Transfer Protocol (HTTP)

A document transfer protocol used in the WWW system.

Images (Inline, External)

Images within a fetched WWW page are inline images. Larger images are often placed as external images and have to be viewed separately.

Internet Access Point

Where your communicator connects to Internet by way of a data call. An Internet access provider can be, for example, a commercial Internet service provider or your own company.

Internet Mail Access Protocol, version 4 (IMAP4)

A protocol used for accessing the remote mailbox.

Internet Protocol (IP) address

All computers and other devices connected to the Internet using the Internet Protocol have their own individual addresses. The address consists of four numbers separated by full stops: for example, "131.227.21.167."

Multipurpose Internet Mail Extensions (MIME)

A standard Internet format which permits including multiple mail objects in a single message. The mail objects can be, for example, formatted multiformat text messages and non-textual elements, such as images and audio fragments.

Plug-in

A plug-in is add-on software that can be downloaded from the WWW. The communicator uses plug-ins to display a document that the WWW application itself cannot show. See "Plug-ins" on page 7-15.

Point to Point Protocol (PPP)

A common networking software protocol making it possible for any computer with a modem and a phone line to connect directly to the Internet.

Post Office Protocol, version 3 (POP3)

Another common mail protocol that can be used for accessing the remote mailbox.

Protocol

A formal set of rules that govern how data is transferred between two devices.

Proxy

In some networks, the connection between the WWW application and the resource you want to connect to is blocked by a firewall. The firewall protects the internal network from unauthorised external access. A proxy is an intermediary program which enables access through the firewall. A proxy can also serve as a network "cache", which speeds up the fetching process.

Simple Mail Transport Protocol (SMTP)

An Internet protocol governing the transfer of electronic mail.

SSL (Secure Socket Layer)

A security protocol that prevents eavesdropping, tampering, or message forgery over the Internet.

If you want your Nokia 9000i Communicator to support SSL encryption, it can be installed later. Contact <http://www.club.nokia.com> for more information.

TCP Port

Identifies the data port of the destination computer.

Transmission Control Protocol/Internet Protocol (TCP/IP)

A protocol that governs the data communication in the Internet and in the TCP/IP networks.

Uniform Resource Locator (URL)

Link information required by the WWW service to connect to a given WWW host computer. The URL usually starts with *http://* followed by *www*. For example, the Club.Nokia home page can be found at *http://www.club.nokia.com*. URLs are often referred to with phrases like "Home page location," "Site location," "can be found at..."

Internet settings

To define Internet settings:

- Press **Settings** in the Internet application's main view. The Internet settings main view (figure 7-1) opens.

To define an Internet access point:

- ① In the Internet settings main view choose *Internet access* and press **Change**.
- ② To define a new Internet access point, press **New**. To modify or change an existing one, press **Edit**.

Note: The Internet settings apply to all Internet applications.

Information concerning the settings must be obtained from your Internet service provider. The service provider may be able to configure the access point for you via a special SMS message. This message sets all the necessary Internet access settings (see the following section) and adds a new entry to the list of defined Internet access points.

The Internet settings are:

Modem initialisation — Allows you to define your communicator's modem settings.

Autobauding (default) — The data transmission rate is determined automatically.

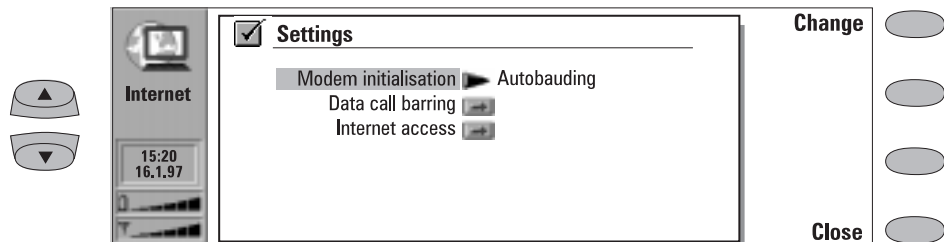


Figure 7-1

Autobauding with V.42bis compression — Speeds up data transfer (e.g. mail sending or receiving) when supported by the cellular

network.

Fixed 9600 b/s — Fixed data transmission rate

is used. If you experience problems with establishing a data call, try this option.

Custom — When a data call is established, the modem is first set to the factory defaults and then initialised according to the string you enter here. In the case of Terminal connections, see "Defining Terminal connections" on page 7-18.

Data call barring — Initiates a data call barring dialogue, similar to that in the Telephone application (see chapter 4 "Telephone: Telephone settings - Voice call barring" on page 4-7). To see the current barring mode, press **Get status**. To cancel all barrings, press **Cancel data barrings**.

Internet access — Lists the defined Internet access points. You can configure the communicator differently for each Internet access point. Press **Edit** to change the settings of an existing access point. Press **New** to define a new access point. Press **Delete** to remove an access point.

Provider name — The Internet access provider's name which appears on the access point list. If you define the access point manually, the name can be edited freely.

Phone number — Telephone number of the Internet access point.

User name — Used in the PPP authentication process if required by the Internet access provider.

Prompt for password: Yes / No (default) — If you must enter a new password every time you log on to a server, or you do not want to save the password, change this setting to Yes.

Password — Used in the PPP authentication process if required by the Internet access provider.

Advanced settings — Opens a new view where you can make further adjustments for an Internet access point, if required:

Modem initialisation — Enter any modem initialisation string containing AT commands here, if needed. This initialisation string is executed after the initialisation string you define in *Modem initialisation: Custom* view of the Internet settings.

Login customisation: None, Manual — Some Internet access points do not automatically enable PPP. In such cases you need to choose either *Manual*, as it allows you to enter manually your login name and password over a terminal connection, or press **New** in the pop-up box, to write and save a new login script.

If you choose *None*, your password and user name are automatically taken from the Internet access point settings. For more information on login scripts, see the *scripts.txt* file on the diskette supplied with the communicator.

Compression: On/Off (default) — Speeds up data transfer (e.g. mail sending or receiving) when supported by the remote PPP server.

IP address — The communicator's own IP address.

Default gateway — The IP address of the system that is a gateway out of the local network.

Network mask — Shows which portion of the communicator's IP address identifies the network.

Primary nameserver — The IP address of the primary nameserver.

Secondary nameserver — The IP address of the secondary nameserver.

Note: You may define several Internet access points, as well as specify an IAP to be used for a certain connection.

Mail

The Nokia 9000i Communicator mail system is compliant with the Internet standards SMTP, IMAP4, POP3, MIME1 and MIME2.

Mail is started in the Internet applications main view by selecting *Mail* and pressing the **Select** command button. The Mail main view shows the following folders:

Own texts — Contains the texts you have created with the communicator. The listed documents may contain formatted text, but the text will appear in the editor without formatting.

Received mail — Contains mail fetched from the remote mailbox. See "Reading mail" on page 7-9.

Remote mailbox — Your electronic mailbox service which receives all your mail. This service may be offered by a network operator, your company, or a commercial Internet access provider. The mail protocol used between the communicator and the remote mailbox is IMAP4 or POP3. Required mailbox and Internet access point settings are described in "Reading mail" on page 7-9.

Document outbox — The communicator's outgoing communications manager. See chapter 12 "Document outbox" on page 12-1.

Mail settings

Be sure to define your Internet access point as described in "Internet settings" on page 7-3.

To define the mail settings:

- ① Go to the Mail main view.
- ② Press **Settings**.

To change one of the following items, select it and press **Change**:

Internet access — Refers to the Internet access point you will use to send and receive mail. To define a new or edit an existing Internet access point, see "Internet settings" on page 7-3.

Show header fields — The term header field refers to the information given at the top of an E-mail message. This setting controls which header fields within the received message will be shown when the message is opened:

All will show all possible fields.

Basic (default) will show the *Date*, *From*, *To* and *Subject* fields.

None will not show any header fields (the sender and the subject of the message are still shown in the name of the message).

Font — *URW Mono / URW Roman / URW Sans* (default). Choose the font you prefer for your mail. This setting determines the font used in the mail editor and viewer.

Sending settings — Changing this setting opens a new set of options:

Own E-mail address — A standard Internet format address. The address must contain the @ character. This entry is obligatory if Internet mail services are to be used. Replies to your messages will be sent to this address.

Sending host — The IP address or host name of the computer which sends your Internet mail.

Send mail — *Immediately* (default) / *Upon request / During next connection*. Choose *Immediately* to send mail automatically, *Upon request* if you want to write several mail messages and send them at your convenience, or *During next connection* if you want your mail sent the next time you make a connection to the Internet access point that your mailbox uses (see "Sending mail: Send mail upon request" on page 7-8).

Copy to own E-mail address — Yes / No (default). If the setting is Yes, the mail will be automatically sent to the address defined in *Own E-mail address*.

MIME character encoding — On (default) / Off. MIME character encoding allows another MIME compliant mail system to read the character set used in your communicator. Only when text containing special characters (e.g. å, ä, ß) is sent to a non MIME compliant mail reader should the MIME character encoding be turned off. When MIME character encoding is off the special characters are automatically converted to ASCII characters: 'ä' becomes 'a' and so on.

Remote mailbox settings — Changing this setting opens a new set of options, described below. Your remote mailbox service provider will supply you with the required information.

Remote mailbox user name and *Remote mailbox password* — These may be required to connect to the server and to open your mailbox.

The password characters appear as asterisks (*) on the display. The user name and password stored here will be automatically offered to the server. You will only have to enter your user name and password if you have stored them incorrectly (in this case, you will be prompted when you connect to the remote mailbox).

Pressing **Cancel**, or entering your user name and password incorrectly three times will ter-

minate the connection to the remote mailbox. For information on how to change the Remote mailbox password, contact your remote mailbox service provider.

Receiving host — The IP address or host name of the computer that receives your Internet mail.

Remote mailbox folder — INBOX is the default folder name for your incoming mail. Do not change this name without consulting with your remote mailbox service provider. This option is only available when the remote mailbox protocol is IMAP4.

Remote mailbox protocol — IMAP4 (default) / POP3. Choose the mail protocol your mailbox service provider recommends.

Fetch headers — All (default) / Recent. Determines whether all mail headers or just the headers for mail received since the last connection will be fetched. It is possible to have old or unread mail (that you have chosen not to download or delete) in the remote mailbox.

Fetch attachments — Yes (default) / No. Determines whether possible mail attachments are fetched or not. Text attachments are always fetched. This option is only available if the remote mailbox protocol is IMAP4.

Delete fetched — Yes / No (default). Determines whether fetched mail will be automatically deleted from the remote mailbox. All fetched mail goes to the Received mail folder.

Sending mail

Mail can be sent either via the Mail, Notes (see chapter 8 "Notes: Sending" on page 8-3) or Calendar (see chapter 9 "Calendar: Daily schedule - Memos" on page 9-3) applications.

To create new mail:

① Press **Write mail** in the Mail main view. An

empty mail editor opens.

② Write the message. You can change the font within the Mail settings.

③ When the message is ready to be sent, press **Recipient** to select an address from the Mail

directory. See "Sending mail: Mail directory" on page 7-7.

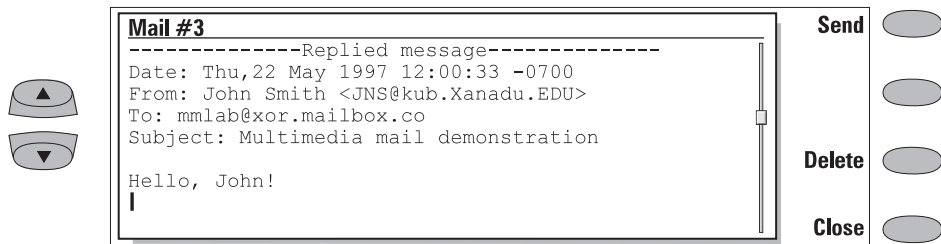


Figure 7-2

To send previously created documents:

- ① Select the Own texts folder in the Mail main view and press **Open**.
- ② Select a document and press **Open**. The document is loaded in the mail editor using the font chosen in the Mail settings. If the document contains text formattings, before you can edit the document, you will be asked if you want to edit the original (and lose all formattings) or create a copy in the Own texts folder and edit the copy instead.
- ③ When the document is ready to be sent, press **Recipient** to open the Mail directory. See "Sending mail: Mail directory" on page 7-7.
- ④ Select the recipient or enter the mail address and press **Send**. Your mail will go to the Document outbox.

To reply to received mail:

- ① Select the Received mail folder and press **Open**.
- ② Select a message and press **Open**. The document is opened in the mail viewer, and a new set of commands appears.
- ③ Press **Menu** and select **Reply**. If the received mail message is a MIME document, only the first text part is included in the reply. (For more information about the **Menu** command, see "Reading mail" on page 7-9.)
- ④ When the reply is ready to be sent, press **Send**. The Mail envelope view opens, see "Mail envelope" on page 7-8.

To forward received mail:

- ① Select the Received mail folder and press **Open**.
- ② Select a message and press **Open**. The document is opened in the mail viewer.
- ③ Press **Menu**, and select **Forward**. The mail editor opens. The contents of the message you are forwarding will be included in the new message. If the received mail message is a MIME document, only the first text part is copied to the forwarded message and may be edited. Any MIME attachments are included in the forwarded message, but they are not visible in the editor.
- ④ When the message is ready to be sent, press **Recipient** to open the Mail directory. See the following "Mail directory" section.

Mail directory

The directory shows a list of contacts that have electronic mail addresses in the Mail field(s) of their contact cards.

To select a recipient listed in the Mail directory:

- ① Move the selection frame over the contact's name and press **Select**. If the contact has only one mail address, the Mail envelope opens.
- ② If the contact has several mail addresses, a pop-up box opens, listing the available mail addresses. Select an address and press **Select** to open the Mail envelope. See "Sending mail: Mail envelope" on page 7-8.

To enter the recipient's address manually:

① Press **Enter address**. The Mail envelope

opens. See "Sending mail: Mail envelope" on page 7-8.

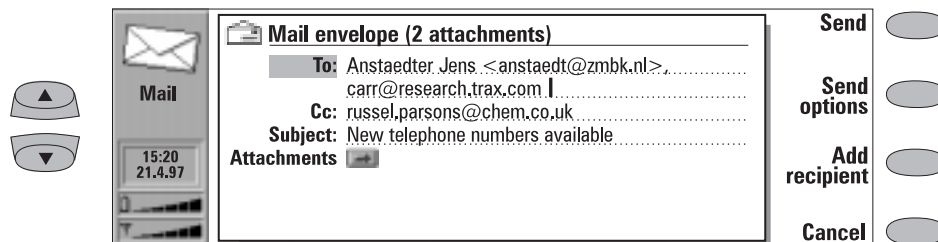


Figure 7-3

Mail envelope

The Mail envelope opens whenever you are about to send mail (figure 7-3). All field entries are freely editable.

To determine how the current mail message will be sent:

Press **Send options**. To change the current setting, press **Change**. The possible options are:

Send mail — Immediately/ Upon request/ During next connection

Copy to own E-mail address — Yes / No (default)

MIME character encoding — On/ Off

For more information, see "Mail settings" on page 7-5.

To add addresses to the *To* or *Cc* fields in the Mail directory:

Press **Add recipient**. The new address will be entered into the field that was selected when you pressed **Add recipient**. (If the *Subject* field is selected, the command is dimmed.)

Multiple addresses in the *To* and *Cc* fields must be separated by a comma.

You can also enter standard Internet mail addresses manually. The basic format of an Internet mail address is *mailbox@domain*. The mailbox part identifies the mail recipient within a domain.

To add attachments to the message:

Scroll down to *Attachments* and press **Attachments**. A list of attachments opens. To add documents to the list, press **Add**. You can select documents from the *Own texts* and *Downloaded files* folders. To remove documents from the attachment list, press **Remove**. When all the desired attachments are in the list, press **Close**.

To send the message, press **Send**.

Send mail upon request

When you have several mail messages to send, you may want to use the *Upon request* (you choose the time and initialise the sending) or *During next connection* (your mail will be sent automatically the next time you make an connection to the Internet access point your remote mailbox uses) option, which are set in the Mail settings. This way you may send all your mail during the same data call.

To send *Upon request*:

- ① Write your mail, select the recipient and press **Send options**.
- ② Select the *Upon request* option and then press **Send** to send the mail.
- ③ Go to the Document outbox and press **Open**.
- ④ Press **Start** to send your mail.

Reading mail

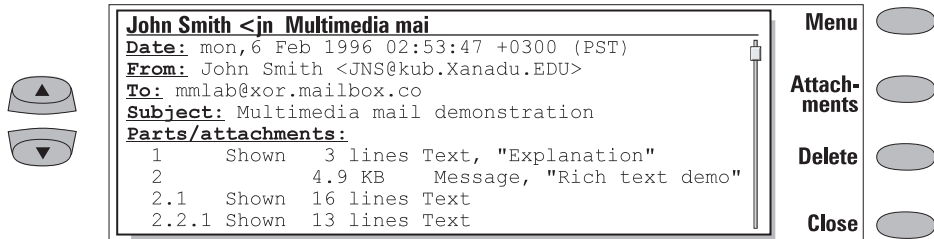



Figure 7-4

Unlike faxes, Internet mail addressed to you is not automatically received by your communicator, but a remote mailbox (figure 7-5). This is to let you determine which messages you want to read and when. To read your mail, you must first connect to your remote mailbox and then select the messages you wish to fetch onto your communicator. Connection to the remote mailbox is established via a data call.

If your remote mailbox server is capable of sending you special short messages, you will hear tone (unless the system is set to silent service mode) and see a note when new mail arrives in your remote mailbox.

Mail that you fetch from your remote mailbox is stored in the Received mail folder. To open the Received mail folder, select it in the Mail main view and press **Open**. The folder lists received mail messages. Mail messages that have not yet been opened in the communicator are marked with .

- To rename or delete a document press **Rename** or **Delete**.
- To close the Received mail folder, press **Close**.
- To view the selected message, press **Open**. The selected message is opened in the mail viewer.

From the Received mail folder, when you open a received mail the following command buttons are displayed:

Menu — Opens up a pop-up box with the reply and forward options:

Reply (include text) — Replies to a mail message and includes the received mail in your reply.

Reply — Replies to a mail message without including the received mail in your reply.

Replyall (include text) — Replies to all persons who received the mail and includes the received mail in your reply.

Replyall — Replies to all persons who received the mail without including the received mail in your reply.

Forward — Forwards a received mail and the possible mail attachments.

Scroll to any of these and press **Select**.

Attachments — Lists all MIME attachments (text, image, audio, video or application). If no attachments are contained in the message, this command is dimmed. When viewing the list of attachments you may select an attachment and choose from the following options:

View will open and display the attachment, provided there is enough memory and a viewer associated with the attachment.

Save will save the attachment in the Downloaded files folder.

Close returns you to the previous screen.

Delete — Deletes the open mail message.

Close — Returns you to the previous screen.

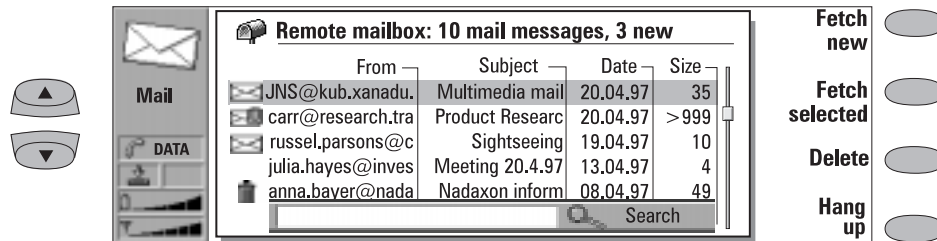





Figure 7-5

Connecting to remote mailbox

To connect to the remote mailbox, move the selection frame in the Mail main view over the Remote mailbox and press **Connect**.

