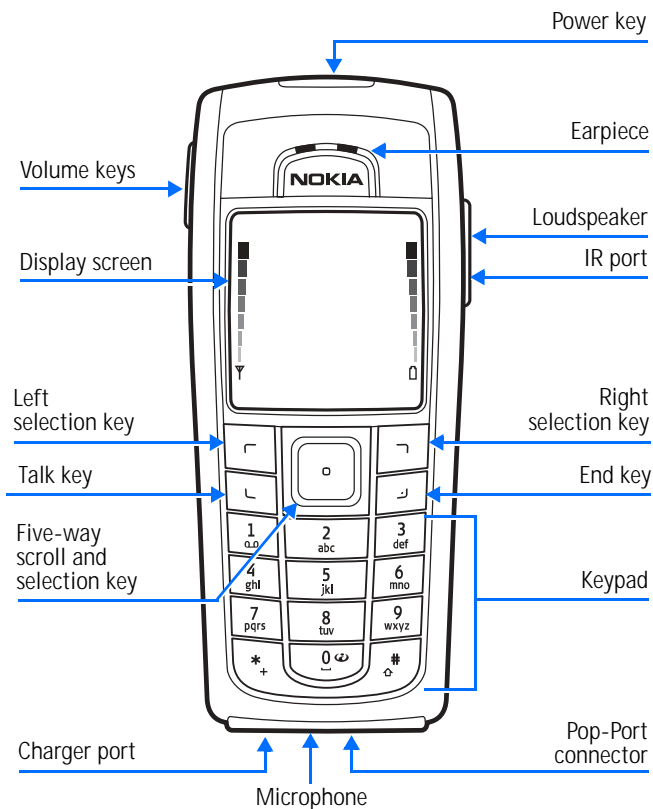




**NOKIA**  
CONNECTING PEOPLE

# User Guide

## Nokia 6230 phone at a glance



# Quick guide

Make a call	Enter a phone number, and press the <b>Talk</b> key.
Answer a call	Press the <b>Talk</b> key.
Answer call during call	Select <b>Options</b> > <b>Answer call</b> .
End a call	Press the <b>End</b> key.
Decline a call	Press the <b>End</b> key.
Mute a call	Select <b>Mute</b> during a call.
Redial	Press the <b>Talk</b> key twice.
Adjust call volume	Press the <b>Volume</b> keys on the left side of the phone during a call.
Use the in-call menu	Select <b>Options</b> during a call.
Save a name and number	Enter a number, select <b>Save</b> , enter a name, and select <b>OK</b> .
Use 1-touch dialing	Press and hold a key (2–8). You must assign a key to a number in <b>Contacts</b> .
Look up a name	Select <b>Contacts</b> > <b>Find</b> .
Check voice mail	Press and hold the <b>1</b> key (contact your service provider for details).
Write and send text messages	Select <b>Menu</b> > <b>Messages</b> > <b>Text messages</b> > <b>Create message</b> . Enter the message and select <b>Send</b> . Enter the number and select <b>OK</b> .
Send a picture message	Select <b>Menu</b> > <b>Messages</b> > <b>Text messages</b> > <b>Create message</b> > <b>Options</b> > <b>Insert picture</b> . Scroll to the picture you want and select <b>View</b> > <b>Insert</b> . Enter the text message and select <b>Send</b> . Enter the number and select <b>OK</b> .
Read a new message	If <b>New Message</b> appears, select <b>Read</b> , highlight the message, and select <b>Read</b> again.
Press	Press a key briefly and release it.
Press and hold	Press and hold a key for 2 to 3 seconds and release it.



## LEGAL INFORMATION

### DECLARATION OF CONFORMITY

We, NOKIA CORPORATION declare under our sole responsibility that the products RH-12 and RH-28 are in conformity with the provisions of the following Council Directive:  
1999/5/EC.

A copy of the Declaration of Conformity can be found at  
[http://www.nokia.com/phones/declaration\\_of\\_conformity/](http://www.nokia.com/phones/declaration_of_conformity/).

# CE 168

Part No. 9232971, Issue No. 1

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This device may contain commodities, technology, or software subject to export laws and regulations from the U.S. and other countries. Diversion contrary to law is prohibited.

## **FCC/INDUSTRY CANADA NOTICE**

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

Manufactured or sold under one or more following US Patents.

Asterisk (\*) indicates design patents pending.

4868846	5519885	5827082	5966378	6112099	6266330
4969192	5526366	5835889	5970059	6115617	6282436
5001372	5553125	5839101	5987137	6118775	6285888
5045973	5557639	584884	5991716	6121846	6292668
5101175	5565821	5845219	5991857	6122498	6295286
5212834	5570369	5857151	5999523	6128322	6308084
5230091	5581244	5862178	6005857	6128509	6310609
5233634	5597102	5870683	6011853	6138091	6311054
5241284	5625274	5887266	6014573	6140966	6314166
5241583	5640395	5889770	6018277	6144243	6324412
5266782	5664004	5892475	6026161	6144676	6347218
5311151	5664053	5898925	6028567	6148209	6356759
5311179	5669069	5907823	6029128	6151485	6359904
5317283	5677620	5914690	6038238	6151507	6363259
5331638	5678224	5914796	6043760	6163609	6370362
5335362	5692032	5915440	6047196	6164547	6370390
5353328	5699406	5917868	6049796	6167248	6377803
5378935	5699482	5920826	6050415	6170073	6393121
5384782	5701392	5926138	6055439	6178535	6430721
5390223	5729534	5926769	6060193	6185295	6434133
5396657	5729541	5930233	6069923	6188909	*29/170210
5400949	5734683	5946651	6072787	6195338	*29/170229
5416435	5754976	5956332	6081534	6199035	*29/170245
5442521	5760568	5956625	6084962	6201876	*29/170246
5444816	5782646	5956633	6088746	6219560	
5446364	5794142	5960354	6094587	6240076	
5479476	5802465	5960389	6097964	6240079	
5487084	5805084	5963901	6105784	6249584	
5493255	5805301	5966374	6108553	6259312	



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# 1 For your safety

Read these simple guidelines. Not following them may be dangerous or illegal. Read the complete user guide for further information.



## SWITCH ON SAFELY

Do not switch the phone on when wireless phone use is prohibited or when it may cause interference or danger.



## ROAD SAFETY COMES FIRST

Obey all local laws. Always keep your hands free to operate the vehicle while driving. Your first consideration while driving should be road safety.



## INTERFERENCE

All wireless phones may be susceptible to interference, which could affect performance.



## SWITCH OFF IN HOSPITALS

Follow any restrictions. Switch the phone off near medical equipment.



## SWITCH OFF IN AIRCRAFT

Follow any restrictions. Wireless devices can cause interference in aircraft.



## SWITCH OFF WHEN REFUELING

Don't use the phone at a refueling point. Don't use near fuel or chemicals.



## SWITCH OFF NEAR BLASTING

Follow any restrictions. Don't use the phone where blasting is in progress.



## USE SENSIBLY

Use only in the normal position as explained in the product documentation. Don't touch the antenna unnecessarily.



## QUALIFIED SERVICE

Only qualified personnel may install or repair this product.



## ENHANCEMENTS AND BATTERIES

Use only approved enhancements and batteries. Do not connect incompatible products.



## WATER-RESISTANCE

Your phone is not water-resistant. Keep it dry.



## BACK-UP COPIES

Remember to make back-up copies or keep a written record of all important information stored in your phone.



## CONNECTING TO OTHER DEVICES

When connecting to any other device, read its user guide for detailed safety instructions. Do not connect incompatible products.



## EMERGENCY CALLS

Ensure the phone is switched on and in service. Press the **End** key as many times as needed to clear the display and return to the main screen. Enter the emergency number, then press the **Talk** key. Give your location. Do not end the call until given permission to do so.

## • ABOUT YOUR DEVICE

The wireless device described in this guide is approved for use on the GSM 850, 900, 1800, and 1900 MHz network. Contact your service provider for more information about networks.

When using the features in this device, obey all laws and respect privacy and legitimate rights of others.



**Warning:** To use any features in this device, other than the alarm clock, the phone must be switched on. Do not switch the device on when wireless phone use may cause interference or danger.

## • NETWORK SERVICES

To use the phone you must have service from a wireless service provider. Many of the features in this device depend on features in the wireless network to function. These Network Services may not be available on all networks or you may have to make specific arrangements with your service provider before you can utilize Network Services. Your service provider may need to give you additional instructions for their use and explain what charges will apply. Some networks may have limitations that affect how you can use Network Services. For instance, some networks may not support all language-dependent characters and services.

Your service provider may have requested that certain features be disabled or not activated in your device. If so, they will not appear on your device menu. Contact your service provider for more information.

## • SHARED MEMORY

The following features in this device may share memory: contacts, text and multimedia messages, e-mails, voice tags, SMS distribution lists, calendar, to-do notes, Java™ games and applications, and the note application. Use of one or more of these features may reduce the memory available for the remaining features sharing memory. For example, saving many contact entries may use all of the available memory. Your phone may display a message that the memory is full when you try to use a shared memory feature. In this case, delete some of the information or entries stored in the shared memory features before continuing. Some of the features may have a certain amount of memory specially allotted to them in addition to the memory shared with other features.



**Note:** Gallery files such as images, ringing tones, and video clips share a different memory. See “Gallery” on page 101.



## 2 Overview of functions

The Nokia 6230 phone provides many useful functions, such as a radio, alarm clock, calculator, wallet, calendar, and more. Your phone can also connect to a PC, laptop, or other device using the data cable, Bluetooth connection, or built-in infrared (IR) port. To personalize your phone, you can set your favorite ringing tones, configure the Go to menu, and select an Xpress-on™ color cover.

In addition, your phone has the following advanced features.

- **MULTIMEDIA MESSAGING SERVICE (MMS)**

Your phone is able to send and receive multimedia messages containing text, a picture or video clip, and sound such as polyphonic ringing tones. You can save pictures, video clips, and ringing tones to personalize your phone. In addition, you can easily send text messages and multimedia messages to multiple recipients.

See “Multimedia messages” on page 46 for more information.

- **CAMERA, CAMCORDER, AND VIDEO PLAYER**

Your phone has a built-in camera for taking still pictures and video clips. After you have taken a picture or video, you can attach it to a multimedia message and send it with MMS, save it as wallpaper in the standby mode, save it in a compatible PC using Nokia PC Suite software, and upload it to a Web address with the content image uploader. When you attach a picture to an entry in your list of contacts, the picture is displayed when your contact calls you.

See “Camera” on page 106 for more information.

- **MULTIMEDIACARD MEMORY CARD**

You can install a MultiMediaCard in your phone to provide up to 256 MB of extra memory. You can store images, video clips, music, and other data on the MultiMediaCard. The MultiMediaCard can be used as a folder in the Gallery menu.

See “Install the MultiMediaCard” on page 20 for more information.

## • **BLUETOOTH**

Bluetooth wireless technology allows you to connect the phone to a compatible device with Bluetooth connectivity within 30 feet. You can use a Bluetooth connection to send business cards, calendar notes, images, video clips, and sound clips.

See “Bluetooth connectivity” on page 87 for more information.

## • **PRESENCE-ENHANCED CONTACTS**

Presence-enhanced contacts enable you to conveniently share your availability information with your colleagues, family, and friends.

See “Presence service” on page 70 for more information.

## • **GENERAL PACKET RADIO SERVICE (GPRS)**

GPRS technology allows mobile phones to send and receive data over a mobile network. Applications such as browsers, MMS, text messaging, and Java use GPRS. Your phone supports up to three simultaneous GPRS connections.

For more information on GPRS, see “GPRS, EDGE, CSD, HSCSD” on page 90.

Also, consult the Nokia PC Suite online help. Nokia PC Suite and all related software can be downloaded from the U.S. Mobile Phone products section of [www.nokia.com](http://www.nokia.com).

## • **JAVA™ APPLICATIONS**

Your phone supports Java 2 Micro Edition, J2ME™, and includes some Java applications and games that have been specially designed for mobile phones.

You may be able to download new applications and games to your phone from a PC with Java installer software or from some mobile Internet services.

See “Applications” on page 131 for more information.

- **POLYPHONIC SOUND (MIDI)**

Polyphonic sounds can be used in ringing tones, gaming sounds, and message alert tones. They consist of several sound components played at the same time, like an actual melody through a speaker. Your phone has sound components from over 128 instruments and it can play up to 24 instruments at once. The phone supports scalable polyphonic MIDI (SP-MIDI) format.

You can receive polyphonic ringing tones using a multimedia service (see “Read and reply” on page 51) or download them using the gallery menu [see “Gallery” on page 101].

- **BROWSER**

Your phone has a built-in browser you can use to connect to selected services on the mobile Internet. You can view weather reports, check news or flight times, view financial information, and much more.

See “Services” on page 139 for more information.

## 3 About your phone

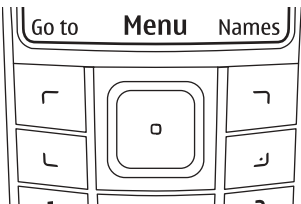
### • REGISTER YOUR PHONE

Be sure to register your phone at [www.warranty.nokiausa.com](http://www.warranty.nokiausa.com) or call 1-888-NOKIA-2U (1-888-665-4228) so that we can serve you better if you need to call a customer center or to have your phone repaired.

### • TERMS

This guide uses certain terms for the parts of the phone and the steps that you are asked to perform.

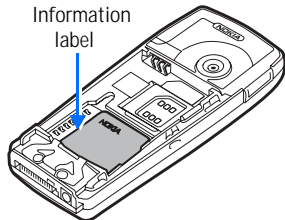
- **Highlighted** options on the screen are enclosed within a colored bar. The selection keys are used to act on the highlighted option.
- **Left selection key** and **Right selection key** are used to select the options on the left and right bottom corners of the screen.
- **Five-way scroll and selection key** is used to navigate through names, phone numbers, menus, and settings. It is also used to move the cursor up, down, right, and left when writing text, using the calendar, and in some game applications. Pressing the key briefly in the middle selects the item in the bottom center of the screen. The middle of the **Five-way scroll and selection key** is also called the **Middle selection key**. The top, bottom, left, and right edges of the **Five-way scroll and selection key** are also called the **Scroll up**, **Scroll down**, **Scroll left**, and **Scroll right** keys.
- **Select** means to press the **Left selection key** or the **Right selection key**, or to press the center of the **Five-way scroll and selection key** (the **Middle selection key**). To select an option, press the selection key below the menu item on the phone screen. In the illustration, press the **Left selection key** to select **Go to**, press the **Middle selection key** to select **Menu**, or press the **Right selection key** to select **Names**.
- **Talk** and **End** keys. Press the **Talk** key to place a call or to answer an incoming call. Press the **End** key to end a call or to return to the start screen.



## • FIND INFORMATION ABOUT YOUR PHONE

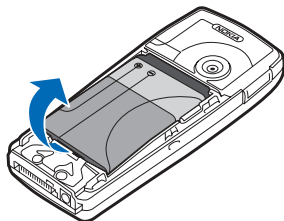
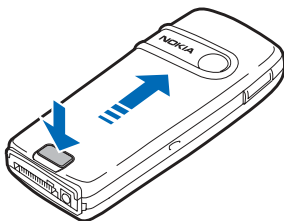
The label on the back of your phone, underneath the battery and MultiMediaCard, contains the following information:

- Model number
- Phone type and FCC ID
- International mobile equipment identity (IMEI)

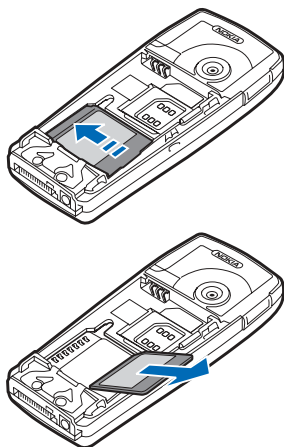


To access the phone label:

- 1 With the back of the phone facing you, push the back cover release button.
- 2 Slide the back cover toward the top of the phone to remove.
- 3 Remove the battery by lifting it as shown.



- 4 Slide the MultiMediaCard to the left and lift it out of the holder as shown.



## • GET HELP

If you need help, Nokia Customer Care is available for assistance. We recommend that you write down the following information and have it available if you call.

- The IMEI printed on the back of the phone, beneath the battery
- Your zip code

## Contact Nokia

Please have your phone or enhancement with you when contacting either of the numbers below.

Nokia Customer Care Center, USA	Customer Care, Canada
<p>Nokia Inc. 7725 Woodland Center Boulevard Suite 150 Tampa, Florida 33614 Tel: 1-888-NOKIA-2U (1-888-665-4228) Fax: 1-813-249-9619 TTY: 1-800-24-NOKIA (1-800-246-6542) (hearing impaired only)</p>	<p>Nokia Products Ltd. 601 Westney Road South Ajax, Ontario L1S 4N7 Tel: 1-888-22-NOKIA (1-888-226-6542) Fax: 1-905-427-1070</p>

## Contact your service provider

To use the network services available in your phone, you will need to sign up with a service provider. In many cases, the service provider will make available descriptions of their services and instructions for using features such as:

- Voice mail
- Call waiting, call forwarding, and caller ID
- Messaging
- News and information services
- Selected mobile Internet services

Service providers may differ in their support of features. Before you sign up, make sure a service provider supports the features that you need.

## Guide updates

From time to time, Nokia updates this guide to reflect changes. The latest version may be available at [www.nokia.com/us](http://www.nokia.com/us).

## Online tutorials

An interactive tutorial for this product may be available at the Web site [www.nokiahowto.com](http://www.nokiahowto.com).

## In-phone help

Many features have brief descriptions (help text) that can be viewed on the display. To view these descriptions, scroll to a feature and wait for about 15 seconds to allow the help text to appear. Select **More** to view all of the description (if necessary), or select **Back** to return to the menu.

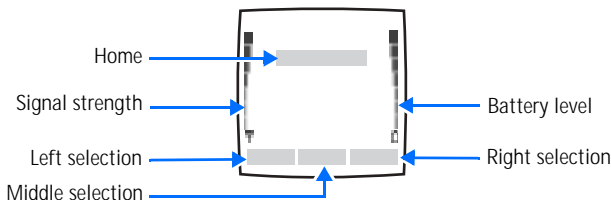
To activate or deactivate help text:

From the menus, select **Settings > Phone settings > Help text activation > On or Off**.

A confirmation message appears in the display indicating your selection.

## • START SCREEN

The start screen is *home base* and indicates that the phone is in the standby mode.



**Home**—The name of your service provider may appear here.

**Signal strength**—A higher bar indicates a stronger network signal.

**Battery level**—A higher bar indicates more power in the battery.

**Left selection key**—Accesses the Go to menu from the start screen. See “Go to menu” on page 11.

**Middle selection key**—Accesses the phone main menu from the start screen.

**Right selection key**—Accesses various functions:

- **Names**—Accesses the **Contacts** menu.
- A shortcut to a function that you have selected. See “Personal shortcuts” on page 86 to configure this shortcut.

Various indicators and icons may also appear on the start screen. See “Indicators and icons” on page 13 for more information.

### Go to menu

The Go to menu gives you quick access to selected functions.

#### CHOOSE FUNCTIONS

1 From the start screen, select **Go to** > **Options** > **Select options**.

2 Scroll to the desired function from the list, and select **Mark**.

A mark appears in the box next to the selected function indicating that you have selected the function. Select **Unmark** to remove a function from the list.

3 Repeat the previous step to select or remove as many functions as you wish.

4 Select **Done** when you have added all desired functions.

5 At the confirmation prompt, select **Yes**.



## ORGANIZE FUNCTIONS

- 1 From the start screen, select **Go to > Options > Organize**.
- 2 Scroll to the function you wish to rearrange; then select **Move**.
- 3 Select **Move up**, **Move down**, **Move to top**, or **Move to bottom** from the list of choices.

The list of **Right** selection key functions is displayed in the new order.

- 4 Select **Done**.
- 5 At the confirmation prompt, select **Yes** to save the changes.

## ACCESS A FUNCTION

From the start screen, select **Go to**; then select the desired function from the list.

### Quick keys

From the start screen, each scroll key takes you directly to a function:

**Scroll up**—Activate the camera viewfinder.

**Scroll left**—Create a message.

**Scroll down**—Go to your list of contacts.

**Scroll right**—View the calendar.

### Power saving

The phone automatically activates a digital clock display to save power when no function of the phone has been used for a few minutes. Press any key to deactivate the digital clock display. If you have not set the time, 00:00 is displayed.














### Screen saver














You can select an image or video clip to use as a screen saver when the phone is in the standby mode. See “Set screen saver” on page 84.

### Wallpaper

You can set the phone to display a background picture (wallpaper) when it is in the standby mode. See “Wallpaper” on page 83.

## Indicators and icons

Icon	Indicates...
	You have one or more text or picture messages. See "Read a message" on page 41.
	You have one or more multimedia messages. See "Read and reply" on page 51.
	You have one or more voice messages. See "Voice messages" on page 57.
	The phone has registered a missed call. See "Call log" on page 61.
	Your phone keypad is locked. See "Lock the keypad" on page 29.
	Your phone does not ring for an incoming call or text message when Incoming call alert is set to Off and Message alert tone is set to Off. See "Customize a profile" on page 81.
	The alarm clock is set to On. See "Alarm clock" on page 115.
	The countdown timer is running. See "Countdown timer" on page 136.
	The stopwatch is running in the background. See "Stopwatch" on page 137.
	The GPRS connection mode <b>Always online</b> is selected and the GPRS service is available. The indicator is shown on the top left of the display. See "GPRS modem settings" on page 91.
	A GPRS dial-up connection is established. The indicator is shown on the top left of the display. See "GPRS modem settings" on page 91.
	The GPRS dial-up connection is suspended. For example, you have an incoming or outgoing call during a GPRS connection. The indicator is shown on the top right of the display.
	Bluetooth connection indicator. See "Bluetooth connectivity" on page 87.

Icon	Indicates...
	IR connection indicator. See "Infrared" on page 90.
	Forward all voice calls. All calls are forwarded to another number. If you have two phone lines, the indicator for line 1 is  and for line 2  .
<b>1</b> or <b>2</b>	If you have two phone lines, this indicator displays the selected phone line. See "Phone settings" on page 96.
	Loudspeaker is active. See "Loudspeaker" on page 24.
	Calls are limited to a closed user group. See "Closed user groups" on page 32.
	The timed profile is selected. See "Profiles" on page 81.
 or 	Voice privacy encryption is active (or not active) in the network.
 ,  ,  or 	A headset, hands-free, loopset, or music stand enhancement is connected to the phone.

## • COPYRIGHT PROTECTION

Copyright protections may prevent some images, ringing tones, and other content from being copied, modified, transferred, or forwarded.

## • ACCESSIBILITY SOLUTIONS

Nokia is committed to making mobile phones easy to use for all individuals, including those with disabilities. For more information, visit the web site at [www.nokiaaccessibility.com](http://www.nokiaaccessibility.com).

## • NOKIA PC SUITE

Nokia PC Suite is a collection of powerful software tools that let your phone work with a compatible PC to manage phone features and data. For example, with Nokia PC Suite you can download photos from your phone camera to the PC, create new ringing tones and wallpapers for your phone, synchronize your phone and your PC or remote Internet server, and much more.

Nokia PC Suite 5.8 for the Nokia 6230 phone contains the following applications:

**Nokia Application Installer** to install J2ME Java applications from the compatible PC to the phone, for example games and dictionaries.

**Nokia Audio Manager** to organize digital music files, music tracks, and play lists and transfer them to your phone.

**Nokia Image Converter** to make images in supported formats usable for multimedia messages or wallpaper and to transfer them to your phone.

**Nokia Sound Converter** to optimize polyphonic ringing tones in supported formats to be compatible with your phone and to transfer them to your phone.

**Nokia Content Copier** to back up and restore personal data between your phone and a compatible PC. Supports also content transfer to another compatible Nokia phone.

**Nokia Settings Manager** to edit and send your browser bookmarks or update the connection sets to your phone. You can also search for radio channels, and delete, edit, or modify the current radio channels on your phone.

**Nokia Phone Editor** to send text messages and edit the contacts in your phone.

**Nokia Phone Browser** to view the contents of the Gallery folder of your phone on a compatible PC. You can browse picture and audio files and also modify files in the phone memory and transfer files between phone and the PC.

**Nokia Multimedia Player** to for playing sounds, images, videos, and multimedia messages on the PC. The multimedia player allows you to view multimedia received on your phone or through e-mail.

**Nokia PC Sync** to synchronize contacts, calendar, and to-do notes between your phone and a compatible PC.

**Nokia Modem Options** contains settings for HSCSD and GPRS connections.

**Nokia Connection Manager** to select the connection type between the PC and the phone.

**Nokia 6230 data modem drivers** enable you to use your phone as a modem.

**Language Selection** to select the language used during an installation of Nokia PC Suite and the Nokia PC Suite application itself.

**Online help** to support the application usage.

For more information, consult the Nokia PC Suite online help.

Nokia PC Suite software and documentation can be downloaded from the U.S. Mobile Phone products section of **[www.nokia.com](http://www.nokia.com)**.

## • CONNECTION SETTINGS SERVICE

To use browsers, MMS, GPRS, and other wireless services, you must have the proper connection settings on your phone. Your service provider may be able to send the settings directly to you as a connection settings message. You only need to save the settings on your phone. For more information about the availability of the settings, contact your service provider or nearest authorized Nokia dealer.

You may be able to receive the connection settings for GPRS, multimedia messages, synchronization, e-mail, presence, and the browser.

If you receive the connection settings as a message and the settings are not automatically saved and activated, **Connection settings received** is displayed. You can do one of the following:

- To save the received settings, select **Options > Save**. If **Enter settings' PIN** is displayed, enter the PIN code for the settings, and select **OK**. For the PIN code, contact the service provider that supplies the settings.

If no settings have been saved yet, the settings are saved under the first free connection set.

- To view the received settings first, select **Options > View**. Then, to save the settings, select **Save**.
- To discard the received settings, select **Options > Discard**.

You may need to activate the settings as described in section for that service.

You can also find the settings in the support section of [www.nokia.com/us](http://www.nokia.com/us).

## • PHONE MENUS

Phone features are grouped according to function and are accessed through the main menus of your phone. Each main menu contains submenus and lists from which you can select or view items and customize phone features.



**Note:** Some features may not be available, depending on your network. For more information, contact your service provider.

You can choose from two types of menu interface: **List** and **Grid**. See "Select menu view" on page 84 to switch between interfaces.

In the **List** interface, full color animated images introduce every menu. In the **Grid** interface, multiple menu icons appear on a single display.

You can use menus and submenus by scrolling or by using a shortcut.

## Scroll method

- 1 At the start screen, use the **Middle** selection key to select **Menu**.
- 2 In the **List** view, scroll through the main menus one at a time using the **Scroll up** key and the **Scroll down** key.

OR

In the **Grid** view, use all four scroll keys to navigate through the menu icons.

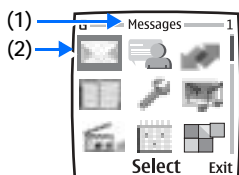
To change between the **List** and **Grid** view, select **Settings > Display settings > Menu view > List** or **Grid**.

As you scroll through the menus, the menu number (1) appears in the upper right corner of the display. Below the menu number is a scroll bar with a tab (2). The tab moves up or down as you scroll through the menus, providing a visual representation of your current position in the menu structure.



List view

In addition, in the **Grid** view, the name of the menu (1) appears at the top of the display, and the icon for the selected menu (2) is highlighted.



Grid view

- 3 When the desired menu is highlighted, press the **Middle** selection key.
  - 4 If the menu contains submenus, use the scroll keys to highlight the desired menu; then press the **Middle** selection key.
- Select **Back** (press the **Right** selection key) to return to the previous menu or submenu.
  - Press the **End** key to return to the start screen from any main menu.

## Shortcuts

Menus and options are numbered so that you can quickly key-press your way to an option. The numbers appear in the top right corner of the screen and show your location in the menu.

Select **Menu**, and within 1.5 seconds, enter the first number of the menu function you want to access. Repeat until you have entered all the numbers.

## 4 Basic operations

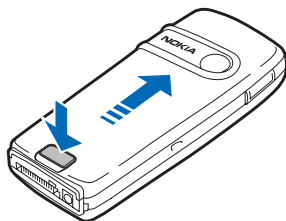
### • INSTALL THE SIM CARD

The SIM card and its contacts can easily be damaged by scratches or bending, so be careful when handling, inserting, or removing the card.

Before installing the SIM card, always make sure that the phone is switched off and that you have removed the cover and battery.