Unread messages are marked with , messages with attachments with  and deleted messages with .

The Mail and Internet access point settings must be configured correctly. Read "Mail settings" on page 7-5 and follow the instructions given by your remote mailbox and Internet service providers.

Fetching mail

Once you have connected to the remote mailbox, you can fetch and delete mail. If the *Delete fetched* setting is on (see "Mail settings" on page 7-5), fetched messages are marked as deleted. These messages will be retained in Received mail folder, and deleted from the remote mailbox.

To fetch all new mail:

- Press **Fetch new**. All mail with the new mail icon is fetched to the Received mail folder. After new mail has been fetched, connection to the remote mailbox is closed and the Mail main view returns.

To fetch a selected message:

- Select the mail message(s) you want to fetch and press **Fetch selected**. After mail has been fetched, the Remote mailbox view returns.

To delete/undelete a mail message:

- Select a message and press **Delete** or **Undelete**. The messages will be deleted when you exit the remote mailbox. You can also use multiselection, see chapter 2 "Getting started: Special features - Multiselection" on page 2-12.

To disconnect from the remote mailbox:

- Press **Hang up**. If you have messages marked as deleted, you will be prompted to confirm the deletion. The connection to remote mailbox closes, and the Mail application main view returns on the display.

World Wide Web

To connect to the World Wide Web, your SIM card has to be activated for the service and you need an account with an Internet service provider.

To open the World Wide Web (WWW) application:

- Select *WWW* in the Internet applications main view, and press **Select**.

To exit the WWW application:

- Press **Hang up** in the WWW main view (the Hotlist). The data call will end and the WWW application will close.

WWW settings

To enter the WWW settings view, press the **Settings** command button in the WWW main view. To change the setting, select it and press **Change**.

Internet access point — Contains your current Internet settings. Although the proxy settings may be left blank, an Internet access point must be defined before you can make an Internet connection (see "Internet settings" on page 7-3).

Internet access — To change the Internet access point, press **Change**. Choose one of the IAPs you have defined in the Internet settings (main view). The Internet access point that was selected when the Internet access view was closed is set as the default access point.

HTTP proxy — The hostname of the HTTP proxy server.

Proxy port — The port number that the proxy server uses.

No proxy for — You may define domains for which the proxy must not be used. Domain names are delimited by commas (for example, nokia.com,edu.fi). You may specify the domains as accurately as you wish.

Proxy settings allow you to use a proxy (see "Internet glossary" on page 7-1). The *HTTP proxy* server name and *Proxy port* must be defined before using the proxy.

Autodisconnect time — 2 min/ 3 min (default)/5 min/Maximum. Determines the length of time the communicator will be connected to the Internet in an idle state before automatically disconnecting.

Show E-mail address — Yes(default) / No. If set to Yes, your mail address is included in the fetch request when fetching a WWW page. The mail address is defined in the Mail application's Remote mailbox settings.

Autoload images — Yes / No (default). If the autoload images option is Yes, inline (JPG or GIF) images on the WWW page are fetched automatically. When the setting is No, WWW pages are fetched without the images and shown much faster.

Clear cache and history — Yes (default) / No. Most recently fetched WWW pages are kept in the communicator's temporary memory, the "cache".

If set to Yes, the WWW cache, history list and cookie file are automatically emptied after you exit the WWW application. If set to No, the cache stores as much information as possible. When you restart the WWW application, the most recently stored information can be fetched from the cache and history without making a new data call.

URL entry box visible — Yes (default) / No. When Yes is chosen, the URL entry box is shown in the WWW browser main view, and the URL is read

from the entry box. When the option is *No*, the URL is read from the Hotlist.

Accept cookies – *Yes/No* (default). Determines whether the cookies functionality is enabled (see "Internet glossary" on page 7-1).

Plug-ins – Contains a list of installed plug-ins. See "Navigating in WWW: Plug-ins" on page 7-15.

Hotlist

The WWW main view shows the Hotlist (a list of predefined WWW page locations), with the name of the Internet access point to be used for your next Internet connection. Below the Hotlist is the URL entry field which shows the address of the last visited WWW page.

To view a page:

- ① Select an entry in the Hotlist or enter an address in the URL entry field (use the back-space key to delete the address shown)
- ② Press **Fetch**.

To add a new Hotlist item:

- ① Press **Define**. A new set of commands is activated.
- ② Press **New**.
- ③ Enter the *Item name* you want for your new Hotlist item, then move to the *URL* field.
- ④ Enter the HTTP address (e.g. www.nokia.com).
- ⑤ The *Autoselect IAP* field is for those who want to use a specific Internet access point (IAP) to connect to a certain web site. If you have no preferences about which IAP is used, leave the *Autoselect IAP* at *Yes*. To specify an IAP,

choose *No*. You may then move down to the *Internet access* field, press **Change**, and select from among the predefined access points.

URL addresses begin by default: "http://," but the prefix "file:/" (note: three slashes) can also be used. The WWW application checks that the syntax of the URL you enter is correct. If a prefix is missing, "http://" will be added automatically.

To edit the Hotlist:

- ① In the WWW main view, press **Define**. A new set of commands is activated.
- ② Scroll to the Hotlist item you wish to edit, and Press **Edit**. You can also use multiselection (see chapter 2 "Getting started: Special features - Multiselection" on page 2-12).
- ③ Make your changes and press **Close** to exit the view.

If the WWW page is stored locally (stored in the communicator memory), the prefix "file:/" can be used (see "Connecting to WWW: Locally stored WWW pages" on page 7-13).

Press **Delete** to delete the selected Hotlist entry.

Connecting to WWW

Select a WWW page from the Hotlist or enter a URL address into the URL entry box (see "Navigating in WWW" on page 7-14) and press **Fetch**.

If the WWW page was already recently fetched, the page is fetched from temporary working mem-

ory (or "cache"). If not, the page is fetched from the Internet by making a data call to the selected Internet access point. You can also fetch WWW pages stored on the communicator by using the

prefix "file:///." See "Connecting to WWW: Locally stored WWW pages" on page 7-13.

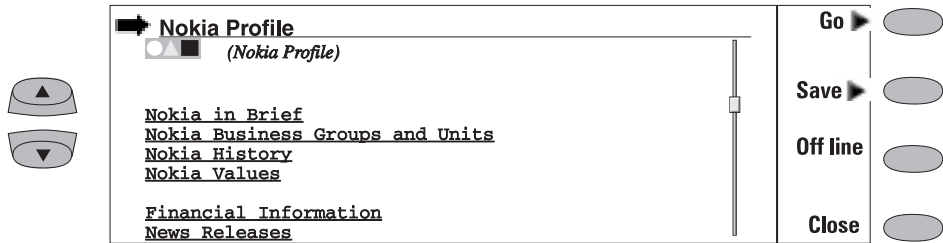


Figure 7-6

Some servers have access restrictions that require a valid user name and password. In this case, you must enter the user name and password before the document can be fetched. The communicator stores the passwords and user names that you enter to gain access to that domain, and the next time you connect to the same domain, they will be offered automatically. If automated login does not succeed, you must enter the information manually.

Note: Stored passwords to individual web sites are removed when the communicator is rebooted.

The fetched WWW page is loaded in the WWW browser. The status line on top of the display shows the status of the connection, the title of the document and how many bytes of the document file have been received.

To reload a web page, press Ctrl-R.

After the WWW page has been fetched, the following commands are available (see figure 7-6):

Go activates the WWW navigation commands, see "Navigating in WWW" on page 7-14.

Save activates a new set of commands:

Copy text/Copy image copies the text (or image) on the opened page into the Downloaded files folder. Possible text formattings are retained in the copy.

Add to hotlist adds on the Hotlist a link pointing to this WWW page.

Copy HTML saves the HTML code of the currently opened WWW page or inline image into the Downloaded files folder and adds on

the Hotlist a link pointing to this WWW page. See "Connecting to WWW: Locally stored WWW pages" on page 7-13.

Back returns the previous set of commands.

Go off line ends the data call and disconnects from the Internet. Once you are off line, this command changes to **Go on line**.

You may use the off line function, for example, to read copied text off line. The copied text can be read or edited (see chapter 8 "Notes: Editing" on page 8-2).

To reconnect to the Internet, press **Go on line**. While you are off line, commands **Fetch**, **Fetch image** or **Previous**, or other applications may also return you to on line.


Close returns to the Hotlist.

Locally stored WWW pages

To store fetched WWW pages locally (i.e. on your communicator):

- ① From the WWW page you have fetched, press **Save**. A new set of commands is activated.
- ② Press **Copy source**.

The current WWW page HTML code is stored in the Downloaded files folder and a link pointing to this WWW page is added on the Hotlist.

Locally stored WWW pages are marked by  in the Hotlist.

If you want to view the HTML code of the saved WWW page, open the document in the Note editor (in the Downloaded files of the Notes appli-

cation). If you want to view the document as it would appear in the World Wide Web, open the document in the WWW browser (in the WWW application). A locally stored WWW page is opened in the WWW browser by using the prefix "file:/// " instead of "http:///".

You can edit the HTML code in the Own texts folder.

A fetched WWW document may contain an SMS form. You can send the contents of an SMS form as a short message.

Navigating in WWW

If there are hyperlinks or hotspots in the part of the WWW document shown in the application window, one will always be selected (see figure 7-7).

Hyperlinks are links to other documents or images, used to send or receive information from the World Wide Web.

Hotspots (such as selection lists, text entry fields and reset/submit buttons) enable you to input information into the World Wide Web.

Use the scroll buttons to scroll the view and to choose hyperlinks and hotspots. Each scroll key press selects the nearest hyperlink or hotspot, or moves the view one line up or down.

The following commands may be available in this view, depending on the hyperlink or hotspot:

Fetch follows a hyperlink.

Fetch image loads an image (see "Navigating in WWW: Viewing images" on page 7-14).

Press is available when a hyperlink should be chosen by pressing a button.

Change activates various items, such as check boxes.

Previous opens the previously visited WWW page. Command is dimmed if there is no previous page.

Back returns the WWW browser commands.

History activates the History view. You can select a previously fetched WWW page from the list and press **Fetch**. The history list contains the most recently fetched documents (and their URLs – shown in the URL entry box). After the maximum list length is reached, older pages are deleted one by one as new ones are stored.

If you wish to clear the list, choose **Clear now**. All the items from the History list and the cache will be deleted.

Viewing images

Images that are part of the fetched WWW page are called inline images. By default, inline images are not fetched with the WWW page (see the option *Autoload images* in "WWW settings" on page 7-11), but will be displayed as icons. To fetch an image, select the icon and press **Fetch image**.

Inline images can also be image maps. An inline image map acts like a hyperlink. A fetched and

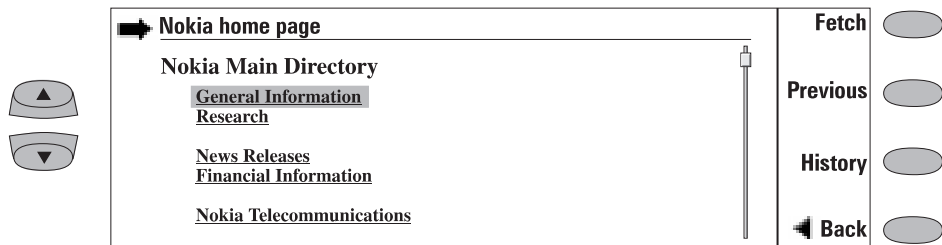


Figure 7-7

selected image map contains a cursor which can be moved with the keyboard arrow keys. When you press **Fetch**, the pixel coordinates of the cursor are sent to the URL, and the corresponding WWW page is fetched.

Images that are separate documents and not part of a hypertext document are called external images. When an external image is fetched, it is viewed separately from the hypertext document in the image viewer.

The external image viewer commands are:

Copy image copies the external image in the Downloaded files folder with its server-given name.

View enables zooming, see chapter 5 "Fax: Received faxes" on page 5-3.

Plug-ins

The Nokia 9000i Communicator is capable of accepting software plug-ins that can increase web browser functionality. The WWW application activates the plug-ins when necessary.

To download a plug-in:

- ① Move the cursor over the hypertext link that points to the plug-in and press **Fetch**.
- ② Press **Install**. If there is sufficient memory available, the plug-in will be installed. Installed plug-ins can be removed in the Plug-ins list in the WWW settings.

Downloading add-on software

The WWW application can be used to install applications on your communicator.

- ① Go to the WWW site where the add-on software package exists.
- ② Select the hypertext link that points to the add-on software package.
- ③ Press **Fetch** to fetch the package. After the software package has been successfully fetched, the software installation view opens.
- ④ Press **Install** to install the software.

Caution: Beware of viruses. Install into the Nokia 9000i Communicator only software you have obtained from sources that offer adequate protection against viruses.

Telnet

The Telnet application is activated in the Internet main view by selecting Telnet and pressing **Select**.

The Telnet application is used to make a connection to a remote computer via the Internet.

The Telnet application is similar to the Terminal application, in that both applications emulate the VT100 terminal display (see figure 7-8). The display occupies the left side of the screen. The screen size is 80 characters in 24 lines.

Once a Telnet connection is established, you must in most cases enter your login name and a password in order to be able to use the services provided by the host computer. The Telnet main view shows all pre-defined Telnet hosts.

To connect with a pre-defined Telnet host, select a host and press **Connect** (see "Defining Telnet connections: Telnet connection" on page 7-16).

To create new or edit existing connections, press **Define**. See "Defining Telnet connections" below.

Defining Telnet connections

After you have pressed **Define** in the Telnet main view, the defined Telnet connections are shown.

To edit existing connections, press **Edit**.

To define new Telnet connections, press **New**.

To delete the selected connection, press **Delete**.

Pressing **Edit** or **New** opens the Define Telnet connection view, where you can define the following settings:

Connection name — Edit an existing or enter a new connection name. The name can be defined freely.

Destination host — Edit an existing or enter a new connection address. The host is identified by either a numeric IP address or a correct textual host name.

Internet access — Select a service provider from those currently defined. To change the preferred service provider, press the **Change** command button.

Backspace key — Defines whether the keyboard backspace key is used as a backspace (**BS** - default) or delete (**DEL**) key.

Telnet connection

When you have connected to the remote system, the following commands become available (see figure 7-8):

Press **Keys** to emulate the VT100 special keys, which are not available on the communicator keyboard. The special keys include:

- Four programmable function keys (PF1-4)
- All VT100 application keypad keys (numbers 1-9, minus, comma, period, dash, enter)
- The following VT100 functions: reset terminal, Ctrl-[, Ctrl-], Ctrl-~.

In a Telnet connection, these special keys include the following commands (can be used in remote systems that support them):

Interrupt — Interrupts the current process on the remote computer.

Skip command output — Prevents command output from being displayed on the screen.

Are you there? — Enquires whether the remote system is still running (if the execution of a

task seems to take too long).

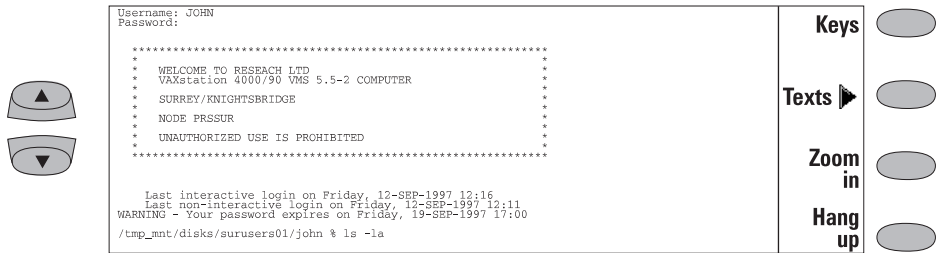


Figure 7-8

The selected special character is entered to the left of the cursor by pressing **Insert**. The inserted special characters send a control signal to the remote computer – they are not displayed on the screen.

Press **Zoom in** if the whole emulated screen and, consequently, character size is too small. The **Zoom out** command returns the unzoomed view. When the view is being zoomed, the scroll keys can be used to switch between the upper and lower parts of the terminal screen.

Press **Texts** to activate the text transfer commands, see "Defining Telnet connections: Text transfers" on page 7-17.

Press **Hang up** to close the connection to the host, end the data call and return to the Telnet application main view.

The scroll up/down buttons can be used for scrolling the view. Scrolling does not affect the cursor position. Pressing any keyboard key returns the view to the cursor position.

Text transfers

The purpose of the text transfer function is to enable you to download (capture) or upload (send) texts between the host computer and the communicator. This feature can be used, for ex-

ample, to send pre-written mail messages to the company mainframe computer, or alternatively, copy received mail and then read it later, off line.

Once you have connected to the host, press **Texts** in the Telnet or Terminal main view to access the Text transfer view.

To send text to the host computer:

- ① Press **Send text**.
- ② Open one of the folders shown and select the document you want to send.
- ③ Press **Send**.

While the text is being uploaded, the keyboard is inactive.

To copy text from the host computer:

- ① Prepare the text reading application on the host.
- ② Press **Capture text**. All interaction with the host will be recorded in a file in the Downloaded files folder. Control characters, except line changes, will not be stored.
- ③ Press **Stop capture** to end the text capture process.

Press **Back** to return to the previous set of commands.

Terminal

The Terminal application is activated in the Internet main view by selecting Terminal and pressing **Select**. The Terminal application is used to connect directly (not via Internet) to a remote computer by way of a data call.

The Terminal main view shows defined Terminal connections. The Terminal application is similar to the Telnet application, in that both applications emulate the VT100 terminal display (see figure 7-8). The display occupies the left side of

the screen. The screen size is 80 characters in 24 lines.

Selecting the host and the connection initiation procedures are done in the same way as with Telnet connections. To connect with the selected pre-defined Terminal connection, press **Connect**. See "Defining Terminal connections: Terminal connection" on page 7-19.

To create new or edit existing connections, press **Define**. See "Defining Terminal connections" on page 7-18.

Defining Terminal connections

After you have pressed **Define** in the Terminal main view, the defined Terminal connections are shown.

To edit existing connections, press **Edit**.

To define new Terminal connections, press **New**.

To delete the selected connection, press **Delete**.

Pressing **Edit** or **New** opens the Define Terminal connection view (figure 7-9):

Connection name – Edit an existing or enter a new connection name. The name can be defined freely.

Phone number – The phone number for accessing the service. The phone number may include spaces and hyphens.

Data bits – Service/host specific communication parameter: 7/8 (default).

Parity – Service/host specific communication parameter: *None* (default)/*Odd/Even*.

Stop bits – Service/host specific communication parameter: 1 (default)/2.

Local echo – Controls whether characters typed from the communicator keyboard are echoed to the communicator interface display (i.e., locally) or to the remote host computer: *On* (echoed locally)/*Off* (echoed to the remote host – default).

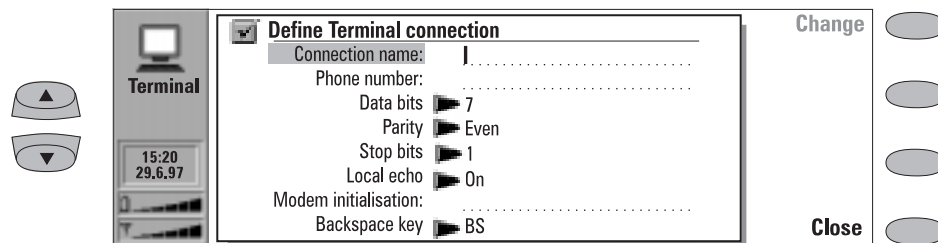


Figure 7-9

Modem initialisation – Any modem initialisation string containing AT commands may be entered here, if needed. The initialisation string you enter here is executed after the initialisation string you define in the Internet settings (in *Modem initialisation: Custom* view).

Backspace key – Defines whether the keyboard backspace key is used as a backspace (*BS* – default) or delete (*DEL*) key.

Terminal connection

When you have connected to the remote system, the following commands become available:

Press **Keys** to emulate the VT100 special keys, which are not available on the communicator keyboard. The special keys include:

- Four programmable function keys (PF1-4).
- All VT100 application keypad keys (numbers 1-9, minus, comma, period, dash, enter).

- The following VT100 functions: reset terminal, Ctrl-[, Ctrl-], Ctrl-~.

The selected special character is entered to the left of the cursor by pressing **Insert**.

Press **Texts** to activate the text transfer commands, see "Defining Telnet connections: Text transfers" on page 7-17.

Press **Zoom in** if the whole emulated screen and, consequently, character size is too small. The **Zoom out** command returns the unzoomed view. When the view is being zoomed, the scroll keys can be used to switch between the upper and lower parts of the terminal screen.

Press **Hang up** to close the connection to the host, end the data call and return to the Terminal application main view.

The scroll up/down buttons can be used for scrolling the view. Scrolling does not affect the cursor position. Pressing any keyboard key returns the view to the cursor position.

8. Notes

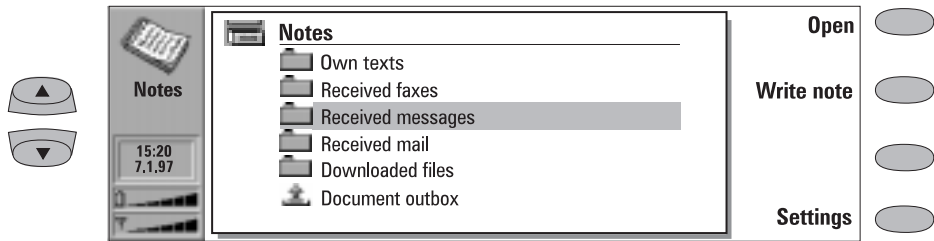


Figure 8-1

Notes is used for writing notes and managing various documents stored on the communicator. Notes is the only application where documents can be printed.

Folders in the Notes main view are (see figure 8-1):

Own texts – Created mail, faxes, short messages, notes and memos.

Received faxes, Received messages, Received mail – All received documents.

Downloaded files – Documents downloaded with the Internet applications.

Document outbox – Documents waiting to be sent.

To read a document in any of the above folders:

- ① Select a folder and press **Open**.
- ② Select a document from the folder's document list and press **Open**.

To delete a document:

- ① Select a folder and press **Open**.
- ② Select a document from the folder's document list and press **Delete**.

To create a new document:

- ① Press **Write note** in the Notes main view. A new document is created in the Own texts folder and the note editor opens.
- ② Write the document.

Menu

Each folder has **Menu** as one of the commands. When you press **Menu**, the following options become available:

Write note – Available only inside Own texts folder.

Rename – You can rename the selected subfolder or document. Memos cannot be renamed.

Copy – Choose a folder into which the document is copied.

Move – You can select in which folder to move the document. Memos cannot be moved.

Create folder – Allows you to make a new subfolder.

Editing

When you open a document, the document is opened in the appropriate editor or viewer (received faxes are opened in the fax viewer, downloaded figures in the image viewer, etc.). The available commands vary according to the editor/viewer.

If the opened document is very large (dozens of pages), the time required before the document opens and can be scrolled or edited is longer than with smaller documents.

Documents that open in the Note editor can be directly edited and formatted. To format the text, press **Style**. The following options are available:

Font: URW Mono / URW Roman / URW Sans (default) (true type fonts)

Size: 10 / 12 (default) / 14 / 18 / 24 / 36 / User defined (measured in points)

Bold (Ctrl-B): On / Off

Italics (Ctrl-I): On / Off

Underlined (Ctrl-U): On / Off

Justification: Left / Centred / Right / Full

Margins — Opens a new view where you can choose a value (default is 2.54 centimetres/1 inch) for the top, bottom, left and right margins. The unit of measurement is chosen in the System settings (see chapter 10 "System: System settings" on page 10-1).

A new style setting affects all new text from the cursor point forward. The margin settings, however, apply to the whole document. To change the settings permanently, you must do it in the main view settings (see "Notes settings" on page 8-4).

Special characters

The special character key Chr on the keyboard is used to create characters that are not included in

the keyboard. The character key can always be used when you are able to enter characters from the keyboard. The case of the inserted special character is determined by whether the Shift or Caps lock key has been pressed.

To enter special characters from the character table:

- ① Press and release the Chr key and a special character table opens on the screen.
- ② Move the selection frame over the desired special character with the arrow keys, scroll buttons or by pressing a keyboard key.
- ③ Press **Insert** to close the character table and to insert the selected character to the left of the cursor.

To insert special characters from the keyboard:

- Press and hold the Chr key and simultaneously press a key with a special character printed on the key as the third (green) character. The special key will be inserted on the display.
- In addition, special characters can be generated in the above described way using certain unmarked keys, for example, "a" and "e". If you continue to hold the Chr key down and press the same letter key again, the second special character is shown in the place of the first, and so on, until the first character is shown again.

For information about the available editing shortcuts see chapter 2 "Getting started: Special features - Shortcuts" on page 2-12.

Created and downloaded texts

All created documents, as well as downloaded and captured texts (see chapter 7 "Internet: Connecting to WWW" on page 7-12 and "Defining Telnet connections: Text transfers" on page 7-17), can be opened in the Note editor.

Read-only documents

Received short messages, received mail and ASCII text files (transferred to the communicator with the File transfer application, see chapter 10 "System: File transfer" on page 10-6) are read-only documents. Read-only documents themselves cannot be edited, but an editable copy can be created:

- ① Open a read-only document – the contents are shown as plain text.
- ② In the opened read-only document, press any character key. You will be asked if you want to create an editable copy.

- ③ Press **Create** to close the original file and copy its contents to a new, created text file. The DOS file will be deleted after an editable copy has been created.
- ④ Edit the new created note normally.

Received faxes and downloaded figures

The contents of a received fax cannot be converted into text or edited. Opening a fax activates the fax viewer (see chapter 5 "Fax: Received faxes" on page 5-3) and opening an image activates the image viewer (see chapter 7 "Internet: Navigating in WWW" on page 7-14).

Sending

When you send a document in the Notes application, you can choose whether to send the document as a fax, mail or short message.

Pressing the **Print/Send** command button in Notes opens a pop-up box listing printing and different sending options. Select the option you want and press **Select**:

- To print the file, select *Print*. The print commands view opens. Printing will be described in more detail in the following "Printing" section.
- To send as a fax, select *Send as fax*. The fax directory opens. The sending procedure from this point on is similar to that described in chapter 5 "Fax: Sending faxes – Fax directory" on page 5-2.
- To send as a short message, select *Send as short message*. The sending procedure is similar to that described in chapter 6 "Short messages: Sending messages" on page 6-2.
- To send as mail, select *Send as mail*. The sending procedure is similar to that described in chapter 7 "Internet: Sending mail" on page 7-6.

Printing

Documents can be directly printed in Notes only. Printing is possible only to a printer that has an IrDA compatible infrared port. To print to other printers, transfer the file to a PC, as described in chapter 10 "System: File transfer" on page 10-6.

Please refer to the User's Guide of the printer for detailed safety instructions on the device.

To establish an infrared serial connection:

Make sure that the communicator's infrared port faces the infrared port of the printer. Keep the infrared connection clear. In the event the infrared connection is obstructed for too long (for example, something is moved between the infrared sensors or the communicator is moved), printing is interrupted.

To print a document:

Open the document, press **Print/Send** and select *Print*.

For information on the supported printers, read the *readme.txt* file on the diskette supplied in the communicator sales package, or see the Club.Nokia home page in the World Wide Web (found at the address <http://www.club.nokia.com>).

More printer drivers can be installed with the Install/Remove software application under System.

After the communicator has checked that you do not already have an active PC connection, it starts to scan for a printer. This means that you cannot print while you are, for example, transferring files from the communicator to a PC. If the printer cannot be found, a failure note is shown and the editor view returns. If the correct printer is found, the printer driver is selected automati-

cally and the printing view shows the name of the document and the selected printer.

Press **Start** to start printing.

Printing problems

Though the communicator may detect a connected printer, certain complications might still occur.

If the printer found is not recognised:

Select the correct printer driver manually.

You can choose another printer after pressing **Printers**.

If the printer found is not recognised, and the communicator does not have the correct driver for the printer:

You can try to print the document using one of the available printer drivers.

Notes settings

You can change the note editor's default settings by pressing the **Settings** command button in the Notes main view. The settings are the default values for note and fax editors' text options and margins, and they are valid until they are changed again in the Settings view.

To change the settings, choose a setting and press **Change**.

Font: URW Mono / URW Roman / URW Sans (default)

Size: 10 points / 12 (default) / 14 / 18 / 24 / 36 / User defined

Margins — Opens a new view where you can define values for the following (the unit of measure is chosen in the *Preferences* of the System application's settings):

Top margin (default 2.54 cm / 1 inch)

Bottom margin (default 2.54 cm / 1 inch)

Left margin (default 2.54 cm / 1 inch)

Right margin (default 2.54 cm / 1 inch)

9. Calendar

In the Calendar application, you can view your scheduled events, keep a list of tasks in the To-do list, set calendar alarms and link memos to events (see "Daily schedule: Memos" on page 9-3).

The Calendar contains:

- Monthly schedule — Shows a month at a time as well as the events of a selected day. The monthly schedule is the main view in Calendar.
- Daily schedule — Shows a list of events for the selected day.
- Weekly schedule — Shows the timetable of a week as well as the events of a selected day.
- To-do list — Allows you to make a list of tasks that are not associated with any particular day, and prioritise your list.

One of the commands in the monthly, daily and weekly schedules is **Menu**. Pressing **Menu** provides you with the following options:

- To-do list*
- View month /View week**
- Today*
- Next month/week/day (Ctrl-N)**
- Previous month/week/day (Ctrl-P)**
- Settings*

* These menu choices vary according to the schedule you are in when you press **Menu**.

Select *Settings* to see the following options:

- Booking password* — Used to protect your calendar from receiving scheduled events from anyone except those who have your password (see "Calendar booking: Booking password" on page 9-4). When a password is written in the field, all characters appear as asterisks.
- Default alarm* — Used when you set an alarm to an event. The alarm will go off 10 minutes before the scheduled time of an event, unless you specify otherwise here.



Figure 9-1

Monthly schedule

The monthly schedule shows the days of the current month in columns according to the number of the week (on the top row).

- Today's date is shown in a frame (in the figure 9-1, April 22nd).
- The currently selected date is darkened with white digits (April 2nd).
- Days that have scheduled events are indicated by a grey bar on the left.
- If the selected day contains scheduled events (as in the figure, on April 2nd), they are shown in a separate daily events list on the right side of the display. The schedule can be edited by selecting a date and pressing **Day**. If you just

start writing the event in the monthly schedule, the Details view opens automatically.

- If the whole day has been reserved for an event, there is a dark grey bar to the left of the day, and the event appears in **bold** in the daily events list (as "Meeting with Sarah" in figure 9-1).




Use the scroll or arrow keys to move the selection frame.

To write yourself reminders of important matters, press **To-do list**.

Daily schedule

Activate the daily schedule by pressing **Day** in the monthly or weekly schedule. The daily events list displays the events of the selected day. The contents of event entries are freely editable.

The symbols in the daily schedule are:

- Attached alarms.
-  — Calendar bookings.
-  — Attached memos.
-  — Recurring events.
- Annual events.

The symbol appears next to the event's name (see figure 9-2). For each event, only the symbol with the highest priority is shown (the symbols will appear in the order listed above).

To add events:

- ① Move the selection frame over the starting time of the event.
- ② Type the event on the dotted line. If you want to add an event without a start time, write the event, press **Details** and remove the start time. The event will be shown with a hyphen.

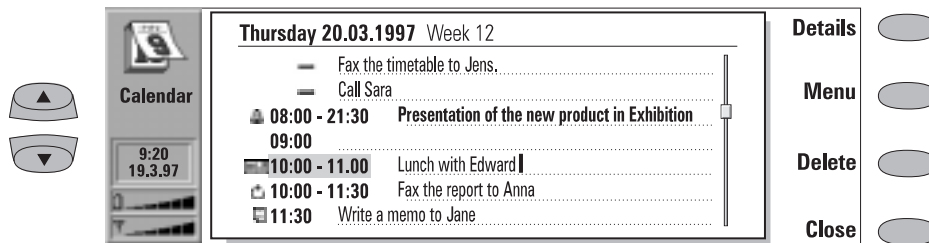


Figure 9-2

To delete events:

Select the event and press **Delete**. If you delete (or edit) recurring events, you will be asked if you want to apply the changes to all or only to the selected event.

To adjust the details of the selected event:

Press **Details**. A new view opens, allowing you to adjust the following details:

Description — The description of the event.

Reserve: whole day(s) – You can write down the number of days required for the event.

Start:

Date – The date of the event. The default date is that of the selected day. The year is always given using two digits.

Time – The time when the event starts.

The default start time is the selected time row in the daily events list.

End:

Date – The date when the event ends (optional).

Time – The time when the event ends (optional).

Alarm – You can set an alarm for the selected event. See "Alarms" on page 9-5.

Frequency – You may define how often the event repeats. The options are *None* (default) /*Daily* /*Weekly* /*Monthly* /*Annually* /*Every other week* /*Working days*.

Repeat until: (date) – You can write down the last date of the event.

Event sent to – A list of all the people to whom you have sent the current event as a request or a reservation (see "Calendar booking" on page 9-4). The list shows the status of the sent event:

Accepted or *Confirmed* means that the re-

cipient has accepted the event.

Discarded indicates that the recipient has rejected the event.

No reply means that no information has been received from the recipient.

Forced means that the event has been sent as a reservation.

If you press **Cancel event** in the "Event sent to" list, the event is cancelled from the recipient's calendar (see "Calendar booking: Cancelling and changing bookings" on page 9-5).

Memos

To attach memos to an event:

- ① Move the selection frame over the desired event and press **Details** in the daily schedule.
- ② Press **Memo** to open the note editor. In the note editor you can:
 - press **Print/Send** and select whether to print or send the memo as a fax, SMS or mail, (see chapter 8 "Notes: Sending" on page 8-3 and "Printing" on page 8-3).
 - press **Style** to format text. (See chapter 8 "Notes: Editing" on page 8-2.)
 - press **Delete** to delete the memo.
 - press **Close** to link the memo to the selected event.

Weekly schedule

The weekly schedule shows the timetable of the selected week.

- Today's date is outlined by a square frame (June 17th in figure 9-3).
- The currently selected time box is shaded (Thursday 19th, 12:00 in figure 9-3).
- All the events are marked with grey bars according to their start and end times. The bars are thinner if the events of the day overlap (Friday 20th in figure 9-3).

- If the whole day has been reserved for an event, all the time boxes are marked with a dark grey bar (Tuesday 17th in figure 9-3).

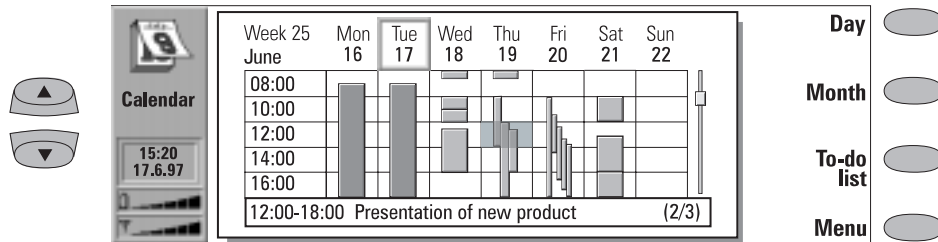


Figure 9-3

To enter an event in the weekly schedule, type the event description. The Details view will open automatically.

To open the daily schedule or the monthly schedule, press **Day** or **Month**, respectively.

You can use the scroll buttons and arrow keys to scroll inside a day in the weekly schedule.

If you scroll to a time box containing an event, the bar across the bottom of the weekly schedule will show the basic details of the event (see fig-

ure 9-3). The numbers to the right of the event description indicate the number of events that are contained within that time box (e.g., "2/3" means that you are seeing the details of the second of three events).

If a time box contains more than one event, you may view the basic details of each event in the time box by scrolling to the time box and pressing the Tab key on the keyboard. Press Shift and Tab to view the previous event.

Calendar booking

Calendar booking enables you to send event requests or reservations to other calendars. The difference between an event request and an event reservation is that the recipient may decide whether to accept or discard an event request, but event reservations can only be accepted.

Booking password

Sending event reservations requires that you know the recipient's booking password. If you add the recipient's password to the booking password field of the recipient's contact card in the Contacts application, the password is automatically taken from there when you send a res-

ervation (see chapter 3 "Contacts: Contact cards - Customising contact cards" on page 3-2).

You can give your own booking password to those whom you allow to send reservations to your calendar. If you do not set a password, your communicator accepts all reservations.

Define your booking password in the Calendar settings. See page 9-1.

The booking password is not needed when you send event requests.

Making requests and reservations

- ① Select an event in the daily schedule or write

a new one.

- ② Press **Calendar booking** in the Details view and select whether to make the booking as a request or a reservation.
- ③ **Send as SMS** opens the SMS directory where you can select the recipient.
- ④ Press **Send** to send the booking.

The name or number of the recipient is added to the "Event sent to" list (see "Daily schedule" on page 9-2).

Receiving requests

When you receive an event request, a note appears on the display showing the details of the event, and the name or number of the sender.

If you press **Accept** or **Deny**, your communicator sends a reply to the sender informing about your decision. Accepted events are moved to your calendar.

The request can be dismissed by pressing **Cancel**.

Receiving reservations

When you receive an event reservation, a note appears on the display giving the details of the event.

Alarms

Alarms are set in the daily schedule by pressing the **Details** command button and then selecting the *Alarm* option. The alarm will be attached to the currently selected event.

You can choose the alarm tone in the System application's System sounds settings.

To set alarms that are not related to any calendar event, use the Clock application, see chapter 11 "Extras: Clock – Alarm clock" on page 11-3.

When you press **OK**, the reservation is moved to your calendar. If you press **Confirm**, the event is moved to your calendar and a confirmation note is sent to the sender of the reservation.

Old events are not removed when new events are added, even if they have the same date and time.

Cancelling and changing bookings

There are two ways to cancel bookings that you have sent to other peoples' calendars:

1. Delete the event from your own calendar. Your communicator will check the "Event sent to" list and send a special SMS to any remote calendars that share the event, deleting the event in the remote calendars as well.

2. Select a recipient in the "Event sent to" list and press **Cancel event**.

To change a booking that you have sent:

Select the event and press **Details**. Make the desired changes. The changes are sent to the calendars of the persons to whom you originally sent the booking.