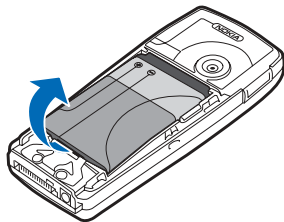
#### REMOVE THE BACK COVER

- 1 With the back of the phone facing you, push the back cover release button.
- 2 Slide the back cover toward the top of the phone to remove.



#### REMOVE THE BATTERY

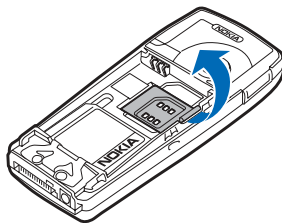
- 3 Remove the battery by lifting it as shown.



**Warning:** Keep all SIM cards out of reach of small children.

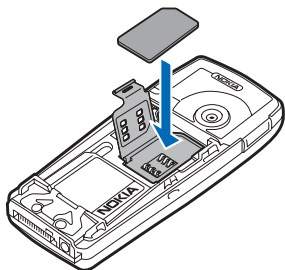
#### INSERT THE SIM CARD

- 4 To release the SIM card holder, gently pull the locking clip of the card holder and open it.

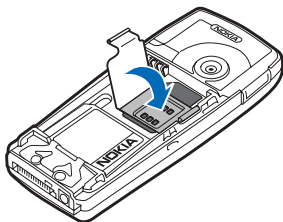


- 5 Insert the SIM card into the SIM card holder as shown.

Make sure that the SIM card is properly inserted and that the gold-colored contact area on the card is facing downward.



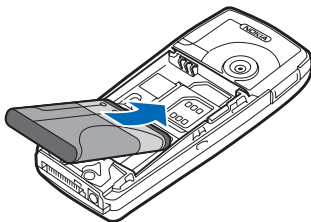
- 6 Close the SIM card holder and press it until it snaps into position.



## REPLACE THE BATTERY

The SIM card must be installed *before* installing the battery.

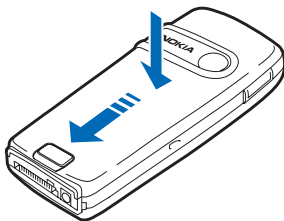
- 7 Position the battery so the gold-colored contacts match up with those on the phone.  
The battery label should be facing *away* from the phone.
- 8 Insert the battery, contact end first into the battery slot.
- 9 Snap the other end of the battery into place.





## REPLACE THE BACK COVER

- 10 Slide the back cover into place.



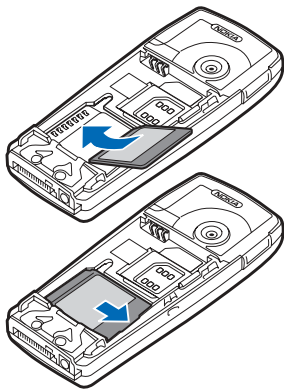
## • INSTALL THE MULTIMEDIACARD

Use only MultiMediaCards up to 256 MB with this device. Other memory cards, such as secure digital (SD) cards, do not fit in the MultiMediaCard card slot and are not compatible with this device. Using an incompatible memory card may damage the memory card as well as the phone, and data stored on the incompatible card may be corrupted.

- 1 Remove the back cover and battery from the phone as shown in "Remove the back cover" on page 18 and "Remove the battery" on page 18.
- 2 Place the MultiMediaCard in the card holder.

Make sure that the MultiMediaCard is properly inserted and that the gold-colored contact area on the card is facing downward and is on the same side as the gold-colored contacts in the phone.

- 3 Replace the battery and back cover as shown in "Replace the battery" on page 19 and "Replace the back cover" on page 20.



## • SWITCH THE PHONE ON OR OFF

- 1 To turn your phone on or off, press and hold the power key on top of the phone for at least 3 seconds.

If the phone displays **Insert SIM card** even though the SIM card is properly inserted, or **SIM card not supported**, contact your service provider.

- 2 If the phone asks for a PIN code, enter the PIN code (displayed as \*\*\*\*), and select OK.

See "PIN code request" on page 29 for more information.

- 3 If the phone asks for a security code, enter the security code, and select OK.

See "Security code" on page 33 for more information.



**Note:** If the language that appears in your display is not correct, see "Language" on page 96 for information on changing the display language.

## • SET THE CLOCK

Before many functions such as call timers will operate properly, you need to set the clock.

- 1 From the menus, select **Settings > Time and date settings > Clock > Set the time**.
- 2 Enter the time in *hh:mm* format, and select OK
- 3 If required, select **am** or **pm**.

## • MAKE AND ANSWER CALLS

### Use the keypad

- 1 Enter the phone number (including the area code), and press the **Talk** key.  
To delete a character to the left of the cursor, select **Clear**.
- 2 To end the call or to cancel the call attempt, press the **End** key.

## Use contacts

- 1 At the start screen, press the **Scroll down** key and scroll to the entry you wish to view.  
To search the list of entries quickly, press the key in which the letters match the first letter of the name for which you are searching.
- 2 Press the **Talk** key to make the call or select **Details** to view details of the entry.

## Redial a number

- 1 At the start screen, press the **Talk** key to display the last 20 numbers you have dialed.
- 2 Press the **Talk** key to redial the last number, or scroll to the number (or name) you wish to redial and press the **Talk** key.

## Make an international call

- 1 Press the \* key twice for the international prefix.  
A plus (+) sign replaces the international access code.
- 2 Enter the country code, the area code without a leading zero (if necessary), and the phone number, and press the **Talk** key.

## Make a conference call

Conference calling is a network service that allows up to five persons to take part in a conference call.

- 1 Make a call to the first participant.
- 2 To call a new participant, select **Options > New call**.
- 3 Enter the phone number of the new participant, or select **Find** to retrieve a number from contacts, and select **Call**.  
The first call is put on hold.
- 4 When the new call picks up, select **Options > Conference** to connect the calls.
- 5 To add a new participant to the call, repeat steps 2–4.
- 6 To have a private conversation with one participant, select **Options > Private call** and the desired participant.
- 7 Rejoin the conference call as described in step 4.
- 8 To end the conference call, press the **End** key.

## Answer or reject an incoming call

When you receive a call, the phone shows the caller's name, phone number, or the message **Private number** or **Call**. If more than one name is found in contacts with the seven last digits of the caller's phone number, only the phone number is displayed. The phone may display an incorrect name if the caller's number is not saved in contacts but there is another name saved with the same seven last digits.

- Press the **Talk** key to answer the call.
- Press the **End** key to reject the call.
- If **Forward if busy** is activated to your voice mailbox, the call is diverted to your voice mail. If not, the call is rejected.
- If you select **Silence**, only the ringing tone is muted. You can then either answer or reject the incoming call.
- If the HDB-4 or HDS-3 headset is connected, you can answer or end a call by pressing the key on the headset.

## Call waiting

During a call, press the **Talk** key to answer the waiting call. The first call is put on hold. Press the **End** key to end the active call.

To activate call waiting, see "Call waiting" on page 94.

## Answer a call with the keypad locked

To answer a call with keyguard on, simply press the **Talk** key. During the call, all features function as normal. When you end or reject the call, the keypad automatically relocks.



**Note:** When keyguard is on, calls may be possible to emergency numbers programmed into your phone (for example, 911). Enter the emergency number and press the **Talk** key. The number is displayed only after you have keyed in its last digit.

## • EARPIECE VOLUME

The **Volume up** and **Volume down** keys are located on the left side of the phone.

- To increase the volume of a call, press the **Volume up** key on the left side of the phone.
- To decrease the volume of a call, press the **Volume down** key on the left side of the phone.

When adjusting the volume, a bar chart appears in the display indicating the volume level.

## • LOUDSPEAKER

You can use your phone as a loudspeaker during a call. When the loudspeaker is active, you can set the phone on a desk or table and leave your hands free. Do not hold the phone to your ear during the loudspeaker operation.

- To activate the loudspeaker, select **Options > Loudspeaker**.  
OR  
Use the **Right** selection key to select **Loudsp.**
- To deactivate the loudspeaker during a call, select **Options > Handset**.  
OR  
Use the **Right** selection key to select **Normal** (if a headset is not attached) or **Heads.** (if a headset is attached).

The loudspeaker is deactivated automatically when a call (or a call attempt) ends or when certain enhancements are connected.



**Note:** When you select the **New call** option from the in-call menu, the loudspeaker does not automatically deactivate.

## • OPTIONS DURING A CALL

Many of the options that you can use during a call are network services. During a call, select **Options** and one of the following:

**Mute**—Mute your voice; you can hear the other party but they cannot hear you.

**Unmute**—Return to normal from mute status.

**End call**—End the call.

**End all calls**—End all calls within a conference call.

**Contacts**—Open the contacts menu.

**Menu**—Display the main menus.

**Auto volume on** or **Auto volume off**—Activate or deactivate automatic volume control. See “Automatic volume control” on page 92.

**Hold** or **Unhold**—Place the current call on hold, or remove it from hold status.

**Lock keypad**—Lock the keypad to prevent an accidental key press.

**Record**—Record the call. See “Record a phone call” on page 113.

**New call**—Place a new call; the first call is put on hold.

**Conference**—Call another party and invite them into the call. Up to five callers can participate in a conference call.

**Private call**—Have a private conversation with one participant in a conference call.

**Answer**—Answer another incoming call.

**Reject**—Reject a call; the calling party receives a busy signal.

**Loudspeaker**—Use the phone as a loudspeaker. Do not hold the phone to your ear when the loudspeaker is active.

**Handset**—Stop using the phone as a loudspeaker and return to normal use (hold the phone to your ear).

**Handsfree or Headset**—If you have connected a compatible hands-free unit or a headset to the phone, the **Handset** option is replaced with **Handsfree** or **Headset**.

**Touch tones**—Send touch tones generated by your phone keypad. Enter the touch tone string or search for it in contacts, and select **Tones**.

**Swap**—Switch between the active call and the call on hold.






**Transfer**—Connect a call on hold to an active call, and disconnect yourself from the calls.

## 5 Text entry

You can use two methods for entering text and numbers.

- **Standard mode** (dictionary off) is the only way to enter names into contacts and to rename caller groups.
- **Predictive text input** (dictionary on) is a quick and easy method for writing messages.

Press the # key to switch predictive text on or off and to switch between uppercase and lowercase text. As you press the # key, the following icons (not the descriptions) appear in the upper left of the display:

Icon	Indicates...
	Uppercase text. Predictive text is off.
	Lowercase text. Predictive text is off.
	Sentence case text. Predictive text is off.
	Sentence case text. Predictive text is on.
	Lowercase text. Predictive text is on.

To switch to numeric entry, press and hold the # key; then select Number mode. To switch back to text entry, press and hold the # key.



### • STANDARD MODE

- Press a key once to insert the first letter on the key, twice for the second letter, etc. If you pause briefly, the last letter in the display is accepted and your phone awaits the next entry.
- Select Clear to backspace the cursor and delete a character.
- Select and hold Clear to backspace continuously and delete characters.
- Press the 0 key to enter a space and accept a completed word.
- Press the 1 key to enter a period (.).
- Press the \* key once to display special characters, or twice to display smileys. See “Special characters and smileys” on page 28.

## • PREDICTIVE TEXT INPUT

Predictive text input allows you to write messages quickly using your keypad and the built-in phone dictionary. It is much faster than using the standard mode multitap method. You can use predictive text to write a message, create a calendar note, and make a to-do list.



**Note:** When predictive text is on, the icon  appears in the upper left corner of the display. When predictive text is off, the icon  appears in the upper left corner of the display.

### Activate predictive text

At any text entry screen, select and hold **Options**.

OR

At a text entry screen, select **Options > Predictive text** and the desired language.

The selection of a writing language does not affect the language used in the phone menus, displays, and messages.

### Enter text

- For each letter of the word that you want to spell, press the corresponding key on your keypad only *once*, even if the letter you want is not the first letter on the key. The phone guesses the word you are trying to spell.
- If a displayed word is not correct, press the \* key to see other matches. To move forward through a list of matches, keep pressing the \* key. To return to the previous word in the list of matches, select **Prev**.
- Press the 0 key to accept the word, enter a space, and begin writing the next word.
- If ? appears after a word, select **Spell** to add the word to the dictionary. See "Add new words to the dictionary" on page 28.
- Press the 1 key to insert a period into your message.
- Press and hold the \* key to display special characters. Press the \* key again to display smileys. See "Special characters and smileys" on page 28.

### Compound words

Enter the first part of the word and confirm it by pressing the **Scroll right** key. Enter the last part of the word and confirm it by pressing the 0 key.



## Add new words to the dictionary

If you encounter a word that predictive text does not recognize, a question mark (?) follows the word and **Spell** appears in the bottom center of the display.

Select **Spell**, enter your new word using the keypad, and select **Save**. The word is added to the dictionary and to the message that you are writing.

Keep these factors in mind when adding words:

- New words that you accept by selecting **Save**, the **0** key, or deleting the space between two words are saved to the dictionary.
- Depending on the language and the length of the words, you may be able to add hundreds of words to the dictionary.
- When the dictionary is full, the most recent addition replaces the first.

## Predictive text example

To write *Nokia* with predictive text **on** and with the English dictionary selected, press each of the following keys *once*:

the 6 key    the 6 key    the 5 key    the 4 key    the 2 key



The illustration above simulates your display each time a key is pressed.

## • SPECIAL CHARACTERS AND SMILEYS

While at any text entry screen, press the \* key to display special characters (press and hold the \* key if predictive text is on). Press the # key again to display smileys (emotional icons composed of several punctuation marks and other characters, such as :-D).

Navigate through the list of special characters or smileys by using the four-way scroll keys like a joystick. Once the desired character or smiley is highlighted, select **Insert** to insert the character or smiley into your message.

## 6 Phone security

An array of security features prevents accidental calls, allows you to restrict the calls your phone can make and receive, and keeps your stored information safe.

### • KEYGUARD

With keyguard, you can lock the keypad to prevent keys from being pressed accidentally. With Security keyguard, you can require the security code to unlock the keypad. See “Automatic keyguard” on page 96 and “Security keyguard” on page 96.

If the keypad is locked, it unlocks when you receive a call. After the call, the lock automatically reactivates.

#### Lock the keypad

At the start screen, select **Menu** > \* key.

#### Unlock the keypad

- 1 At the start screen, select **Unlock** > \* key.
- 2 If Security keyguard is on, enter the security code at the prompt, and select **OK**.

When keyguard is on, calls may be possible to emergency numbers programmed into your phone (for example, 911). Enter the emergency number and press the **Talk** key. The number appears in the display after you have keyed in the last digit.

### • PIN CODE REQUEST

The PIN code provides extra security in case your phone is lost or stolen. The PIN code must be obtained from your service provider. It is typically provided with your SIM card.

The PIN code can be 4–8 digits in length.

You can set your phone to request the PIN code upon power-up. After three successive incorrect entries the PIN code is blocked and you are asked to enter the personal unblocking key (PUK) code. Some SIM cards do not allow you to turn the PIN code request off.

- 1 From the menus, select **Settings** > **Security settings** > **PIN code request**.
- 2 At the prompt, enter the PIN code, and select **OK**.
- 3 Scroll to **On**, and select **OK**.

A message appears in the display confirming your selection.

## • CALL RESTRICTIONS

This network service lets you restrict the calls your phone can make and receive. Check with your service provider for details.

When calls are restricted, calls may be possible to emergency numbers programmed into your phone (for example, 911). Enter the emergency number and press the **Talk** key. The number appears in the display after you have keyed in the last digit.

### Turn on call restrictions

- 1 From the menus, select **Settings > Security settings > Call restrictions** and one of the following:

**Outgoing calls**—Calls cannot be made.

**International calls**—Calls cannot be made to foreign countries.

**Int. calls except to home country**—When abroad, calls can be made only within the current country and to your home country (that is, the country where your home network operator is located).

**Incoming calls**—Calls cannot be received.

**Incoming calls if roaming**—Calls cannot be received outside your home area.

**Cancel all call restrictions**—Turns off all call restrictions. Calls can be made and received in the usual way. If you select this option, steps 2 and 3 are not available.

- 2 Scroll to one of the following options:

**Activate**—Enter the restriction password, and select **OK**.

**Cancel**—Enter the restriction password, and select **OK**. This option allows you to cancel one type of call restriction and leave others in force.

**Check status**—The phone lists the call types with call restriction active.

- 3 Select **OK**.

### Change your restriction password

Contact your service provider for your original restriction password.

- 1 From the menus, select **Settings > Security settings > Access codes > Change restriction password**.
- 2 Enter your current password, and select **OK**.
- 3 Enter your new password, and select **OK**.
- 4 Reenter your new password for verification, and select **OK**.

## • FIXED DIALING

Once you set up and activate a fixed dialing list, your phone can make calls only to those numbers that you have defined in the fixed dialing list. Fixed dialing is a network feature and must be supported by your service provider.

When fixed dialing is on, calls may be possible to emergency numbers programmed into your phone (for example, 911). Enter the emergency number and press the **Talk** key. The number appears in the display after you have keyed in the last digit.

### Set up and activate a fixed dialing list

- 1 From the menus, select **Settings > Security Settings > Fixed dialing**.

After a brief pause, the following options appear in the display.

**On**—Activate fixed dialing.

**Off**—Deactivate fixed dialing.

**Number list**—View the numbers in your fixed dialing list.

If you activate fixed dialing and the number list is empty, all outgoing calls, except for emergency numbers such as 911, require entry of the PIN2 code.

- 2 Select **Number list**.

**Fixed dialing not active** appears in the display followed by **Fixed dialing list empty**.

- 3 At the prompt, enter the PIN2 code, and select **OK**.

- 4 Enter the fixed dialing number, or select **Find** to retrieve a number from contacts, and select **OK**.

- 5 Enter a name for the number, and select **OK**.

A confirmation note appears in the display and you are returned to the fixed dialing number list.

- 6 Select **Back > On** to activate fixed dialing.

### View or edit the fixed dialing list

- 1 From the menus, select **Settings > Security Settings > Fixed dialing > Number list**.

- 2 At the prompt, enter the PIN2 code, and select **OK**.

Any numbers which you have assigned to fixed dialing appear in the display.

- 3 Scroll to a number, and select **Options** and one of the following:

**View number**—View the number for an entry.

**Add**—Add a number to your fixed dialing list.

**Edit**—Edit the highlighted entry.

**Delete**—Delete the highlighted entry.

**Delete all**—Delete all entries in your fixed dialing list.

## Notes about fixed dialing

- If a SIM card with fixed dialing that is activated is inserted into a phone that does not support fixed dialing, the SIM card is rejected.
- If you try to add a name without a number to the fixed dialing list, you receive an error message.
- When fixed dialing is on, GPRS connections are not possible except while sending text messages over a GPRS connection. In this case, the recipient's phone number and the message center number must be included in the fixed dialing list.
- If you try to browse the fixed dialing list but have not stored any numbers, **Fixed dialing list empty** appears in the display.
- You cannot access SIM memory manually (view or copy numbers on the SIM card) while fixed dialing is active.

## • CLOSED USER GROUPS

A closed user group is a network service that specifies the group of people whom you can call and who can call you. For more information, contact your service provider.

When calls are limited to closed user groups, calls may be possible to emergency numbers programmed into your phone (for example, 911). Enter the emergency number and press the **Talk** key. The number appears in the display after you have keyed in the last digit.

- 1 From the menus, select **Settings > Security settings > Closed user group > On, Off, or Default**.
- 2 If you selected **On**, enter the group number provided by your service provider, and select **OK**.

## • SECURITY LEVELS

The security level determines your access to features when a non-owner SIM card is used. A non-owner SIM card is one (other than the original) that is inserted after you power off the phone. There are three security levels:

**Off**—Owner and non-owner cards are treated the same.

**Memory**—The phone will ask for the security code when the SIM card memory is selected and you want to change the memory in use or copy from one memory to another.

**Phone**—The security code is required whenever a new SIM card is inserted.

Use this procedure to set your security level.

- 1 From the menus, select **Settings > Security settings > Security level**.
- 2 At the prompt, enter the security code (default 12345), and select **OK > Off, Memory, or Phone**.

## • ACCESS CODES

The following access codes provide increased protection for your information:

- Security code (5–10 digits)
- PIN code and PIN2 code (4–8 digits)
- PUK code and PUK2 code (8 digits)
- Call restriction password (4 digits)

Avoid using codes similar to emergency numbers such as 911 to prevent accidental dialing of the emergency number.

### Security code

The security code controls access to features such as the security level and is supplied with the phone. The preset code is 12345.

If you enter the wrong security code five times in succession, you will not be able to enter a code for five minutes, even if you power off the phone between incorrect entries.

Once you change the security code from its preset of 12345, keep the new code secret and in a safe place separate from your phone. Use this procedure to change your security code.

- 1 From the menus, select **Settings > Security settings > Access codes > Change security code**.
- 2 At the prompt, enter the current security code (default 12345), and select **OK**.
- 3 At the prompt, enter the new security code, and select **OK**.
- 4 At the prompt, enter the new security code again, and select **OK**.

## PIN code

Before you can change your PIN code, you need to enable **PIN code request**. See “PIN code request” on page 29.

- 1 From the menus, select **Settings > Security settings > Access codes > Change PIN code**.
- 2 At the prompt, enter the current PIN code, and select **OK**.
- 3 At the prompt, enter the new PIN code, and select **OK**.
- 4 At the prompt, enter the new PIN code again, and select **OK**.

## PIN2 code

The PIN2 code is required for features such as fixed dialing. If you enter an incorrect PIN2 code three times in succession, the PIN2 code is blocked and you will have to enter the PUK2 code.

The original PIN2 code must be obtained from your service provider.

Use this procedure to change your PIN2 code.

- 1 From the menus, select **Settings > Security settings > Access codes > Change PIN2 code**.
- 2 At the prompt, enter the current PIN2 code, and select **OK**.
- 3 At the prompt, enter the new PIN2 code, and select **OK**.
- 4 At the prompt, enter the new PIN2 code again, and select **OK**.

## PUK and PUK2 code

The PUK code is required to change a blocked PIN code. The PUK2 code is required to change a blocked PIN2 code. If the codes are not supplied with the SIM card, contact your service provider.

## 7 Messages



If you have subscribed to a message network service, you can send and receive messages to compatible phones that are also subscribed to a message service. You can also send and receive picture messages, multimedia messages, and e-mail if supported by your service provider. Also, you can make distribution lists that contain phone numbers and names from your contact list. Standard text messages can be up to 160 characters in length. See “Text entry” on page 26 for more information.

Using special (Unicode) characters such as è, â, á, ì take up more space. If there are special characters in your message, the indicator may not show the message length correctly. Before the message is sent, the device tells you if the message exceeds the maximum length allowed for one message. You can cancel sending by selecting Cancel or you can save the message in the inbox.

### • LINKED MESSAGES

Your phone can send and receive long text messages (up to 450 characters). Text messages that exceed 160 characters are automatically split into multiple messages and sent as a series. The series of messages is linked by the compatible phone when received and displayed as a single SMS message. For this feature to work properly, the receiving phone must also support linked messages.

While you write a message, the number of available characters and the current part number of linked message (for example, 120/2) are shown in the top right corner of the display.

While receiving linked messages, you can start reading the first part before the phone has received the entire message. While viewing the message, you may see “some text missing” on the display. This is normal, and the message content will be updated as soon as the missing sequence arrives.

If the memory is full, you may have to delete a message from your inbox or outbox before your phone can update the missing text. See “Delete text and picture messages” on page 45 for more information.









## • BEFORE YOU CAN SEND AND RECEIVE MESSAGES

You will need the following to send and receive messages:

- A messaging service through your service provider
- A message center number, which must be saved to your phone (if your service provider has not done so already). See “Save your message center number” on page 37.

## • ICONS

Icons that precede the title of a message indicate the following:

-  The message has not been read.
-  The message has been read.
-  The message which you have composed has not been sent.
-  The message which you have composed has been sent.
-  The message is a delivery report.
-  The message is a MMS (multimedia message).

## • FONT SIZE

From the menus, select Messages > Message settings > Other settings > Font size > Small font or Large font.

## • TEXT AND PICTURE MESSAGES

### Settings

- 1 From the menus, select Messages > Message Settings > Text messages > Sending profile.

- 2 If more than one message profile set is supported by your SIM card, select the set you want to change; then select one of the following:

**Message center number**—Save the phone number of the message center, which is necessary for sending text messages; obtain this number from your service provider.

**Messages sent as**—Select the message type Text, E-mail, or Page.

**Message validity**—Define how long the network attempts to send your messages before it gives up.

**Default recipient number**—For text messages, the default number used to send messages.

**Delivery reports**—Request the network to send delivery reports on your messages.

**Use GPRS**—Set GPRS as the preferred method of sending text messages.

**Reply via same center**—Allow the recipient of your message to send you a reply message using your message center (network service).

**Rename sending profile**—Change the name of the selected profile. This option is available only if your SIM card supports multiple sending profiles. It is not available for the default profile.

- 3 Follow the prompts to change the selected setting.

## SAVE YOUR MESSAGE CENTER NUMBER

Messages sent by your phone are routed through your service provider's message center. Normally, this number is saved to your phone by your service provider. To save the number manually, do the following:

- 1 From the menus, select **Messages > Message settings > Text messages > Sending profile > Default profile > Message center number**.
- 2 If the box in the display is empty or contains an incorrect number, enter the number given by your service provider, and select **OK**.

OR

If the box in the display contains the correct number, select **OK**.

A message appears in the display confirming your number is saved.

## OVERWRITE TEXT, PICTURE, AND E-MAIL MESSAGES

When the message memory is full, your phone cannot send or receive any new messages. However, you can set your phone to automatically replace old messages in the **Inbox** and **Sent** items folders when new ones arrive.

From the menus, select **Messages > Message settings > Text messages > Overwriting in sent items or Overwriting in inbox > Allowed or Not allowed**.

## Folders

You can use folders to organize text and picture messages.

From the menus, select **Messages > Text messages** and one of the following folders:

**Inbox**—Messages are automatically stored in the inbox after they have been read or if you select **Exit** when **Message received** appears on the start screen.

**Sent items**—Messages that you have sent are automatically stored in this folder.

**Saved items**—You can store messages that have been read in the **Saved items** folder.

**Templates**—Pictures and prewritten templates are stored in the **Templates** folder. Preloaded templates can be edited and customized.

**My folders**—You can create personal folders within this folder.

### SAVE MESSAGES TO FOLDERS

You can save messages to an existing folder or to a folder that you created.

- 1 From the menus, select **Messages > Text messages > Create message**.
- 2 Write your message, and select **Options > Save message**.
- 3 Select either **Saved items**, **Templates**, or the name of a folder which you created.

The message is saved.

### VIEW MESSAGES IN INBOX

From the menus, select **Messages > Text messages > Inbox** and the message you wish to view.

### MOVE A MESSAGE TO A FOLDER

- 1 While viewing the message, select **Options > Move**.
- 2 Select the destination folder.

### MY FOLDERS

Keep your messages organized by creating custom folders and saving some of your messages there.

Use this procedure to add a folder of your own.

- 1 From the menus, select **Messages > Text messages > My folders**.
- 2 If there are no folders in the list, select **Add**.

OR

If there are folders in the list, select **Options > Add folder**.

- 3 Enter a name for the new folder, and select **OK**.

The folder is added.

## DELETE A FOLDER

Only folders created in **My folders** can be deleted. The **Inbox**, **Sent items**, **Saved items**, and **Template** folders are protected. When you delete a folder, all messages in the folder are also deleted.

- 1 From the menus, select **Messages > Text messages > My folders**.
- 2 Scroll to the folder you wish to remove, and select **Options > Delete folder**.
- 3 At the confirmation prompt, select **Yes** to delete or **No** to exit.

## Distribution lists

If you need to send messages frequently to a fixed group of recipients, you can define a distribution list for that purpose. You can save these distribution lists in phone memory. Note that the phone sends the message separately to each recipient in the list. Therefore, sending a message using a distribution list may cost more than sending a message to one recipient.

### CREATE

Make sure that the contacts you want to add to the distribution lists are saved in the internal contact memory of the phone.

- 1 From the menus, select **Messages > Text messages > Distribution lists**.  
The names of the available distribution lists are shown.
- 2 If you have not saved any lists, select **Add**.  
OR  
If you have previously saved lists, select **Options > Add list**.
- 3 Enter the name for the list, and select **OK > View > Add**.
- 4 Select a name from the contacts list.
- 5 To add more contacts to the list, select **Add** and a name from the contacts list.

### VIEW OPTIONS

- 1 From the menus, select **Messages > Text messages > Distribution lists**.
- 2 Scroll to a list, and select one of the following:  
**View**—View the details or delete the contacts in the selected list.  
**Options > Add list**—Add a new distribution list.  
**Options > Rename list**—Change the name of the selected list.

**Options > Clear list**—Delete all names and phone numbers from the selected list.

**Options > Delete list**—Delete the selected distribution list.

## VIEW UNDELIVERED OPTIONS

If a message cannot be sent to one or more recipients in the distribution list, **Undelivered** appears in the list of distribution lists.

Select **Undelivered** and one of the following:

**View**—View the list of recipients to whom the latest message sending failed.

**Options > Resend to list**—Resend the message to the recipients on the **Undelivered** list.

**Options > Delete list**—Delete the **Undelivered** list.

**Options > View message**—View the failed message.

## Write and send a message

- 1 From the menus, select **Messages > Text messages > Create message**.

OR

Press the **Scroll left** key at the start screen.

- 2 Compose a message using the keypad.
- 3 For other options while composing the message, select **Options** and one of the following:

**Sending options**—Send the message to more than one recipient.

**Clear text**—Erase the text clipboard.

**Save message**—Select **Saved items** to save the message in the **Saved items** folder, or **Templates** to save the message as a predefined templates. If you have defined any folders under **My folders**, they also appear in the list and you can save the message to one of them.

**Insert contact**—Insert a name from contacts into your message.

**Insert number**—Insert a number from contacts into your message.

**Use template**—Insert a predefined template into your message.

**Insert picture**—Insert a picture from the **Templates** folder into your message.

**Exit editor**—Save the message to your archive automatically and leave the message editor.

**Insert smiley**—Insert a smiley into your message.

**Insert word**—Enter a word and insert it into your message. This option is available if predictive text is on.

**Insert symbol**—Insert a special character into your message. This option is available if predictive text is on.

**Predictive text**—Turn predictive text on or off.

- 4 To send the message, select **Send**, enter the recipient's phone number or select **Find** to retrieve a number from contacts, and select **OK**.

OR

Select **Options > Sending options** and one of the following:

**Send to many**—Send the message to multiple recipients in your contact list. When you have sent the message to all desired recipients, select **Done**.

**Send to list**—Send the message to one of your distribution lists.


**Sending profile**—Send the message to one of your predefined profiles.



**Note:** When sending messages, your device may display the words **Message Sent**. This is an indication that the message has been sent by your device to the message center number programmed into your device. This is not an indication that the message has been received at the intended destination. For more details about messaging services, check with your service provider.

## Read a message


When you receive a text or picture message or SMS e-mail,  **n Message(s)** received appears in the display, where **n** is the number of new messages.

The blinking  indicates that the message memory is full. Before you can receive new messages, delete some of your old messages. See "Delete text and picture messages" on page 45 for more information.

- 1 To view the message immediately, select **Show**.

OR

To save the message to the inbox for later viewing, select **Exit**.

- 2 To view a saved message, select **Messages > Text messages > Inbox**.
- 3 If more than one message is received, scroll and select the message you want to read. Unread messages are indicated by .
- 4 While viewing the message, select **Options** and one of the following:
  - Delete**—Delete the message you are viewing.
  - Use detail**—Extract numbers, e-mail addresses and Website addresses from the current message.
  - Save picture**—For a picture message, save the picture in the **Templates** folder.
  - Forward**—Forward the message to another recipient.

**Edit**—Edit the message.

**Move**—Move the message to a folder you specify.

**Rename**—Rename the message before it is saved to a folder.

**Copy to Calendar**—Copy text from the beginning of the message to the phone calendar as a reminder note for the current day.

**Message details**—View the sender's name and phone number, the message center used, and the date and time sent.

## Reply to a message

- 1 While viewing a message, select **Reply**.
- 2 Select a **Start reply with** option:
  - Empty screen
  - Original text
  - Template
  - Yes
  - No
  - OK
  - Thank you
  - Congratulations
  - Happy birthday
  - I love you too
  - Hugs and kisses
  - Sorry
  - Sorry, I'm late
- 3 Compose your reply and send the message as described in "Write and send a message" on page 40.

## Forward a message

### AS A TEXT MESSAGE

- 1 While viewing a message, select **Options > Forward > Via text message**.
- 2 Edit the message if desired, and select **Send**.
- 3 Enter the recipient's phone number or retrieve it from contacts, and select **OK**.

## AS E-MAIL

- 1 While viewing a message, select **Options > Forward > Via e-mail**.
- 2 Enter the e-mail address or retrieve it from contacts, and select **OK**.
- 3 Enter a subject for the e-mail, and select **OK**.
- 4 Edit the message if desired, and select **Send**.
- 5 Enter the e-mail server number, and select **OK**.

## Picture messages

Your phone comes with 10 preloaded pictures; however, you can save more pictures. If necessary, you can overwrite any of the preloaded pictures. Pictures can be attached to a message and sent using a text message to compatible phones. Picture messages behave the same as text messages, but pictures take up more space than text. Pictures are stored in the **Templates** folder under **Messages > Text messages > Templates**.

You cannot send a picture message using e-mail.

## DOWNLOAD PICTURES

Your phone can download pictures, or receive them from compatible phones using text messaging. You can also create pictures and send them to your phone or other compatible phones using Nokia PC Suite.



**Note:** This function can be used only if it is supported by your service provider. Only phones that offer compatible picture message features can receive and display picture messages. Contact your service provider for details.

## RECEIVE A PICTURE MESSAGE

When you receive a picture message, your phone beeps and **Message received** appears in the display as well the message icon (✉).

When you have unopened picture messages in your inbox, ✉ is shown in the upper left corner of the start screen as a reminder.

Use this procedure to view a picture message.

- 1 Select **Show** to view the picture message, or select **Exit** to move it to your inbox.
- 2 If you have more than one picture message, scroll and select the message that you want to view.
- 3 Use the scroll keys to view the whole picture if necessary.



- 4 Keep scrolling to view other information, such as the sender number and time the message was sent.
- 5 Once you are finished, select **Back** to move the picture message to the inbox, or select **Options** for other choices.

## SAVE A PICTURE FROM A PICTURE MESSAGE

- 1 While viewing a picture message, select **Options** > **Save picture**.
- 2 Enter a title for the picture, and select **OK**.

If your templates folder is full of pictures, scroll to the picture you would like to replace, and select **Select**.

## COMPOSE AND SEND A PICTURE MESSAGE

One picture message is equivalent in size to three text messages. When you insert a picture into a message, you will have enough remaining space for about 121 characters in the message. If you try to insert a picture into a message that is almost full of text, a beep sounds, and you are prompted to delete some text before proceeding.

- 1 From the menus, select **Messages** > **Text messages** > **Create message**.  
If you insert pictures before adding text, you can check remaining space for text in the upper right corner of the display.
- 2 Write a message (or enter nothing to just send a picture), and select **Options** > **Insert picture**.

A list of pictures appears in the display.

- 3 Scroll to a picture, and select **View**.
- 4 To insert the picture into your message, select **Insert**.

OR

To view another picture, select **Back**, scroll to another picture, and select **View**.

- 5 To send the picture message, select **Send**.
- 6 Enter the phone number for your recipient, or select **Find** to retrieve a number from contacts, and select **OK**.



**Note:** When sending messages, your device may display **Message Sent**. This is an indication that the message has been sent by your device to the message center number programmed into your device. This is not an indication that the message has been received at the intended destination. For more details about messaging services, check with your service provider.

## PREVIEW, CHANGE, OR DELETE A PICTURE FROM A MESSAGE


After a picture has been inserted into your message, select **Options** and one of the following:

**Preview**—Preview the inserted message before sending. Select **Back** to return to the list of options.

**Change picture**—Go back to the picture list. Scroll to highlight a new picture, select **View > Insert** to replace the previous picture in your message.

**Delete picture**—Select **OK** to delete the picture from your message, or select **Back** to return to the list of options.

## Delete text and picture messages

If your message memory is full and you have more messages waiting at the network,  blinks in on the start screen. You can do the following to create more space:

- Read some of the unread messages, and delete them.
- Delete messages from some of your folders.

### A SINGLE MESSAGE

To delete a single message, you need to open it first.

- 1 From the menus, select **Messages > Text messages** and the folder containing the message you want to delete.
- 2 Select **Options > Delete**.
- 3 At the confirmation prompt, select **Yes** to delete the message or **No** to return to the list of options.

### ALL MESSAGES IN A FOLDER

- 1 From the menus, select **Messages > Text messages > Delete messages**.
- 2 To delete all messages from one folder, select the folder, then **Yes**.  
OR
- 3 To delete all messages from all folders, select **All messages > Yes**.



**Warning:** If you select **All messages**, it deletes any messages that have been read in *all* of the folders.

## SMS e-mail

You can use the text messaging function of your phone to send and receive SMS e-mail messages. Contact your service provider for information and to subscribe to the service.

## WRITE AND SEND SMS E-MAIL

- 1 From the menus, select **Messages > Text messages > Create SMS e-mail**.
- 2 Enter the recipient's e-mail address, or select **Find** to search for it in contacts, and select **OK**.
- 3 Enter a subject for the e-mail, and select **OK**.
- 4 Enter the e-mail message, and select **Send**.
- 5 If you have not saved the settings for SMS e-mail service, enter the number of the e-mail server, and select **OK**.

## RECEIVE SMS E-MAIL

Received SMS e-mail messages are handled the same way as text messages. See "Read a message" on page 41 for more information.

## • MULTIMEDIA MESSAGES

A multimedia message can contain text, sound, and a picture. Your phone supports multimedia messages that are up to 100 KB. If the maximum size is exceeded, the phone may not be able to receive the message. Depending upon your network, you may receive a message that includes an Internet address where you can go to view the multimedia message. Pictures are scaled to fit the display area of the phone. Your phone has a multimedia message viewer for playing messages and a multimedia inbox for storing saved messages. Once you save the multimedia message, you can use the image as a screen saver or the sound as a ringing tone.

Copyright protections may prevent some images, ringing tones, and other content from being copied, modified, transferred, or forwarded.



**Note:** This function can be used only if it is supported by your service provider. For availability and a subscription to the multimedia messaging service, contact your service provider. Only compatible devices can receive and display multimedia messages.

The default setting of the multimedia message service is on.

Multimedia messaging supports the following formats:

- Picture: JPEG, GIF, animated GIF, WBMP, BMP, and PNG
- Sound: SP-MIDI, AMR audio, and monophonic ringing tones
- Video: clips in H.263 format with SubQCIF image size and AMR audio



**Note:** If a received message contains unsupported elements, these elements may be replaced with the text **Object format not supported**.

You cannot receive multimedia messages if you have a call in progress, a game or other Java application running, or an active browsing session over GSM. Because delivery of multimedia messages can fail for a variety of reasons, do not rely solely upon them for essential communications.

## MMS settings

Before you can use the multimedia message feature, you must specify whether you want to receive messages at all times or only if you are in the service provider's home system.

### RECEIVE MULTIMEDIA CONNECTION SETTINGS

You may be able to receive multimedia connection settings as a connection settings message from your service provider. For more information, contact your service provider.

### ALLOW OR BLOCK MULTIMEDIA RECEPTION

You can choose to receive all messages, to block all messages, or to receive messages only when you are in the service provider's home network.

- 1 From the menus, select **Messages > Message settings > Multimedia msgs.** > **Allow multimedia reception** and one of the following:  
**Yes**—Allow all incoming messages.  
**No**—Block all incoming messages.  
**In home network**—Allow incoming messages only if you are in the service provider's home system.
- 2 Select **Incoming multimedia messages > Retrieve**.

### ALLOW OR BLOCK ADVERTISEMENTS

This setting is not available if multimedia reception is blocked.

From the menus, select **Messages > Message settings > Multimedia msgs.** > **Allow advertisements > Yes or No**.

## EDIT CONNECTION SETTINGS

Contact your service provider for the settings.

From the menus, select **Messages > Message settings > Multimedia msgs. > Connection settings > Edit active multimedia settings**; then select each of the following in turn and enter the settings provided by the service provider.

**Settings' name**—Rename the setting to your preference.

**Homepage**—Enter the homepage where your browser retrieves multimedia messages, and select **OK**.

**Proxies**—Select **Enable** or **Disable**.

**Primary proxy** and **Secondary proxy**—Enter the proxy address. These options are only available if **Proxies** is set to **Enable**.

**Data bearer**—Select the data bearer (always **GPRS**).

**Bearer settings**—Set each of the following settings for the data bearer:

- **GPRS access point**—Enter the access point name, and select **OK**.
- **Authentication type**—Select either **Normal** or **Secure**.
- **User name**—Edit or enter your user name, and select **OK**.
- **Password**—Edit or enter a password, and select **OK**.

You may be able to receive multimedia connection settings as a text message from your service provider. For more information, contact your service provider.

## OTHER MMS SETTINGS

Other multimedia settings include saving your messages to the **Sent** items folder and editing your connection settings.

From the menus, select **Messages > Message settings > Multimedia msgs.** and one of the following:

**Save sent messages**—Select **Yes** to save sent multimedia messages to the **Sent** items folder or **No** to discard.

**Delivery reports**—Select **On** to be informed if the message was delivered or **Off** to not be informed.

**Scale image down**—Select **Yes** to scale images to a smaller size when inserted into a message or **No** to keep the original size.

**Default slide timing**—Set the default time in *mm:ss* format for each slide in an MMS to remain on the screen.

**Allow multimedia reception**—Select **Yes**, **No**, or **In home network** for your multimedia service. **In home network** cannot receive multimedia messages outside the home network.

**Incoming multimedia messages**—Select **Retrieve** to receive multimedia messages, or **Reject** to not receive multimedia messages.

**Connection settings**—Define browser settings for retrieving multimedia messages. Activate the set where you want to save the connection settings and then edit the settings. See “Edit connection settings” on page 48.

**Allow advertisements**—Select **Yes** to enable reception of automatic multimedia advertisements, or **No** to disable.

## Folders

Your phone has the following folders under **Messages > Multimedia messages**:

**Inbox**—Contains received multimedia messages.

**Outbox**—Contains multimedia messages which you have sent and are still waiting to be transmitted.

**Sent items**—Contains sent multimedia messages.

**Saved items**—Contains saved multimedia messages that you can send later.

## Write and send

- 1 From the menus, select **Messages > Multimedia msgs. > Create message**.
- 2 Enter the text of your message, and select **Options > Insert > Image, Sound clip, or Video clip**.

The list of available folders in the **Gallery** is shown.

- 3 Open the desired folder, scroll to the image, sound clip, or video clip, and select **Options > Insert**.

The indicator in the header of the message indicates that a picture, sound clip, or video clip has been attached.

Copyright protections may prevent some images, ringing tones, and other content from being copied, modified, transferred, or forwarded.


- 4 To add a new page (also called a slide) to the message, select **Options > Insert > Slide**.

Each slide can contain text, one image, and one sound clip. If the message contains several slides, you can open the desired slide by selecting **Previous slide**, **Next slide**, or **Slide list**.

- 5 To set the time interval between the slides, select **Options > Slide timing**, enter the time interval, and select **OK**.

- 6 To move the text to the top or bottom of the message, select **Options > Text on top** or **Text on bottom**.
- 7 To insert a name from contacts, select **Options > More options > Insert contact**, scroll to the desired name, and select **Select**.
- 8 To insert a number, select **Options > More options > Insert number**, enter the number or search for it in contacts, and select **OK**.
- 9 To insert a calendar note, select **Options > Insert > Calendar note**.
- 10 To insert a business card, select **Options > Insert > Business card**.
- 11 To delete an image, slide, video clip, or sound clip from the message, select **Options > Delete > Image, Sound clip, Video clip, or Slide**.
- 12 To add a subject to the message, select **Options > More options > Edit subject**, enter a subject, and select **OK**.
- 13 To view the message or slide presentation before sending it, select **Options > Preview**.
- 14 To save the message to the **Saved items** folder, select **Options > Save message**.
- 15 To send the message, select **Send**, or select **Options > Send to e-mail** or **Send to many**.  
If you have attached a picture to the message, you cannot send the message using e-mail.
- 16 Enter the recipient's number or e-mail address, or search for it in contacts, and select **OK**.

The message is moved to the **Outbox** folder for sending.



It takes more time to send a multimedia message than to send a text message. While the multimedia message is being sent, the animated indicator  is displayed and you can use other functions on the phone. If there is an interruption while the message is being sent, the phone tries to resend it a few times. If this fails, the message remains in the **Outbox** folder and you can try to resend it later. Check your **Outbox** folder for unsent messages.



**Note:** When sending messages, your device may display the words **Message Sent**. This is an indication that the message has been sent by your device to the message center number programmed into your device. This is not an indication that the message has been received at the intended destination. For more details about messaging services, check with your service provider.

Messages that you have sent are saved in the **Sent items** folder if the setting **Save sent messages** is set to **Yes**. See "Other MMS settings" on page 48. This is not an indication that the message has been received at the intended destination.

## Read and reply

When a multimedia message is being received,  appears (blinking) in the display. Once the message has been fully downloaded,  and **Multimedia** message received appear in the display.

- 1 To view the message immediately, select **Show**.

OR

To save the message to the inbox for later viewing, select **Exit**.

- 2 To view a saved message, select **Messages > Multimedia messages > Inbox** and scroll to view the message.
- 3 While viewing the message, select **Play** to view the entire MMS, or select **Options** and one of the following:

**View text**—View only the text included in the message.

**Open image, Open sound clip, or Open video clip**—View or listen to the corresponding file.

**Delete message**—Delete the message you are viewing.

**Reply or Reply to all**—Enter a reply and send it to the original sender and any other recipients of the message.


**Use detail**—Extract numbers, e-mail addresses and Web site addresses from the current message.

**Forward to no., Forward to e-mail, or Forward to many**—Forward the message to a phone number, to an e-mail address, or to multiple recipients.

**Message details**—View the sender's name and phone number, the message center used, reception date and time, message size and type.

**Save image, Save sound clip, or Save video clip**—Save the corresponding file to the gallery.

## Delete multimedia messages

If  blinks and **Multimedia memory full, view waiting msg.** appears in the display, memory for multimedia messages is full. To view the waiting message, select **Show**. Before you can save the message, you need to delete some of your old messages.



## A SINGLE MESSAGE

To delete a single message, you need to open it first.

- 1 From the menus, select **Messages > Multimedia msgs.** and the folder containing the message you want to delete.
- 2 Select **Options > Delete message.**
- 3 At the confirmation prompt, select **Yes** to delete the message or **No** to return to the list of options.

## ALL MESSAGES IN A FOLDER

- 1 From the menus, select **Messages > Multimedia msgs. > Delete messages.**
- 2 Select the folder from which you want to delete all messages, then select **Yes.**

## • E-MAIL

You can write, send, and read e-mails with your phone. Your phone supports POP3 and IMAP4 e-mail servers.

Before you can send and receive e-mail messages, you may need to do the following:

- Obtain a new e-mail account or use your current account. For availability of an e-mail account contact your e-mail service provider.
- Contact your network operator or e-mail service provider about availability of this feature and to set the settings required for e-mail. See "Connection settings service" on page 16 for more information about receiving the settings as a connection settings message.
- Set the e-mail settings on your phone. See "Settings" on page 52.

## Settings

### AS A CONNECTION SETTINGS MESSAGE

You may receive the e-mail settings as a connection settings message from the network operator or service provider. For information about receiving the settings as a connection settings message, see "Connection settings service" on page 16.

## MANUAL ENTRY

- 1 From the menus, select **Messages > Message settings > E-mail messages > Active e-mail settings**.
- 2 Scroll to the set in which you want to save the settings, and select **Activate**.
- 3 Select **Edit active e-mail settings**; then select each of the settings in turn and enter all the required information. Contact your network operator or e-mail service provider for the settings.

**Mailbox name**—Enter the name that you want to use for the mailbox. You can use any name.

**E-mail address**—Enter your e-mail address.

**My name**—Enter your name or nickname. Your name and e-mail address will be shown.

**Outgoing (SMTP) server**—Enter the server address.

**Incoming server type**—Select either **POP3** or **IMAP4** depending on the type of e-mail system that you are using. If both types are supported, select **IMAP4**. Changing the server type also changes the incoming port number.

If you select **POP3** as the incoming server type, the following options are shown:

- **Incoming (POP3) server**—Enter the e-mail server address for incoming e-mail.
- **POP3 user name**—Enter the user name to access the e-mail account.
- **POP3 password**—Enter the password to access the e-mail account.

If you select **IMAP4** as the incoming server type, the following options are shown:

- **Incoming (IMAP4) server**—Enter the e-mail server address for incoming e-mail.
- **IMAP4 user name**—Enter the user name and password to access the e-mail account.
- **IMAP4 password**—Enter the password to access the e-mail account.

**Other settings**—Select each of the following in turn and enter the required information:

- **Include signature**—You can define a signature that is automatically added to the end of your e-mail, when you write your message.
- **Use SMTP authorisation**—If your e-mail service provider requires authentication for sending e-mails, select **Yes**. In this case, you must also define your **SMTP user name** and **SMTP password**.

- **SMTP user name**—Enter the user name for outgoing mails that you have obtained from your e-mail service provider. If you do not enter an SMTP user name, the e-mail server uses the POP3 or IMAP4 user name instead.
- **SMTP password**—Enter the password that you want to use for outgoing mails. If you do not enter an SMTP password, the e-mail server uses the POP3 or IMAP4 password instead.
- **Outgoing (SMTP) port**—Enter the number of the e-mail server port for outgoing e-mail. The most common default value is 25.

If you selected POP3 as the incoming server type, the following options are shown:

- **Incoming (POP3) port**—Enter the port number that you have obtained from your e-mail service provider.
- **Reply-to address**—Enter the e-mail address to which you want the replies to be sent.
- **Secure login**—Select **On** if your connection requires an encrypted login; otherwise select **Off**. Contact your service provider if in doubt. Using encrypted login enables increased security for user names and passwords. It does not increase security for the connection itself.
- **Retrieve e-mails**—Enter the maximum number of e-mails that you want to retrieve at a time.
- **SMTP connection settings**—Define the connection settings required for outgoing e-mail.
- **POP3 connection settings**—Define the connection settings for incoming e-mail. See “Set up for browsing” on page 139.

If you selected IMAP4 as the incoming server type, the following options are shown:

- **Incoming (IMAP4) port**—Enter the port number that you have obtained from your e-mail service provider.
- **Reply-to address**—Enter the e-mail address to which you want the replies to be sent.
- **Retrieve e-mails**—Enter the number of e-mails that you want to retrieve at a time.
- **Retrieval method**—Select **Latest** to retrieve all new received e-mails, or select **Latest unread** to retrieve only e-mails that you have not read.
- **SMTP connection settings**—Define the connection settings required for outgoing e-mail.
- **IMAP4 connection settings**—Define the connection settings required for incoming mail. See “Set up for browsing” on page 139.

## Folders

Your phone has the following folders under Messages > E-mail:

**Inbox**—Store received e-mails.

**Other folders**—Contains the following subfolders:

- **Drafts**—Store unfinished e-mails.
- **Archive**—Organize and save e-mails.
- **Outbox**—Store e-mails that have not been sent.
- **Sent items**—Store e-mails that have been sent.

## Write and send e-mail

- 1 From the menus, select **Messages > E-mail > Create e-mail**.
- 2 With the **E-mail address** field highlighted select **Edit**.
- 3 Enter the e-mail address, or select **Options > Find** to retrieve an e-mail address from contacts, and select **OK**.
- 4 Use the **Down scroll** key to highlight the **Subject** field, enter a subject for the e-mail, and select **OK**.
- 5 Select **Options > Message editor** and compose your e-mail, leaving enough space in the total character count (160) for the e-mail address.
- 6 Select **Send > Send now** or **Send later**.  
If you select **Send later**, the e-mail is saved in the **Outbox** folder.
- 7 If you have not saved the settings for sending e-mail, enter the number of the e-mail server at the prompt, and select **OK**.




**Note:** When sending messages, your device may display **Message Sent**. This is an indication that the message has been sent by your device to the message center number programmed into your device. This is not an indication that the message has been received at the intended destination. For more details about messaging services, check with your service provider.

## Download e-mail messages

- 1 From the menus, select **Messages > E-mail**.
- 2 To download e-mail messages that have been sent to your e-mail account, select **Retrieve**.  
OR  
To download new e-mail messages and send e-mails saved in the **Outbox** folder, select **Other options > Retrieve and send**.  
The phone connects to the e-mail service and downloads the messages to the **Inbox** folder.
- 3 If more than one message was received, scroll to the desired message.
- 4 Select **Select** to read the new message immediately, or **Back** to read it later.

## Read the message later

From the menus, select **Messages > E-mail > Inbox** and the message you want to read.

An unread message is indicated by  in front of the message.

## Reply to an e-mail message

- 1 While viewing a message, select **Options > Reply** or **Reply to all**.
- 2 To include the original text in your reply, select **Original text**.  
OR  
To reply without the original text, select **Empty** screen.
- 3 Confirm or edit the e-mail address, and write your reply.
- 4 Select **Options > Send > Send now** to send the message.

## Delete e-mail messages

- 1 Select **Messages > E-mail > Other options > Delete messages**.
- 2 To delete all messages from one folder, select the folder, then **Yes**.  
OR

To delete all messages from all folders, select **All Messages > Yes**.



**Note:** Deleting an e-mail message from the phone does not delete it from the e-mail server.

## • VOICE MESSAGES

If you subscribe to voice mail, your service provider will furnish you with a voice mailbox number. You need to save this number to your phone to use voice mail. When you receive a voice message, your phone lets you know by beeping, displaying a message, or both. If you receive more than one message, your phone shows the number of messages received.

### Save your voice mailbox number

Your service provider may have already saved your voice mailbox number to your phone. If so, the number will appear in the display in step 2. Select OK to leave the number unchanged.

- 1 From the menus, select **Messages > Voice messages > Voice mailbox number**.
- 2 If the **Mailbox number** box is empty, enter the voice mailbox area code and number, and select OK.

The phone confirms that the number has been saved.

Save yourself the trouble of entering the mailbox codes each time you dial voice mail. See "Automate voice mail" on page 58.

### Call and set up your voice mail

- 1 Once you have saved the voice mailbox number, press and hold the 1 key.
- 2 When you connect to voice mail and the prerecorded greeting begins, follow the service's automated instructions to setup your voice mail.

### Listen to your voice messages

Once you have set up voice mail, you can dial the number in one of four ways:

- Dial the voice mailbox number using the keypad.
- Press and hold the 1 key.
- Select **Listen** if there is a notification message in the display.
- From the menus, select **Messages > Voice messages > Listen to voice messages**. After a brief pause, your phone dials the voice mail number.

Once you connect and the prerecorded greeting begins, follow the automated instructions to listen to your voice messages.

## Automate voice mail

You can insert special characters called dialing codes into phone numbers such as voice mail and then save the number to a 1-touch dialing location. Dialing codes instruct the receiving system to pause, wait, bypass, or accept the numbers that follow them in the dialing string.



**Note:** Each voice mail service can vary. The examples and steps that follow are for clarification. Check with your service provider if you have specific questions about your voice mail service.

### WRITE DOWN SOME INFORMATION

You will need this information in “Dialing codes setup” on page 58. Be sure to record all of the information correctly.

- 1 Write down your voice mailbox number.
- 2 Call and check your voice mail as you normally would.
- 3 Write down your interaction with the recorded prompts step-by-step. Keep in mind that each voice mail service may vary. However, it should look something like this:

*Dial 2145551212, pause 5 seconds, press 1, pause 2 seconds, press 1234, press pound key.*

### DIALING CODES SETUP

- 1 From the menus, select **Contacts > 1-touch dialing**.
- 2 Scroll to an empty 1-touch dialing slot, and select **Assign**.
- 3 Enter your voice mailbox number, including the area code.
- 4 Enter any dialing codes as necessary.  
For example, if you pause for 5 seconds after connecting to voice mail, enter p twice *after* the voice mailbox number, such as 2145551212pp.  
See “Insert dialing codes” on page 59.
- 5 Enter any remaining pauses, PIN codes, and other information that allows you to listen to your messages, and select **OK**.
- 6 Enter a name (such as Voice Mail), and select **OK**.  
A message appears in the display confirming your 1-touch dialing location has been saved.
- 7 To dial and listen to your voice mail, press and hold the assigned 1-touch dialing key at the start screen.  
No other keypresses should be necessary to connect and listen to your messages.

## INSERT DIALING CODES

Press the \* key repeatedly to cycle through dialing codes. Once the desired code appears in the display, pause briefly and the code is inserted into the dialing string. For example, press the \* key four times to display w (wait character). Pause briefly and the wait character is inserted into the dialing string. Available dialing codes are as follows:

- \* Bypasses a set of instructions.
- + Precedes an international telephone number.
- p Pauses for 2.5 seconds before sending any numbers that follow.
- w Wait. Your phone waits for you to press the Talk key before it sends any numbers or codes that follow.