The alarm options are:

None (default) / *At start time / ... minutes before event* (enter a value).

An active alarm is indicated by an icon in the daily schedule (in the figure 9-2, the 8:00 event). When the alarm occurs, an alarm note is shown on both interface displays.

The alarm sound can be turned off by pressing any key. If you have set the communicator to the silent mode (in the System application's settings), only the alarm note will be shown.

To-do list

To access the To-do list:

1. Press the **To-do list** command button in the monthly or weekly schedule, or
2. Press **Menu** and select the *To-do list* option in any of the schedules.

The To-do list is a list of tasks which must be completed eventually, but are not connected to any specific time or day. After a calendar alarm has occurred, you have the opportunity to move the message contents of the alarm to the To-do list by pressing the **Move to To-do list** command button.

The entries in the To-do list are numbered, and they can be given high priority. High priority en-

tries are always shown at the top of the list (see figure 9-4).

To change the status of the selected task:

- ① Press **Priority**. A pop-up box opens.
- ② Change the status of the entry to *High priority* or *Normal priority* (default), or mark the task as *Completed* (as task number four in figure 9-4).

To create a new to-do task, press **New**. A new empty entry field is added at the end of the To-do list.

To remove the currently selected entry from the list, press **Delete**.

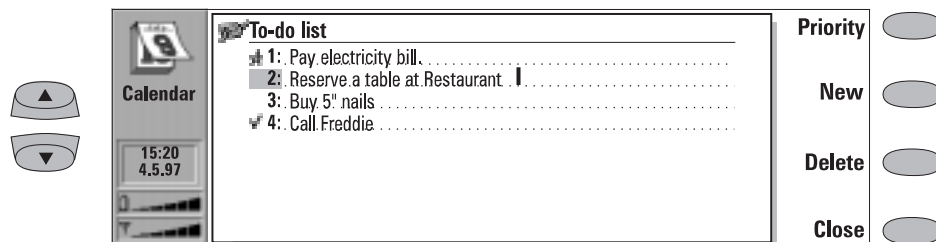


Figure 9-4

10. System

System contains applications for security, system and PC connectivity.

The System applications are started by pressing the System application button, selecting an application in the System main view and pressing **Select**. If one System application is active, you must close it by pressing **Close** in the application's main view before you can start another.

Note: When one of the PC connection applications or the fax modem application is activated, the communicator consumes more power than normally. To extend the battery operation time, these applications should be closed when they are not in use.

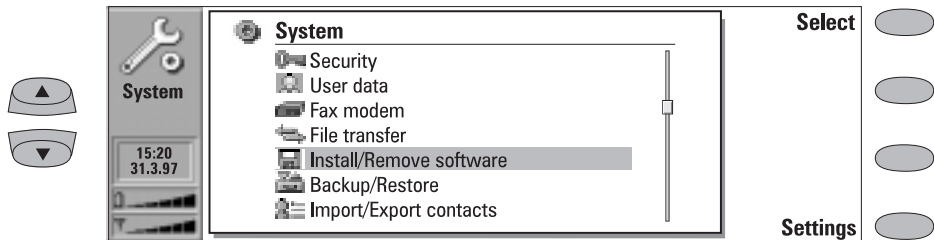


Figure 10-1

System settings

System settings includes all system-related permanent settings. To enter the System settings view, press **Settings** in the System main view. You may define the settings of the following features after selecting a feature and pressing **Change**.

Contrast control – The contrast view shows a test picture and a set of commands that can be used to adjust the picture. The '+' command button increases the contrast. The '-' command button decreases the contrast. When the setting seems satisfactory, press **OK**.

Screen blanker period – The screen blanker period setting sets the time period after which the display will blank out if the device remains inactive.

This feature saves the battery and increases the communicator's operation time. The time-out value can be between 2 to 15 minutes. The screen blanker cannot be turned off.

System sounds – Includes all the sounds in the communicator. The available settings are:

All sounds – Ring / Beep / Silent / Silent for. The *All sounds* setting affects incoming call alerts and other alarms on both interfaces, with the exception of clock alarm. With *Silent for* the communicator remains in the silent mode until the time you have entered there has passed. Use the format *hh:mm*.

Ring volume — Level 1/2/3/4/5

Ring tone — You can select one of the tones in the pop-up box or compose a special ringing tone for your telephone in the Extras application (see chapter 11 "Extras: Composer" on page 11-5).

Key click — Off / Quiet / Loud

Warning tone — On/Off

Application tones — Calendar alarm, Clock alarm, Received fax, Received SMS, Received mail

For each of these individual settings you can set a specific ringing. You would then be able to tell by the tone whether you have received a fax or a short message, for example.

The clock alarm will always sound. When a phone call is active and the communicator is used in handsfree operation, all sounds except the clock alarm are automatically turned off.

Preferences — Preferences lets you change date and time formats and the measurement unit. The preferences list contains the following items:

Date format — *dd.mm.yy / mm.dd.yy / yy.mm.dd*. For example, 25.10.97 / 10.25.97 / 97.10.25.

Time format — *24 hour / AM/PM*. For example, 09:35 / 9:35 AM.

Unit of measure — Choose either Centimetre or Inch as the basic unit of measure.

Security

To lock the communicator:

- You can manually lock the communicator in the Security application's main view by pressing **Lock system**.
- If autolock (*Autolock period*, defined in the Security settings) is off, you must first enter the correct lock code (provided in the sales package).
- If autolock is on, pressing **Lock system** will lock the device immediately. Or, after the defined inactivity period, the communicator will lock automatically.
- Alternatively, you can also lock the system in the phone interface menu 5 8 (see chapter 13 "Phone interface: Menus - Security options (Menu 5)" on page 13-11).

After the communicator has been locked, it cannot be used until the correct lock code is given. Incoming voice calls can, however, be answered via the phone interface.

Note: When the communicator is locked, it may be possible to make a call via the phone

interface to the emergency number programmed into your phone (e.g., 112 or other official emergency number).

Security settings

To change the security settings:

- ① Press **Settings** in the Security main view.
- ② Select the setting and press **Change**.
- ③ If you are prompted for a code, enter it and press **OK**.
- ④ Choose a new value.

The codes are shown as asterisks. If you are changing a code, you will be prompted for the current code and then the new code twice. The code cannot be changed if the corresponding security feature is not in use.

Note: Avoid using codes that are similar to emergency numbers to prevent accidental dialling of the emergency number.

Pressing **Close** will close the security settings view and return to the Security main view.

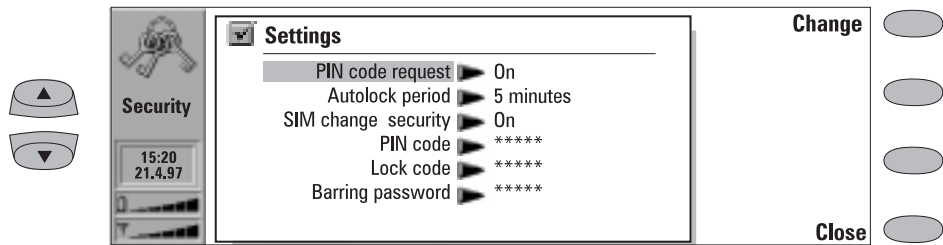


Figure 10-2

The security settings list is as follows:

PIN code request – On / Off (default)

If you set the PIN (Personal Identity Number) code request on, the system requests the code every time when the phone interface is turned on by pressing **①**. You can also turn the PIN code request on or off in the phone interface Security options menu (Menu 5 1). This setting cannot be changed if the phone interface is switched off.

Note: Some SIM cards do not allow you to turn the PIN code request off.

If you enter the PIN code incorrectly three times in a row, you will need a PUK code to unblock the SIM card. When the SIM card is blocked, you cannot make or receive any calls (including faxes, short messages, mail, etc.), except emergency calls. Otherwise, the communicator can be used normally.

Autolock period – Autolock off (default) / 1 / 2 / 5 / 10 / 15 minutes

This setting determines the security time-out period, after which the system will lock. The timer is reset by any input, calls or data transfer/printing activity.

SIM change security – On (default) / Off

When active, this security option checks whether the SIM card in the communicator has been changed. The check is made every time the phone interface is switched on. The SIM change security option can also be activated in the phone interface Security options

menu (Menu 5 2).

If the SIM card has been changed and the new SIM card has not previously been used with your communicator, the communicator locks itself until the lock code, supplied with the phone, is correctly entered. The communicator recognises five different SIM cards as the owner's cards.

PIN code

When the phone interface is switched on, this setting allows you to change the PIN code. The changing procedure is as described at the beginning of this "Security" section. The new PIN code must be 4 to 8 digits long. The PIN code can also be changed in the phone interface Security options menu (Menu 5 6 2).

The PIN code is supplied with the SIM card. When the PIN code request is enabled, the code is required each time the phone interface is switched on. The PIN code request must be turned on to change the code.

If you enter a wrong PIN code three times in succession, the PIN code is disabled and cannot be used any more. At the prompt, key in the PUK code (see below) and follow the instructions on the display.

Lock code

This setting allows you to change the lock code. The changing procedure is as described at the beginning of this "Security" section. The new code must be 5 digits long. The lock code can also be changed in the phone inter-

face Security options menu (Menu 5 6 1).

The lock code is needed to lock (except when the autolock period is in use) and unlock the communicator. The device can be locked in both the communicator interface (System, Security: **Lock system**) and the phone interface (System lock, Menu 5 8). The lock code is also required when you change the SIM change security setting and turn the Autolock period on or off. You can find the lock code on a sticker in the sales package of your communicator. Keep it secret and in a safe place, separate from the communicator.

If you key in an incorrect lock code (you get a code error message) several times in succession, the communicator must be sent back to the dealer to be unlocked.

Barring password

When the phone interface is switched on, this setting allows you to change the barring password. The new code must be 4 digits long. The barring password can also be changed in the phone interface Security options menu (Menu 5 6 4).

The barring password is needed to change call barrings, see chapter 4 "Telephone: Telephone settings" on page 4-6. You obtain the password from your network operator when you subscribe to the service.

If the password is changed correctly, the communicator requests the network to perform the desired operation (see chapter 4 "Telephone:

Telephone settings - Changing the settings of network services" on page 4-6).

Other codes

PIN2 code (4 to 8 digits)

The PIN2 code can only be changed in the phone interface Security options menu (Menu 5 3).

The PIN2 code is supplied with some SIM cards. The PIN2 code is required to access some functions, such as call charging unit counters, which must be supported by the SIM card. If you enter a wrong PIN2 code three times in succession, the PIN2 code is disabled and cannot be used any more.

PUK and PUK2 codes (8 digits)

You cannot change the PUK (PIN Unblocking Key) codes. If you lose the code, contact your network operator.

The PUK is supplied with the SIM card. The code is required when you want to change a disabled PIN code. If you enter a wrong PUK code ten times in succession, the SIM card is rejected and you cannot make or receive any calls, except emergency calls. Contact your network operator for a new card.

The PUK2 code is supplied with some SIM cards. The code is required when you want to change a disabled PIN2 code. If you enter a wrong code ten times in succession, you will not be able to access the functions which require the PIN2 code. To utilise these functions, contact your network operator for a new card.

User data

The User data card contains your personal information. You can freely edit the information in the *Name, Company, Job title, Address, Tel, Fax, Tel(GSM), Fax(GSM), Mail and URL* fields.

The User data will automatically be included in the corresponding fields of the fax cover page within the Fax application. Likewise, the SMS application uses this information when you send your own business card.

Connecting to a PC

To use the System applications that allow you to connect to a PC (File transfer, Install/Remove software, Backup/Restore, Import/Export contacts, Import/Export calendar data), you must first install the Nokia Communicator Server programme (provided on a diskette in the sales package) on the PC and then launch it. The Nokia Communicator Server software requires Microsoft Windows 3.1 (or later) or Windows NT 3.51 (or later) and a free serial or infrared (IrDA compatible) port to run. See the *readme.txt* file on the diskette supplied in the communicator sales package.

To install the connectivity software on the PC:

- ① Insert the diskette in your diskette drive.
- ② In the Program Manager of your Windows, click on the "File" menu.
- ③ Click on menu item "Run" and type *a:\server* in the command line.
- ④ Press Enter.
- ⑤ Follow the instructions shown on the screen.

To establish an infrared serial connection:

- ① The IrDA software must be installed and running on your PC in order to establish an infrared connection. If you have Windows 95, you will need to download the IrDA driver software from the Internet site of Microsoft. The default IrDA port for the software is COM4; however, the physical port may be COM1 or COM2.
- ② Make sure that the communicator's infrared port faces the infrared port of the PC (or printer). Keep the infrared link clear – check the infrared indicators in the indicator area, see chapter 2 "Getting started: Indicators" on page 2-9. In the event the infrared link is ob-

structed for too long (for example, something is moved between the infrared sensors or the communicator is moved), the operation is interrupted.

- ③ Start the connectivity software on the PC. Check that the COM port reported by the connectivity software is correct.

Note: When using the communicator as a fax modem, use the infrared connection (see "Fax modem" on page 10-6).

To establish a serial cable connection:

- ① Connect the adapter to the communicator (for instructions on how to do this, see chapter 2 "Getting started: Connectors" on page 2-4).
- ② Connect the 9-pin adapter end of the RS-232 cable to the COM port of the PC and the other end to the adapter (into the connector on the left side of the adapter).
- ③ Start the connectivity software on the PC. Check that the COM port reported by the connectivity software is correct.

After you have established a connection to a PC and the connectivity software is running on the PC, you can start the communicator's connectivity applications. When the PC connection is active, the call status indicator shows the text PC-CONN. If the connection to the PC cannot be created, check the settings of the connectivity application. You must define the COM port and the PC drive or path correctly.

Note: Making or answering to phone calls during a PC connection is not recommended as it might disrupt the operation.

Remember to make backup copies of all important data!

Fax modem

Before your computer can recognise the communicator as a fax modem, the computer needs to be properly configured. Consult the user's guide of your computer on how to install new modems. Computers with Microsoft Windows 95 or NT 3.51 (or higher) operating systems can use the modem information file found on the Nokia Communicator Server diskette. See also the *readme.txt* file on the diskette.

Using the communicator as a fax modem requires that data calls are supported by the network you are using and that this service is activated for your SIM card. If you want to receive data calls, your SIM card also needs a data number. Contact your home service provider for details.

- ① Connect the communicator to the PC via an infrared link as described in "Connecting to a PC" on page 10-5.
- ② Wait until the connection is established.
- ③ Press **Activate** in the Fax modem main view. This will change the communicator to a fax modem. When the communicator is used as a fax modem, the call status indicator shows the text MODEM.
- ④ To stop using communicator as a fax modem, press **Disable**.

Operations of a modem can be controlled by AT commands and S-registers. These commands give the advanced user an opportunity to control all the features of the modem. However, it is not

always necessary to enter the AT commands manually. Most PC communications applications have a user-friendly interface that hides the AT commands from the user. Should you need to enter the commands manually, consult the documentation of the PC application that you are using. A list of the common AT commands (based on the ETSI 07.07 standard) supported by the Nokia 9000i Communicator are available as an ASCII text file on the diskette that came with the sales package of your communicator.

When the communicator is used as a fax modem, its normal communication features are disabled (otherwise, the applications remain functional).

If an active PC connection is idle for longer than 20 minutes, the fax modem mode is automatically disabled to conserve power. However, when the communicator is connected to an electrical outlet (for example, while charging a battery), the time-out is not active.

To change the Fax modem settings, press **Settings** and select:

Connection type — Infrared (recommended)/Cable. The cable connection is intended for use with the communicator's own PC connectivity applications for backup, file transfer, export/import and software installation purposes. The functionality of a cable connection when the communicator is used as a fax modem is not guaranteed.

File transfer

To select the serial connection type (infrared or cable) and the PC drive used, press **Settings** in File transfer application's main view.

To connect to a PC:

- ① Make sure that the connectivity software has been installed on your PC and is running (see "Connecting to a PC" on page 10-5).

- ② Press **Connect to PC** in the File transfer main view.

When you are connected to a PC, there are two system windows on the communicator interface display. The left window shows the folders on the communicator (the same folders as seen in the Notes main view) and the right window shows

the contents of the selected PC directory. The currently active window has a thick frame and the selection frame can be moved inside it.

You can change the active window by pressing the **Change window** command button, or alternatively, the keyboard Tab key. In addition, the left and right arrow keys can be used to activate the left or right window.

The following files can be transferred:

Text files – Nokia 9000i Communicator text files transferred to a PC can be read and edited in a PC environment with standard Windows or MS-DOS text editors. Correspondingly, PC text files can be read and edited in the communicator.

Graphics files (figures) – When transferring files from a PC to the communicator, files with the extensions JPG and GIF are considered as graphics files. Graphics files transferred to the communicator can be viewed with the image viewer.

Transferring files from the communicator

To transfer files to and from the communicator, you must open both the correct PC directory and communicator folder. When the File transfer view opens for the first time, all of the communicator's folders are closed. Files can be copied to or from an opened folder only.

After the connection type and PC drive have been selected in the settings, and you are connected to the PC:

- ① If the PC directory shown in the right window is not the directory to which you want to copy the file(s), you must change it as follows:
 - Press the right arrow key to activate the PC window.
 - If necessary, press **Close** to close the current directory.
 - Press **Open** to open the correct directory.
 - Press **Change window** (or the left arrow key) to activate the communicator window.

- ② Press **Open** (or the enter key) to open the folder containing the file(s) you want to transfer. Select a file by moving the selection frame over it.

Use the Chr-up or down arrow key combination to scroll through the files screen by screen. If the file you want is in a different folder, press **Close** and select another folder. If you want to copy more than one file, use multiselection (scroll to the desired items and press Ctrl-Space bar; see chapter 2 "Getting started: Special features – Multiselection" on page 2-12) and repeat the procedure from step ①.

- ③ Press **Copy to PC** to start file transfer.

Before files can be copied to a PC, you must change the name of the copied file to a PC compatible format. The communicator will suggest a name, but you can also enter it yourself. The maximum allowed length of the name is 8 + 3 characters separated by a full stop.

Transferring files to the communicator

After the connection type and PC drive have been selected in the settings:

- ① Press the left arrow key to activate the communicator window.
- ② Select the correct destination folder and press **Open**.
- ③ Press **Change window** (or the right arrow key) to activate the PC window.
- ④ Press **Open** to open the directory containing the file(s) you want to transfer. The window shows the subdirectories and then the files in alphabetical order. Open a subdirectory, if necessary, then select the file by moving the selection frame over it.
- ⑤ Press **Copy from PC** to start the file transfer. If you want to copy more files, use multiselection (see chapter 2 "Getting started: Special features – Multiselection" on page 2-12) and repeat the procedure from step ①.

To terminate the connection to the PC, press **Disconnect**.

Install/Remove software

The Install/Remove software application enables you to install communicator software from a PC and later remove the software from the communicator.

The Install/Remove software main view displays the serial connection type and the PC drive used. Press **Settings** to change the connection type or to redefine the PC drive used. The connection type is changed by pressing **Change**. The directory name and path can be edited manually.

Before using this application, make sure that the connectivity software has been installed on your PC and is running (see "Connecting to a PC" on page 10-5).

To install software:

- ① Press **Install** in the Install/Remove software view. The communicator starts to search for software to install from the designated PC drive. If installable software is found, it will be listed on the screen.
- ② Select the software you want to install with the selection frame and press **Install**.

When installation is complete, the confirmation note tells you under which application button the software was installed (destination cannot be selected). If an application with the same name as the software to be installed already exists, you will be asked to confirm the replacement operation by pressing **Replace** or to cancel it with **Cancel**.

To remove software

- ① Press **Remove** to search for removable software on the communicator. The amount of free space on your communicator is also displayed.
- ② Select the software you want to remove and press **Remove**.

Note: The set of applications that are on the communicator at the time of purchase cannot be removed.

Caution: Beware of viruses! Install into the Nokia 9000i Communicator only software you have obtained from sources that offer adequate protection against viruses.

Backup/Restore

The Backup/Restore application enables you to make backups of various data on your communicator, and to restore it later. Data is backed up in sets which are stored in separate directories on the PC.

Before using this application, make sure that the connectivity software has been installed on your PC and is running (see "Connecting to a PC" on page 10-5).

When data is backed up the previous contents of the backup directories will be deleted. If you want to keep the previous backup set, you should

copy the files to another directory on the PC, or change the backup directory in the Backup/Restore settings before making a new backup.

When data is restored, only files with similar names in the destination folder will be overwritten.

The Backup/Restore main view shows the data group which will be backed up or restored, the connection type (infrared or cable) and the backup or restoration directory. Press **Settings** to change the connection type or the path to the PC directory.

The sets of data you can back up are:

All data — Backing up all data means backing up your communicator exactly as it is at the moment (except for contact logs).

Documents — Document backup covers all documents in the application folders that can be opened for viewing (except contact cards and logs).

Contacts — The contact directory backup file cannot be edited. If you want to edit the Contacts database contents, use the Import/ Ex-

port contacts application (see the next section).

Calendar — The data in your calendar can be backed up and restored.

Press **Backup** or **Restore** to start the respective operations. A backup directory will be created if necessary.

While the Backup/Restore is in progress, the communicator's other applications cannot be used. To interrupt the operation, for example, to make an emergency call, press **Cancel** and confirm by pressing **Interrupt**.

Import/Export contacts

The Import/Export contacts application allows you to export contact cards to a PC and import them back to the communicator. The contact information is exported to the PC as a single ASCII text file, *contacts.txt*, which can be edited as any ASCII file. If you edit the contents of the file, you should be very careful not to delete accidentally any record or field definition strings, placed inside square brackets []. Do not delete any of the brackets, either. It is always a good idea to back up your data before doing any editing.

Alternatively, you can open the exported contact information in an application or database compatible with the Nokia 9000i Communicator's contact card format.

The main view shows the connection type used and the default path in the PC. To change the connection settings, press **Settings**.

Before using this application, make sure that the connectivity software has been installed on your PC and is running (see "Connecting to a PC" on page 10-5).

To import contacts:

Press **Import** in the Import/Export contacts main view. When the data in the defined PC directory has been copied to the communicator, you will be asked to confirm the conversion of the imported data as contact cards. The imported contacts will be added to your contacts directory.

To export contacts:

Press **Export** in the Import/Export contacts main view. If a file with the default name (*contacts.txt*) already exists on the PC, the existing file will be overwritten.

Import/Export calendar data

The Import/Export calendar data application allows you to export calendar data (events, event details and to-do list) onto a PC and import it back to the communicator. The calendar data is exported to the PC as a single ASCII text file, *cal-*

endar.txt. You can edit the calendar data the same way as exported contact cards. Note that memos attached to the events are referenced in the *calendar.txt* file, but not exported (to export memos, use the File transfer application).

The main view shows the connection type used and the default path in the PC. To change the connection settings, press **Settings**.

Before using this application, make sure that the connectivity software has been installed on your PC and is running (see "Connecting to a PC" on page 10-5).

To import calendar data:

Press **Import** in the Import/Export calendar data main view. When the data in the defined

PC directory has been copied to the communicator you will be asked to confirm the conversion of the imported data as calendar data.

Note: The imported calendar data will replace all your current calendar data.

To export calendar data:

Press **Export** in the Import/Export calendar data main view. If a file with the default name (*calendar.txt*) already exists on the PC, the existing file will be overwritten.

Data removal

The Data removal application comes in handy if you want to remove personal information from the communicator, for example, before lending it to someone else. This way you do not need to remove data one by one.

The removable data is arranged in four groups: *All data*, *Calendar data*, *Documents*, *Contacts and Speed dials*.

Select the desired data group by moving the selection frame and press **Delete**. Before any data is re-

moved, you must enter the lock code (see "Security" on page 10-2). When deleting calendar data, you can choose to delete all calendar data or only events that occur before a given date.

Note: Even if you choose the *All data* option, your Internet settings will not be erased.

If you want to restore your communicator in the same state it was in at the time of purchase, see chapter 14 "Troubleshooting" on page 14-1.

Memory

This view shows the amount of available free memory for storing data and installing new software. Pressing **Details** will open up a list of folders and other data in the communicator, and the

amount of memory each of them uses. The list is updated every time it is opened.

If the memory is getting low, you should delete some documents. Before deleting, you can send them or transfer them to a PC.

About this product

This view displays information about the Nokia 9000i Communicator.

11. Extras

The Extras application group contains:

- Text Web
- Calculator
- Clock
- Composer
- Converter
- Wireless data backup

To start one of the applications, select an application and press **Select**.

With one Extras application active, you can quickly switch to another by pressing the Extras button.

To close an active application, press **Close**.

Text Web

With Text Web you can fetch information from the Internet, using SMS. Such information can include for example flight schedules, weather reports and stock news. You can also access services provided by your network operator and Nokia.

The Text Web main view includes the following items:

- Nokia services
- Operator services
- User-defined services
- Saved forms

To select one of these services, choose the service with the scroll or arrow keys and press **Select**.

To change the access numbers of Nokia and Operator services, or to change, add or delete service access points that you have defined yourself, press **Settings**.

Nokia services

The contents are maintained by Nokia, and they cannot be changed. Nokia updates the contents from time to time with special short messages.

Operator services

The Operator services allows the network operator to provide various services to their subscribers. The operator-specific items may vary from subscriber to subscriber, and are updated by the network operator.

User-defined services

To define new service access points, press **Settings** in the Text Web main view. Press **New** to open an empty service information card. Enter the title of the service, the server number (SMS message centre number) and the service number (phone number).

To fetch information:

- ① In the Text Web main view, scroll to one of the service access points that you have defined and press **Select**.
- ② Enter in the space provided a word (keyword) that describes the type of information you are looking for.

If you press **Get keywords**, you will receive a list of available keywords. **History list** contains previously used keywords.

- ③ To send the keyword, press **Send**. When you receive a reply from the service provider, the TTML browser opens up. Press the arrow keys in the browser to move from one hotspot to another.

The commands in the browser are:

Send — To send the form, press **Send**.

Fetch/Change — **Fetch** will appear if the selected hotspot is a hyperlink. When the command is **Change**, you can tick off boxes and buttons.

Menu — To add the form to the Saved forms list, select **Save form**. To copy the text to Downloaded files folder, select **Save as text**.

Saved forms

Saved forms grants you quick access to Internet services. You can add items to Saved forms list from the other services.

To open the selected form, press **Open**. The TTML browser opens up with the same commands as above.

To rename a service, press **Rename** in the Saved forms main view.

Calculator

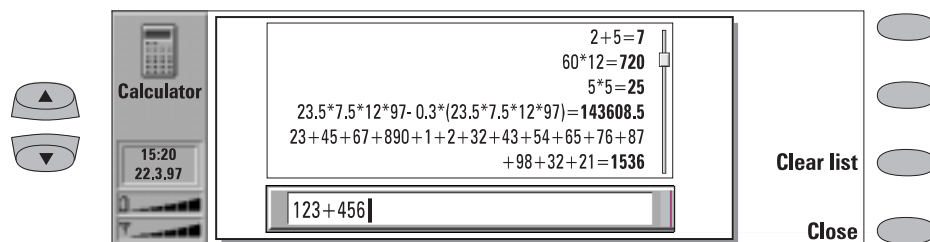


Figure 11-1

The Calculator contains an entry field at the bottom of the screen and above it a "tape" where previous calculations can be seen (if any). The tape can be scrolled using the scroll or arrow keys. The most recent calculations are shown at the bottom of the tape.

The results of the calculations appear in **bold**. In the case of a syntax error, the calculation remains in the entry field for editing. As long as you have not pressed Enter or "=", you can move in the calculation string with the arrow keys and edit the string.

All data and calculation commands are entered from the keyboard. The following characters can be used for the corresponding operations:

Numbers 0 to 9	
.	decimal point
(space)	can be entered, ignored in the calculation
+	addition
-	subtraction
*	multiplication
/	division

%	percent calculation
()	parenthesis
= or Enter	sum
C	clears the entry field

Pressing **Clear list** will erase previous calculations from the calculator tape.

The maximum number of characters per calculation is 100. The maximum length of the calculator tape is 100 lines.

Calculating percentages

The following examples demonstrate the principles for calculating percentages with Calculator:

- How much is 20% of 1000?
 $1000 * 20\% = 200$
- What percent of 50 is 10?
 $10 / 50\% = 20$
- What would be a 22% markup of 500?
 $500 + 22\% = 610$
- What would be a 17.5% discount of 500?
 $500 - 17.5\% = 412.5$
- How much is 20%?
 $20\% = 0.2$

Clock

The Clock shows the time and date in your home city and country, as well as in several other cities and countries in the world. The Clock also includes an alarm clock.

The "Alarm active" symbol and time of the alarm are shown only if an alarm is active.

Alarm clock

The Alarm clock is activated with the **Alarm clock** command in the Clock main view. The alarms will occur according to the home city time (note this when in a different time zone, e.g. when travelling abroad).

An alarm can be set to occur within the next 24 hours. Alarms that occur later than this are set in the Calendar application.

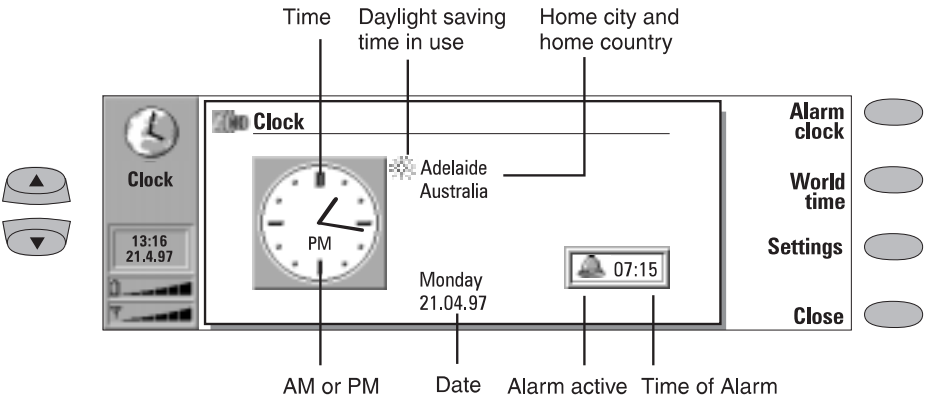


Figure 11-2

To set an alarm:

- ① Press **+** or **-** to adjust the time shown in the alarm clock display. Each press changes the time by one minute, but if you hold the button down a while longer, the time will start to change in steps of 15 minutes.
- ② Press **OK** to accept the set alarm.

There can only be one active alarm. If an alarm is already active, the command names are different. A counter on the lower right side of the screen shows how much time remains to the time of the alarm.

Press **Change alarm time** if you want to readjust the time of the alarm.

Press **Delete alarm** to cancel the alarm.

When the alarm sounds, it can be turned off by pressing any phone interface or communicator interface key.

If the alarm is not turned off, or it is turned off by pressing other than the **OK** button on the Communicator display, the alarm will sound five more times or until you press the **OK** button.

Note that if the alarm interval is set to zero, the alarm will sound only once. Set the alarm interval in the clock settings.

World time

World time (figure 11-3) is activated with the **World time** command in the Clock main view (see figure 11-2).

The **Home** box shows the name of the currently selected home city, country, time, date and whether daylight saving time is in use.

The **Destination** box shows the same information for the currently selected destination city, as well as the international call prefixes needed to make a call from the home city to the destination city.

The world map shows the currently selected destination city in the world map in cross hairs.

To select the destination city:

Press **Set destination**, and select a city from the list. You can also type the first letter of the city to move the cursor to the first city name beginning with that letter.

Editing the cities database

Press **Cities** in the world time view to open the Cities list.

To make changes to existing city cards, press **Edit city**. The city information is presented in the form of a data card. The city card contains the following fields:

City— The name shown in the Cities list. Can be entered manually.

Country— The name of the country associated with the city. The country name is selected from a list of countries.

Area code— The area code required when calling the city. The area code can be entered with or without a national prefix. Only numbers can be entered.

GMT offset— Indicates by how much the local time differs from the Greenwich Mean Time. Select a value for the offset from a list. The offset can range from -12 to +12 hours.

Set position— Opens a world map view where you can determine the position of a city by

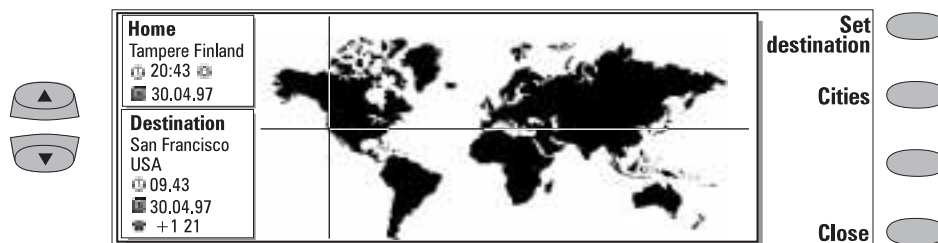


Figure 11-3

moving the cross hairs with the arrow keys. When the city is where you want it to appear, press **OK**.

To create a new city card, press **Add city**.

To remove a city from the database, press **Delete city**. The current home city cannot be deleted (change the home city first).

Clock settings

The Clock application's settings are adjusted with **Settings** in the Clock main view. Select the setting you want to change and press **Change** or type the new time or date from the keyboard.

Home city— Select the home city by scrolling the city list with the scroll keys, or type the first letter of the city name to jump to the first name starting with that letter. When your home city has been selected, press **OK**. Your new home city now appears in the home city window in the world time view. If you select a city that is in a

different time zone than your current home city, the system time will change.

Time— Enter the new time in the current time format (24 hour or AM/PM, selected in System Settings: *Preferences*).

Date— Enter the new date in the current date format.

Alarm interval— 0/1/2/3/4/5 minutes. You can choose the interval between alarms. If you select 0, the alarm clock will go off only once.

Daylight saving— You can set the home city and destination city daylight saving time *On* or *Off*. This setting remains the same even if the home/destination city is changed.

Changing the time or daylight saving time of a home city will also adjust the time of the whole time zone, as well as the system time. If a set alarm is skipped because of changes in any of the above fields, the alarm goes off immediately.

Composer

The Composer application enables you to create your own, customised ringing tones.

Note: You can change the phone ringing tone in the Telephone application's settings (see chapter 4 "Telephone: Telephone settings - Ringing settings" on page 4-6) or in System application's System sound settings (see chapter 10 "System: System settings" on page 10-1).

To start the composer for the selected tune, press **Open**.

To compose a new custom tune press **Compose tune**.

To play the composition shown on the staff, press **Play tune**. While the composition is being played, the command changes into **Stop playing**.

Custom tune options

Press **Options** to do one of the following:

Tempo opens the tempo pop-up box with a new set of commands. Tempo is measured in beats per minute. To alter the tempo, use backspace and enter a new value in the box.

To accept the tempo, press **OK**.

To test the tempo, press **Test**. The tune will be played with the tempo shown in the entry field.

To use the default tempo (150 beats/min.), press **Default**.

Clear tune deletes the tune shown on the staff.

Undo changes restores the tune to what it was before editing.

Editing a custom tune

To edit the tune, press **Edit**. In the editor, a cursor appears at the bottom of the screen, indicating the currently selected note or rest. The cursor can be moved with the **Left** and **Right** commands or the left and right arrow keys. The editing commands affect the note/rest in the selected column.

To create a note, a rest or alter the note's pitch:

Press the scroll or arrow keys. Each press up or down changes the note's pitch. A rest will appear after all possible note levels have been scrolled through.

To alter the length of the selected note or rest:

Press **Duration**. Choose sixteenth note, eighth note, quarter note (default), half note or whole note. Press the command button until the value you want is shown.

While in the editing mode, you can use the following shortcuts:

Enter	Plays the tune
Colon (:)	Staccato
Hyphen (-)	Inserts a rest
Spacebar	Inserts an empty column to the left of the cursor. Moves all following columns to the right
Backspace	Deletes the selected column (containing a note or a rest). Moves all following columns to the left
Full stop (.)	Lengthens the duration of the note or rest by half

For quick composing, press the corresponding letter key on the keyboard to generate a note. For example pressing C generates the note C. When you press Shift and the corresponding letter key, a sharp note is generated, e.g. Shift-D generates D sharp.

Menu

When you press **Menu** in the Composer main view, the following options become available:

Copy – Copies a tune.

Delete – Deletes a tune.

Rename – You can write the new name into the input field.

Send as SMS – Opens up the SMS directory where you can select a recipient for the composition. To send the composition, press **Send**.

When you receive a composition, a note showing the name or number of the sender and the name of the sent composition will appear on the display. To add the composition to the list of tunes, press **Accept**. To discard the composition, press **Cancel**.

Note: If you have received several compositions at once, they cannot be accepted or discarded one by one. However, you may delete them individually after you have accepted them.

Converter

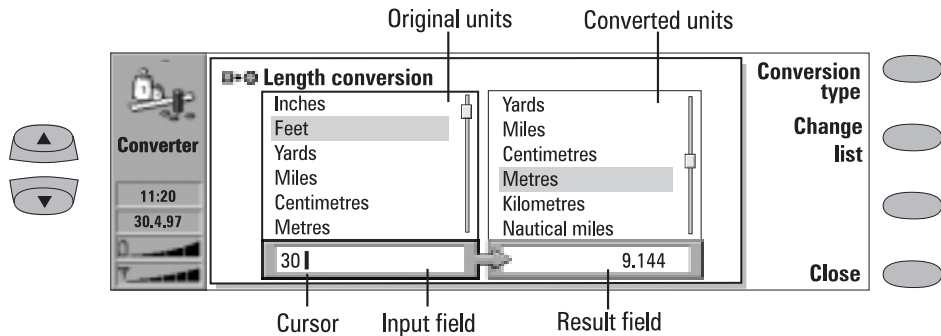


Figure 11-4

This application allows you to make conversions between different units of measure, which include: length, area, volume, mass, velocity, temperature, power, energy, and currency.

The converter main view shows two identical lists containing the units to be converted. Below them on the left is the input field, and on the right the result field. The frame of the currently active list is darkened and the cursor is in the input field.

To make a conversion:

- ① Press **Conversion type** to open the list of units of measure.
- ② Select one of the conversion types by scrolling the list and press **OK**.
- ③ When the main view returns, scroll the selection frame in the original units list (on the left) to the unit from which you want to convert. Change between lists by pressing **Change list**.
- ④ Scroll the selection frame in the converted units list (on the right) to the units to which you want to convert.
- ⑤ Enter the amount to be converted. Any amount you enter will automatically appear in the input field. The result will appear in the result field.