## • INFO MESSAGE SERVICE

With the info message network service, you can receive short text messages from your service provider on various topics, such as weather and traffic conditions. Contact your service provider for more information.

From the menus, select **Messages > Info messages** and one of the following:

**Info service**—Select **On** or **Off** to activate or deactivate the service, or **Topic index** to activate index reception.

**Topics**—Options for selecting, adding, editing, and deleting info topics.

**Language**—Select the language in which info messages are received. The language you select does not affect the language you select under the **Phone settings** menu.

**Info topics saved on SIM card**—Select one or more info topics to save to your SIM card.

**Read**—Read messages received from your service provider. This option only appears if info messages have been received.



**Note:** If the GPRS connection is set to **Always online**, info messages may not be received. In that case, set the GPRS connection to **When needed**. See “GPRS, EDGE, CSD, HSCSD” on page 90 for more information.



## • SERVICE COMMANDS

Use the **Service commands** editor to enter and send service requests (also known as USSD commands) to your service provider. Contact your service provider for information about specific service commands.

- 1 From the menus, select **Messages > Service commands**.
- 2 Enter a service request, such as an activation command for a specific network service, and select **Send**.

## 8 Call log



**Call log** stores information about the last 20 missed, 20 received, or 20 dialed calls. It also adds the total duration of all calls. When the number of calls exceed the maximum, the most recent call replaces the oldest. For **Call log** to work properly:

- Your service provider must support caller ID, and it must be enabled.
- Your calls cannot be blocked.
- Your phone must be on and within the service area.

### • OPTIONS

The following options are available from the call log menu:

**Missed calls**—Show the phone numbers of unanswered incoming calls.

**Received calls**—Show the phone numbers of the most recently answered incoming calls.

**Dialed numbers**—Show the most recently dialed numbers.

**Delete recent call lists**—Clear phone numbers from recent call lists.

**Call timers**—View the duration of recent calls and clear the call timers.

**GPRS data counter**—Show the amount of sent and received GPRS data for the last session and in total, and reset the counters. The security code is required to reset the counters.

**GPRS connection timer**—Show the duration of GPRS data connections for the last connection and in total, and reset the timers. The security code is required to reset the timers.

**Message counter**—Show the number of messages that were sent and received, and reset the counters.

### • VIEW CALLS OPTIONS

Whether you are viewing missed, received, or dialed calls, the menu options are the following:

**View**—Display the number.

**Call time**—Display the date and time of the call.

**Send message**—Send a message to the number.

**Edit number**—Edit the number and associate a name with the number.

**Save**—Enter a name for the number and save it to contacts.

**Add to contact**—Add the number to an existing entry in contacts, if the number is not associated with a name.

**Delete**—Clear the number from memory.

**Call**—Call the number.

## • MISSED CALLS

Missed calls are calls that were not answered while the phone was on and in your home service area. You can check for missed calls in two ways:

- 1 If **# missed call** appears in the display, select **List**.  
The phone number appears in the display.
- 2 Select **Options** and the desired option from the list.  
See “View calls options” on page 61.  
OR
- 1 From the menus, select **Call log > Missed calls**.
- 2 Scroll to a name or number, and select **Options** and the desired option from the list.  
See “View calls options” on page 61.

## • RECEIVED CALLS

Received calls are calls that have been answered.

- 1 From the menus, select **Call log > Received calls**.
- 2 Scroll to a name or number, and select **Options** and the desired option from the list.  
See “View calls options” on page 61.

## • DIALED NUMBERS

You can view dialed numbers in one of two ways:

- 1 At the start screen, press the **Talk** key.  
OR  
From the menus, select **Call log > Dialed numbers**.
- 2 Scroll to a name or number, and select **Options** and the desired option from the list.  
See “View calls options” on page 61.

## • CALL TIMES

You can receive up to five calls from the same number and view the time and date each call occurred. Your clock must be set for this feature to work accurately. See "Set the clock" on page 21 for instructions on setting your clock.

- 1 While viewing dialed numbers or a missed or received call, select **Options > Call time**.

The time that the last call occurred appears in the display.

- 2 Press the **Scroll down** key to view other call times from this number.
- 3 Select **Back** to return to the options list.

## • DELETE CALL LISTS

To clear any missed, dialed, or received calls from phone memory, select **Call log > Delete recent call lists > All, Missed, Received, or Dialed**.

## • CALL DURATION

If you have two phone lines, each line has its own call timers. When you view call durations, the timers for the currently selected line are displayed.

From the menus, select **Call log > Call timers** and one of the following:

**Duration of last call**—Show the duration of the last call received.

**Duration of received calls**—Show the duration of all received calls.

**Duration of dialed calls**—Show the duration of all dialed calls.

**Duration of all calls**—Show the duration of all calls (missed, dialed, and received).

**Clear timers**—Reset all call timers to zero. The security code is required to reset the timers.

## • POSITIONING

The positioning feature allows the network to detect the location of your phone. When the network receives a request for the location, a message is displayed on your phone. You can then accept or reject the request.

The functionality and accuracy of this feature is dependent on the network, satellite systems, and the agency receiving the information. It may not function in all areas or at all times.

### View position log

The position log contains the 10 most recent positioning requests and notifications.

- 1 From the menus, select **Call log > Positioning > Position log > Open folder**.
- 2 Scroll to the desired item, and select **Show** to view details of the request.

### Delete position log


From the menus, select **Call log > Positioning > Position log > Delete all**.

The list of positioning requests is deleted.

## 9 Contacts



Contacts can be saved in the phone memory and on the SIM card. The phone memory can save up to 1000 names with numbers and text notes for each name. You can also save an image with some of the names. The amount of names, numbers and text entries that you can save may vary, depending on their length and the total number of entries in contacts.

The phone supports SIM cards that can save up to 254 names and phone numbers. Contacts saved on the SIM card are indicated by .

In dynamic contacts (Presence) you can publish your current availability status to show to anyone who has access to this service and is requesting this information. You can view the availability status of any of the contacts that you have subscribed to in the **Subscribed names** menu and in the detailed view of a name in contacts.

### • MENU

From the menus, select **Contacts** and one of the following:

**Find**—Find a name or select from a list.

**Add contact**—Add a name to contacts.

**Delete**—Delete a name and its associated numbers.

**My presence**—See “Presence service” on page 70.

**Subscribed names**—See “Subscribed names” on page 73.

**Copy**—Copy entries from phone memory to SIM and vice versa.

**Settings**—Set memory in use (phone or SIM), change contacts view, and check the memory status of your phone and SIM card.

**1-touch dialing**—Display the list of 1-touch dialing numbers saved to memory.

**Voice tags**—Display and manage voice tags. See “Voice dialing” on page 77.











**Service numbers**—Display a list of numbers related to your service provider.

**My numbers**—View the numbers (line 1, line 2, data) in use by your SIM card.

**Caller groups**—View and edit the properties (such as the ringing tone) for any of the caller groups.

## • TYPES OF INFORMATION

Each contact entry can contain one or more of the following types of information:

-  General phone number
-  Mobile phone number
-  Home phone number
-  Work phone number
-  Fax number
-  E-mail address
-  Web address
-  Street address
-  User ID for presence service
-  Note

## • SAVE INFORMATION

You can save names and numbers to phone memory or to SIM memory. See “Select contacts view and memory” on page 79.

### Quickly save a name and number

- 1 At the start screen, enter the phone number you wish to save, and select **Save**.
- 2 Enter a name for the number, and select **OK**.

### Quickly save only a number

You can save a phone number as a stand-alone entry in contacts.

- 1 At the start screen, enter the number you wish to save.
- 2 Select and hold **Options**.  
A message appears in the display confirming the number is saved.

## Save an entry

- 1 From the menus, select **Contacts > Add contact**.
- 2 Enter a name, and select **OK**.
- 3 Enter a number, and select **OK**.
- 4 Select **Done** to return to the start screen.

## Save multiple numbers and text items

For each entry in phone memory, you can save different types of phone numbers and short text items. (SIM card memory can have only one name and number per entry.) The first number you save for any entry is automatically set as the default, or primary number. It is indicated with a frame around the number type indicator. If you save multiple numbers, you can designate another number as the primary number if desired. See "Change the primary number" on page 68.

- 1 Make sure that the memory in use is either **Phone** or **Phone and SIM**.  
See "Select contacts view and memory" on page 79.
- 2 At the start screen, press the **Scroll down** key, and scroll to the entry to which you want to add a number or text item.
- 3 Select **Details > Options > Add number** or **Add detail** and the desired number or text type.  
See "Types of information" on page 66.
- 4 Enter a number, address, or note, and select **OK**.
- 5 To change the number or text type, with a number or text item highlighted, select **Options > Change type** and the desired type.
- 6 Press the **End** key to return to the standby mode.

## Save a user ID for presence service

- 1 At the start screen, press the **Scroll down** key, and scroll to the entry to which you want to add a user ID.
- 2 With the entry highlighted, select **Details > Options > Add detail > User ID**.



- 3 To enter the user ID manually, select **Enter ID manually**, enter the user ID, and select **OK**.

OR

To search for a user ID in the server of your service provider, select **Search**.

If one user ID is found it is automatically saved.

If multiple user IDs are found, scroll to the desired user ID, and select **Options > Save**.



**Note:** To search for a user ID, you must be connected to the presence service. See "Presence service" on page 70.

## Save addresses and notes

To save an address or note, you need to add it to an existing entry (name).

- 1 At the start screen, press the **Scroll down** key, and scroll to the entry to which you want to add an address or note.
- 2 With the entry highlighted, select **Details > Options > Add detail > E-mail address, Web address, Street address, or Note**.
- 3 Enter the text for the note or address, and select **OK**.

## • CHANGE THE PRIMARY NUMBER

In a contact with more than one phone number, you can select which number should be the primary number. When you highlight the contact in the contact list and press the **Talk** key, the phone automatically dials the primary number.

- 1 At the start screen, press the **Scroll down** key, scroll to the entry you want to change, and select **Details**.
- 2 Scroll to the number you want to set as default, and select **Options > As primary number**.

## • SEARCH FOR AN ENTRY

- 1 At the start screen, press the **Scroll down** key to display the contents of contacts.
- 2 Press the key which corresponds to the first letter of the name for which you are performing a search.

- 3 Press the **Scroll up** key or the **Scroll down** key to scroll up and down through names and numbers in the list.

Press the **Left selection** key or the **Right selection** key to move the cursor left or right in the search window at the bottom of the display, if necessary.

- 4 Select **Details** to view the details of the selected entry.
- 5 Use the **Scroll up** and **Scroll down** keys to scroll through the details of the entry, if necessary.

## • MAKE A CALL

At the start screen, press the **Scroll down** key, and scroll to the entry for the person you want to call.

To dial the primary number, press the **Talk** key.

OR

To dial one of the other numbers for that contact, select **Details**, scroll to the desired number, and press the **Talk** key.

## • ADD AN IMAGE TO A NAME OR NUMBER

You can add an image to a name or number saved in phone memory. The image is displayed when you receive a call from that phone number.

- 1 At the start screen, press the **Scroll down** key.
- 2 Scroll to the name or number to which you want to add an image, and select **Details > Options > Add image**.

The display shows the list of folders in the **Gallery**.

- 3 Scroll to the folder that contains the image, and select **Open**.
- 4 Scroll to the desired image, and select **Options > Save to contacts**.  
A copy of the image is added to the contact.

You can use the phone to take a photo and attach it to the contact. See "Take a photo" on page 106 for more information.

## • EDIT AN ENTRY

- 1 At the start screen, press the **Scroll down** key.
- 2 Scroll to the entry that you want to edit, and select **Details**.
- 3 Scroll to the item you want to edit, and select **Options**.  
The list of available options varies according to the type of item selected.
- 4 Select an option, and follow the prompts to edit the item.

## • DELETE NAMES AND NUMBERS

- 1 From the menus, select **Contacts > Delete**.
- 2 To delete individual names and numbers, select **One by one**.
- 3 Scroll to the entry you wish to delete, and select **Delete > Yes** to confirm the deletion.
- 4 To delete the entire contents of contacts, select **Delete all > Phone or SIM card > Delete > Yes**.
- 5 At the prompt, enter your security code, and select **OK**.

## • PRESENCE SERVICE

Presence service is a network service that lets you give information about your presence status to other people who have access to the same presence service. These others are known as viewers. Your presence status includes your availability, status message, and personal logo. When you publish your current presence status, viewers can request this information by using their **Subscribed names** list. See “Subscribed names” on page 73.

You can control and personalize the information that you want to share with viewers. You can decide who can view all of your presence information, who can view only your availability, and who cannot view your presence at all. For example, you may want to display a message to the viewers in your private list telling them that you are in a business meeting until 5:00 p.m., but you may want your other viewers to simply see that you are not available.

Before you can use presence, you must subscribe to the service. To check the availability of the presence service, contact your service provider. The service provider will supply your user ID and password and the settings for the service. To set the required settings, see “Presence settings” on page 98.

You need to access the presence service before you can share your presence information with others. Viewers need access to the presence service and a compatible phone to see your presence information.

### Connect and disconnect

While you are connected to the presence service, you can use the other functions of the phone, and the presence service remains active in the background.




From the menus, select **Contacts > My presence > Connect to “My presence” service**.

To disconnect from presence service, select **Contacts > My presence > Disconnect**.

## Change your presence status

From the menus, select **Contacts > My presence > My current presence** and one of the following:

**View current presence**—Select **Private pres.** or **Public pres.** to view your current private or public status.

**My availability**—Set your availability status. Select **Available** (indicated by ) , **Busy** (indicated by ) or **Not available** (indicated by ) . Setting an availability status does not prevent your phone from receiving calls or messages, or change the behavior of the phone in any way.

**My presence message**—Enter a status message to be shown to other persons, or select **Options > Previous msgs.**, and an old message as the status message. You can use the message to tell viewers where you are, what you are doing, or any other information that you wish to share.

**My presence logo**—Select your personal logo from the **Graphics** folder in the gallery. If you select **Default**, the logo is not published.

**Show to**—Choose the groups with whom you want to share or not share your presence status information. Select one of the following:

- **Private and public**—Contacts in your private list can see your full presence information; other contacts can see only your availability.
- **Private viewers**—Contacts in your private list can see your full presence information; other contacts cannot see any information.
- **No one**—No one can see your presence information.

## Manage viewers

### VIEW LISTS OF VIEWERS

From the menus, select **Contacts > My presence > Viewers** and one of the following:

**Current viewers**—View all the persons who have subscribed to your presence information.

**Private list**—View the list of persons who are allowed to see all of your presence information. Viewers who are not in your private list can see only your availability.

**Blocked list**—View the list of persons you have blocked from viewing your presence information.

## ADD AND REMOVE VIEWERS FROM YOUR PRIVATE LIST

Viewers on your private list can see all of your presence information, including availability, status message, and logo.

- 1 From the menus, select **Contacts > My presence > Viewers > Current viewers > Options > Add to private list**.
- 2 Scroll to each viewer that you want to add to your private list, and select **Mark**.
- 3 To remove a viewer from the private list, select **Unmark**.
- 4 When you are finished, select **Done**.

## BLOCK AND UNBLOCK VIEWERS

Viewers on your blocked list cannot see any of your presence information.

- 1 From the menus, select **Contacts > My presence > Viewers > Current viewers > Options > Move to blocked list**.
- 2 Scroll to each viewer that you want to add to your blocked list, and select **Mark**.
- 3 To remove a viewer from the blocked list, select **Unmark**.
- 4 When you are finished, select **Done**.

## Settings

From the menus, select **Contacts > My presence > Settings** and one of the following:

**Show current presence in idle**—Choose whether to show your current presence status on the start screen. Select **On** to show the current status indicator or **Off** to hide it.

**Synchronize with profiles**—You can update your presence message and availability status automatically by linking them to the currently active profile. See “Customize a profile” on page 81 for more information. Select **On** to update automatically, or **Off** to update manually. You cannot link a personalized status logo to a profile.

**Connection type**—Select **Automatic** to have the phone connect automatically to the presence service when the phone is switched on. Select **Manual** connect to the presence service manually.

**Presence settings**—Set the presence settings. See “Presence settings” on page 98.

## • SUBSCRIBED NAMES

You can create a list of contacts whose presence status information you want to be aware of. You can view the information if the contacts allow you to view it and the network does not prevent it. You can view these subscribed names either by scrolling through your contact list or by using the **Subscribed names** submenu.

### Connect to service

- 1 Make sure that the memory in use is either **Phone** or **Phone and SIM**.  
See "Select contacts view and memory" on page 79.
- 2 To connect to the presence service, from the menus, select **Contacts > My presence > Connect to 'My presence' service**.

When you are not connected to the presence service, you can view the subscribed names but you cannot see their presence status information.

### Subscribe to a contact

#### FROM THE SUBSCRIBED NAMES MENU

- 1 From the menus, select **Contacts > Subscribed names**.  
If you have not connected to the presence service, the phone asks if you want to connect now.
- 2 Select **Options > Subscribe new**, and select a contact from the list.  
If the contact has a user ID saved, the contact is added to the subscribed names list. If there are multiple user IDs, select one of them. After subscription to the contact, **Subscription activated** is shown.




#### FROM THE CONTACT LIST

- 1 At the start screen, press the **Scroll down** key, and scroll to the contact you want to subscribe to.
- 2 Select **Details > Options > Request presence**.
- 3 To subscribe to the contact, select **As subscription**.  
OR  
To view the contact's presence information without subscribing, select **One time only**.

## View subscribed names

- 1 From the menus, select **Contacts > Subscribed names**.

The status information of the first contact on the dynamic contacts list is displayed. The information that the person wants to give to the others may include text and some of the following icons:

,  or  indicate that the contact is either available, busy, or not available.

 indicates that the contact's presence information is not available.

- 2 Scroll to the desired contact, and select one of the following:

**Details**—View the details of the selected contact.

**Options > Subscribe new**—Add a new contact to the list of subscribed names.

**Options > Chat**—Start a chat conversation.

**Options > Send message**—Send a text message to the selected contact.

**Options > Send e-mail**—Send an e-mail to the selected contact.

**Options > Send bus. card**—Send a business card to the selected contact.

**Options > Unsubscribe**—Remove the selected contact from the list of subscribed names.

## Unsubscribe a contact

### FROM THE SUBSCRIBED NAMES MENU

- 1 From the menus, select **Contacts > Subscribed names**.
- 2 Scroll to the contact that you want to unsubscribe, and select **Options > Unsubscribe**.

### FROM THE CONTACT LIST

- 1 At the start screen, press the **Scroll down** key, and scroll to the contact you want to unsubscribe.
- 2 Select **Details**, select the ID, and select **Options > Unsubscribe > OK**.

## • COPY ENTRIES

- 1 From the menus, select **Contacts > Copy > From phone to SIM card** or **From SIM card to phone** and one of the following:

**One by one**—Selects and copies entries one by one. Go to step 2.

**All**—Copies all entries from the SIM card or phone. Go to step 3.

**Primary numbers**—Copies only primary numbers. This appears only if you selected **From phone to SIM card**. Go to step 3.

- 2 Scroll to the entry you wish to copy, and select **Copy > Keep original** or **Move original**.



**Warning:** Select **Keep original** if you are unsure of which copy method to use. This ensures original entries are merely copied to the new location. **Move original** deletes files after copying.

The entry is copied and you are returned to the list of contact entries.

- 3 If you selected **All** or **Primary numbers** in step 1, select **Keep original** or **Move original > Yes** to confirm your choice.

All entries are copied to the selected destination.

- 4 Select **Back** to return to the list of contacts entries, or press the **End** key to return to the start screen.

## • BUSINESS CARDS

You can send and receive an entry in contacts to a compatible phone or other handheld device using IR, Bluetooth, or a text or multimedia message, if supported by your service provider.

### Receive a business card using IR

- 1 From the menus, select **Settings > Connectivity > Infrared** to ensure IR is activated.  
When you receive the business card, your phone beeps, and a message appears in the display.
- 2 Select **Show > Save** to save the business card in phone memory, or select **Exit > OK** to discard the business card.



## Send a business card

- 1 Highlight an entry from contacts that you wish to send, and select **Details > Options > Send bus. card > Via infrared, Via text message, Via Bluetooth, or Via multimedia.**
- 2 If the contact has more than one number, select **Primary number** or **All details.**
- 3 Follow the prompts to finish sending the business card.

## • 1-TOUCH DIALING

You can associate any phone number with a key from 2–9, and dial that entry by pressing and holding the assigned key. If you assign a number that is not already in your contact list, the number is added to the list.

### Assign a key

- 1 From the menus, select **Contacts > 1-touch dialing.**
- 2 Scroll to any empty slot, and select **Assign.**
- 3 If the entry is already in contacts, select **Find**, the desired entry, and the desired number within the entry.  
The number is assigned to the key.
- 4 If the entry is not in contacts, enter the number (including the area code), and select **OK**, enter a name for the number, and select **OK.**  
The number is assigned to the key and the name and number are added to the contact list.

### Make a call

Press and hold the key to which an entry has been assigned. Your phone dials the entry assigned to the key.

### Change numbers

- 1 From the menus, select **Contacts > 1-touch dialing.**
- 2 Scroll to the 1-touch dialing entry you wish to change, and select **Options > Change.**
- 3 If the new entry is already in contacts, select **Find**, the desired entry, and the desired number within the entry.  
The new number is assigned to the key.
- 4 If the new entry is not in contacts, enter the number (including the area code), and select **OK**, enter a name for the number, and select **OK.**  
The new number is assigned to the key, and the new name and number are added to the contact list.

## Delete numbers

- 1 From the menus, select **Contacts > 1-touch dialing**.
- 2 Scroll to the 1-touch dialing location you wish to delete, and select **Options > Delete > OK**.

## • VOICE DIALING

You can make a phone call by saying a voice tag that has been added to a phone number in contacts. Any spoken word, such as a name, can be a voice tag. You can assign voice tags to up to 25 contacts.


### Notes about voice tags

- Voice tags are sensitive to background noise. Record them and make calls in a quiet environment.
- Very short names are not accepted. Use longer, unique names, for example, "John Smith, work."
- When recording a voice tag or making a call using a voice tag, hold the phone in the normal position at your ear.



**Note:** Using voice tags may be difficult in a noisy environment or during an emergency, so you should not rely solely upon voice dialing in all circumstances.

### Assign a voice tag

- 1 At the start screen, press the **Scroll down** key to display the contacts.
- 2 Scroll to the entry you would like to assign a voice tag, and select **Details**.
- 3 If the entry has multiple numbers, scroll to the number you wish to tag.
- 4 Select **Options > Add voice tag > Start**.
- 5 After the phone beeps, pronounce the voice tag clearly into the microphone. After the voice tag is recorded, it is replayed through the earpiece and a confirmation note appears in the display. The  icon is displayed next to the number in the contact list.

## Voice dial a number

### WITHOUT THE HEADSET

- 1 At the start screen, press and hold the **Volume down** key.  
The phone beeps, and **Speak now** appears in the display.
- 2 Within 3 seconds, pronounce the tag into the microphone.  
Once the voice tag is recognized, the tagged entry appears in the display, replays through the earpiece, and the number is dialed.

### VOICE DIAL WITH THE HEADSET

- 1 At the start screen, press and hold the remote button on the headset.  
The phone beeps, and **Speak now** appears in the display.
- 2 Pronounce the voice tag into the microphone.  
Once the voice tag is recognized, the tagged entry appears in the display, replays through the earpiece, and the number is dialed.

## Display, change, and delete voice tagged entries

- 1 From the menus, select **Contacts > Voice tags**.  
The first voice tagged name and number appear in the display.
- 2 Press the scroll keys to view other voice tagged entries in alphabetical order.
- 3 Select a voice tag; then select one of the following:  
**Playback**—listen to the voice tag.  
**Change**—Record a new voice tag in place of the existing one.  
**Delete**—Delete the voice tag.

## • INFO, SERVICE, AND MY NUMBERS

Your service provider may have saved the operating number of your phone, as well as various information and service numbers to your SIM card.

From the menus, select **Contacts** and one of the following:

**Info numbers**—Contact your service provider to obtain information.

**Service numbers**—Contact your service provider to obtain service.

**My numbers**—Display the operating number, or numbers which have been assigned to your phone by your service provider.

## • CALLER GROUPS

You can add contacts entries to any of five caller groups, and then assign a unique ringing tone or graphic to that group. This enables you to identify callers from the group by their unique ringing tone or graphic. A caller group can be as small as one person or as large as the contacts list. You can rename caller groups to suit your preference.

To set the phone to ring only for calls from members of a selected caller group, see the **Alert for** option in "Customize a profile" on page 81.

### Set caller group options

- 1 From the menus, select **Contacts > Caller groups > Family, VIP, Friends, Business, or Other** and one of the following:  
**Rename group**—Rename the group to your preference.  
**Group ringing tone**—Set the ringing tone for the group.  
**Group logo**—Turn the graphic for the caller group on or off.  
**Group members**—Add or remove members from the caller group.
- 2 Follow the prompts to set the option according to your preference.

### Set up a caller group

- 1 Recall a name from contacts, and select **Details > Options > Caller groups**.
- 2 Select the caller group to which you want to add the name.

### Remove a name from a caller group

- 1 From the menus, select **Contacts > Caller groups > Family, VIP, Friends, Business, or Other > Group members**.
- 2 Scroll to the name that you want to remove, and select **Options > Remove contact**.

## • SELECT CONTACTS VIEW AND MEMORY

At the start screen, select **Contacts > Settings** and one of the following:

**Memory in use**—Select the memory you wish to use. Options are **Phone**, **SIM card**, or **Phone and SIM combined**. With **Phone and SIM** selected, when you save a new contact entry, it is saved to phone memory only. However, when you display the contact list you can see the entries in both phone memory and the SIM card.

**Contacts view**—Select the **Name list**, **Name and number**, **Name only**, or **Name and image view**.

**Memory status**—View the amount of phone or SIM memory used and available.

## 10 Operator menu

Your service provider may have programmed an operator-specific menu into your phone. If this menu exists in your phone, its functions depend entirely on the service provider. Contact your service provider for more information.

# 11 Settings



Use this menu to set or change your personal shortcuts, time and date settings, call settings, phone settings, display settings, tone settings, enhancement settings, security settings, and to restore factory settings.

## • PROFILES

Profiles define how your phone reacts when you receive a call or a message, how your keypad sounds when you press a key, and more. Ringing options, keypad tones, and other settings for each of the five available profiles can be left at their default setting, or customized to suit your needs. Select and customize the most suitable profile for your situation, such as when you are in a meeting or outdoors. The profiles available are **Normal**, **Silent**, **Meeting**, **Outdoor**, and **Pager**.

Profiles are also available for enhancements such as a headset and car kit. See "Enhancement settings" on page 98 for more information about enhancement profiles.

### Select a profile

From the menus, select **Settings > Profiles**, a profile from the list, and **Activate**.

### Customize a profile

You can customize any of the profiles a variety of ways.

- 1 From the menus, select **Settings > Profiles**.
- 2 Select the profile you want to customize; select **Customize** and one of the following:
  - Incoming call alert**—Select how the phone notifies you of an incoming call.
  - Ringing tone**—Select the ringing tone for incoming calls.
  - Ringing volume**—Set the volume of your ringing tone.
  - Vibrating alert**—Turn the vibrating alert on or off.
  - Message alert tone**—Select the tone for received messages.
  - Instant message alert tone**—Select the tone for incoming instant messages.
  - Keypad tones**—Set the volume of your keypad tones (or turn them off).
  - Warning tones**—Turn warning and confirmation tones on or off.
  - Alert for**—Define which caller groups the selected profile will accept or decline. See "Caller groups" on page 79 for more information.

**My presence**—Set your availability status and presence message for the selected profile. This option appears only if the **Synchronize with profiles** presence setting is set to **On**. See “Presence service” on page 70 for more information.

**Profile name**—Rename the profile (up to 16 characters). You cannot rename the **Normal** profile.

## Set a timed profile

Timed profiles can be used to prevent missed calls. For example, suppose you attend an event that requires your phone be set to **Silent** before the event starts, but you forget to return it to **Normal** until long after the event. During this time, you have missed several calls because the ringing tone was silent.

With the timed profile feature, you can set a profile to expire after any length of time up to 24 hours. When the profile expires, your phone automatically returns to the default profile.

- 1 From the menus, select **Settings > Profiles**.
- 2 Select a profile and **Timed**.
- 3 Enter the time for the profile to expire, and select **OK**.

The profile you have set for expiration is now active and appears in the start screen along with a small clock icon.

## Change presence status

This function is available if you have set **Synchronize with profiles** to **On**. See “Presence service” on page 70.