Currency converter

If you select currency as the conversion type, the command **Rates** will appear. As there are no preset exchange rates in the communicator, you will have to set the base currency and the exchange rates before you can use the currency converter.

Within the Rates view, **Edit unit** allows you to change the name of the currency.

To use the currency converter:

- ① In the Currency conversion main view, press **Rates**, then **Base currency**.
- ② Scroll to the currency you would like to set as the base currency and press **OK**.
- ③ The screen returns to the list of available currency units. Enter the exchange rates compared to the base currency. Press **Close** to return to the Currency conversion main view.
- ④ Select the currency from which you want to convert in the list on the left, and the currency to which you want to convert in the list on the right.
- ⑤ Enter the quantity you would like to convert. The amount is displayed in the result field.

Note: Changing the base currency will clear all set exchange rates.

Wireless data backup

The Wireless data backup application allows you to backup and restore data over the digital cellular network via a data call.

To use this application you must first obtain this service from a service provider. Contact Nokia HelpLine (see the Accessories Guide) for more information.

12. Document outbox

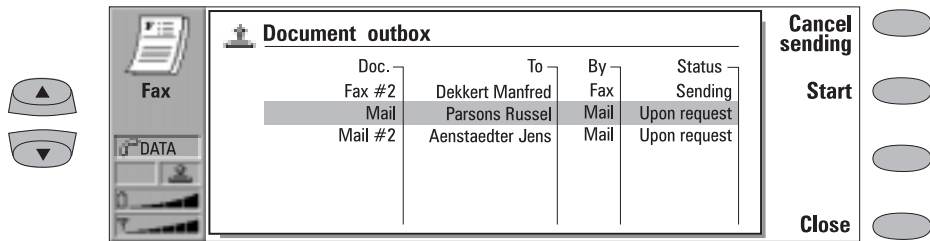


Figure 12-1

All documents you send go through the Document outbox. The Document outbox sends the documents whenever it is possible (see also chapter 1 "Introduction: Things to remember" on page 1-2).

The Document outbox can be accessed in the Fax, SMS, Mail and Notes applications' main views, where it is shown at the bottom of the folders list. To open the Document outbox, select the Document outbox from the list and press **Open**.

The document at the top of the list will be sent next. The document's position in the list reflects its sending status. As the status changes, the document will be moved up or down the list. For example, if sending fails, the document is placed at the bottom of the list and Document outbox will try to send it again later.

The main statuses that documents can have:

- **Sending** – The document is currently being sent.
- **Waiting** – The document is waiting for sending to become possible (e.g., when the phone interface is switched on, cellular signal strength becomes adequate, previous phone call ends).

- **Retry [time]** – Sending of the document failed and it will be sent again later (at the time given in square brackets).
- **Queued** – The document is waiting for its turn in the sending queue.
- **At [time]** – The fax is waiting to be sent at the time you have specified (see chapter 5 "Fax: Fax settings" on page 5-4).
- **Sending [current page/total pages]** – The number of the fax page that is being sent and the total number of the pages.
- **[number] % sent** – An E-mail message is being sent, and the Document outbox shows the percentage that has been sent.
- **Upon request** – E-mail messages may have this status if the *Send mail* setting has been set to *Upon request* (see chapter 7 "Internet: Mail settings" on page 7-5). These messages will not be sent until you select one and press **Start**. All mail with the *Upon request* status will be sent during the same connection.

To speed up manually the sending of documents with the status *Waiting*, *Retry* or *Upon request*:

- Select the document and press **Start**. The document(s) will be sent as soon as possible.

A document is removed from the Document out-box only if:

- Sending succeeds.
- You cancel the sending manually by pressing **Cancel sending**.
- Sending fails ten times or fails because of missing or inadequate sending information. In this case, an information note will be shown.

13. Phone interface

When operating the phone interface, keys are pressed one at a time. Two keys are never to be pressed simultaneously.

① switches the phone interface on and off.

Note: This button does not function when the device cover is open.

As with any other radio transmitting device, avoid unnecessary contact with the antenna when the phone interface is switched on.

ABC switches between alpha mode and numeric mode. In the menu facility, this key produces a help text on the current function.

C deletes characters or exits the menu facility and memory functions.

▼ and ▲ are used to scroll through menus, submenus or settings. If there are no active calls, the scroll keys can be used to browse through the memory contents. When a call is active, pressing the scroll keys adjusts the volume level.

☎ dials a phone number and answers a call.

⏏ ends any active call or cancels a dialled call.

0 ... 9 are the number and alpha keys. To call your voice mailbox, press and hold **1**.

*** #** are used for special purposes in certain functions.

— Selection keys. The function of these two keys (on both sides of the scroll keys) depends on the text shown on the bottom line of the display. See figure 13-2.

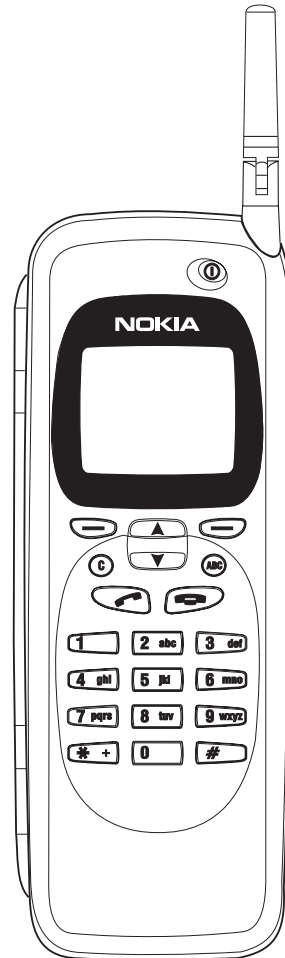


Figure 13-1

Using the selection keys

When this manual instructs you to press a key (the name of the function appears in **bold**), it means that you should press the selection key under the function name; for example, pressing **Menu** (the selection key under the text *Menu*) gains access to the menu functions and **Memory** (the selection key under the text *Memory*) to the memory functions. The functions change according to the situation and previous selection.

Note: The selection must often be confirmed by pressing **OK**. Whenever the **Quit** function is shown, it can be used to return to the previous menu level without making any changes.

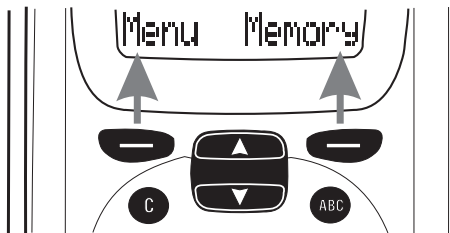


Figure 13-2

Display indicators

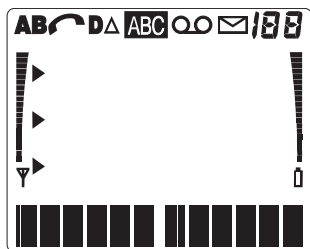


Figure 13-3

A or B Indicates which memory is currently selected. "A" refers to the SIM card memory and "B" to the communicator's memory.



A voice call is in progress.

D A data or fax call is in progress.



Roaming – The communicator is used in other than your home network.



The phone interface is in alpha mode (letters, as well as digits, can be entered).



You have received an SMS message, fax or mail.

I and bar Indicates one of the following: memory location, menu, submenu or setting option.



Indicates that you should use the scroll keys to reach items that are currently not shown on the screen.



Indicates that there is a list of options to select from. The pointer also indicates the currently selected option.



Indicates the current signal strength at your location. The higher the bar, the better the signal. When this antenna symbol is not visible, you are outside network's service area.



Indicates how much charge there is left in the battery. The higher the bar, the more charge in the battery.

OO Nokia 9000i Communicator PCN model only: If your network supports this feature, the spool symbol appears on the display when a message has been left with your answering service. The symbol remains on the display until you listen to and either delete or save the message. If you simply listen to the message, the spool symbol will remain on the display. To play the message, press **Listen**.

Making a call

The communicator can make and receive calls only when:


- The phone interface is switched on.
- The communicator has a valid SIM card fitted.
- The communicator is located in the service area of the cellular network (▼ is shown).

Note: Emergency calls to the international emergency number 112 can usually be made without the SIM card. Check with your network operator. For more information about making emergency calls, see chapter 16 "Important safety information: Emergency calls" on page 16-2.

- ① Key in the area code and the phone number of the person you wish to call. If you make a mistake, you can delete the digits one by one by

pressing **C** repeatedly, or clear the whole display by pressing and holding down the **C** key.

For international calls, start by pressing ***** twice quickly. The international call character **+** appears on the display, which informs the network centre to select the country-specific international prefix. Enter the country code, area code and the subscriber number.

- ② Press  to dial the phone number.
- ③ When the phone number disappears and the text *Call 1* is shown, the call is connected.



Note: The microphone and earpiece are on the backside of the device.


When a call is active, you can use the ▼ and ▲ keys to lower or raise the volume level of the phone interface's earpiece.

Receiving a call

When you receive a call, the communicator gives a ringing tone and the text **CALL** flashes on the display. If you have selected *Silent* in Menu 10, only the keypad and display lights will flash. If you have selected *Beep*, only a single beep will be heard. If the caller can be identified, the caller's phone number (or name if stored in memory) and the text **CALLING** will be displayed instead.

You can answer the call any time, even while using the memory or menu functions.

To answer an incoming voice call, press  or any other key except ① or .

If you do not want to answer the call, simply press . The caller will hear the alerting tone change to a busy tone, and the call will be diverted to your voice mailbox if *Divert when phone is busy* is on and set to *To voice mailbox*, see chapter 4 "Telephone: Telephone settings – Voice call diverting" on page 4-6.

Sending DTMF tones

If you need to send long DTMF strings, it is more convenient to send them within the communicator interface, see chapter 4 "Telephone: Managing calls – Sending DTMF tones" on page 4-5.

- ① Make a call to the desired phone number.

- ② Key in the digits you want to send as DTMF tones. The digits are sent one by one to the network. DTMF tones can be transmitted even when the keypad tones are set off.


Automatic transmission


In order to send DTMF tones automatically, you must store them first. Storing DTMF strings is most conveniently done in the communicator interface, see chapter 3 "Contacts: Contact cards - Storing DTMF tones" on page 3-3. If you want to store DTMF strings in the phone interface, see "Using memory: Storing information via the phone interface" on page 13-5.

- ① Press **Memory**. Key in the name of the contact card that contains the DTMF service phone number and the DTMF digits and press **Find**.

For how to recall information, see "Using memory: Recalling information" on page 13-5.

Note: When stored DTMF tones are recalled in the phone interface, only DTMF strings that have been stored in a *Tel* field can be used.

- ② When the recalled string (containing the phone number and the DTMF digits) is on the display, press .

After the connection has been established, the DTMF tones will be sent directly, after a small pause (if the sequence contained the **p** character) or after you press  for the second time (if the sequence contained the **w** character).

Using memory


The phone numbers and names you store are normally located in the standard memory of the communicator, indicated by the letter "B" on the phone interface display.

The "B" memory is the communicator memory, known as the Contacts directory. When the communicator is started up for the first time, the "B" memory is selected automatically.

The "A" memory is located on the SIM card that is inserted in the communicator. The SIM card memory uses numbered memory locations to store data. When numbers are saved in the SIM card ("A") memory, a message will indicate its location number. The number of standard memory locations available on SIM cards varies from one card to another.

When the "A" memory is selected, the phone interface stores all contact information on the SIM card and cannot access the Contacts directory. Therefore, the use of the communications applications of the communicator interface will be less convenient (you will have to enter most contact information manually). This manual will assume that you use the standard "B" memory.

Keying in a name

- ① Press the **Memory** selection key to switch to the alpha mode (the  indicator is shown on the phone interface display).
- ② Press the key that has the desired character. If the character you want is not the first to be displayed, press the key again within one second (before the cursor appears) to display the next character. Keep pressing the key until the desired character appears.
- ③ If you miss a character, keep pressing the key until it appears again; or first press **C** and then start pressing the key again.

If you want a lower case character, press and hold a key until the character appears in lower case. All further letters will appear in lower case until a key is pressed and held once again.

To enter a space between characters, press **#**.

To correct a mistake, press **C**.

- ④ Once the desired character is on the display and you want to enter a new character, do either of the following:

If the next required character is located on some key other than the previously pressed key, press the new key and the first character on the key will appear.

If the next required character is located on the same key as the present one, wait one second. The vertical cursor will appear to the right of the character just pressed. Alternatively: press ***** and select the character without waiting for the cursor to appear.

Note: In the alpha mode, the numeric characters available for each key are only for use with names. You cannot use the characters as ordinary phone numbers.

Storing information via the phone interface

To store names and phone numbers via the phone interface (to enter other contact information, use the Contacts application):

- ① Press **Memory**.
- ② Key in the name (of up to 30 characters) that you want to store with the phone number. For details, see "Using memory: Keying in a name" on page 13-4.
- ③ Press **Save**.
- ④ Key in the international access and country codes (if necessary), area code and phone number. Instead of the country-specific international access code, you can use the + character (press ***** twice). When the + character is used, the cellular network will automatically add the international access code of the country from which you are trying to call.

If you are storing DTMF sequences and want to use the DTMF special characters, for a pause, press ***** three times quickly, so that a **p** is displayed. For a wait character, press ***** four times quickly, so that a **w** is displayed. For more information on storing DTMF se-

quences, see chapter 3 "Contacts: Contact cards – Storing DTMF tones" on page 3-3.

- ⑤ Press **Save**. The message SAVED will appear (in the middle of the display). The entry will be automatically saved in the Contacts directory in alphabetical order (numbers will precede letters).

See also chapter 3 "Contacts: Contacts directory and the phone interface" on page 3-4.

A quick way to save text or numbers on the display is to press **Memory** for three seconds.

Recalling information

You may fetch phone numbers and names from memory by the name with which the required phone number was stored or by the speed dial number of the Contacts directory entry.

To recall a phone number by corresponding name:

- ① Press **Memory**.
- ② Key in the name or its first letter(s).
- ③ Press **Find**. The name closest to the keyed in characters will appear.
- ④ You can move to the next name containing the same characters by pressing **Next**, or scroll through the names with **▼** or **▲** until you reach the correct one.


To review the phone number stored with the name:

- ① Press **ABC**. If the phone number has been designated a speed dial number, the location number of the name and phone number is shown in the upper right corner of the display.

Dialling shortcuts

The dialling shortcuts provide quick and convenient ways to make voice calls.

Speed dialling


Speed dialling is a handy way to call frequently-used phone numbers by keying one digit and the  key. You can define up to eight speed dial numbers in the communicator memory ("B" memory). For information on how to assign phone number speed dials, see

chapter 3 "Contacts: Contact cards - Speed dials" on page 3-2.

- ① Key in the number of the memory or speed dial location where you have stored the phone number.

- ② Press .

The phone interface will recall the number from the memory, display it briefly, and then dial it. If the speed dial location is empty, an error message will be displayed.


Number 1 is the speed dial location of your voice mailbox. To call your voice mailbox, press **1** and then , or just press and hold **1**.

Note: Speed dialling is not possible during a call.

Speed search



- ① Press **Memory** and key in as many characters as needed to identify the contact.
- ② Press **Find**. The first matching name appears with the cursor blinking under the last matching character you keyed in.
- ③ If the name found was not the one you searched for, press **Next** to view the next matching name. Note that the **Next** selection

key will only show names that match the keyed in sequence. If the initial character sequence produced too many matches, key in more characters and continue from step ②.

- ④ When the name of the contact you want to call is shown on the display, press .

Last number redial

The communicator stores the phone numbers you dial, i.e., call or attempt to call. However, only the last twenty phone numbers (and associated names) can be stored in the memory at a time.

- ① If there are any characters on the display, clear the display by pressing and holding **C**.
- ② Press . The last dialled number will appear on the display.
- ③ You can scroll the numbers with **▼** or **▲** until the desired number is displayed.
- ④ Press  to dial the number.

You can also recall Recent dialled calls (Menu 01 1), Recent received calls (Menu 01 2) and Recent missed calls (Menu 01 3), see "Recent calls (Menu 01)" on page 13-8.

Using the menus

The phone interface offers a set of menu functions, which allow you to tailor the phone interface to your particular use. In each menu and submenu, you can check and alter the setting of any particular function. The menus and submenus can be entered by scrolling the menu or using appropriate menu shortcuts.

You can access the menu functions even during a call.

Menu scrolling

- ① Press **Menu** to enter the menu facility. The display will read *View menu*.
- ② Press either **▼** or **▲** to scroll the list of menus until you reach the desired menu.

- ③ Press **Select** to enter the menu. If the menu contains any submenu, reach the one you want with **▼** or **▲**.
- ④ Press **Select**. The current setting of the function is indicated on the display by the pointer **►**.
- ⑤ Press **▼** or **▲** to scroll the list of setting options until the pointer points to the desired option.
- ⑥ Press **OK** to select the option. If you don't want to change the setting after all, you can return to the previous menu level by pressing **Quit**.

Pressing **C** or pressing and holding **Quit** will exit the menu facility.

Menu shortcuts

All the menus, submenus and settings are numbered. This index number is shown in the upper right corner of the display.

To access a menu function by its shortcut:

- ① Press **Menu**.
- ② Key in the number of the main menu under which the desired submenu is located.
- ③ Key in the number of the submenu where the function can be found before the *View options* text appears.
- ④ Key in the number of the desired setting option.

For instance, to select the ringing volume level 2 (Menu 4 2 2): Press **Menu** (to enter the menu facility), **4** (to enter the Phone settings menu), **2** (to enter the Ringing volume submenu), **2** (to select ringing level 2).

Main menu structure

The following menu structure lists the names of the main menu and their submenus. Third-level menus are not shown here. Some menu items are shown only when the menu list mode has been set to *Complete* in Phone settings: Menu list (Menu 4 13). These menus are indicated by the ✓ symbol in the following menu list.

Some menu functions are network services, indicated by the Y symbol in the following menu list. These functions can be utilised only if provided by your cellular network. To make use of a network service, you must first subscribe to it. Note that network services are specific to each SIM card. If you change the SIM card and you do not have obtained the service for the new card, you will not be able to use the service.

MENU	FUNCTION	SUBMENUS
MENU 01	RECENT CALLS ✓	1 Dialed calls, 2 Received calls, 3 Missed calls, 4 Erase all recent calls
MENU 2	MESSAGES	1 Listen to voice messages (Y), 2 Read messages (Y), 3 Show delivery reports Y, 4 Read info messages, 5 Message settings
MENU 3	VOICE CALL DIVERTING Y	1 Divert all voice calls, 2 Divert when busy, 3 Divert when not answered, 4 Divert if not reachable, 5 Cancel all divers
MENU 4	PHONE SETTINGS	1 Lights ✓, 2 Ringing volume ✓, 3 Ringing tone ✓, 4 Keypad tones ✓, 5 Warning tones ✓, 6 One-touch dialling ✓, 7 Automatic answer ✓, 8 Date and time, 9 Cell info display ✓Y, 10 Own number sending ✓Y, 11 Call waiting ✓Y, 12 Restore factory settings, 13 Menu list
MENU 5	SECURITY OPTIONS ✓	1 PIN code request, 2 SIM change security, 3 Voice call barring, 4 View fixed dial list, 5 Fixed dialling, 6 Change access codes, 7 Closed user group, 8 System lock
MENU 6	DURATION AND COST ✓	1 Call duration, 2 Call costs Y, 3 Call costs limit, 4 Show costs in Y
MENU 7	NETWORK SELECTION ✓	
MENU 8	MEMORY FUNCTIONS	1 Memory selection, 2 SIM card memory status ✓, 3 Copy between memories, 4 Erase SIM card memory ✓, 5 Show own numbers
MENU 9	IN-CALL OPTIONS ✓	
MENU 10	ALL SOUNDS	
MENU 11	KEYPAD LOCK	

Menus

When you have reached the correct menu, use ▼ or ▲ to scroll through the menu options.