- 1 From the menus, select **Settings > Profiles**.
- 2 Select a profile; then select **Customize > My presence** and one of the following:

**My availability**—Select your availability status (**Available**, **Busy**, or **Not available**).

**My presence message**—Edit your status message, and select **OK**.

## • TONE SETTINGS

You can adjust the ringing volume, keypad tones, and more for the active profile. Select **Settings > Tone settings** and one of the following:

**Incoming call alert**—Select how the phone notifies you of an incoming call.

**Ringing tone**—Select the ringing tone for incoming calls.

**Ring volume**—Set the volume of your ringing tone.

**Vibrating alert**—Turn the vibrating alert on or off.

**Message alert tone**—Select the tone for received messages.

**Keypad tones**—Set the volume of your keypad tones (or turn them off).

**Warning tones**—Turn warning and confirmation tones on or off.

**Alert for**—Define which caller groups the selected profile will accept or decline. See “Caller groups” on page 79 for more information.

## • DISPLAY SETTINGS

### Wallpaper

You can set your phone to display a background picture (wallpaper) on the start screen. Some pictures are presaved in the **Gallery** menu. You can also take pictures with the built-in camera; receive pictures using multimedia messaging; download them from browser pages, or transfer them with Nokia PC Suite from your PC; and save them in the gallery. Your phone supports JPEG, GIF, BMP, PNG, and WBMP formats but not necessarily all variations of these formats.

#### SELECT

- 1 From the menus, select **Settings > Display settings > Wallpaper > Select wallpaper**.
- 2 Scroll to a folder that contains images, and select **Open**.
- 3 Scroll to the image of your choice, and select **Options > Set as wallpaper**.

#### ACTIVATE OR DEACTIVATE

- 1 From the menus, select **Settings > Display settings > Wallpaper**.
- 2 Select **On** to activate or **Off** to deactivate.

### Select color scheme

You can change the color of some display components in your phone, such as indicators and signal bars.

From the menus, select **Settings > Display settings > Color Schemes** and the color of your choice.



## Select menu view

You can select either the List interface or the Grid interface.

From the menus, select **Settings > Display settings > Menu view > List or Grid**.

## Show or hide operator logo

This is a network service. If supported by your service provider, you can choose whether the display shows the operator logo when the phone is in the standby mode.

- 1 From the menus, select **Settings > Display settings > Operator logo**.
- 2 Select **On** to show the logo or **Off** to hide the logo.

## Set screen saver

You can select an image or video clip to use as a screen saver. The screen saver is activated when no function of the phone is used after a preset period of time. Press any key to deactivate the screen saver. The screen saver is also deactivated when the phone is out of the network coverage area.

Regardless of the screen saver settings, for power saving a digital clock view is activated when no function of the phone has been used for a few minutes.

### ACTIVATE OR DEACTIVATE

From the menus, select **Settings > Display settings > Screen saver > On or Off**.

### SELECT IMAGE

- 1 From the menus, select **Settings > Display settings > Screen saver > Select s. saver**.
- 2 Scroll to the folder containing the image or video clip that you want to use, and select **Open**.
- 3 Scroll to the desired image or video clip, and select **Options > Set as s. saver**.

### SET TIMEOUT

You can set your phone to display a screen saver after a preset time or after a custom time (up to 60 minutes) of your choosing.

- 1 From the menus, select **Settings > Display settings > Screen saver > Time-out**.
- 2 Select **10 seconds** or **30 seconds**.  
OR

If you want to set a custom time (up to 60 minutes), select **Other**; then enter the custom time, and select **OK**.

## • TIME AND DATE SETTINGS

### Set the clock

- 1 From the menus, select **Settings > Time and date settings > Clock > Set the time.**
- 2 Enter the time in *hh:mm* format, and select **OK**.
- 3 If required, select **am** or **pm**.

### Show or hide the clock

You can display or not display the clock on the start screen.

From the menus, select **Settings > Time and date settings > Clock > Hide clock** or **Show clock**.

If the clock was previously hidden (not shown on the display), it will now appear in the upper right corner of the start screen.

If the clock was previously shown in the display, it will now be hidden.

### Change the time format

You can set the time format for **am/pm** or **24-hour format (military time)**.

From the menus, select **Settings > Time and date settings > Clock > Time format > 24-hour** or **12-hour**.

### Set the date

- 1 From the menus, select **Settings > Time and date settings > Date > Set the date.**
- 2 Enter the date, and select **OK**.

### Show or hide the date

You can display or not display the date on the start screen.

From the menus, select **Settings > Time and date settings > Date > Show date** or **Hide date**.

### Set or change the date format

- 1 From the menus, select **Settings > Time and date settings > Date > Date separator** and the separator of your choice (period, slash, hyphen, or space).
- 2 Select **Date > Date format** and the format of your choice.

## Automatic update of date and time

This is a network service. You can set the phone to update the date and time from the network when you turn the phone on. If the clock in your phone is 30 seconds or more off the network time, the phone will be updated automatically to reflect the network time.

Automatic update of the date and time does not change the time you have set for the alarm clock, calendar, or alarm notes. They are in local time. Updating may cause some alarms that you have set to expire.

From the menus, select **Settings > Time and date settings > Auto-update of date & time** and one of the following:

**On**—Update the time automatically

**Confirm first**—Request confirmation before updating the time. You can accept or decline the update.

**Off**—Do not automatically update the time.

## • PERSONAL SHORTCUTS

### Right selection key

You can set the **Right selection** key to go directly to a specific function from the start screen.

From the menus, select **Settings > Personal shortcuts > Right selection key** and one of the functions in the list.

The selected name or function will appear over the **Right selection** key in the start screen.

### Voice commands

Some phone functions can be voice-activated. You can add up to 16 voice commands for these functions.

- 1 From the menus, select **Settings > Personal shortcuts > Voice commands**.
- 2 Select the desired command folder, scroll to the command for which you want to add a voice tag, and select **Add**.
- 3 Select **Start** and speak after the tone.

See “Notes about voice tags” on page 77 for more information.

You cannot activate or add a voice command during a call or while sending or receiving data over a GPRS connection.

## • CONNECTIVITY

You can connect the phone to a compatible device using an IR or Bluetooth connection. You can also define the settings for (E)GPRS dial-up connections. You can connect the phone to a compatible PC using IR, Bluetooth, or a data cable; and use the phone as a modem to enable GPRS connectivity from the PC.

For more information, see the Nokia PC Suite online help. Nokia PC Suite and all related software can be downloaded from the U.S. Mobile Phone products section of [www.nokia.com](http://www.nokia.com).

### Bluetooth connectivity

Bluetooth connectivity enables cost-free wireless connections between electronic devices within a maximum range of 30 feet. A Bluetooth connection can be used to send and receive images, texts, gallery files, voice recordings, video clips, notes, business cards, and calendar notes. It can also be used to connect wirelessly to products that use Bluetooth wireless technology, such as computers. You can synchronize your phone and your PC using a Bluetooth connection.

Since devices with Bluetooth connectivity communicate using radio waves, your phone and the other device do not need to be in direct line-of-sight.

The two devices only need to be within a maximum of 30 feet (10 meters) of each other, although the connection can be subject to interference from obstructions such as walls or from other electronic devices.

The Bluetooth application consumes the battery and reduces the operating time of the phone. Take this into account when performing other operations with your phone.

There may be restrictions on using devices with Bluetooth connectivity. Check with your local authorities.

Your phone supports Bluetooth specification 1.1 and the following profiles:

- SIM access profile
- Object push profile
- File transfer profile
- Dial-up networking profile
- Headset profile
- Hands-free profile
- Generic access profile
- Serial port profile
- Generic access exchange profile

For compatibility between your phone and another device with Bluetooth connectivity, consult the device documentation and your Nokia dealer.

## PAIRING

You can set up a permanent association (pairing) between your phone and another device with Bluetooth connectivity. Some devices may require pairing before data transfer can take place.

To pair with a device, you and the owner of the other device must agree on a passcode of 1–16 numeric characters. The first time you try to connect the devices, you must each enter the same passcode. Once the devices are paired, you will not need to use the passcode again, so there is no need to remember it.

Paired devices are placed in your paired device list. You can view the list even when Bluetooth is not active or when the devices in the list are not available for connection.

To view the paired device list:

- 1 From the menus, select **Settings > Connectivity > Bluetooth > Paired devices**.
- 2 Scroll to the desired device, and select **Options** and one of the following:

**Assign short name**—Give a nickname (visible to you only) to the selected device.

**Request conn. authorization**—Select **No** if you want the phone to connect to the selected device automatically or **Yes** if you want the phone to ask for your permission first.

**Delete pairing**—Delete the pairing to the selected device.

**Pair new device**—Search for active devices with Bluetooth connectivity within range, scroll to the desired device, and select **Pair** to establish pairing with that device.

## SETTINGS


You can define how your phone is shown to other devices with Bluetooth connectivity.

From the menus, select **Settings > Connectivity > Bluetooth > Bluetooth settings** and one of the following:

**My phone's visibility**—Select **Shown to all** to show the phone to all other devices with Bluetooth connectivity or **Hidden** to show the phone only to the paired devices.

**My phone's name**—Change your phone name that is seen by other users.

## SET UP A BLUETOOTH CONNECTION

- 1 From the menus, select **Settings > Connectivity > Bluetooth**.
- 2 To activate the Bluetooth function, select **Bluetooth > On**.  
The active Bluetooth connection is indicated by  at the top of the display.
- 3 Select **Search for audio enhancements** to search for compatible devices with Bluetooth connectivity.  
The list of found devices appears in the display.
- 4 Select the desired device.
- 5 If required, enter the Bluetooth passcode of the device to pair with the device.  
Your phone connects to the device. You can start data transfer.
- 6 To view the device you are connected to, select **Active device**.
- 7 To deactivate Bluetooth, select **Bluetooth > Off**.

## SEND DATA

Instead of using the **Settings** menu, you can use other phone menus to send various types of data to other devices with Bluetooth connectivity. For example, you can send a video clip from the **Video clips** folder of the **Gallery** menu. See the appropriate sections of the user guide for information about sending different types of data.

## RECEIVE A DATA TRANSFER

When a Bluetooth connection is active in your phone, you can receive notes, business cards, video clips, and other types of data transfers from another device with Bluetooth connectivity. When you receive a data transfer, an alarm sounds, and a message appears in the start screen.

To view the transferred item immediately, select **Show**.

OR

To save the item for later viewing, select **Exit**.

Depending on the nature of the item it is saved in the appropriate menu in your phone. For example, a business card would be saved in **Contacts**, and a calendar note would be saved in **Calendar**.

## Infrared

You can set up the phone to receive data through its IR port. To use an IR connection, transmission and reception must be to or from an IR compatible phone or device. You can send or receive data such as business cards, graphics, images, sound clips, videos, and calendar notes to or from a compatible phone or data device (such as a computer) using the IR port of your phone.





**Warning:** Do not point the IR beam at anyone's eye or allow it to interfere with other IR devices. This device is a Class 1 laser product.

### SEND AND RECEIVE DATA

- 1 Ensure that the IR ports of the sending and receiving devices are pointing at each other and that there are no obstructions between the devices.  
The preferable distance between the two devices in an IR connection is from 3 inches to 3 feet.
- 2 Activate IR in your phone by selecting **Settings > Connectivity > Infrared** from the menus.
- 3 The user of the other device should activate IR as well.

If data transfer is not started within two minutes after the activation of the IR port, the connection is cancelled and must be restarted.

### CONNECTION INDICATOR

- When  is shown continuously, the IR connection is activated and your phone is ready to send or receive data using its IR port.
- When  blinks, your phone is trying to connect to the other device or a connection has been lost.

## GPRS, EDGE, CSD, HSCSD

With your phone you can use general packet radio service (GPRS), high-speed circuit switched data (HSCSD), and circuit switched data (CSD). The use of HSCSD services consumes the battery faster than normal voice or data calls. You may need to connect the phone to a charger during HSCSD data transfer.

With GPRS, you can stay connected to the mobile Internet and allow faster downloads without completing a dial-up connection. Applications using GPRS include MMS, SMS messaging, browsing sessions, e-mail, remote SyncML, Java application downloading, and the PC dial-up. Your phone can support three simultaneous GPRS connections.

Enhanced GPRS (EGPRS), also known as EDGE (enhanced data rates for GSM evolution) is similar to GPRS but the connection is much faster.

To use the EDGE service, subscribe to it from your service provider and save the GPRS settings for the functions that you want to use over the EDGE network. For information on pricing, availability, and data transfer speed, contact your service provider.

When you have selected GPRS as a data bearer, the phone uses EDGE instead of GPRS if this is available in the network. You cannot choose between EDGE and GPRS, but for some applications, such as browsing mobile Internet pages, you may be able to select either GPRS or CSD.

## DEFINE GPRS CONNECTION

Depending on your service, you may be able to define when the phone connects to the GPRS or EDGE network.

From the menus, select **Settings > Connectivity > GPRS > GPRS Connection** and one of the following:

**When needed**—The phone registers and connects to the GPRS or EDGE network only if you use a function that needs the GPRS service. Establishing a connection may take longer than when **Always online** is selected.

**Always online**—The phone automatically registers to a GPRS or EDGE network when you switch the phone on, if the network is available in your location.

## GPRS MODEM SETTINGS

When you use your Nokia phone as a wireless modem, you can enable GPRS connectivity from your PC or laptop computer.

Before you can use GPRS technology, you must save the GPRS settings for each of the applications used over GPRS. Some service providers may have already set up information for your GPRS dial-up connection.

In order to use GPRS, you must first subscribe to the network service. Contact your service provider for details.



- 1 From the menus, select **Settings > Connectivity > GPRS > GPRS modem settings > Active access point** and the access point that you want to activate.
- 2 Select **Edit active access point > Alias for access point**, enter the name for the access point, and select **OK**.
- 3 Select **GPRS access point**, enter the access point name to establish a connection to a GPRS network, and select **OK**.

You can also set the GPRS dial-up service settings (access point name) on your PC using the Nokia Modem Options software. See the Nokia PC Suite online help for more information. If you set the settings on both the phone and the PC, the PC settings will be used.



## GPRS ICONS

The following icons appear in the upper left corner of the screen to show you the status of your GPRS connection.

-  Indicates an active GPRS connection, for example, when you are using the browser.
-  Indicates that the GPRS connection has been interrupted by a voice call or text message.

## Data communication applications

For information on using a data communication application, refer to the documentation provided with the application.

If you use an IR connection, activate the IR connection in your phone by selecting **Settings > Connectivity > Infrared** from the menus. Also, make sure that the connection is active in your PC.

For better performance during an IR connection, place the phone on a stationary surface. Do not move the phone while the IR connection is active.

If you use the DKU-2 data cable:

- 1 Connect the cable to the USB port on your computer and to the Pop-Port™ connector on your phone.
- 2 Start using the data communications application on the computer.



**Note:** Making or answering phone calls during a computer connection is not recommended as it might disrupt the operation.

## • CALL SETTINGS

### Automatic volume control

Automatic volume control automatically adjusts the phone earpiece volume according to the noise level in your environment and the volume of the speaker on the other end of the call. For example, if you are in a noisy environment, the volume is increased. If the person to whom you are speaking is speaking loudly, the volume is decreased.

Automatic volume control is not available if you are using a headset or other accessory.

## FROM THE MENU

- 1 From the menus, select **Settings > Call settings > Automatic volume control**.
- 2 Select **On** to activate or **Off** to deactivate.  
The default setting is **Off**.

## DURING A CALL



**Note:** Setting automatic volume control during an active call affects only the current call.

- 1 During a call, select **Options**.
- 2 Select **Auto volume on** to activate or **Auto volume off** to deactivate.

If you change the volume during an active call by pressing the **Volume up** or **Volume down** key, the phone volume level changes regardless of whether or not automatic volume control is activated.

When you end the call, the volume returns to the level set before automatic volume control was activated.

## Call forwarding

Call forwarding tells your network to redirect incoming calls to another number.

Call forwarding is a network service and may not work the same in all networks. Contact your service provider for more information.

## ACTIVATE CALL FORWARDING

- 1 From the menus, select **Settings > Call settings > Call forwarding** and one of the following:  
**Forward all voice calls**—Forward all calls to the number you specify.  
**Forward if busy**—Forward all calls when you are in a call.  
**Forward if not answered**—Forward all calls to another number if you do not answer. You can also set a delay before forwarding takes place.  
**Forward if out of reach**—Forward all calls when your phone is turned off or out of the coverage area.  
**Forward if not available**—Forward all calls when you do not answer, your phone is busy or turned off, or out of the coverage area. You can also set a delay before forwarding takes place.  
**Forward all data calls**—Forward all data calls to a data mailbox.  
**Cancel all call forwarding**—Cancel any call forwarding options you may have set.
- 2 Select **Activate**.

- 3 Select the destination to which your calls will be forwarded.
- 4 Enter the number to which your calls, data, or other information will be forwarded, and select **OK**; or select **Find** to retrieve a number from contacts.
- 5 If required, select the delay time before the call is forwarded.

Your phone calls the network to activate the feature you have requested. The network sends a confirmation note when the feature has been activated successfully.

## CANCEL CALL FORWARDING

- 1 From the menus, select **Settings > Call settings > Call forwarding**.
- 2 Select **Cancel all call forwarding**.

OR

Select one of the call forwarding options, and select **Cancel**.



**Note:** Canceling all call forwarding may affect your ability to receive voice mail messages. Contact your service provider for specific details.

## Anykey answer

Anykey answer allows you to answer an incoming call by briefly pressing any key except the **Power** key, the selection keys, and the **End key**.

From the menus, select **Settings > Call settings > Anykey answer > On or Off**.

## Automatic redial

Occasionally, your network may experience heavy traffic, resulting in a *fast* busy signal when you dial. With automatic redial activated, your phone redials the number up to 10 times, and notifies you once the network is available.

From the menus, select **Settings > Call settings > Automatic redial > On or Off**.

## 1-touch dialing

You can turn the 1-touch dialing feature on and off. For more information, see “1-touch dialing” on page 76.

From the menus, select **Settings > Call settings > 1-touch dialing > On or Off**.

## Call waiting

If supported by your service provider, call waiting notifies you of an incoming call even while you are in a call. You can accept, reject, or ignore the incoming call.

## ACTIVATE OR DEACTIVATE

From the menus, select **Settings > Call settings > Call waiting > Activate or Cancel**.

## CHECK STATUS

You can see whether call waiting is active, and for which type of calls.

From the menus, select **Settings > Call settings > Call waiting > Check status**.

## USE CALL WAITING

- 1 During a call, press the **Talk** key to answer the waiting call.  
The first call is put on hold.
- 2 Press the **End** key to end the active call.

## Summary after call

You can display the time spent on a call when you hang up.

From the menus, select **Settings > Call settings > Summary after call > On or Off**.

## Send my caller identity

You can prevent your number from being displayed on the receiving party's caller ID. This feature is a network service and works on a call-by-call basis. Contact your service provider for more information.

From the menus, select **Settings > Call settings > Send my caller ID > Set by network, Yes, or No**.

## Select a line for outgoing calls

This is a network service. Check with your service provider for availability and a description of the feature.

- 1 From the menus, select **Settings > Call settings > Line for outgoing calls > Line 1 or Line 2**.  
If you select **Line 2** but have not subscribed to this network service, you will not be able to place calls. However, calls on both lines can be answered regardless of the selected line.  
If supported by your SIM card, you can prevent the line selection by using the **Lock** option.
- 2 In the start screen, press and hold the **#** key to switch from one line to the other.

## • PHONE SETTINGS

### Language

From the menus, select **Settings > Phone settings > Phone language** and the desired language for the phone display.

### Phone memory

You can check the amount of memory available in the phone and in the MultiMediaCard.

- 1 From the menus, select **Settings > Phone settings > Memory status > Handset or Memory card**.

For the handset, you can view **Size, Free memory, Used memory, Contacts, Text messages, Multimedia msgs., Gallery, Organizer, and Applications**. For the MultiMediaCard, you can view **Size, Free memory, and Used memory**.

- 2 Scroll through the list to view the memory associated with each item.

For more information, see “Shared memory” on page 3.

### Automatic keyguard

You can set the keypad of your phone to lock automatically after a preset time delay (from 5 seconds to 60 minutes). When the preset delay expires, the keypad locks automatically.

When the keyguard is on, calls still may be possible to the official emergency number programmed into your phone. Enter the emergency number and press the **Send** key.

- 1 From the menus, select **Settings > Phone settings > Automatic keyguard > On or Off**.
- 2 If you selected **On**, at the **Set delay** prompt, enter the delay (in *mm:ss* format), and select **OK**.

### Security keyguard

You can set the phone to ask for the security code when you unlock the keyguard.

- 1 From the menus, select **Settings > Phone settings > Security keyguard**.
- 2 Enter the security code, and select **OK**.
- 3 Select **On** to activate or **Off** to deactivate.

## Cell info display

Cell info display is a network service and may not work the same in all networks. Contact your service provider for availability.

When this function is selected, your phone will indicate when it is used in a system cell based on microcellular network (MCN) technology. MCN technology increases the capacity of wireless networks in urban areas. The setting will remain in effect even if the SIM card is changed or the phone is switched off.

From the menus, select **Settings > Phone settings > Cell info display > On or Off**.

## Welcome note

You can write a welcome note which shows up briefly on your display whenever you power up your phone.

Predictive text input cannot be used for entering welcome note text.

- 1 From the menus, select **Settings > Phone settings > Welcome note**.
- 2 Enter a note (up to 44 characters).  
Press the \* key to display and select from available special characters and smileys. For more information, see "Special characters and smileys" on page 28.
- 3 When you are finished, select **Save**.

## System selection

You may be able to manually search for another network which has a roaming agreement with your home service provider.

From the menus, select **Settings > Phone settings > Operator selection** and one of the following:

**Automatic**—Your phone defaults to those settings which have been preset by your service provider.

**Manual**—Your phone searches for a network which has a roaming agreement with your service provider.

If **No system access** appears in the display, you will need to switch to **Automatic** mode, or insert another SIM card into the phone.

## Confirm SIM service actions

This option allows you to request notification when your service provider makes changes to SIM-related services (such as activating GPRS service).

- 1 From the menus, select **Settings > Phone settings > Confirm SIM service actions**.
- 2 Select **Yes** to request notification or **No** to prevent notification.

## Help text

Your phone displays brief descriptions for most menu items. When you arrive at a feature or menu, pause for about 15 seconds to allow the help text to appear. Select **More** to view all of the description (if necessary), or select **Back** to return to the menu.

You can turn help text on or off. The default setting is on.

From the menus, select **Settings > Phone settings > Help text activation > On or Off**.

## Start-up tone

You can set your phone to play (or not to play) a start-up tone when the phone is switched on.

From the menus, select **Settings > Phone settings > Start-up tone > On or Off**.

## • PRESENCE SETTINGS

Contact your service provider for the settings required for presence. You may be able to receive presence settings as a connection settings message. See “Connection settings service” on page 16.

Use this procedure to enter the settings manually.

- 1 From the menus, select **Settings > Presence settings > Current presence settings**.
- 2 Scroll to the set that you want to activate, and select **Activate**.  
The service settings are activated for the selected set.
- 3 Select **Edit current presence settings**, and enter the required settings from your service provider.

## • ENHANCEMENT SETTINGS

The **Enhancement settings** menu is shown only if the phone is or has been connected to one of the compatible enhancements such as the headset or music stand.

Each compatible enhancement appears in the **Enhancement settings** menu only after it has been connected to the phone. Once an enhancement has been connected, it always appears in the menu even if it is not currently connected.

- 1 From the menus, select **Settings > Enhancement settings > Headset, Handsfree, Loopset, TTY/TDD, Music stand, or Charger.**  
A list of options appears in the display.
- 2 Select the option of your choice and follow the prompts.

## Headset options

**Default profile**—Choose the profile you wish to be automatically activated when a headset is connected.

**Automatic answer**—Calls are answered automatically after one ring when a headset is connected. Select **On** or **Off**.

## Hands-free options

Hands-free options are available when the phone is connected to a car kit.

**Default profile**—Choose the profile you wish to use when your phone is connected to a car kit.

**Automatic answer**—Calls are answered automatically after one ring when a car kit is connected. Select **On** or **Off**.

**Lights**—Choose to keep the phone lights always on, or to shut off automatically after several seconds. Select **On** or **Automatic**.

**Ignition sense**—When the phone is connected to the full car kit, this feature prevents the phone from draining the car battery when the car ignition is off. Select **Ignition on** to automatically switch off the phone approximately 20 seconds after the car ignition is turned off. Select **Ignition off** to leave the phone on when the car ignition is turned off. This option is available only if the car kit has the ignition sense feature installed.

## Loopset options

**Use loopset**—Enable use of the LPS-4 mobile inductive loopset. Select **Yes** or **No**.

**Default profile**—Choose the profile you wish to be automatically activated when a loopset is connected.

**Automatic answer**—Calls are answered automatically after one ring when a loopset is connected. Select **On** or **Off**.

## TTY/TDD options

**Use TTY**—Activates the TTY feature. Select **Yes** to activate TTY or **No** to deactivate.



## Music stand options

**Default profile**—Choose the profile you wish to be automatically activated when your phone is connected to the music stand.

**Automatic answer**—Calls are answered automatically after one ring when the phone is connected. Select **On** or **Off**.

**Lights**—Choose to keep the phone lights always on, or to shut off automatically after several seconds. Select **On** or **Automatic**.

## Charger options

**Default profile**—Choose the profile you wish to be automatically activated when your phone is connected to the charger.

**Lights**—Choose to keep the phone lights always on, or to shut off automatically after several seconds. Select **On** or **Automatic**.

## • SECURITY SETTINGS

For information about security features, see “Phone security” on page 29.

## • RESTORE FACTORY SETTINGS

You can reset some of the menu settings to their original values. However, data that you have entered or downloaded is not deleted. For example, names and numbers in contacts are not affected.

- 1 From the menus, select **Settings > Restore factory settings**.
- 2 Enter the security code (the default is 12345), and select **OK**.

A message appears in the display confirming that original settings have been restored.

## 12 Gallery



You can save pictures, video clips, recordings, and ringing tones to folders in the gallery, and add new folders to the ones already there. You can download images and tones using MMS, mobile Internet sites, or Nokia PC Suite.

Your phone supports a digital rights management system to protect content that you have acquired. A piece of content, such as a ringing tone, can be protected and associated with certain usage rules, for example, the number of usage times or a certain usage period. The rules are defined in the content activation key that can be delivered with the content or separately, depending on the service provider. You may be able to update these activation keys. Always check the delivery terms of any content and activation key before acquiring them, as they may be subject to a fee.

Copyright protection may prevent some images, ringing tones, and other content from being copied, modified, transferred, or forwarded.

Your phone has about 8 MB of memory for storing files in the gallery. This memory is *not* shared with other functions, such as contacts. If the phone displays a message that the memory is full, delete some existing files before proceeding. You can also use a compatible MultiMediaCard to add up to 256 MB of memory.

### • FOLDERS

- 1 From the menus, select **Gallery**.

A list of folders is displayed. **Images**, **Video clips**, **Music files**, **Graphics**, **Tones**, and **Recordings** are preset in the phone. If there is a MultiMediaCard in the phone, a MultiMediaCard icon is also displayed.

- 2 Scroll to a folder, and select **Open** to view a list of the files in the folder.

OR

Select **Options** to access the following:

**Delete folder**—Delete a folder you have created. You cannot delete a preset folder.

**Move**—Move the selected folder into another folder. After selecting **Move**, scroll to another folder, and select **Options > Move here**. You cannot move a preset folder.

**Rename folder**—Rename a folder you have created. You cannot rename a preset folder.

**Set password**—Create a password (1–8 characters) for the MultiMediaCard, to protect it against unauthorized use. This option is available only for the MultiMediaCard folder.

**Change password**—Change the MultiMediaCard password that you have created. This option is available only for the MultiMediaCard folder.

**Delete password**—Delete the MultiMediaCard password that you have created. This option is available only for the MultiMediaCard folder.

**Rename mem. card**—Enter a name for the MultiMediaCard. This option is available only for the MultiMediaCard folder.

**Format mem. card**—Delete all files and folders stored on the MultiMediaCard. This option is available only for the MultiMediaCard folder.

**Details**—Show the name, size, and date of creation of the selected folder.

**Type of view**—Select **List with icons**, **List**, or **Grid** to determine how the folders and the files within folders are displayed.

**Sort**—Sort the contents of the selected folder by name, date, format, or size.

**Add folder**—Create a new folder.

**Memory status**—Check the available memory for the phone handset or the MultiMediaCard.

**Activation key list**—View the list of available activation keys. You can delete activation keys if desired.

**Downloads**—Download more images, tones, or videos. Select **Graphic downloads**, **Tone downloads**, or **Video downloads**; then select a site. Selecting **More bookmarks** displays the list of bookmarks in the **Services** menu.

When you select **Downloads**, the phone tries to connect to the mobile Internet using your browser and the currently active set of gallery downloads. If the connection fails, you may need to activate another set or change the current settings. See “Set up for browsing” on page 139 for more information.

## • FOLDER ITEMS

- 1 From the menus, select **Gallery**.  
A list of folders appears in the display.
- 2 Scroll to a folder, and select **Open**.  
A list of files appears in the display.

### 3 Scroll to a file, and select **Options**.

Depending on the type of file, some of the following options appear:

**Play**—Play a multimedia file.

**Pause**—Pause a multimedia file that is playing.

**Zoom**—Display a zoomed-in version of the image. Use the scroll keys to move around in the image.

**Open**—Open the selected file.

**Delete**—Delete the selected file.

**Send**—Send the selected file as a multimedia message or by Bluetooth or IR connection. The **Send** option may not be available if the selected file (either image or sound) is copyrighted.

**Edit image**—Start the image editor.

**Move**—Move the file to another folder.

**Rename**—Rename the selected file.

**Mute audio**—Mute a sound file.

**Unmute audio**—Unmute a muted sound file.

**Set contrast**—Adjust the contrast in the image.

**Set as wallpaper**—Set the image as wallpaper.

**Set as ring tone**—Use the tone as the ringing tone in the current profile.

**Details**—View details of the file, such as the name, time, and date the file was created.

**Sort**—Sort the files according to date, type, name, or size.

**Delete all**—Delete all items in the current Gallery folder.

**Open in sequence**—View all of the images in the folder sequentially as a slide show, or listen to each of the tones in sequence.

**Type of view**—Select **List with icons**, **List**, or **Grid** to determine how the folders and the files within folders are displayed.

**Add folder**—Create a new folder.

**Memory status**—Check the available memory for the phone handset or the MultiMediaCard.

**Activation key list**—View the list of available activation keys. You can delete activation keys if desired.

**Activate content**—Update the activation key of the selected file. This option is shown only if the file supports activation key updating.

## • EDIT AN IMAGE

- 1 From the menus, select **Gallery**.
- 2 Select a folder that contains images, and select **Open**.
- 3 Scroll to an image, and select **Options > Edit image > Options**.  
Options include **Insert text**, **Insert frame**, **Insert clip-art**, and **Crop image**.

To insert text in the center of the image:

- 1 Select **Insert text**.
- 2 Enter text in the text editor, and select **OK**.
- 3 To change the appearance of the inserted text, select **Options > Font style**, **Font size**, **Font color**, or **Rotate**, and follow the prompts.
- 4 When you are satisfied with the appearance of the inserted text, select **OK**.

To put a frame around the image:

- 1 Select **Options > Insert frame**.
- 2 Scroll to one of the frame images in the **Graphics > Clip-arts** folder, and select **Options > Insert**.
- 3 When the image is displayed with the frame added, select **OK**.

To insert clip art in the image:

- 1 Select **Options > Insert clip-art**.
- 2 Scroll to an image in a folder containing images, and select **Options > Insert**.  
The image is displayed with the clip art added.
- 3 Use the scroll keys to move the clip art up, down, left, and right on the image.
- 4 To change the size and shape of the clip art, select **Options > Rescale**, and use the scroll keys to move the bottom and right borders of the clip art.
- 5 To move the clip art, select **Options > Move**, and use the scroll keys to move the clip art within the image.
- 6 When you are satisfied with the size and position of the clip art, select **OK**.

To crop the image:

- 1 Select **Options > Crop image > Portrait size** or **Adjustable size**.  
The image appears with a marking box to indicate the part of the image that is being cropped.
- 2 Use the scroll keys to move the marking box up, down, left, and right on the image.

- 3 To change the size of the marking box, select **Options > Rescale**, and use the scroll keys to move the bottom and right borders of the box.
- 4 To change the position of the marking box, select **Options > Move**, and use the scroll keys to move the box.
- 5 To toggle between **Rescale** mode and **Move** mode, press the # key.
- 6 When you are satisfied with the size and position of the marking box, select **OK**.
- 7 The portion of the image inside of the marking box appears in the display.

To save the edited image:

- 1 Select **Save**.
- 2 Enter a name for the image, and select **OK**.
- 3 Scroll to the folder where you want to save the image, and select **Options > Save**.

# 13 Media



## • CAMERA

You can take photos and record video clips with the built-in camera and adjust its settings. The camera lens is on the back of the phone, and the color display of the phone works as a viewfinder. The camera produces photos in JPEG format and video clips in H.263 (SubQCIF) format. After you have taken a picture or video, you can attach it to a multimedia message, and send it with MMS, save it as wallpaper in the standby mode, save it in a compatible PC using Nokia PC Suite software, and upload it to a Web address with the content image uploader. When you attach a picture to an entry in your list of contacts, the picture is displayed when your contact calls you.

If there is not enough memory to take a new photo, you need to free some by deleting old photos or other files in the gallery.

### Take a photo

- 1 To open the camera viewfinder quickly with standard photo view, press the **Scroll up** key at the start screen; then press the **Scroll right** and **Scroll left** keys to switch to portrait photo, night mode, or video.

OR

From the menus, select **Media > Camera** and one of the following:

**Standard photo**—Lets you take a photo in landscape orientation under normal lighting conditions.

**Portrait photo**—Lets you take a photo in portrait orientation that can be added to a name/phone number saved in contacts.

**Night mode**—Lets you take a photo in landscape orientation in dim lighting.

- 2 The live image appears on the display, and you can use the display as a viewfinder.

- 3 To use the self-timer, select **Options > Self-timer > Start**.

OR

To take a photo immediately, select **Capture**.

If the self-timer is running, the phone beeps repeatedly. When the photo is taken, a shutter sound is heard. The phone saves the photo in the **Images** folder of the **Gallery** menu. The saved photo is shown on the display.

- 4 Select **Back** to take another photo.

OR

Select **Delete** to delete the photo.

OR

Select **Options** and one of the following:

**Zoom**—Display a zoomed-in version of the photo. When a photo is zoomed, the photo is not stored permanently in the zoomed size. You cannot edit or send a zoomed photo. Select **Back** to display the image in normal size.

**Send**—Send the selected photo as a multimedia message or using IR or Bluetooth.

**Attach to contact**—Add the photo to an entry in the contact list. Scroll to the desired entry, and select **Attach**. This option is only available in portrait mode.

**Rename**—Rename the selected photo.

**Open Gallery**—Display the **Images** folder in the **Gallery**.

**Set contrast**—Increase or decrease contrast of the selected photo using the **Scroll right** and **Scroll left** keys.

**Set as wallpaper**—Set the photo as wallpaper.


**Details**—View details of the photo, such as the name, size, time and date the photo was taken, image resolution, file format, and copyright information.

## Record a video clip

- 1 From the menus, select **Media > Camera > Video**.

The live image appears in the display.

- 2 To start the video, select **Record**.

While you are recording, the  indicator and the remaining recording time are shown at the top of the display.

- 3 Select **Pause** to pause the recording and **Continue** to resume the recording.
- 4 Select **Stop** to stop the recording.

The phone saves the recording in the **Video clips** folder of the **Gallery** menu.



- 5 Select **Back** to record another video.

OR

Select **Play** to view the video.

OR

Select **Options** and one of the following:

**Delete**—Delete the video clip.

**Send**—Send the video clip to another device as a multimedia message or using IR or Bluetooth connectivity.

**Rename**—Rename the video clip.

**Open Gallery**—Go to the **Video clips** folder in the gallery.

**Mute audio** or **Unmute audio**—Turn the sound on or off.

**Set contrast**—Increase or decrease contrast of the selected video using the **Scroll right** and **Scroll left** keys.

**Details**—View details of the selected video, such as name, size, time and date created, length, file format, and copyright information.

## Settings

You can select the image quality, turn camera sounds on and off, and define a default title to be used when you save a photo.

From the menus, select **Media > Camera > Settings** and one of the following:

**Image quality**—Define file compression when saving the image. Select **High**, **Normal**, or **Basic**. **High** has the least file compression and provides the best image quality, but takes more memory.

**Video clip length**—Select **Default** or **Maximum**. The maximum is approximately 4 minutes depending on conditions. Only video clips that are default length or shorter can be sent in a multimedia message.

**Camera sounds**—Set the shutter and self-timer sounds to **On** or **Off**.

**Default title**—Define the title that will be used when saving a photo. If you select **Automatic**, the default title will be used. If you select **My title**, you can enter or edit a new title.

**Image storage**—Define the folder where photos or videos are stored. Select **Default** folder to use the default folder or **Other folder** to select the folder of your choice.

## • MEDIA PLAYER

With the media player you can download, view, and play compatible images, audio and video files, and animated images from a variety of sources.

The media player allows you to play streaming videos and streaming audio from a network server. Streaming functionality is a network service and requires network support. Check the availability of these services, pricing, and tariffs with your network operator or the service provider whose service you wish to use. Service providers will also give you instructions on how to use their services.

From the menus, select **Media > Media player** and one of the following:

**Open Gallery**—Open the gallery. From the gallery, you can play stored audio and video files. See “Gallery” on page 101.

**Bookmarks**—Open the list of bookmarks in the Services menu. See “Bookmarks” on page 142.

**Go to address**—Enter the address of a mobile Internet service, and select **OK**.

**Media downloads**—Download more graphics, tones, or videos to your phone. Download content only from sources you trust.

**Streaming sett.**—Set the connection settings for the media service. Contact your service provider for information about connection settings.

### Set up the phone for a streaming service

For more information and for the appropriate settings, contact the network operator or service provider that offers the service that you want to use. You may receive the streaming settings as a connection settings message from the network operator or service provider that offers the service that you want to use. See “Connection settings service” on page 16.

To add and edit the settings with Nokia PC Suite, see the Nokia PC Suite online help.

To key in the settings manually:

- 1 From the menus, select **Media > Media player > Streaming sett. > Active connection settings**.
- 2 Scroll to the connection set you would like to activate, and select **Activate**.
- 3 Select **Edit active connection settings**.

Select each of the settings one by one, and key in all the required settings according to the information you have received from your network operator or service provider.

## • MUSIC PLAYER

Your phone includes a music player for listening to music or other tracks in MP3 or AAC format. You can transfer files from a PC to your phone through Nokia Audio Manager. To transfer music tracks from a compatible PC and manage the music tracks and track lists, see the instructions for the Nokia Audio Manager application in the Nokia PC Suite online help.

Music files stored in the **Music player** folder are automatically detected and added to the default play list. Music files stored elsewhere, such as in a MultiMediaCard folder, must be defined in the play list before you can listen to them.

You can listen to the sound files through a compatible headset or the phone loudspeaker.

You can make or answer a call while using the music player. During a call, the playback is paused.

### Play music tracks

From the menus, select **Media > Music player**.

The details of the first track on the default track list are shown.

To play a track, scroll to the track that you want, and select **Play** or press the **Scroll right** key.

To adjust the volume level, use the volume keys on the side of the phone.

To stop the playing, select **Stop**, or press the **Scroll left** key.

To skip to the beginning of the next track, press the **Scroll down** key. To skip to the beginning of the previous track, press the **Scroll up** key twice.

To rewind the current track, press and hold the **Scroll up** key. To fast forward the current track, press and hold the **Scroll down** key. Release the key at the position you want.



**Note:** Listen to music at a moderate level. Continuous exposure to high volume may damage your hearing.

### Music player settings

From the menus, select **Media > Music player > Options** and one of the following:

**Play options**—Select **Random** to play the tracks on the track list in random order. Select **Repeat** to play the current track or the entire track list repeatedly.

**Music downloads**—Connect to a browser service related to the current track. This function is only available when the address of the service is included in the track.

**Loudspeaker**—Listen to the music player through the phone loudspeaker.

**Headset**—Listen to the music player through a compatible headset connected to the phone. When using a compatible headset, you can skip to the next track by pressing the headset key quickly. To stop the playing, press and hold the headset key.

**Track list**—View all the tracks available on the track list and play the desired track. To play a track, scroll to the desired track, and select **Play** or press the **Scroll right** key. Select **Options** to refresh the track list (for example, after adding new tracks to the list), and change the track list that is shown when you open the **Music player** menu if several track lists are available in the phone.

## • RADIO

Your phone has an FM radio that also functions as an alarm clock radio. You can listen to the FM radio on your phone through the hands-free speaker or with a headset. For FM stereo, connect a compatible music stand or stereo headset to the connector on the bottom of the phone.

The FM radio uses the wire of the headset as an antenna. A compatible headset must be attached to the device for the FM radio to function.

The quality of a radio broadcast depends on coverage of the radio station in that particular area.



**Note:** Listen to music at a moderate level. Continuous exposure to high volume may damage your hearing.

### Turn the radio on and off

- 1 Connect the phone to a compatible headset or music stand.
- 2 From the menus, select **Media > Radio**.
- 3 To turn off the radio, press and hold the **End** key.

### Use the radio

With the radio on, select **Options** and one of the following:

**Turn off**—Turn off the radio.

**Save channel**—Save the current station to one of 20 locations.

**Automatic tuning**—Briefly press the **Scroll up** key or the **Scroll down** key to start the channel search up or down. Select **OK** when a channel is found.

**Manual tuning**—Press the **Scroll up** key or the **Scroll down** key to search in increments of 0.05 MHz.

**Set frequency**—Manually enter the frequency of a known radio station.

**Delete channel**—Delete a saved channel.

**Rename**—Enter a new name for the saved channel, and select **OK**.

**Loudspeaker or Headset**—Listen to the radio through the speakerphone or through the headset.

**Mono output or Stereo output**—Listen to the radio in monaural mode (default) or in stereo. Stereo output is available through a stereo enhancement.

To set the radio frequency, press the **\*** key and use the keypad to enter the frequency of a known radio station. To tune the radio manually, press the **#** key; then press the **Scroll up** key or the **Scroll down** key to search in increments of 0.05 MHz.

To adjust the radio volume, press the **Volume up** and **Volume down** keys.

When an application using a GPRS connection is sending or receiving data, it may interfere with the radio.

When you place or receive a call, the radio automatically mutes. Once the call is ended, the radio switches back on.

## Save a radio channel

You can save a preset station to any one of 20 locations in memory, and then tune to that station by pressing the **Scroll up** key or the **Scroll down** key with the radio on.

- 1 With the radio on, press and hold the **Scroll up** key or the **Scroll down** key to start the channel search.

Searching stops when a channel is found.

- 2 To save the channel, select **Options > Save channel**.
- 3 Enter a name for the channel, and select **OK**.
- 4 Select an **(empty)** location to save the channel.

To save an FM station quickly to 1–9 memory locations, press and hold the corresponding number key while the radio is playing. Then, enter the name of the channel, and select **OK**.

## • VOICE RECORDER

You can make a short (up to 3 minutes) recording and save it to the **Recordings** folder or another folder in the Gallery. You can also record your phone calls.

### Make a recording

- 1 From the menus, select **Media > Voice recorder**.
- 2 To start the recording, select **Record**.
- 3 Hold the phone in the normal position near your ear, and record your message.
- 4 To stop the recording, select **Stop**.  
The recording is saved in the **Recordings** folder of the Gallery.
- 5 To replay the latest recording, select **Play last recorded**.
- 6 To send the latest recording as a multimedia message or by IR or Bluetooth connectivity to a compatible phone, select **Send last recorded**.

### Record a phone call

During a call, select **Options > Record**. To stop recording, select **Stop**.

While the call is being recorded, all parties to the call can hear a faint beeping sound approximately every 5 seconds.

The recording is saved in the **Recordings** folder of the Gallery.

### Define a storage folder

You can select a folder other than **Recordings** as the default folder to store your voice recordings.

- 1 From the menus, select **Media > Voice recorder > Select memory**.
- 2 Scroll to a folder in the gallery, and select **Options > Select**.

### Manage recordings

- 1 From the menus, select **Media > Voice recorder > Recordings list**.
- 2 Scroll to the **Recordings** folder or the folder that you have defined for storing recordings, and select **Open**.
- 3 Use the options available in the Gallery. See "Folder items" on page 102.

## • MEDIA EQUALIZER

The equalizer enhances the sound quality when using the music player by amplifying or attenuating frequency bands. There are five preset equalizer settings (Normal, Pop, Rock, Jazz, and Classical) and two customizable settings.

### Activate an equalizer set

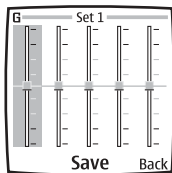
From the menus, select **Media > Media Equalizer**, scroll to the desired setting, and select **Activate**.

### Create a custom equalizer set

- 1 From the menus, select **Media > Media Equalizer**.
- 2 Scroll to **Set 1** or **Set 2**, and select **Options > Edit**.

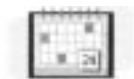
The selected set appears in the display with the bar on the far left highlighted.

The bars adjust frequencies, from the lowest (the leftmost bar) to the highest (the rightmost bar). The higher the indicator on a particular bar, the more that frequency is amplified.



- 3 To adjust the lowest frequency, use the **Scroll up** and **Scroll down** keys to move the indicator up and down on the bar.
- 4 To adjust other frequencies, use the **Scroll left** and **Scroll right** keys to move to the other bars.
- 5 Repeat steps 3 and 4 to adjust the setting for each frequency.
- 6 When you are finished, select **Save**.
- 7 To rename the setting, select **Options > Rename**, enter a new name, and select **OK**.
- 8 To activate the setting, select **Activate**.

# 14 Organizer



Your phone has many useful features for organizing your everyday life, including an alarm clock, a calendar, and a to-do list.

## • ALARM CLOCK

The alarm clock is based on the internal clock of your phone. It sounds an alert or turns on the built-in FM radio at the time you specify. The alarm works even if the phone is off, as long as there is enough power in the battery. When the alarm is triggered, the clock radio alarm stays on until the radio is turned off.

### Select an alarm tone

From the menus, select **Organizer > Alarm clock > Alarm tone** and one of the following:

**Standard**—Select the default alarm tone.


**Radio**—Use the radio as an alarm. If you select this option, connect the headset to the phone. The phone uses the last channel you listened to as an alarm tone. If the headset is not connected, the default alarm tone is used.

**Ringtone**—Select an alarm tone from the ringtone list.


**Open Gallery**—Select a sound clip from a gallery folder to use as an alarm. Open a folder that contains tones, scroll to the tone you want, and select **Options > Select**.

### Set an alarm

#### NOT ALREADY SET

- 1 From the menus, select **Organizer > Alarm clock > Alarm time**.
- 2 Enter the time for the alarm in *hh:mm* format, and select **OK > am or pm**.  
Alarm on appears briefly in the display, and  appears on the start screen.

#### ALREADY SET

- 1 From the menus, select **Organizer > Alarm clock > Alarm time > On**.
- 2 Enter the time for the alarm in *hh:mm* format, and select **OK > am or pm**.  
Alarm on appears briefly in the display, and  appears on the start screen.



## REPEAT ALARM

You can set the alarm clock to alert you on selected days of the week.

- 1 From the menus, select **Organizer > Alarm clock > Repeat alarm > Repetition days**.
- 2 Scroll to each desired day, and select **Mark**.  
OR  
To mark all days, select **Options > Mark all**.
- 3 When you are finished, select **Done**.

## Turn off an alarm setting

From the menus, select **Organizer > Alarm clock > Alarm time > Off**.

**Alarm off** appears briefly in the display.

## When the alarm sounds

Your phone beeps, vibrates, and the display lights up. **OK** and **Snooze** appear in the bottom of the display.

### WITH THE PHONE ON

Select **OK** to shut the alarm off.

OR

Select **Snooze**. The alarm stops for 10 minutes, and **Snoozing** appears in the display.

If you do not press a key, the alarms stops (snoozes) for 10 minutes, then sounds again.

### WITH THE PHONE OFF

If the alarm time is reached while the device is switched off, the device switches itself on and starts sounding the alarm tone. If you select **Stop**, the device asks whether you want to activate the device for calls. Select **No** to switch off the device or **Yes** to make and receive calls. Do not select **Yes** when wireless phone use may cause interference or danger.

## • CALENDAR

The calendar keeps track of reminders, calls you need to make, meetings, and birthdays. It can even sound an alarm for any of these events.

### Open the Calendar

From the menus, select **Organizer > Calendar**.

OR

Press the **Scroll right** key at the start screen.

After a brief pause, the month view of the calendar appears in the display with the current date highlighted. You can move to another date by using the four-way scroll keys like a joystick.

### Month view

The month view provides an overview of the selected month and weeks. It also allows you to jump to a specific date. Any days or dates that appear in bold font contain calendar notes such as a meeting or reminder.



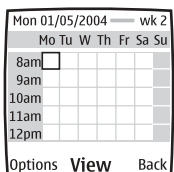
Month view

### Week view

The week view displays one week at a time, with each day divided into one-hour blocks.

In the month view, select **Options > Week view**.

To return to the month view, select **Back**.



Week view

### Calendar settings

In either the month view or the week view, select **Options > Settings** and one of the following:

**Set the date**—Enter the current date, and select **OK**.

**Set the time**—Enter the current time, and select **OK > am or pm** (if required).

**Time zone**—Select your time zone.

**Date format**—Select the format for the date that is displayed in the start screen.

**Date separator**—Select the separator (period, slash, hyphen, or space) for the date that is displayed in the start screen.

**Time format**—Select **12-hour** or **24-hour**.

**Week starts**—Select the first day of the week (Saturday, Sunday, or Monday). This selection affects both the month view and the week view.

**Auto-delete**—Set the phone to delete calendar notes automatically after a day, a week, or a month, or to never delete notes. Even if you set the phone for automatic deletion, repeating notes such as birthdays are not deleted.

## Go to a date

- 1 In either the month view or the week view, select **Options > Go to date**.
- 2 Enter the date (for example, 01/05/2004), and select **OK**.

The month or week view appears in the display with the jump date highlighted.

## Make a calendar note

You can choose from five types of notes: **Meeting**, **Call**, **Birthday**, **Memo**, and **Reminder**. Your phone asks for further information depending on which note you choose. You can also set an alarm for any note.

- 1 Go to the date for which you want to make a note, and select **Options > Make a note** and one of the following:



**Meeting** prompts you to enter a subject, a location, and a start and end time. You can then set an alarm, with or without an alarm tone.



**Call** prompts you to enter a phone number, a name, and the time. You can then set an alarm, with or without an alarm tone.



**Birthday** prompts you to enter the person's name, and year of birth. You can then set an alarm, with or without an alarm tone.



**Memo** prompts you to enter a subject and a start and end date. You can then set an alarm, with or without an alarm tone.



**Reminder** prompts you to enter the subject you wish to be reminded about. You can then set an alarm, with or without an alarm tone.

- 2 Enter the information requested by the prompts.

## View calendar notes (the day view)

After you have created some calendar notes, you can view them as follows:

- 1 From the menus, select **Organizer > Calendar**.  
After a brief pause, the monthly view appears in the display with the current date highlighted. Any dates that contain calendar notes are in bold.
- 2 Use four-way scrolling to go to the date containing the note.
- 3 Select **View**.  
The headers of any notes you have for the day appear in a list format.
- 4 Scroll to the desired note, and select **View**.  
The body of the note appears in the display.

## Calendar note options

While viewing the header or the body of a note, select **Options** and one of the following:

**Make a note**—Make another note for the selected date (not available when viewing the body of a note).

**Delete**—Delete the note.

**Edit**—Edit the note (not available when viewing the body of a note).

**Move**—Move the note to another date on your calendar.

**Repeat**—Make the note recur on a regular basis (daily, weekly, biweekly, monthly, and yearly).

**Go to date**—Jump to another date on your calendar (not available when viewing the body of a note).

**Send note**—Send the note to another device using IR or Bluetooth connectivity, as a text or multimedia message or as a note to another compatible phone calendar.

**Copy**—Copy the note. You can then paste the note to another date.

**Settings**—Set the date and time, date and time format, the day each week starts, and whether you want your notes to autodelete after a specified time.

**Go to to-do list**—Takes you to the to-do list for today's date.

## When a note alarm sounds

The phone beeps and displays the note. When a call note is displayed, you can call the displayed number by pressing the **Talk** key.

To stop the alarm without viewing the note, select **Exit**.

To stop the alarm and view the note, select **View**. Select **Snooze**; the phone sounds an alarm again after 10 minutes.

## Send a calendar note to another device

- 1 From the menus, select **Organizer > Calendar**.  
After a brief pause, the monthly view appears in the display. Days containing notes are in bold font.
- 2 Jump or scroll to the date containing the note you wish to send, and select **View**.
- 3 Scroll to the note you wish to send, and select **Options > Send note** and one of the following:  
**Via Infrared**—Go to step 4.  
**Via calendar**—Go to step 5.  
**Via text message or Via multimedia**—Go to step 6.  
**Via Bluetooth**—Go to step 9.
- 4 If you select **Via Infrared**, align the IR ports of both devices.  
Ensure the other device is set to receive data using IR. For more information on enabling IR in the receiving device, refer to the user guide for the receiving device.  
The note is sent.
- 5 If you select **Via calendar**, enter the number for the recipient (or select **Find** to retrieve a number from contacts), and select **OK**.  
The note is sent.
- 6 If you select **Via text message or Via multimedia**, the note appears in the display.
- 7 Select **Send**.
- 8 Enter the number for the recipient (or select **Find** to retrieve a number from contacts), and select **OK**.  
The note is sent.
- 9 If you select **Via Bluetooth**, the phone automatically activates Bluetooth connectivity and searches for devices with active Bluetooth connectivity within range.
- 10 Select the desired device and follow the prompts.  
See “Bluetooth connectivity” on page 87 for more information.

## Receive calendar notes from another device

When you receive a calendar note, your phone displays **Calendar note received**. You can then save the note in your calendar if desired, and set an alarm for any date and time.

- 1 When your phone displays **Calendar note received**, select **Show**.  
The text of the note appears in the display.
- 2 Press the scroll keys to view the entire message, if necessary.
- 3 To save the calendar note, select **Options > Save**.  
OR  
To discard the calendar note, select **Options > Discard**.

## • TO-DO LIST

Use the to-do list feature to keep track of your tasks. You can save a note for a task, select a priority level for the note, and mark it as done when you have completed it. You can sort the notes by priority or by date.

### Add a to-do note

- 1 From the menus, select **Organizer > To-do list**.
- 2 If there are no notes, select **Add note**.  
OR  
If there are notes, select **Options > Add**.
- 3 Enter the subject of the to-do note, and select **Save**.
- 4 Select either **High**, **Medium**, or **Low** priority.  
The to-do note is saved. The phone automatically sets the deadline.

### View a to-do note

- 1 From the menus, select **Organizer > To-do list**.
- 2 Scroll to a to-do note, and select **View**.  
The to-do note appears in the display.

## Options while viewing to-do notes

Select **Options** while viewing the header or body of a particular note and the following options appear:

**Add**—Add another note (available only in header view).

**Deadline**—Set a deadline for the note (available only in body view).

**Delete**—Delete the note.

**Mark note as done**—Mark a note or task as complete; no more reminders will follow.

**Sort by deadline**—Sort the notes according to their deadline.

**Send**—Send the note to another device using IR or Bluetooth, as a text or multimedia message, or as a calendar note to another compatible phone.

**Edit priority**—Change the priority to high, medium, or low (available only in body view).

**Go to calendar**—Leave the to-do list, and go to the calendar.

**Save to calendar**—Save the to-do note to a date on your calendar.

**Delete all notes**—Delete all the to-do notes in the list (available only in header view).

## • NOTES

You can use the notes application to write and send notes to compatible devices using IR or Bluetooth or as a text message or multimedia message.

### Make a note

- 1 From the menus, select **Organizer > Notes**.
- 2 If there are no notes, select **Add note**.  
OR  
If there are notes, select **Options > Make a note**.
- 3 Enter the text of the note.
- 4 While entering text, select **Options** to access the following:
  - Insert time & date**—Add the current time and date to the note.
  - Close**—Close the entry screen and return to the notes list.
  - Insert smiley**—Insert an “emotional icon” in the note.
  - Insert word**—Enter a word and insert it into the note. Available only when predictive text is on.

**Insert symbol**—Insert a special character into the note. Available only when predictive text is on.

**Predictive text**—Turn predictive text on or off. See “Predictive text input” on page 27 for more information.

- 5 When you are finished, select **Save**.

## Send a note

- 1 Highlight the note you want to send, and select **Options > Send note > Via infrared, Via text message, Via multimedia, or Via Bluetooth**.
- 2 Follow the prompts to send the note.

## • WALLET

The wallet feature allows you to store personal information like debit and credit card information to an encrypted area of phone memory. This information can then be used to make secure online purchases. Wallet purchases can also use digital signatures enabled by a security module in the SIM card (if present) for signing and verifying transactions. Online purchases and digital signature capabilities are dependent upon your service provider.