Recent calls (Menu 01)

In this menu, you can review and erase the phone numbers stored automatically. Note that the Received calls and Missed calls functions are network services which work only in networks that allow you to view the caller's phone number. These functions are described in chapter 4 "Telephone: Making a call" on page 4-2.

Dialled calls (Menu 01 1), Received calls (Menu 01 2), Missed calls (Menu 01 3).

Note: The communicator only registers missed calls when the phone interface is switched on and it is used within the network's service area.

Erase all recent calls (Menu 01 4)

Caution: The phone numbers are erased without warning. You cannot undo the operation.

Messages (Menu 2)


The Short Message Service (SMS) function is a network service and may not be supported by your network. Contact your home service provider for details. The phone interface can be used for recording and listening to voice messages in voice mailboxes and for reading received short messages. Reading short messages is, however, more convenient via the larger display of the communicator interface. To read or send short messages, use the communicator interface's SMS application (see chapter 6 "Short messages" on page 6-1) or the Notes application (see chapter 8 "Notes" on page 8-1).

Listen to voice messages (Menu 2 1)

When you enter this function, the communicator dials the phone number stored in Menu 2 5 1. If required, key in the access code of the mailbox (or answering machine). It is sent as

DTMF tones to the receiving end.

Read messages (Menu 2 2)

When you receive a short message, the text MESSAGE RECEIVED and the  indicator will be displayed and a tone will sound (if the communicator has not been set to silent service in Menu 10). A note is also shown when you receive faxes or mail. To read received faxes or mail, you must use the respective applications of the communicator interface. To read the message immediately, press **Read**. To read the message later, press **Quit**.

Press ▼ to view the first message. The messages are shown in the order they were received.

Once you have read the message, you can press **Quit** or **Option**. The options available in the phone interface are:

Read next — Shows the next message.

Erase — Erases the selected message from memory.

Use number — Copies the phone number from the message and moves it onto the phone interface display. You can now call the number or save it.

Show delivery reports (Menu 2 3)


Delivery reports give information about the status of sent messages. The sent message can be either successfully delivered, pending, or the sending of the message has failed.

Read info messages (Menu 2 4)

This network service allows you to receive short messages on various topics. You may select from topics that are pre-defined on the communicator interface see chapter 6 "Short messages: SMS settings" on page 6-5. Press **Select** to view the list of available topics.

Use ▼ or ▲ to scroll through the topic list. To read a topic, press **Read**: the content of the topic is displayed. If the topic contains no information, the text NO MESSAGE ON THIS TOPIC is displayed.

You can scroll the text with ▼ or ▲. Pressing **Option** gives you the following options:

Use number— Copies the phone number from the current message onto the display, from which you can dial it or store it elsewhere in the normal way. (Instead of this function, you may press  while viewing the message.)

Off— Turns the info message receiving off.

If you want to read a message again, choose the message from the menu. The message will appear immediately on the display.

Message settings (Menu 2 5)

Set voice mailbox number (Menu 2 5 1)

The phone number that you enter here will be dialled when you select the *Listen to voice messages* function in Menu 2 1. A voice mailbox can be a network service or your personal answering machine. You may enter a new or edit an existing phone number. The number will be used until you change the number again.

Info service (Menu 2 5 2)

This menu allows you to control the info service settings.

On — Activates the reception of topics that are pre-defined in the communicator interface and which can also be seen within the Read info messages menu (Menu 2 4).

Off — Deactivates new topic reception. You can still read previously saved messages.

Index — You receive only the list of available topics, no messages. Any previously received index list will be shown and updated automatically by the service provider.

To receive the messages for the chosen topics, you must first select the topics from the list (via the communicator interface), then change the setting to *On*.

Voice call diverting (Menu 3)

The call divert network service allows you to direct your incoming calls to another phone number when you do not want to be disturbed, or when the phone interface is switched off or outside of the network coverage area. The call diverting functions are described in more detail in

chapter 4 "Telephone: Telephone settings – Voice call diverting" on page 4-6.

Note: Call diverts made via the phone interface only apply to voice calls. Fax diverting is done in the Fax application's settings (see chapter 5 "Fax: Fax settings" on page 5-4).

- ① Select the desired call divert mode in the main menu:

Divert all voice calls (Menu 3 1), Divert when busy (Menu 3 2), Divert when not answered (Menu 3 3), Divert if not reachable (Menu 3 4), Cancel all diverts (Menu 3 5)

Unless you chose **Cancel all diverts**, the following options are now available:

Press ▼ or ▲ to move the pointer to *Activate*. You will be asked for the phone number to which you wish to divert the incoming voice calls (to your voice mailbox or some other number). See chapter 4 "Telephone: Telephone settings – Voice call diverting" on page 4-6 for details.

When the phone interface is in idle state (you have no active calls and you are not in any menu), you can modify the phone number to which your calls will be diverted by using a manual command string.

The delay time, after which the call is diverted, can be modified by a command string programmed by your network operator.

Cancel — Sets the divert mode off.

Status — Shows call types that are being diverted.

Phone settings (Menu 4)

Lights (Menu 4 1)

The keypad and display of the phone interface are fitted with lights to make them easy to read. When the communicator is used as a handportable phone or is connected to a charger, this setting determines whether the lights remain on for 15 seconds after the last keystroke or an incoming call alert (*On*) or remain permanently off (*Off*).

The lights can be switched on for 15 seconds by pressing ① quickly even if *Off* is selected. When the communicator is connected to a

handsfree car kit, the lights always remain on (*On*) or extinguish after 15 seconds (*Off*).

Ringing volume (Menu 4 2)

The ringing tone will be heard when you receive a call. There are several ringing tone volume levels available. If you have set the communicator to *Silent* or *Beep* in Menu 10, the ringing tone will not be heard.

Ringing tone (Menu 4 3)

You can select from a range of different tone patterns. When you change the ringing tone, a short sample tone will be heard. If you have set the communicator to *Silent* or *Beep* in Menu 10, the ringing tone will not be heard.

Keypad tones (Menu 4 4)

A short tone sounds each time you press a key. You can select a suitable volume level or set the keypad tones off. If you have set the communicator to *Silent* or *Beep* in Menu 10, the keypad tones will not be heard.

Warning tones (Menu 4 5)

A warning tone, i.e., error or confirmation tone will sound, for example, when the cellular network is currently too busy to allow new calls or the battery charge is too low. If you have set the communicator to *Silent* or *Beep* in Menu 10, the warning tones will not be heard.

One-touch dialling (Menu 4 6)

When this function is set on, you can dial phone numbers stored in speed dial locations 1 to 9 by simply pressing and holding the assigned speed dial key.

Automatic answer (Menu 4 7)

When this function is set on, the communicator will automatically receive an incoming call.

This function can only be used when the communicator is connected to an approved handsfree car kit equipped with ignition sense. The ignition sense has to be installed and ignition has to be switched on. Note that this function works with voice calls only.

Date and time (Menu 4 8)

You can select whether the date and time are shown on the display.

Cell info display (Menu 4 9)

When this function is set on, the phone interface will indicate when it is using a network cell based on Micro Cell Network (MCN) technology. The setting will remain in effect even if the SIM card is changed or the phone interface is switched off.

Note: The communicator consumes more power when the Cell info display is on.

Own number sending (Menu 4 10)

The setting of this function determines whether the phone number of your current SIM card is revealed to the receiving end. This function works only in cellular networks that allow you to view the caller's phone number. For subscription to this service, contact your network operator.

Choose *Preset*, *On* or *Off*. *Preset* selects the preferential setting (*On* or *Off*) that you have agreed upon with your network operator. When you change the SIM card, the *Preset* setting is automatically selected.

Call waiting (Menu 4 11)

Call waiting is a network service. Contact your operator for subscription. See chapter 4 "Telephone: Telephone settings - Voice call waiting" on page 4-7.

Choose *Activate* to set call waiting on, *Cancel* to set call waiting off or *Status* to show call types with which call waiting may be used.

Restore factory settings (Menu 4 12)

You can reset the settings of the menu functions to their original values. When you activate this setting, you will be prompted for the five-digit lock code. This function will not affect stored phone numbers and names, access codes, earpiece volume setting, call timers and cost counters (Menu 6).

Menu list (Menu 4 13)

If you do not need all menu functions frequently, you may hide some of the menus and submenus. When *Complete* is selected, the phone interface will show all its menu functions. When *Short* is selected, only the main functions are shown and can be accessed.

Security options (Menu 5)

The purpose of the security system is to prevent unauthorised use or the altering of important settings. Activating or changing the security options requires, in most cases, the appropriate access code (see chapter 10 "System: Security" on page 10-2).

Note: When call barring, fixed dialling, closed user group, or system lock is in use, calls may be possible to certain emergency numbers in some networks (e.g., 112 or other official emergency number).

PIN code request (Menu 5 1)

See chapter 10 "System: Security" on page 10-2: *On* or *Off*.

SIM change security (Menu 5 2)

See chapter 10 "System: Security" on page 10-2: *On* or *Off*.

Voice call barring (Menu 5 3)

Call barring is a network service; contact your operator for subscription. See chapter 4 "Telephone: Telephone settings - Voice call barring" on page 4-7. In this submenu you can choose the following call barring modes:

Outgoing calls (Menu 5 3 1), International calls (Menu 5 3 2), Int except to home country (Menu 5 3 3), Incoming calls (Menu 5 3 4), Incoming calls if abroad (Menu 5 3 5), Cancel all barrings (Menu 5 3 6).

Note: Call barrings made via the phone interface only apply to voice calls. Fax barrings are made in the Fax application's settings (chapter 5) and data barrings are made in the Internet main settings (chapter 7).

View fixed dial list (Menu 5 4)

In this submenu, you can review the contents of the fixed dialling list that you created in Menu 5 5. If you have selected *Off* in the Menu 5 5, calls to all numbers are possible.

Fixed dialling (Menu 5 5)

You may restrict your outgoing calls to a predetermined set of phone numbers. This 'fixed dialling' function works only with SIM cards

that support it. When the function is set on, you can only call a phone number which is included in the fixed dialling list or which begins with the same digits as a phone number on the list.

Enter the PIN2 code. Select *On*, *Off* or *Numbers* (to edit the fixed dialling list). If you selected *Numbers*, the first number in the list will be displayed.

Press **Option** and choose *Erase all*, *Add*, *Remove* or *Edit*. The *Remove* and *Edit* options affect the name (and the associated phone number) which was on the display when you pressed **Option**.

Change access codes (Menu 5 6)

In this submenu, you can change the following access codes: Lock code (Menu 5 6 1), PIN code (Menu 5 6 2), PIN2 code (Menu 5 6 3), Barring password (Menu 5 6 4). See chapter 10 "System: Security" on page 10-2.

Note: The access codes may only include digits 0 to 9.

Closed user group (Menu 5 7)

This network service allows the restriction of outgoing calls to and incoming calls from a selected group of people. For details on creating a user group and activating this service, contact your network operator. You may be a member of up to 10 user groups (the groups need not necessarily be assigned numbers from 1 to 10).

Select one of the following options:

None— Calls can be made and received in the normal way. This option overrides all other user group settings. You can use this option only if you are entitled to do so.

Preset— Use a preferential user group that the SIM card owner has agreed upon with the network operator.

Set— Use a particular user group. Calls can be made to or received from the members of the selected group only.

System lock (Menu 5 8)

When the system lock is activated in this menu, the communicator will lock immediately. Even if you remove and replace the bat-

tery and switch on the phone interface, the communicator will remain locked.

The communicator can also be locked automatically if the *Autolock period* is turned on in the communicator interface (see chapter 10 "System: Security" on page 10-2).

To lock the communicator, press **Select** to activate the lock code prompt and enter the lock code. The communicator locks immediately.

To unlock the communicator, press **Unlock** and enter the lock code.

Note: To prevent the communicator from locking itself again after the autolock period, deactivate the option in the Security application settings (see chapter 10 "System: Security").

Duration and cost (Menu 6)

In this menu, you can view the duration and cost of your outgoing and incoming calls, reset the timers and counters, limit the duration of calls and select whether the call costs are shown in charging units or units of currency.

Note: The actual time invoiced for calls and services from your service provider may vary, depending upon network features, rounding-off for billing, taxes and so forth.

Call duration (Menu 6 1)

The communicator provides two call timers which help you monitor the duration of your calls.

Last call duration (Menu 6 1 1)

Shows the duration of the last, or current, outgoing or incoming call in hours, minutes and seconds, e.g., 00:02:15.

Note: The duration of incoming calls is not displayed when you are within your home network.

All calls duration (Menu 6 1 2)

Shows the total cost of all calls made or received with any SIM card that you have used with the communicator.

Clear timers (Menu 6 1 3)

Resets all timers.

Note: There is no way to undo the reset operation.

Call costs (Menu 6 2)

This network service allows you to check various call costs. The costs are shown in charging units or units of currency that you have set in Menu 6 4. The call cost is shown for each SIM card separately. For these settings you need the PIN2 code. Contact your service provider for more information.

Last call units (Menu 6 2 1)

Shows the cost of the last, or current, call in charging units or the currency set in Menu 6 4.

All calls units (Menu 6 2 2)

Shows the total cost of all calls in charging units or units of currency that you have set in Menu 6 4.

Clear counters (Menu 6 2 3)

Resets all cost counters. Resetting requires the PIN2 code. This service is not available with SIM cards that do not support the PIN2 code.

Note: There is no way to undo the reset operation.

Call costs limit (Menu 6 3)

This function allows you to limit the total costs of outgoing calls to a specified number of charging units or units of the currency that you have set in Menu 6 4. For this service you need the PIN2 code.

Emergency calls to the number 112 can be made even if there are no charging units left.

Changing the call costs limit requires the PIN2 code. To turn the limit on, select **Set**. Key in the cost limit in charging units or currency units. If you define the limit in currency units, you can press * or # to insert a decimal point.

After the limit has been turned on, the quantity of remaining charging or currency units will be continuously shown on the display when in idle mode. When all units have been used, no calls can be made except for emergency calls to the number 112.

To turn the limit off, select **None**.

Show costs in (Menu 6 4)

In this submenu, you may select whether the call cost limits (and the amount of remaining calling time) will be displayed in currency or charging units. Contact your network operator for charging unit prices. Changing the call costs unit requires the PIN2 code.

To show limits in currency units, select *Currency*, or *Units* to show limits in charging units. If you selected *Currency*, key in the charging unit price. Use * or # to insert a decimal point. Next, enter the currency name.

Network selection (Menu 7)

The communicator can be set to select automatically one of the cellular networks available in your area, or you may select the desired network manually in this menu. This function comes in handy when you want to select a particular network, e.g., due to lower call charges.

When the *Automatic* option is selected, the communicator tries to utilise the network it was last registered on. Outside of the home network service area, the communicator will select one of the networks that have a roaming agreement with the home network.

In the *Manual* mode, when you pick up a network manually from the network list, the communicator will always attempt to register on that network. If the communicator cannot reach or loses contact with the selected network, you are prompted to select another network.

Memory functions (Menu 8)**Memory selection (Menu 8 1)**

In this submenu, you can set the phone interface to use either the SIM card memory ("memory A") or the communicator's internal memory ("memory B"). The letter indicating the currently selected memory is shown in the top left corner of the phone interface display. The memory selection does not affect the communicator interface applications, which will always use "memory B."

Choose *A:Card*, or *B:Phone*, the recommended choice.

SIM card memory status (Menu 8 2)

In this submenu, you may review the number of empty and full memory locations on the SIM card.

Copy between memories (Menu 8 3)

In this submenu, you can copy phone numbers and names between the communicator memory and the SIM card memory. You can copy:

From phone to SIM card (Menu 8 3 1)

You can choose to copy contact cards *One by one* (Menu 8 3 1 1) or copy all *Speed dials* (Menu 8 3 1 2).

Note: All Contacts directory contacts may not fit in the SIM card.

From SIM Card to Phone (Menu 8 3 2)

You can copy locations *One by one* (Menu 8 3 2 1) or *Copy all* SIM card locations (Menu 8 3 2 2) to the Contacts directory.

Note: All copied phone numbers go to the *Tel* field of the contact card. If you want to send SMS messages to these numbers, they must be moved to the *Tel(GSM)* or *Tel(PCN)* field.

Erase SIM card memory (Menu 8 4)

This function allows you to remove phone numbers and names from some or all locations of the SIM, or "A," memory (not the communicator memory). The SIM memory does not need to be selected in order to erase its contents.

Note: Once erased, the memory contents are permanently lost.

You can erase individual locations *One by one* (Menu 8 4 1) or *Erase all* locations (Menu 8 4 2).


Show own numbers (Menu 8 5)


You may view the phone number(s) assigned to the SIM card you are currently using. Some SIM cards do not hold the number and, therefore, the number cannot be shown. If the SIM card is provided with several phone numbers, you may scroll the list.


In-call options (Menu 9)

The phone interface provides a number of control functions that you can use during a call. To access the in-call options during a call, simply press and hold the **Menu** for a second. The in-call options are not numbered. You cannot, therefore, access them by the shortcut method.

Mute / Unmute— Switches off or on the communicator's microphone. If the communicator is connected to a hands free car kit, *Mute* turns off the microphone of the car kit, as well.

Hold / Unhold— Hold allows you to put a currently active call on hold, so that another call can be initiated. After you have finished the new call (with *Drop call*, see below), the original call can be made active again by selecting *Unhold*. If the held call is the only call, you can also unhold it by pressing .

Swap— This function is available when you have one active and one held call. *Swap* makes the held call active and puts the currently active call on hold. In this way, you may converse with one party without ending the other call. Instead of using this function, you can press  to swap between the calls if no numbers have been keyed in.

Drop call— Ends the currently active call. This function is useful when there is an active call, as well as a held call. In such a situation, pressing  would terminate both calls.

Join / Private— *Join* includes a new participant in a conference call. During a conference call, *Private* allows you to converse privately with a selected call participant.

Transfer— The voice call transfer enables you to connect two voice calls together and disconnect yourself from both calls. See chapter 4 "Telephone: Managing calls - Voice call transfer" on page 4-4.

Data— When you have an alternating call active, this option changes the mode of the call from voice to fax or data (see chapter 4 "Telephone: Managing calls - Alternating calls" on page 4-5).

Speech— When you have an alternating call active, this option changes the mode of the call from fax or data to voice.

Send DTMF— Transmits Dual Tone Multi Frequency tones. This function helps you communicate with answering machines, computerised telephony systems, etc. For more details, see "Sending DTMF tones" on page 13-3.

All sounds (Menu 10)

You can select the indication mode for incoming calls and all alerts from the following options. This setting affects both interfaces. You can adjust the same settings in the System settings, see chapter 10 "System: System settings" on page 10-1.

Ring— A ringing tone will sound.


Beep— One short beep will sound and the phone interface will flash its display lights.

Silent— Turns on the silent service: the communicator will flash its display lights. No tones will be heard, including keypad and warning tones. When silent service is selected, the text SILENT will be shown on the display in idle mode.