You can also store important information in a wallet personal note. Security features such as a password and data encryption make it ideal for storing personal information such as PIN codes and other sensitive data.

To protect against unauthorized use, wallet requires a code to be entered each time it is accessed.

If you do not use the wallet for 5 minutes, it is automatically closed.

## Create a wallet code

The first time you access wallet, you will be asked to create a personalized wallet code. The wallet code can be 4–10 digits in length.

- 1 From the menus, select **Organizer > Wallet**.
- 2 At the prompt, enter the 4–10 digit code of your choice, and select **OK**.
- 3 Enter the same code again for verification, and select **OK**.



**Note:** Create a code that is unique, yet easy to remember. This will be your key to using wallet features in the future. Also, keep your wallet code in a secret place, separate from your phone.



**Note:** If you enter an incorrect wallet code three times in succession, you cannot access wallet for 5 minutes.



## Change the wallet code

- 1 From the menus, select **Organizer > Wallet**.
- 2 At the prompt, enter your wallet code, and select **OK > Settings > Change code**.
- 3 Enter the original wallet code, and select **OK**.
- 4 Enter the new wallet code, and select **OK**.
- 5 Enter the new wallet code again for verification, and select **OK**.

A message appears in the display confirming your change.

## Reset the wallet code

If you forget the wallet code and wish to erase all the information stored in wallet, follow these steps.



**Warning:** Once you reset the wallet code and clear the contents of wallet, all of the information is deleted. You must manually enter the information to restore it.

- 1 At the start screen, enter **\*#7370925538#** (\*#res wallet#).  
A message appears asking if you want to clear your wallet content and code.
- 2 If you want to permanently delete your wallet code and its contents, select **Yes**.
- 3 Enter your security code, and select **OK**.  
Your wallet code and content are erased.

## Wallet menu

- 1 From the menus, select **Organizer > Wallet**.
- 2 At the prompt, enter your wallet code, and select **OK** and one of the following:  
**Wallet profiles**—Create card combinations for different services.  
**Cards**—Save personal card information. See “Create a wallet card” on page 125.  
**Tickets**—Save notifications of e-tickets that you have bought through a mobile service.  
**Receipts**—Save receipts for mobile purchases.  
**Personal notes**—Save any personal information that you want to protect with the wallet PIN code.

**Settings**—Set and change the wallet settings.

- **Change code**—Change the wallet code.
- **RFID**—Set the radio frequency identification (RFID) code. The RFID technology helps to securely conduct commerce transactions with your phone. You can enter the RFID code and the RFID type.

## Create a wallet card

Wallet supports several categories of cards.

- 1 Access the wallet, and select **Cards** and one of the following:

**Payment cards**—for credit and debit cards.

**Loyalty cards**—for membership cards.

**Access cards**—for personal user names and passwords to online services.

**User info cards**—for customized personal preferences for online services.

**Address cards**—for contact information such as delivery and billing addresses.

- 2 If there are no cards in that category, select **Add new**.

OR

If there are cards, select **Options > Add new** and follow the prompts.

- 3 When you are finished, select **Done**.

If supported by your service provider, you can also receive card information as a message. You are notified which category the card belongs to. Save or discard the received card. You can view and rename the saved card, but you cannot edit it. Contact your service provider for more information.

## Compose a personal note

Wallet can store up to 30 personal notes, such as passcodes or other sensitive data. Your notes are protected by the wallet security feature.

- 1 Access the wallet, and select **Personal notes**.
- 2 If there are no notes in the list, select **Add new**.

OR

If there are notes in the list, select **Options > Add new**.

- 3 Compose your note, and select **OK**.
- 4 Enter a title for the note, and select **OK**.

Your note is saved.

## Note options

While viewing note headers, select one of the following:

**View**—View the contents of the selected note.

**Options > Edit**—Edit the contents of the selected note.

**Options > Add new**—Compose and save a new note.

**Options > Sort**—Sort the list of notes by name or date.

**Options > Delete**—Delete the selected note.

**Options > Delete all**—Delete all notes.

While viewing the contents of a note, select one of the following:

**Edit**—Edit the note.

**Options > Send via text msg.**—Send the note to a compatible phone using SMS.

**Options > Copy to calendar**—Copy the note to any date on your calendar.

**Options > Use detail**—Capture any numbers within the note. The number can then be saved to contacts, used to place a call, or you can send a message to the number.

**Options > Delete**—Erase the note.

## Create a wallet profile

When you have saved your personal card details, you can combine them into a wallet profile. You can use the profile to retrieve wallet data from different cards while browsing.

1 Access the wallet, and select **Wallet profiles**.

2 If there are no wallet profiles, select **Add new**.

OR

If there are wallet profiles, select **Options > Add new**.

3 Respond to each of the following prompts:

**Select payment card next**—Select a card from the payment card list.

**Select loyalty card next**—Select a card from the loyalty card list.

**Select access card next**—Select a card from the access card list.

**Select user info card next**—Select a card from the user info card list.

**Select billing address next**—Select an address from the address card list.

**Select shipping address next**—Select an address from the address card list.

**Select receipt delivery address next**—Select an address from the address card list.

Select receipt delivery method next—Select either To phone number or To e-mail address.

Wallet profile name—Enter a name for the profile.

## Guidelines for making purchases with wallet

To shop, access the desired service site that supports wallet. See “Sign on to the mobile Internet” on page 139. The service must support the Electronic Commerce Modeling Language specification.

Choose the product you want to buy and read all information carefully.

When you indicate that you want to buy an item, the phone asks whether you want to use wallet, and asks for your wallet PIN code.

Select the card you want to use from the payment cards list. The phone automatically fills in the credit card information or the wallet profile.

Approve the purchase, and the information is forwarded. You may receive an acknowledgement or a digital receipt.

To close the wallet, select **Close wallet**.



**Note:** If you have accessed or tried to access confidential information requiring passwords, such as a bank account, empty the phone cache after each use. See “Cache memory” on page 146.

## • SYNCHRONIZATION

The phone synchronization feature is a network service that allows you to synchronize the calendar, contacts, and notes in your phone with a remote Internet server or a compatible PC. If you have saved data in the remote Internet server, you can synchronize your phone by starting the synchronization from the phone.

You can also synchronize your phone contacts, calendar, and notes to correspond with the data of a compatible PC by starting the synchronization from the PC. You must install Nokia PC Suite on your PC to use this feature. See “Nokia PC Suite” on page 14 for more information.

Contacts in your SIM card will not be synchronized.

Answering an incoming call during synchronization will end synchronization and you will need to restart it.



**Note:** This feature must be supported by your service provider. For more information on availability and synchronization service settings, contact your service provider.

## Save settings

You may receive the synchronization settings as a settings message or you may need to enter the synchronization settings manually.

### SAVE SETTINGS RECEIVED AS A SETTINGS MESSAGE

When you receive the synchronization settings as a settings message, **Synchronization settings received** is displayed.

Select **Options** and one of the following:

**Details**—View the received settings first.

**Save**—Save the synchronization settings.

**Discard**—Discard the synchronization settings.

### SAVE SETTINGS MANUALLY

You need to activate the set where you want to save the synchronization settings. A set is a collection of settings required to make a connection to a service. Contact your service provider for the settings.

- 1 From the menus, select **Organizer > Synchronization > Settings > Active Internet sync. settings**.
- 2 Scroll to the set you wish to activate, and select **Activate**.
- 3 Select **Custom. active Internet sync. sett.**; then select each of the following, and enter the required settings from your service provider:

**Settings' name**—Rename the synchronization setting, and select **OK**.

**Data to be synchronized**—Scroll to **Contacts**, **Calendar**, or **Notes**, and select **Mark** to synchronize that type of data. You can mark one, two, or all three types. Select **Unmark** to prevent synchronization. Select **Done** to save the changes.

**Database addresses**—Select **Contacts database**, **Calendar database**, or **Notes database**, enter the address of the remote Internet server database, and select **OK**. You can provide addresses for one, two, or all three databases.

**User name**—Enter the user name, and select **OK**. (Contact your service provider, if necessary, for this information.)

**Password**—Enter the password, and select **OK**. (Contact your service provider, if necessary, for this information.)

**Synchronization server**—Enter the name of the server, and select **OK**.

**Connection settings**—Define connection settings required for synchronization. Select each of the settings, and key in the required values. Contact your service provider for the settings.

## Synchronize with a remote Internet server

If you have saved data in the remote Internet server, you can synchronize your phone by starting the synchronization from your phone. Once you have customized and selected the appropriate synchronization settings, you are ready to synchronize data. (See "Save settings" on page 128 or "Save settings manually" on page 128 for more information.)

### SYNCHRONIZE DATA

- 1 From the menus, select **Organizer > Synchronization > Settings > Active Internet sync. settings**.
- 2 Scroll to the set you want to activate, and select **Activate**.

The synchronization settings may differ from the service settings required for browsing. After synchronizing, change your active service settings back to the previous ones if you want to use other services later.
- 3 If you have not already done so, mark the data to be synchronized.

See step 3 of the procedure in "Save settings manually" on page 128 for more information.
- 4 From the menus, select **Organizer > Synchronization > Synchronize**.

Synchronization begins.

Depending on the type of connection you are using to synchronize data, connecting or initializing messages may appear.

Synchronizing for the first time or after an interrupted synchronization may take up to 30 minutes, if contacts or calendar are full.

### STOP SYNCHRONIZATION

- 1 To stop synchronization, select **Quit**, or press the **End** key.
- 2 At the **Quit synchronization?** prompt, select **OK**.

### HANDLE CALLS DURING SYNCHRONIZATION

During synchronization, outgoing calls are not possible. Incoming calls can still be received, and can be handled in one of the following ways:

- To reject the incoming call, press the **End** key. Synchronization continues.
- To answer the incoming call, press the **Talk** key. Synchronization is interrupted and a **Synchronization suspended** message appears.

Once the incoming call is ended, a **Start synchronization again?** message appears. Selecting **Yes** starts synchronization over from the beginning.

## Synchronize with your PC

You can synchronize the data in contacts, calendar, and notes to correspond with the data of your PC by starting the synchronization from your PC.

To synchronize data from your PC, use either an IR or Bluetooth connection or a data cable. You also need the Nokia PC Suite software installed on your PC.

Start the synchronization from your PC using Nokia PC suite. For more information, see the Nokia PC Suite online help. After synchronizing, the data in the phone and in the PC are the same.

# 15 Applications



Your phone supports J2ME Java applications. You will find some Java applications and games pre-installed on your phone. Also, you can manage and download new applications and games from your service provider.

Running some applications and games may consume the battery faster. You may need to connect the phone to the charger.

## • GAMES

Challenge yourself or a friend to one of the fun games in your phone!

From the menus, select **Applications** > **Games** and one of the following:

**Select game**—Select a game or enter a game option list. See “Game options” on page 131 for more info on game options.

**Game downloads**—Connect to game downloads on the mobile Internet using your browser.

**Memory**—Check the available memory for games and game related applications.

**App. settings**—Turn game sounds, lights, and shakes on or off.

### Start a game

- 1 From the menus, select **Applications** > **Games** > **Select game**.
- 2 Scroll to a game or game set, and press the **Talk** key or select **Open**.  
If the selection is a single game, the game starts. Otherwise, a list of games within the selected game set appears in the display.
- 3 To start a single game, scroll to the desired game, and press the **Talk** key or select **Open**.

If a game uses the whole display area, selection keys such as **Options** do not appear in the display. Press the **Left** selection key or the **Right** selection key to access options for the game.

### Game options

While viewing the games list, select **Options** to display the following options:

**Delete**—Delete the game.

**Details**—Display details of the game.

**Update version**—Check if a new version of the game is available for download.



**Web page**—Get more information or additional data from a mobile Internet page. This feature is shown only if it is supported by the network and a mobile internet address has been provided by the game.

**App. access**—Choose whether the game should be allowed to access the network. You can require that the game ask every time it tries to access the network, ask only the first time, always access the network without asking, or never access the network.

**Connect via**—Some games need specific service settings. Your phone is set to use as default the service settings for the browser.

## Game downloads

From the menus, select **Applications > Games > Game downloads** and one of the bookmarks displayed. To access the list of bookmarks in the **Services** menu, select **More bookmarks**.

After a brief pause, the phone connects to the Web pages using the currently active set of browser settings.

If the connection fails, you may enter the **Services** menu and activate another set of service settings. See “Set up for browsing” on page 139.

When downloading a game, it may be saved in the **Collection** menu instead of the **Games** menu.

## Game memory

You can view the amount of memory available for games and applications.

From the menus, select **Applications > Games > Memory**.

## Game settings

You can turn game sounds, lights, and vibration on or off.

- 1 From the menus, select **Applications > Games > App. settings**.
- 2 Select **Application sounds** or **Application shakes > On or Off**.

OR

Select **Application lights > App. defined** or **Default**.

## • APPLICATIONS

### Start an application

- 1 From the menus, select **Applications > Collection > Select application**.
- 2 Scroll to an application or an application set, and press the **Talk** key or select **Open**.

If the selection is a single application, the application starts. Otherwise, a list of applications within the selected application set appears in the display.

- 3 To start a single application, scroll to the desired application, and press the **Talk** key or select **Open**.

### Application options

While viewing the application list, select **Options** to display the following options.

**Delete**—Delete the application or application set from your phone. If you delete a pre-installed application or application set, you may be able to download it again from [www.nokia.com/us](http://www.nokia.com/us).

**Details**—Shows additional information about the application.

**Update version**—Check if a new version of the application is available for download.

**Web page**—Get further information or additional data for the application from a mobile Internet page. This feature must be supported by a service provider. It is only shown if a mobile Internet address has been provided with the application.

**App. access**—Choose whether the application should be allowed to access the network. You can require that the application ask every time it tries to access the network, ask only the first time, always access the network without asking, or never access the network.

**Connect via**—Some applications need specific service settings. Your phone is set to use as default the service settings for the browser.

### Download applications



**Note:** Only install sources that offer adequate protection against harmful software. Downloading applications is a network service. Contact your service provider for more information

Your phone supports J2ME Java applications. Make sure that the application is compatible with your phone before you download it. You can download new Java applications in different ways.

When you download games or applications, games may be saved in the **Collection** menu and applications may be saved in the **Games** menu.

## APPLICATION DOWNLOADS

- 1 From the menus, select **Applications > Collection > App. downloads**.  
After a brief pause, the list of available browser bookmarks appears in the display.
- 2 Select **More bookmarks** to access the list of browser bookmarks in your **Services** menu.
- 3 Select the bookmark that contains the application you wish to download.  
After a brief pause, you are connected to the Web page.  
See "Navigate the mobile Internet" on page 140 for information on browsing Web pages.  
  
If the connection fails, you may enter the **Services** menu and activate another set of service settings. See "Set up for browsing" on page 139.

## DOWNLOAD LINKS

From the menus, select **Services > Download links > App. downloads** and one of the sites from the list.

## NOKIA PC SUITE

Use the Nokia Application Installer from Nokia PC Suite to download the applications into your phone. See the Nokia PC Suite online help.

## View memory status for applications

You can view the size of memory available for game and application installations.  
From the menus, select **Applications > Collection > Memory**.

# • CALCULATOR

## Basic calculations

The calculator adds, subtracts, multiplies, divides, calculates the square and the square root, and converts currency values.



**Note:** This calculator has limited accuracy and is designed for simple calculations.

- 1 From the menus, select **Applications > Extras > Calculator**.
- 2 In the calculator screen, enter the first number in the calculation.  
Press the **#** key for a decimal point if necessary.

- 3 To perform an arithmetic calculation, press the \* key to cycle through the add (+), subtract (-), multiply (\*), and divide (/) characters, and pause briefly to select the displayed character.

OR

To perform a square or square root calculation, select **Options > Square or Square root**.

- 4 For an arithmetic calculation, enter the second number in your calculation, and select **Equals**.

The completed calculation appears in the display.

## Currency conversion

You can convert foreign currency to domestic, or vice versa directly from the start screen.

- 1 At the start screen, enter a currency amount to convert.
- 2 Select **Options** and one of the following:  
**To home**—Converts foreign currency to domestic currency.  
**To foreign**—Converts domestic currency to foreign currency.  
If you have not done so already, you are prompted to enter the exchange rate.
- 3 Enter the exchange rate, using the # key to insert a decimal if needed, and select **OK**.

The converted amount appears in the display.

## Edit the exchange rate

- 1 From the menus, select **Applications > Extras > Calculator > Options > Exchange rate** and one of the following:  
**Foreign units in home units**—Enter the number of home units it takes to make one unit of foreign currency.  
**Home units in foreign units**—Enter the number of foreign units it takes to make one unit of your home currency.
- 2 Enter the exchange rate, and select **OK**.


## • COUNTDOWN TIMER

The countdown timer is like an egg-timer or the timer on your microwave oven. You can enter a specified time (up to 99 hours and 59 minutes), and when the time runs out, your phone sounds an alarm.

The countdown timer only works when the phone is on. Once you turn off your phone, the timer is no longer active.

### Set the timer

- 1 From the menus, select **Applications > Extras > Countdown timer**.
- 2 At the prompt, enter the time in *hh:mm:ss* format, and select **OK**.
- 3 Enter a note for the timer, and select **OK**.

The timer begins running. The  icon appears in the upper left corner of the start screen.

### Change the time

After you have set the timer, you can change the time.

- 1 From the menus, select **Applications > Extras > Countdown timer > Change time**.
- 2 Enter the new time in *hh:mm:ss* format, and select **OK**.
- 3 Leave the note as it was, or enter a new note, and select **OK**.

The timer begins running.

### When the alarm sounds

When the time runs out, your phone sounds an alarm and displays the timer note.

Press any key during the alarm to stop the timer, or select **Restart** to start the timer again.

If you do not respond to the timer alert, it expires automatically after 30 seconds.


### Stop the timer before the alarm sounds

From the menus, select **Applications > Extras > Countdown timer > Stop timer**.

**Timer stopped** appears in the display.

## • STOPWATCH

Your phone has a stopwatch that can be used to track time at sporting events or other occasions. The stopwatch displays time in hours, minutes, seconds, and fractions of a second: *hh:mm:ss.ss*

While the stopwatch is running, if you press the End key and return to the start screen, the clock continues to run in the background, and  appears in the upper left corner of the screen.

Using the stopwatch consumes the battery and reduces the operating time of the phone. Be careful not to let it run in the background when performing other operations with your phone.

### Measure time

- 1 From the menus, select **Applications > Extras > Stopwatch > Split timing > Start**.

The running time appears on the screen.

- 2 To stop timing, select **Stop**.
- 3 To start timing again from the point where you stopped, select **Options > Start**.

OR

To reset the time to zero without saving it, select **Options > Reset > Yes**.

### Measure split time

You can use the split time function for such things as a long distance race when you need to pace yourself.

- 1 From the menus, select **Applications > Extras > Stopwatch > Split timing > Start**.

The running time appears on the screen.

- 2 To take an intermediate time, select **Split**.

The timer continues to run. The split time appears below the running time.

If you split the time more than once, the new measured time appears at the beginning of the list. You can scroll to see previous measured times.

- 3 To stop timing, select **Stop**.

The total time appears at the top of the display.

- 4 To start timing again from the point where you stopped, select **Options > Start**.

OR

To reset the time to zero without saving it, select **Options > Reset > Yes**.

## Measure lap time

You can use the lap time function when you want to track how long it takes to complete each cycle or lap.

- 1 From the menus, select **Applications > Extras > Stopwatch > Lap timing > Start**.

The running time appears on the screen.

- 2 Take a lap time by selecting **Lap**.

The clock stops, then starts immediately from zero. The lap time appears below the running time.

If you take more than one lap time, the new measured time appears at the beginning of the list. You can scroll to see previous measured times.

- 3 To stop timing, select **Stop**.

The total time appears at the top of the display.

## Save the time

- 1 While the clock is running, select **Stop > Save**.

- 2 Enter a name for the measurement, and select **OK**.

If you do not enter a name, the total time is used as the default title for the lap time.

## Other stopwatch options

You can choose the following options when using the stopwatch:

**Continue**—When the stopwatch is working in the background, view the time.

**Show last time**—Allows you to view the last measured time.

**View times**—Allows you to browse the saved times.

**Delete times**—Allows you to delete any saved times. You can delete the saved times one by one or all at once.

## 16 Services



The browser on your phone can display content that uses Wireless Mark-up Language (WML) or extensible Hypertext Mark-up Language (XHTML). The browser supports WAP 2.0 protocols (HTTP and SSL) that run on TCP/IP protocols.

This feature is a network service. Contact your service provider for more information.

Because mobile Internet content is designed to be viewed from your phone, your service provider is now your mobile Internet service provider as well.

It is likely that your service provider has created a home page and set up your browser to go to this page when you log on to the mobile Internet. Once at your service provider's home page, you may find links to a number of other sites.

### • SET UP FOR BROWSING

It may not be necessary to manually configure the browser on your phone if this was done by your service provider when you subscribed to the feature.

You may receive the service settings as a connection settings message from your service provider. See "Connection settings service" on page 16.

You can key in the settings manually or add and edit the settings with Nokia PC Suite.

To key in the settings manually:

- 1 From the menus, select **Services > Settings > Connections settings > Active service settings**.
- 2 Scroll to the connection set where you want to save the service settings, and select **Activate**.
- 3 Select **Edit active service settings**; then select each of the settings, and enter the information you received from your service provider.

Contact your service provider if you have problems using the browser.

### • SIGN ON TO THE MOBILE INTERNET

#### Activate service settings for the desired service

- 1 From the menus, select **Services > Settings > Connections settings > Active service settings**.
- 2 Scroll to the desired service, and select **Activate**.




## Connect to the service

Your service provider may have programmed the **Right** selection key to connect you directly to a Web site, for example, the provider's customer site. You can change this setting by reprogramming the **Right** selection key. See "Personal shortcuts" on page 86.

There are several ways to connect to a service:

- To open the service's start page, from the menus, select **Services > Home**.  
OR

At the start screen, press and hold the **0** key (the Internet icon ).



- To select a bookmark, select **Services > Bookmarks**, and select a bookmark from the list.

If the bookmark does not work with the current active service settings, activate another set of service settings and try again.

- To go to the last site you visited, select **Services > Last web addr**.
- To enter the address of the service, select **Services > Go to address**. Enter the address of the service, and select **OK**.

After a brief pause, the phone attempts to connect to your service provider's home page or to the address that you selected.

If you see **Check service settings**, the phone may not be set up for browsing. Contact your service provider to make sure that your phone is configured properly.

If GPRS is selected as the data bearer,  is shown in the upper left corner of the display during browsing. If you make a call or receive a call or text message, the GPRS connection is suspended and  is shown in the upper right corner of the display. After the call, the phone tries to reestablish the GPRS connection.

## • NAVIGATE THE MOBILE INTERNET

Since your phone screen is much smaller than a computer screen, mobile Internet content is displayed differently from content displayed on a computer. This section contains guidelines for using phone keys to navigate a mobile Internet site.

- To browse the site, use any of the scroll keys.
- To select a highlighted item, press the **Talk** key or the **Middle** selection key.
- To enter letters and numbers, press a key from **0–9**.
- To enter special characters, press the **\*** key.

## • EXAMPLE OF A MOBILE INTERNET SITE

The following illustration shows some common elements you may find on a mobile Internet site. These are examples only.

1) **Header line.** Shows the current mobile Internet site.

2) **Active link.** Appears as a highlighted word.

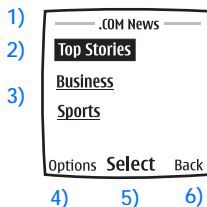
3) **Inactive link.** Appears as an underlined word.

Scroll through the list of links using the Scroll up key and the Scroll down key.

4) **Options.** Select Options to go to the list of service options. See "Options while online" on page 145.

5) **Select.** Select Select to go to the active link.

6) **Back.** Select Back to return to the previous page.



## • APPEARANCE SETTINGS

You can determine how pages appear on the phone display.

- 1 From the menus, select **Services > Settings > Appearance settings.**  
OR

While browsing, select **Options > Other options > Appear. settings.**

- 2 Select one of the following options:

**Text wrapping**—Text on the Web page continues on the next line if it cannot be shown on only one line. Select **On** to allow text wrapping, or **Off** to prevent text wrapping.

**Font size**—Select **Small**, **Normal**, or **Large**.

**Show images**—Select **Yes** to display pictures from the page or **No** to hide pictures. When pictures are displayed, pages load more slowly.

**Alerts**—The phone can alert you to unsecure connections and to unsecure items on secure pages. However, these alerts do not guarantee a secure connection.

- **Alert for unsecure connection**—Select **Yes** to set the phone to alert you when a secure connection changes to an unsecure connection during browsing.
- **Alert for unsecure items**—Select **Yes** to set the phone to alert you when a secure page contains an unsecure item.

**Character encoding**—Select encoding methods for Web content and Web addresses.

- **Content encoding**—Select the character set that the phone uses to display browser pages that do not include that information.
- **Unicode (UTF-8) web addresses**—Determine whether to always use UTF-8 encoding when sending a Web address to a compatible phone. Select **On** or **Off**.

## • BOOKMARKS

You can save addresses for your favorite sites as bookmarks. You can add up to 50 bookmarks to your browser. Once you have saved a bookmark, you can program the **Go to** menu to take you directly to that site. See “Personal shortcuts” on page 86.

### Enter bookmarks manually

- 1 From the menus, select **Services > Bookmarks**.
- 2 If there are no bookmarks in the list, select **New**.

OR

If there are bookmarks in the list, select **Options > New bookmark**.

- 3 Enter an address for the bookmark, and select **OK**.
- 4 Enter a title for the bookmark, and select **OK**.

### Set bookmarks while online

While you are connected to the site that you want to bookmark, select **Options > Add bookmark**.

A message appears in the display confirming your bookmark is saved.

## • SERVICE INBOX

You can receive service messages (pushed messages) from your service provider.

### Receive service messages

To set the phone to receive service messages:

From the menus, select **Services > Settings > Service inbox settings > Service messages > On**.

To set the phone to automatically fetch the content indicated in the service message:

From the menus, select **Services > Settings > Service inbox settings > Automatic conn.** and one of the following:

**On**—The phone automatically activates the browser from the standby mode when a service message is received.

**Off**—The phone activates the browser only when you select **Retrieve** after a service message is received.

## View a service message

When you receive a service message, a note appears in the display.

At the start screen, select **Show** to view the message immediately, or **Exit** to save it for later viewing.

OR

While browsing, select **Options > Other options > Service inbox**.

To view a saved service message:

- 1 From the menus, select **Services > Service inbox**.
- 2 Scroll to the desired message, and select **Options** and one of the following:
  - Retrieve**—Activate the browser, and download the content indicated in the message.
  - Details**—View the details of the message.
  - Delete**—Delete the message.

## • FILE UPLOAD

Depending on your service, you may be able to upload images and sound files from the gallery in your phone to a Web page. You must be connected to an XHTML page that supports form submission. Follow the instructions on the display to upload files. For more information, contact your service provider.

## • FILE DOWNLOAD

You can download tones, images, games, and applications from the mobile Internet.

- 1 From the menus, select **Services > Download links > Tone downloads, Graphic downloads, Game downloads, Video downloads, or App. downloads**.
- 2 Select one of the sites from the list and follow the prompts.

## • DISCONNECT FROM THE MOBILE INTERNET

To close your connection, press the **End** key twice.

OR

Select **Options > Quit > Yes**.

## • RECEIVE A CALL WHILE ONLINE

If you are using the browser over GPRS, you can still receive a voice call. Your GPRS connection is put on hold and you can choose to answer the call.

- To answer the incoming call, press the **Talk** key.
- To reject the incoming call, press the **End** key.

After you end the voice call, the GPRS connection automatically resumes.

## • MAKE A CALL WHILE ONLINE

When you are browsing a mobile Internet site and want to make a call, select **Options > Other options > Use detail > Phone number**. Your phone searches the information on the site for a string of numbers. Choose from the number or numbers displayed to place the call.

An alternate way is to press the **End** key twice to disconnect from the mobile Internet; then place your call by searching contacts for a name and number or by keying in the phone number.

## • MAKE AN EMERGENCY CALL WHILE ONLINE

If you are using GPRS to connect to the mobile Internet, you can end your data connection and then make an emergency call.

- 1 To close your mobile Internet connection, press the **End** key twice.
- 2 Enter the emergency number for your present location (for example, 911).
- 3 Press the **Talk** key.

## • OPTIONS WHILE ONLINE

While you are connected to the mobile Internet, select **Options** to access the following options. Some service providers may have customized these options. Contact your service provider for more information if any of the following options are not available.