Keypad lock (Menu 11)



The keypad lock prevents the keypad keys being accidentally pressed when the communicator is, for example, in your pocket. The keypad can be locked or unlocked even during a call.

When the keypad lock is on:

To answer a call, press  normally. During a call, the keypad is unlocked and the communicator can be operated in the normal way. After the call, the keypad lock is automatically turned back on.

The keypad lock will be automatically turned off when the communicator is connected to a car kit. When the communicator is removed from the car kit, without being switched off previously, the keypad lock will be activated automatically again.

To activate the keypad lock:

- ① Press **Menu** and use  or  to reach the menu *Keypad lock*.
- ② Press **Select**.

Or, alternatively

- ① Press **Menu** and then the ***** key within 5 seconds of the first press.

While the keypad lock is active, the text **KEYPAD LOCKED** and the **Unlock** selection key are displayed all the time.

To deactivate the keypad lock:

- ① Press **Unlock** and then the ***** key within 5 seconds of the first press.

Note: When the keypad lock is on, calls may be possible to the emergency number programmed into your communicator (e.g., 112 or other official emergency number).

Help

Most menu functions are provided with a help text, which gives a brief description of the displayed function. Enter the menu facility about which you want help. Now you can view the help text of the function in two ways:

Wait for 5 seconds. The first page of the help text will appear. The text is scrolled automatically.

Or, press **ABC**. The first page of the help text will appear. For additional pages, press **ABC** as many times as necessary.

Once you have read the text, either press **Select** to enter the function or press **Quit** to return to the title screen.

While reading a help text, you can move to the next or previous menu function by pressing **▼** or **▲**.

14. Troubleshooting

Note: You will find the Nokia HelpLine contact card in the Contacts directory. The HelpLine answers questions and offers instructions over the phone.

1. Phone interface or communicator interface does not start (both displays remain blank)

Make sure the battery is properly installed and charged.

Make sure that the contacts on the battery and the charging stand are clean.

Battery charge may be too low for operation. Check the display and listen for the low battery warning tones. Charge the battery with the adapter and charger as described in chapter 2 "Getting started: Battery" on page 2-4. If the NOT CHARGING message is displayed, the charging is suspended. In that case check that the temperature of the battery is not above +45° C (+113° F). Wait for a while, disconnect the charger, connect it again and retry. If charging still fails, contact your local Nokia dealer.

2. Power comes on, but the phone interface does not work

Remove the battery and replace it again (reboot).

Try charging the communicator. If you see the battery charging indicator on the phone interface but the phone does not work, contact your local Nokia dealer.

Check the field strength indicator, you might be out of the cellular service area. See the answer to problem number 6.

Check if there is an error message on the display after switching on. If so, contact your local dealer.

Check that the SIM card is correctly installed, see chapter 2 "Getting started: SIM card" on page 2-2.

3. Communicator does not activate or applications stop responding

Close the cover and open it again. If this does not help, close the cover and remove the battery. Replace the battery and open the cover again. Wait while the communicator performs a self-test and starts. See also problem 4.

4. Resetting the communicator

Sometimes, for example, removing the battery in mid-sending may cause errors in the communicator's file system. If you receive internal memory or system error messages and/or reboot prompts, or the device does not respond to commands normally, the reset operations help you to recover from most of these problems. Try the reset operations in the order they have been listed: if checking the file system does not help, try deleting temporary files, and so on. To reset the communicator:

- ① Close the cover.
- ② Remove the battery.
- ③ Place the connector end of the battery (the end with the four metal strips) in the battery cavity, but do not press the other end in place yet.
- ④ Place the communicator on a flat surface with the phone interface display upwards (do not let the battery slip from its place).
- ⑤ Open the cover.
- ⑥ Press and hold down the required key combination and simultaneously push the battery end of the communicator down, so that the battery clicks in place. Hold down the keys until you see progress messages or a confirmation prompt on the display.

- ⑦ In some cases you must confirm the action by pressing a command button.

After the reset, the communicator will reboot and start normally.

1) Check the file system

Key combination: Shift-ESC-(left arrow)

Symptoms: The Memory application (in the System main view) shows too much (over 2 megabytes) or too little memory (even if you have just deleted some documents), or the communicator interface applications crash when opening a document.

Caution: If there are problems in the file system, the corrupted files will be removed.

If there are no problems, this operation does not affect any documents or settings.

2) Delete temporary files

Key combination: Shift-ESC-(right arrow)

Symptoms: The communicator interface is in a reboot cycle or a note saying that an .ini file is corrupted is displayed.

Caution: All temporary files are removed. The Document outbox is cleared, default application settings are restored (for example, the SMS message centre number, Internet access point and remote mailbox settings are lost).

Stored documents are not affected.

3) Format file system

Key combination: Shift-ESC-F

Symptoms: The communicator interface is in a reboot cycle or does not boot up.


Caution: Formats the file system. All data you have entered will be lost. This operation will restore your communicator in the same state it was in at the time of purchase. Remember that backed up data can be restored in all cases. If these measures do not help, contact your local dealer.

5. Calls cannot be made or received

The phone interface is off. Close the cover and switch the phone interface on.

If you get the message INVALID SIM CARD, your SIM cannot be used in the communicator. Contact your dealer or network operator.

Check the status of your call barrings and diverts, see chapter 4 "Telephone: Telephone settings" on page 4-6.

The phone interface is already busy (data or fax being sent or received, the communicator is used as a fax modem). Wait for the data/fax transmission to end or drop the call (by pressing the  key on the phone interface keyboard).

6. Call quality is poor

Your location may not allow better call quality. This problem may occur especially in a moving car or train. Move to a location where radio signal reception is better. See chapter 16 "Important safety information: Facts about cellular data transmission" on page 16-3.

Reception is usually better above ground level, outdoors and while stationary. Sometimes even moving the mobile phone slightly will improve reception. You can also try using the communicator in the handsfree mode with the communicator interface's Telephone application (see chapter 4 "Telephone: Audio control" on page 4-1). Remember to turn the antenna to an upright position.

7. Calls, faxes or data cannot be diverted or barred

The service in question may not be subscribed to, or is not supported by the network, or the message centre number and voice mailbox number (required for call diverting) may be missing or incorrect.

Fax diverts and barrings are set in the Fax application's settings. Data barring is set in the Internet main settings (data calls cannot be diverted).

8. Cannot access numbers stored on the SIM

Use the phone interface's Menu 8 3 2 to copy the SIM card entries into the Contacts directory. See chapter 13 "Phone interface: Menus - Memory functions (Menu 8)" on page 13-13.


9. Cannot open a directory entry in the directory view

If you cannot select a contact in the Telephone, Fax, SMS or Mail directory, it means that the contact card does not have a telephone number, fax number, mobile telephone number or an E-mail address. Within the Contacts application, add the missing information to the contact card.

10. Common reasons why faxes, short messages or mail cannot be sent or received

The phone interface is off, or you have no subscription to the network service, or the communicator is low on memory (see problem 16).

The number format used is invalid, or the called number does not answer (within 10 tries) or you are calling to a wrong phone number.

The phone interface is already busy (data or fax being sent or received, the communicator is used as a fax modem). Wait for the data/fax transmission to end or drop the call (by pressing the  key on the phone interface keyboard).

Fax/data barrings or fax diverts may be active (fax barrings/diverts are set in Fax application's settings, data barrings are set in the Internet settings).

Fax reception: The SIM does not have a fax number.

Mail reception: The SIM does not have a phone number for data connections. Contact your cellular service provider.

Short message sending: You have not subscribed to the Short Message Service or the Short Message centre number is missing or incorrect. Contact your cellular service provider.

Mail sending: You do not have a remote mailbox service, or the mail server (which delivers your mail) does not comply with the SMTP protocol. Contact your E-mail service provider. If you are using the *Upon request* sending option, mail sending must be started in the

Document outbox, see chapter 12 "Document outbox" on page 12-1.

The failure reason can also depend on the cellular network: no network support for SMS, no network support for fax, no network support for data/mail, network out of order, network is busy, the field strength is not adequate for sending.

11. Cannot establish a terminal or Internet connection

Internet, Mail, WWW, Telnet or Terminal settings and configurations may be missing or incorrect. Check your Internet access point number (in Internet main settings). Contact your Internet service provider for the correct settings. See also "Internet settings" on page 7-3.

If you receive internal error messages, remove and replace the battery and try again. If the problem persists, see problem 4.

If you receive service provider error messages when connecting to your remote mailbox, contact your remote mailbox service provider. Your remote mailbox may contain corrupted mail messages or the mail server settings may be incorrect.

12. Cannot print

Direct printing is possible via an infrared link only. The remote infrared port must be compatible to the IrDA standard. Check the IR connection, see chapter 10 "System: Connecting to a PC" on page 10-5.

You are using an incorrect printer driver, see chapter 8 "Notes: Printing".

If you fail to establish a working infrared connection, transfer the file to a PC and use the PC to print the document. See chapter 10 "System: File transfer" on page 10-6. Alternatively, you can send the document as a fax to the nearest fax machine. See chapter 5 "Fax: Sending faxes" on page 5-1.

13. PC connectivity problems

The PC software for desktop connectivity is not installed. The software is found on the

diskette included in the communicator sales package.

Check the cable or IrDA connection used. If an infrared connection is used, the IR ports must be facing each other. See chapter 10 "System: Connecting to a PC" on page 10-5.

14. Fax modem problems

When the communicator is used as a fax modem (see chapter 10 "System: Connecting to a PC" on page 10-5), use autobauding. The communicator and the PC must be using the same baud rate. For the communicator, this is set in System settings. For the PC, the baud rate is set in the PC's connectivity software.

If a cable connection is used, fully compatible operation with all PC fax and terminal software cannot be guaranteed (consult with your dealer). If you experience problems with your PC fax software, use the infrared connection.

If you experience problems establishing a data connection with the remote modem, you can try fixing the data transmission rate by using an AT command, for example, `ATS35=6`, which defines the remote modem as a V.32 modem. Common AT commands (based on the ETSI 07.07 standard) supported by the Nokia 9000i Communicator are listed in the file *atcomm.txt* on the diskette supplied with the product. For information on how to use the AT commands, consult the documentation of the telecommunication or fax application that you use on your PC.

15. Access code problems

The lock code is included in the communicator sales package. If you forget or lose the lock code, contact your communicator dealer.

If you forget or lose a PIN or PUK code, or you have not received such a code, contact your network operator.

For information about Internet or terminal passwords, contact your Internet service provider.

16. Low on memory

If you notice that your communicator's memory is getting low or you receive a warning note about insufficient memory, check the Memory details (see chapter 10 "System: Memory" on page 10-10). Use the memory details to determine what kind of data takes up most memory.

First, make a backup of all important data. Next, either delete some data manually (documents, received faxes, etc.) You can also use the Data removal application (see chapter 10 "System: Data removal" on page 10-10). With the Data removal application you can delete old calendar data, for example.

Note: Downloaded images and received faxes can take up significant amounts of memory space.

17. Distorted characters in Terminal

If the data bits/stop bits/parity settings are different from those defined to the data service by the operator, characters may look distorted on the display.

18. Infrared connection

The communicator may be connected to a computer, laptop or printer via an infrared connection.

If you wish to use an infrared connection, the computer to which you want to establish a connection must have an IrDA compatible infrared port; installed and activated IrDA drivers; and Microsoft Windows 95 (for more information on IrDA drivers and their use in Windows 95, contact Microsoft).

If the IrDA drivers are activated on your computer, the computer will automatically detect the presence of the communicator.

If you want use a printer which does not have an infrared port, you may try to connect to the printer via an IrDA adapter (not supplied with the Nokia 9000i Communicator).

For further information see the *readme.txt* file on the diskette supplied with the communicator.

15. Care and maintenance

Your Nokia 9000i Communicator is a product of superior design and craftsmanship and should be treated with care. The suggestions below will help you to fulfil any warranty obligations and to enjoy this product for many years.

Keep the communicator and all its parts and accessories out of small children's reach.

Keep the communicator dry. Precipitation, humidity and liquids contain minerals that will corrode electronic circuits.

Do not use or store the communicator in dusty, dirty areas. Its moving parts can be damaged.

Do not store the communicator in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.

Do not store the communicator in cold areas.

When the communicator warms up (to its normal temperature), moisture can form inside the communicator, which may damage electronic circuit boards.

Do not attempt to open the communicator. Non-expert handling of the communicator may damage it.

Do not drop, knock or shake the communicator. Rough handling can break internal circuit boards.

Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the communicator. Wipe it with a soft cloth slightly dampened in a mild soap-and-water solution.

If the communicator or any of its accessories are not working properly, take them to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

16. Important safety information

Traffic safety

- Do not use the communicator while driving a vehicle. Park the vehicle before using the communicator.
- Always secure the communicator in its holder, and ensure that the locking mechanism on top of the holder is properly engaged; do not place the communicator on the passenger seat or where it can break loose in a collision or sudden stop.
- The use of an alert device to operate a vehicle's lights or horn on public roads is not permitted.
- Remember, road safety always comes first!

Operating environment

- Remember to follow any special regulations in force in any area, and always switch off your communicator's phone interface whenever it is forbidden to use a mobile phone, or when it may cause interference or danger.
- Operation of any radio transmitting equipment, including the Nokia 9000i Communicator, may interfere with the functionality of inadequately protected medical devices. Consult a physician or the manufacturer of the medical device if you have any questions. Other electronic equipment may also be subject to interference.
- As with other mobile radio transmitting equipment, users are advised that for the satisfactory operation of the equipment and for the safety of personnel, it is recommended that the equipment should only be used in the normal operating position.
- Users are advised to switch off the phone interface when at a refuelling point (service station). Users are reminded of the need to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants or where blasting operations are in progress.
- Do not store or carry flammable liquids, gases or explosive materials in the same compartment as the communicator, its parts or accessories.
- Only qualified personnel should install or service the communicator in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty which may apply to the unit.
- Electronic fuel injection systems, electronic anti-skid braking systems, electronic cruise control systems and other electronic systems can malfunction due to the lack of protection from radio signals. Check regularly that all mobile phone equipment in your vehicle is mounted and operating properly.
- Remember to make backup copies of all important data to protect against its possible loss or alteration.
- When connecting the communicator to a PC or printer, please refer to the User's Guides of those devices for detailed safety instructions.
- The infrared beam of the communicator may interfere with the functioning of other infrared devices that are not IrDA certified. Do not point the infrared beam at anyone's eye.

- Consult aircraft personnel as to whether you may use the communicator interface applications in an aircraft. However, always switch off the phone interface before boarding an aircraft. The use of mobile telephones in an aircraft may be dangerous to the operation of the aircraft, disrupt the cellular network and is illegal.
- Failure to observe these instructions may lead to suspension or denial of mobile telephone services to the offender, or legal action or both.

Emergency calls

IMPORTANT!





The Nokia 9000i Communicator, like any mobile phone, operates using radio signals, cellular and landline networks, as well as user-programmed functions which cannot guarantee connection in all conditions. Therefore, you should never rely solely upon any mobile phone for essential communications (e.g. medical emergencies).

Remember, to make or receive any calls the communicator's phone interface must be switched on and in a service area with adequate cellular signal strength.

Emergency calls may not be possible on all cellular phone networks or when certain network services and/or phone features are in use. Check with local cellular service providers.

Some networks may require that a valid SIM card is properly inserted in the communicator.

To make an emergency call:

- ① If the device cover is open, close the cover.
- ② If the phone interface is not on, switch it on (press the  key).
- ③ Press and hold the  key for several seconds to ready the phone interface for calls. If there is an active data or fax call, drop the call first by pressing the  key.
- ④ Key in the emergency number for your present location (e.g., 112 or other official emergency number). Emergency numbers vary by location.
- ⑤ Press the  key.

If certain features are in use (call barring, fixed dialling, closed user group, system lock, keypad lock, etc.), you may first need to turn those features off before you can make an emergency call. Consult this document and your local cellular service provider.

When making an emergency call, remember to give all the necessary information as accurately as possible. Remember that your mobile phone may be the only means of communication at the scene of an accident – do not cut off the call until given permission to do so.

Using this manual

The mobile phone described in this manual is approved for use in the digital cellular networks. This manual is used for both the Nokia 9000i Communicator GSM and PCN models.

A number of features described in this manual are called Network Services. They are special services provided by cellular service providers. Before you can take advantage of any of these Network Services, you must subscribe to the service(s) you require from your home service provider. You can then activate these functions as described in this manual. The manual activation commands for various services are not presented in this manual (e.g., using the ***** and **#** characters for activating or deactivating services). The Nokia 9000i Communicator, nevertheless, is capable of handling commands given in that form. For these commands, please consult with your service providers.

WARNING! This apparatus is intended for use when supplied with power from a Lithium-Ion battery and chargers ACH-4E, ACH-4X and ACH-4A. Other usage will invalidate any approval given to this apparatus and may be dangerous.

Use only accessories approved by the communicator manufacturer. The use of any other types will invalidate any approval or warranty applying to the apparatus, and may be dangerous.

When you disconnect the power cord of any accessory, grasp and pull the plug, not the cord.

Facts about cellular data transmission

The Nokia 9000i Communicator employs the digital data transmission capabilities of the digital cellular network to send faxes, short messages, mail and to establish connections with remote computers.

Cellular data connections can be made from most locations where your mobile phone operates. However, it is recommended that you move the communicator to a location where the strongest possible cellular signal can be obtained. When the signal is strong, data transmission is efficient. In general, you should not expect the same performance from cellular data communications as from landline communications due to the inherent characteristics of the cellular environment.

The following factors may impair cellular connections:

Noise

Radio interference from electronic appliances and equipment, as well as from other mobile phones in metropolitan areas where mobile telephones are prevalent.

Handover

As the mobile phone user moves from one network cell to another, the signal strength of the channel drops and the cellular telephone exchange may hand the user over to a different cell and frequency, where the signal is stronger. A cell handover may also occur when the user is stationary due to varying cellular traffic loads. Such handovers may cause slight delays.

Electrostatic discharge (ESD)

A discharge of static electricity from a finger or a conductor may cause erroneous functions in electric devices. The discharge can result in "garbled" display and unstable software operation. Cellular connections may become unreliable, data may be corrupted, and the transmission halted. In this case you need to end the existing call (if any), switch off the phone interface (if on) and remove the

battery. Then replace the battery and establish a new cellular connection.

Dead spots and dropouts

Dead spots are areas where radio signals cannot be received. Dropouts occur when the mobile phone user passes through an area where the radio signal is blocked or reduced by geographic or structural obstructions.

Signal impairment

Distance and obstacles can cause out-of-phase reflected signals that result in a loss of signal strength.

Low signal strength

Due to either distance or obstacles, the radio signal strength from a cell site may not be strong enough or stable enough to provide a reliable cellular connection for communication. Therefore, to ensure the best possible communication, remember to consider the following points:

- The data connection works best when the communicator is in a stationary position. Attempting cellular communication while in a moving vehicle is not recommended. Fax transmission is more easily impaired than data or short message transmission.
- Do not place the communicator on a metal surface.
- Check that the cellular signal strength on the communicator displays is sufficient (see chapter 2 "Getting started: Communicator applications - Using the applications" on page 2-8 and chapter 13 "Phone interface: Display indicators" on page 13-2). Moving the communicator within a room especially towards a window, may result in a stronger signal. If the cellular signals are not strong enough to support a voice call, data connection should not be attempted until you can find a location with better signal reception.

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