**Shortcuts**—Open a new list of options, for example, options specific to the current page.

**Home**—Go to the service home page.

**Add bookmark**—Saves the current page as a bookmark.

**Bookmarks**—Shows a list of all saved bookmarks. Bookmarks help you find a mobile Internet site quickly.

**Download links**—Show the list of bookmarks for downloading tones, graphics, games, or applications.

**Save to folder**—Add a bookmark for the current site to the list of bookmarks for downloading tones, graphics, games, videos, or applications. The bookmark then appears in the appropriate folder in the **Download links** submenu.

**Other options**—Show a list of other options, such as appearance and security options.

**Reload**—Reload and update the current page.

**Quit**—Disconnect from a service.

## • SECURITY

Security features may be required for some services, such as banking or shopping. For such connections you need security certificates and possibly a security module which may be available on your SIM card. For more information, contact your service provider.

### Security module

The security module improves security services and allows you to use a digital signature. It can contain certificates and public and private keys. Your service provider saves the certificates in the security module.

From the menus, select **Services > Settings > Security settings > Security module settings** and one of the following:

**Security module details**—View the security module title, status, manufacturer, and serial number.

**Module PIN request**—Select **On** to set the phone to ask for the module PIN when using services provided by the security module.

**Change module PIN**—Change the module PIN, if allowed by the security module.


**Change signing PIN**—Select the signing PIN that you want to change, enter the current PIN code; then enter the new PIN code twice.

## Digital signature

You can make digital signatures with your phone if your SIM card has a security module. The signature can be traced back to you through the private key on the security module and the user certificate that was used to perform the signature. Using the digital signature can be the same as signing your name to a paper bill, contract, or other document.

- 1 While browsing, select a link on a page, such as the title of the book you want to buy and its price.

The text to sign (possibly including amount, date, etc.) is shown.

- 2 Check that the header text is **Read** and that the digital signature icon  is shown.

If the digital signature icon does not appear, there is a security breach. Do not enter any personal data such as your signing PIN.

- 3 Read *all* of the text before signing, scrolling through the text if necessary.

- 4 To sign the text, select **Sign**.

- 5 Select the user certificate you want to use, enter the signing PIN (provided with the SIM card if the SIM card has a security module), and select **OK**.

The digital signature icon disappears, and the service may display a confirmation of your purchase.

## Cache memory

The information or services you access with the browser are temporarily saved in the cache memory of the phone. A cache is a buffer memory that is used to store data temporarily.

If you tried to access or have accessed confidential information requiring passwords (for example, your bank account), clear the cache after each use.

To clear the cache from the menu, select **Services > Clear the cache**.

To clear the cache while browsing, select **Options > Other options > Clear the cache**.

## Certificates

There are three kinds of certificates—server, authority, and user.

Certificates have a restricted lifetime. If **Expired certificate** or **Certificate not valid** yet is shown even though the certificate should be valid, check that the current date and time settings in your phone are correct. Before changing these settings, make sure that you really trust the owner of the certificate and that the certificate really belongs to the listed owner.

### SERVER CERTIFICATES

The phone uses a server certificate to create a connection with improved security between the phone and the content server. The phone receives the server certificate from the service provider before the connection is established. The validity of the server certificate is checked using the authority certificates saved in the phone. Server certificates are not saved.

### AUTHORITY CERTIFICATES

Authority certificates are used by some services, such as banking, for checking the validity of other certificates. Authority certificates can be saved in the security module by the service provider, or they can be downloaded from the network if the service supports the use of authority certificates.

To view authority certificates, select **Services > Settings > Security settings > Authority certificates > Certificate list**, scroll to the desired certificate, and select **View**.

### USER CERTIFICATES

User certificates are issued to users by a certifying authority. User certificates are required to make a digital signature. They associate the user with a specific private key in a security module.

To view user certificates, select **Services > Settings > Security settings > User certificates > Certificate list**, scroll to the desired certificate, and select **View**.

## Cookies

A cookie is data that a Web site saves in your phone browser cache memory. The data can be, for example, your user information or your browsing preferences. Cookies will be saved until you clear the cache memory.

- 1 From the menus, select **Services > Settings > Security settings > Cookies**.  
OR  
While browsing, select **Options > Other options > Security > Cookies**.
- 2 Select **Allow** to accept cookies or **Reject** to reject cookies.



## 17 SIM services



In addition to the functions available on the phone, your SIM card may provide additional services that you can access through the SIM services menu. This menu is shown only if it is supported by your SIM card. The name and contents of the menu depend entirely on the service available. For availability, rates, and information on using SIM services, contact your service provider.

To see the messages sent between the phone and the network when you are using the SIM services, select **Settings > Phone settings > Confirm SIM service actions > Yes**.

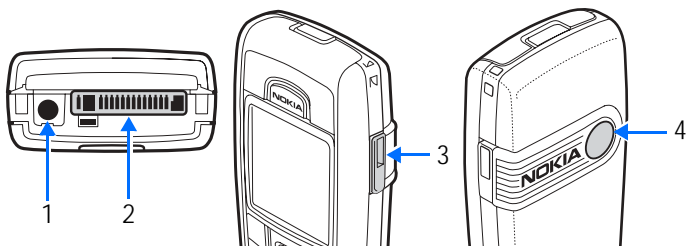
Accessing these services may involve sending a text message or making a phone call for which you may be charged.

# 18 Hardware and enhancements

## • HARDWARE

### Connection ports and other tools

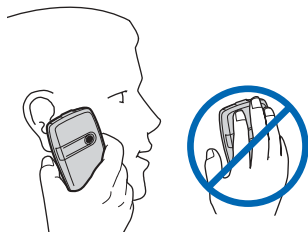
- Charger connector (1)
- Pop-Port connector for headsets and data cables (2)
- IR port and loudspeaker (3)
- Camera lens on the back cover of the phone (4)



### Antenna

Your phone has a built-in antenna. As with any other radio transmitting device, avoid touching the antenna while the phone is powered up.

Contact with the antenna affects call quality and may cause the phone to operate at a higher power level than necessary. Hold the phone as you would any other telephone with the antenna area pointed up and over your shoulder.

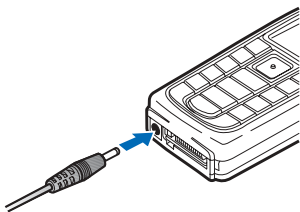


## Recharge the battery

Your phone is powered by a rechargeable battery. To charge the battery:

- 1 Plug the charger transformer in to a standard ac outlet.
- 2 Insert the charger output plug into the round connector at the bottom end of the phone.

After a few seconds, the battery indicator in the display starts to scroll from bottom to top. If the battery is completely discharged, it may take a few minutes before the charging indicator appears on the display or any calls can be made.



You can use the phone while the charger is connected.

## Talk, standby, and charging times

The BL-5C battery provides up to 5 hours of talk time and up to 300 hours of standby time. Operation times are estimates and may vary depending on network conditions, charging, and use of various features.

The charging times listed are approximate.

Charger	ACP-7	ACP-8	ACP-12	LCH-9	LCH-12
Time	2 h 45 min	1 h 55 min	1 h 20 min	1 h 20 min	1 h 20 min

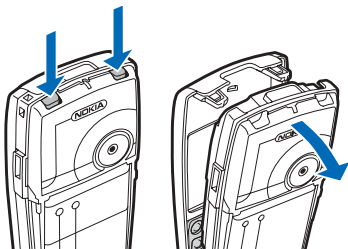
## Change the Xpress-on™ covers



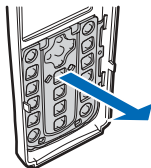
**Warning:** Before changing covers, ensure the phone is powered off and disconnected from the charger or any other device. Always store and use the phone with the covers attached.

- 1 Remove the back cover as described in “Remove the back cover” on page 18.

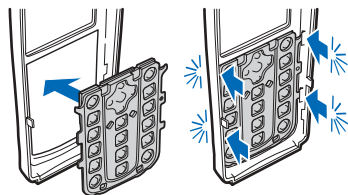
- 2 Beginning at the top of the phone, gently pull the front cover away from the phone and detach the front cover.



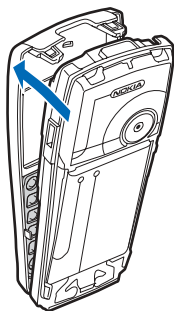
- 3 Remove the key mat from the front cover by pressing it gently outwards.



- 4 Place the keymat in the new front cover and press it gently in.



- 5 Replace the front cover by pressing it gently on the phone, beginning from the bottom.



- 6 Replace the back cover as described in "Replace the back cover" on page 20.

## • ENHANCEMENTS

Your phone is compatible with the following Nokia mobile enhancements:

### Power

- 850-mAh Li-Ion battery (BL-5C)
- Standard travel charger (ACP-7)
- Rapid travel charger (ACP-8)
- Travel charger (ACP-12)
- Mobile charger (LCH-9)
- Mobile charger (LCH-12)

### Data

- Data cable (DKU-2)
- Desktop stand (DCV-14)

### Audio

- Music stand (DT-1)
- Boom headset (HDB-4)
- Stereo headset (HDS-3)
- Headset (HS-5)
- Retractable headset (HS-10)
- Loopset (LPS-4)

### Bluetooth audio

- Wireless headset (HDW-2)
- Wireless clip-on headset (HS-3W)
- Wireless boom headset (HS-4W)

### Accessibility

- Phone adapter (HDA-10)

### Car

- Car installation kit (CK-6)
- Wireless car kit (CK-1W)
- Headrest handsfree (BHF-1)

### Other

- Nokia image viewer (SU-2)
- BT digital pen (SU-1B)
- MultiMediaCard DTS64/256 MB

# 19 Reference Information

## • BATTERY INFORMATION

### Charging and discharging

Your device is powered by a rechargeable battery. The full performance of a new battery is achieved only after two or three complete charge and discharge cycles. The battery can be charged and discharged hundreds of times but it will eventually wear out. When the talk and standby times are noticeably shorter than normal, buy a new battery. Use only Nokia approved batteries, and recharge your battery only with Nokia approved chargers designated for this device.

Unplug the charger from the electrical plug and the device when not in use. Do not leave the battery connected to a charger. Overcharging may shorten its lifetime. If left unused, a fully charged battery will lose its charge over time. Temperature extremes can affect the ability of your battery to charge.

Use the battery only for its intended purpose. Never use any charger or battery that is damaged.

Do not short-circuit the battery. Accidental short-circuiting can occur when a metallic object such as a coin, clip, or pen causes direct connection of the positive (+) and negative (-) terminals of the battery. (These look like metal strips on the battery.) This might happen, 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 59°F and 77°F (15°C and 25°C). A device with a hot or cold battery may not work temporarily, even when the battery is fully charged. Battery performance is particularly limited in temperatures well below freezing.

Do not dispose of batteries in a fire! Dispose of batteries according to local regulations. Please recycle when possible. Do not dispose as household waste.

## • ENHANCEMENTS

A few practical rules about accessories and enhancements:

- Keep all accessories and enhancements out of the reach of small children.
- When you disconnect the power cord of any accessory or enhancement, grasp and pull the plug, not the cord.
- Check regularly that enhancements installed in a vehicle are mounted and are operating properly.
- Installation of any complex car enhancements must be made by qualified personnel only.

## • ENHANCEMENTS, BATTERIES, AND CHARGERS

Check the model number of any charger before use with this device. This device is intended for use when supplied with power from ACP-7, ACP-8, ACP-12, LCH-9, and LCH-12 chargers.



**Warning:** Use only batteries, chargers, and enhancements approved by Nokia for use with this particular model. The use of any other types may invalidate any approval or warranty, and may be dangerous.

For availability of approved enhancements, please check with your dealer. When you disconnect the power cord of any enhancement, grasp and pull the plug, not the cord.

Your device and its enhancements may contain small parts. Keep them out of reach of small children.

## • CARE AND MAINTENANCE

Your device is a product of superior design and craftsmanship and should be treated with care. The suggestions below will help you protect your warranty coverage and enjoy your device for many years.

- Keep the device dry. Precipitation, humidity, and all types of liquids or moisture can contain minerals that will corrode electronic circuits. If your device does get wet, remove the battery and allow the device to dry completely before replacing it.
- Do not use or store the device in dusty, dirty areas. Its moving parts and electronic components can be damaged.

- Do not store the device in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not store the device in cold areas. When the device returns to its normal temperature, moisture can form inside the device and damage electronic circuit boards.
- Do not attempt to open the device other than as instructed in this guide.
- Do not drop, knock, or shake the device. Rough handling can break internal circuit boards and fine mechanics.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the device.
- Do not paint the device. Paint can clog the moving parts and prevent proper operation.
- Use a soft, clean, dry cloth to clean any lenses (such as camera, proximity sensor, and light sensor lenses).
- Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the device and may violate regulations governing radio devices.

All of the above suggestions apply equally to your device, battery, charger, or any enhancement. If any device is not working properly, take it to the nearest authorized service facility for service.

## • ADDITIONAL SAFETY INFORMATION

### Operating environment

Remember to follow any special regulations in force in any area and always switch off your device when its use is prohibited or when it may cause interference or danger. Use the device only in its normal operating positions. To maintain compliance with radio frequency exposure guidelines only use accessories approved by Nokia for use with this device. When the device is on and being worn on the body, always use an approved carrying case.

### Medical devices

Operation of any radio transmitting equipment, including wireless phones, may interfere with the functionality of inadequately protected medical devices. Consult a physician or the manufacturer of the medical device to determine if they are adequately shielded from external RF energy or if you have any questions. Switch



off your phone in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

## **PACEMAKERS**

Pacemaker manufacturers recommend that a minimum separation of 6 inches (15.3 cm) be maintained between a wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research. To minimize the potential for interference, persons with pacemakers should

- Always keep the device more than 6 inches (15.3 cm) from their pacemaker when the device is switched on
- Not carry the device in a breast pocket
- Hold the device to the ear opposite the pacemaker

If you have any reason to suspect that interference is taking place, switch off your device immediately.

## **HEARING AID**

Some digital wireless devices may interfere with some hearing aids. If interference occurs, consult your service provider.

## **Vehicles**

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles such as electronic fuel injection systems, electronic antiskid (antilock) braking systems, electronic speed control systems, air bag systems. For more information, check with the manufacturer or its representative of your vehicle or any equipment that has been added.

Only qualified personnel should service the device, or install the device in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty that may apply to the device. Check regularly that all wireless device equipment in your vehicle is mounted and operating properly. Do not store or carry flammable liquids, gases, or explosive materials in the same compartment as the device, its parts, or enhancements. For vehicles equipped with an air bag, remember that an air bags inflate with great force. Do not place objects, including installed or portable wireless equipment in the area over the air bag or in the air bag deployment area. If in-vehicle wireless equipment is improperly installed and the air bag inflates, serious injury could result.

## Potentially explosive environments

Switch off your device when in any area with a potentially explosive atmosphere and obey all signs and instructions. Potentially explosive atmospheres include areas where you would normally be advised to turn off your vehicle engine. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death. Switch off the device at refuelling points such as near gas pumps at service stations. Observe restrictions on the use of radio equipment in fuel depots, storage, and distribution areas, chemical plants or where blasting operations are in progress. Areas with a potentially explosive atmosphere are often but not always clearly marked. They include below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), and areas where the air contains chemicals or particles such as grain, dust or metal powders.

FCC regulations prohibit using your wireless device while in the air. The use of wireless telephones in an aircraft may be dangerous to the operation of the aircraft, disrupt the wireless telephone network, and may be illegal.

Failure to observe these instructions may lead to suspension or denial of telephone services to the offender, legal action, or both.

## EMERGENCY CALLS



**Important:** Wireless phones, including this phone, operate using radio signals, wireless networks, landline networks, and user-programmed functions. Because of this, connections in all conditions cannot be guaranteed. You should never rely solely on any wireless phone for essential communications like medical emergencies.

To make an emergency call:

- 1 If the phone is not on, switch it on. Check for adequate signal strength. Some networks may require that a valid SIM card is properly inserted in the phone.
- 2 Press the **End key** as many times as needed to clear the display and ready the phone for calls.
- 3 Key in the official emergency number for your present location. Emergency numbers vary by location.
- 4 Press the **Talk key**.

If certain features are in use, you may first need to turn those features off before you can make an emergency call. Consult this guide or your service provider. When making an emergency call, give all the necessary information as accurately as possible. Your wireless phone may be the only means of communication at the scene of an accident. Do not end the call until given permission to do so.

## CERTIFICATION INFORMATION (SAR)

THIS MODEL PHONE MEETS THE GOVERNMENT'S REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg.\* Tests for SAR are conducted using standard operating positions accepted by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (for example, at the ear and worn on the body) as required by the FCC for each model.

The following values are the highest SAR value for this model phone as reported to the FCC.

When tested for use at the ear:

FCCID # QTKRH-12 is 0.65 W/kg

FCCID # QTKRH-28 is 0.76 W/kg

When worn on the body, as described in this user guide:

FCCID # QTKRH-12 is 1.02 W/kg

FCCID # QTKRH-28 is 1.11 W/kg

(Body-worn measurements differ among phone models, depending upon available enhancements and FCC requirements).

While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement. The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of <http://www.fcc.gov/oet/fccid> after searching on FCC ID QTKRH-12 and FCC ID QTKRH-28.

For body worn operation, this phone has been tested and meets the FCC RF exposure guidelines for use with a carry case, belt clip, or holder that contains no metal and that positions the handset a minimum of 5/8-inch (1.5 cm) from the body. Use of other carry cases, belt clips, or holders may not ensure compliance with FCC RF exposure guidelines. If you do not use a body-worn accessory and are not holding the phone at the ear, position the handset a minimum of 5/8-inch (1.5 cm) from your body when the phone is switched on.

\*In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kilogram (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements. SAR values may vary depending on national reporting requirements and the network band. For SAR information in other regions please look under product information at [www.nokia.com](http://www.nokia.com).

## • TECHNICAL INFORMATION

Feature	Specification
Dimensions	Width 44 mm Height 103 mm Depth 20 mm
Weight	97 g with BL-5C Li-Ion Battery
Wireless networks	GSM 850, 1800, and 1900 networks (RH-28) OR GSM 900, 1800, and 1900 networks (RH-12)
Size (volume)	76 cm <sup>3</sup>
Frequency range (Tx)	GSM 850: 824–849 MHz (for RH-28) GSM 900: 880–915 MHz (for RH-12) GSM 1800: 1710–1785 MHz (for RH-12 and RH-28) GSM 1900: 1850–1910 MHz (for RH-12 and RH-28)
Frequency range (Rx)	GSM 850: 869–894 MHz (for RH-28) GSM 900: 925–960 MHz (for RH-12) GSM 1800: 1805–1865 MHz (for RH-12 and RH-28) GSM 1900: 1930–1990 MHz (for RH-12 and RH-28)
Tx output power	2 W (max)
Battery voltage	3.7 V dc
Number of channels	299
Memory capacity	5 MB shared memory 8 MB pool memory for gallery files Up to 256 MB extra memory in MultiMediaCard
Operating temperature	Between 59°F and 77°F (15°C and 25°C).
Number of entries in contacts	Up to 1000

## • Nokia ONE-YEAR LIMITED WARRANTY

Nokia Inc. ("Nokia") warrants that this cellular phone ("Product") is free from defects in material and workmanship that result in Product failure during normal usage, according to the following terms and conditions:

- 1 The limited warranty for the Product extends for ONE (1) year beginning on the date of the purchase of the Product. This one year period is extended by each whole day that the Product is out of your possession for repair under this warranty.
- 2 The limited warranty extends only to the original purchaser ("Consumer") of the Product and is not assignable or transferable to any subsequent purchaser/end-user.
- 3 The limited warranty extends only to Consumers who purchase the Product in the United States of America.
- 4 During the limited warranty period, Nokia will repair, or replace, at Nokia's sole option, any defective parts, or any parts that will not properly operate for their intended use with new or refurbished replacement items if such repair or replacement is needed because of product malfunction or failure during normal usage. No charge will be made to the Consumer for any such parts. Nokia will also pay for the labor charges incurred by Nokia in repairing or replacing the defective parts. The limited warranty does not cover defects in appearance, cosmetic, decorative or structural items, including framing, and any non-operative parts. Nokia's limit of liability under the limited warranty shall be the actual cash value of the Product at the time the Consumer returns the Product for repair, determined by the price paid by the Consumer for the Product less a reasonable amount for usage. Nokia shall not be liable for any other losses or damages. These remedies are the Consumer's exclusive remedies for breach of warranty.
- 5 Upon request from Nokia, the Consumer must prove the date of the original purchase of the Product by a dated bill of sale or dated itemized receipt.
- 6 The Consumer shall bear the cost of shipping the Product to Nokia in Melbourne, Florida. Nokia shall bear the cost of shipping the Product back to the Consumer after the completion of service under this limited warranty.
- 7 The Consumer shall have no coverage or benefits under this limited warranty if any of the following conditions are applicable:
  - a) The Product has been subjected to abnormal use, abnormal conditions, improper storage, exposure to moisture or dampness, unauthorized modifications, unauthorized connections, unauthorized repair, misuse, neglect, abuse, accident, alteration, improper installation, or other acts which are not the fault of Nokia, including damage caused by shipping.

- b) The Product has been damaged from external causes such as collision with an object, or from fire, flooding, sand, dirt, windstorm, lightning, earthquake or damage from exposure to weather conditions, an Act of God, or battery leakage, theft, blown fuse, or improper use of any electrical source, damage caused by computer or internet viruses, bugs, worms, Trojan Horses, cancelbots or damage caused by the connection to other products not recommended for interconnection by Nokia.
  - c) Nokia was not advised in writing by the Consumer of the alleged defect or malfunction of the Product within fourteen (14) days after the expiration of the applicable limited warranty period.
  - d) The Product serial number plate or the enhancement data code has been removed, defaced or altered.
  - e) The defect or damage was caused by the defective function of the cellular system or by inadequate signal reception by the external antenna, or viruses or other software problems introduced into the Product.
- 8) Nokia does not warrant uninterrupted or error-free operation of the Product. If a problem develops during the limited warranty period, the Consumer shall take the following step-by-step procedure:
- a) The Consumer shall return the Product to the place of purchase for repair or replacement processing.
  - b) If "a" is not convenient because of distance (more than 50 miles) or for other good cause, the Consumer shall ship the Product prepaid and insured to:  
Nokia Inc., Attn: Repair Department  
795 West Nasa Blvd.  
Melbourne, FL 32901
  - c) The Consumer shall include a return address, daytime phone number and/or fax number, complete description of the problem, proof of purchase and service agreement (if applicable). Expenses related to removing the Product from an installation are not covered under this limited warranty.
  - d) The Consumer will be billed for any parts or labor charges not covered by this limited warranty. The Consumer will be responsible for any expenses related to reinstallation of the Product.
  - e) Nokia will repair the Product under the limited warranty within 30 days after receipt of the Product. If Nokia cannot perform repairs covered under this limited warranty within 30 days, or after a reasonable number of attempts to repair the same defect, Nokia at its option, will provide a replacement Product or refund the purchase price of the Product less a reasonable amount for usage. In some states the Consumer may have the right to a loaner if the repair of the Product takes more than ten (10) days.

Please contact the Customer Service Center at Nokia at the telephone number listed at the end of this warranty if you need a loaner and the repair of the Product has taken or is estimated to take more than ten (10) days.

- f) If the Product is returned during the limited warranty period, but the problem with the Product is not covered under the terms and conditions of this limited warranty, the Consumer will be notified and given an estimate of the charges the Consumer must pay to have the Product repaired, with all shipping charges billed to the Consumer. If the estimate is refused, the Product will be returned freight collect. If the Product is returned after the expiration of the limited warranty period, Nokia's normal service policies shall apply and the Consumer will be responsible for all shipping charges.
- 9 You (the Consumer) understand that the product may consist of refurbished equipment that contains used components, some of which have been reprocessed. The used components comply with Product performance and reliability specifications.
- 10 ANY IMPLIED WARRANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OR USE, SHALL BE LIMITED TO THE DURATION OF THE FOREGOING LIMITED WRITTEN WARRANTY. OTHERWISE, THE FOREGOING LIMITED WARRANTY IS THE CONSUMER'S SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. NOKIA SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF ANTICIPATED BENEFITS OR PROFITS, LOSS OF SAVINGS OR REVENUE, LOSS OF DATA, PUNITIVE DAMAGES, LOSS OF USE OF THE PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF ANY SUBSTITUTE EQUIPMENT OR FACILITIES, DOWNTIME, THE CLAIMS OF ANY THIRD PARTIES, INCLUDING CUSTOMERS, AND INJURY TO PROPERTY, RESULTING FROM THE PURCHASE OR USE OF THE PRODUCT OR ARISING FROM BREACH OF THE WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT TORT, OR ANY OTHER LEGAL OR EQUITABLE THEORY, EVEN IF NOKIA KNEW OF THE LIKELIHOOD OF SUCH DAMAGES. NOKIA SHALL NOT BE LIABLE FOR DELAY IN RENDERING SERVICE UNDER THE LIMITED WARRANTY, OR LOSS OF USE DURING THE PERIOD THAT THE PRODUCT IS BEING REPAIRED.



- 11 Some states do not allow limitation of how long an implied warranty lasts, so the one year warranty limitation may not apply to you (the Consumer). Some states do not allow the exclusion or limitation of incidental and consequential damages, so certain of the above limitations or exclusions may not apply to you (the Consumer). This limited warranty gives the Consumer specific legal rights and the Consumer may also have other rights which vary from state to state.
- 12 Nokia neither assumes nor authorizes any authorized service center or any other person or entity to assume for it any other obligation or liability beyond that which is expressly provided for in this limited warranty including the provider or seller of any extended warranty or service agreement.
- 13 This is the entire warranty between Nokia and the Consumer, and supersedes all prior and contemporaneous agreements or understandings, oral or written, relating to the Product, and no representation, promise or condition not contained herein shall modify these terms.
- 14 This limited warranty allocates the risk of failure of the Product between the Consumer and Nokia. The allocation is recognized by the Consumer and is reflected in the purchase price.
- 15 Any action or lawsuit for breach of warranty must be commenced within eighteen (18) months following purchase of the Product.
- 16 Questions concerning this limited warranty may be directed to:  
Nokia Inc.  
Attn: Customer Service  
7725 Woodland Center Blvd., Ste. 150  
Tampa, FL 33614  
Telephone: 1-888-NOKIA-2U (1-888-665-4228)  
Facsimile: (813) 287-6612  
TTY/TDD Users Only: 1-800-24-NOKIA (1-800-246-6542)
- 17 The limited warranty period for Nokia supplied attachments and accessories is specifically defined within their own warranty cards and packaging.

# Appendix A Message from the CTIA (Cellular Telecommunications & Internet Association) to all users of mobile phones

© 2001 Cellular Telecommunications & Internet Association. All Rights Reserved. 1250 Connecticut Avenue, NW Suite 800, Washington, DC 20036. Phone: (202) 785-0081

*Safety is the most important call you will ever make.*

### **A Guide to Safe and Responsible Wireless Phone Use**

Tens of millions of people in the U.S. today take advantage of the unique combination of convenience, safety and value delivered by the wireless telephone. Quite simply, the wireless phone gives people the powerful ability to communicate by voice--almost anywhere, anytime--with the boss, with a client, with the kids, with emergency personnel or even with the police. Each year, Americans make billions of calls from their wireless phones, and the numbers are rapidly growing.

But an important responsibility accompanies those benefits, one that every wireless phone user must uphold. When driving a car, driving is your first responsibility. A wireless phone can be an invaluable tool, but good judgment must be exercised at all times while driving a motor vehicle--whether on the phone or not.

The basic lessons are ones we all learned as teenagers. Driving requires alertness, caution and courtesy. It requires a heavy dose of basic common sense---keep your head up, keep your eyes on the road, check your mirrors frequently and watch out for other drivers. It requires obeying all traffic signs and signals and staying within the speed limit. It means using seatbelts and requiring other passengers to do the same.

But with wireless phone use, driving safely means a little more. This brochure is a call to wireless phone users everywhere to make safety their first priority when behind the wheel of a car. Wireless telecommunications is keeping us in touch, simplifying our lives, protecting us in emergencies and providing opportunities to help others in need.

When it comes to the use of wireless phones, *safety is your most important call.*

#### **Wireless Phone "Safety Tips"**

Below are safety tips to follow while driving and using a wireless phone which should be easy to remember.

- 1 Get to know your wireless phone and its features such as speed dial and redial. Carefully read your instruction manual and learn to take advantage of valuable features most phones offer, including automatic redial and memory. Also, work to memorize the phone keypad so you can use the speed dial function without taking your attention off the road.
- 2 When available, use a hands free device. A number of hands free wireless phone accessories are readily available today. Whether you choose an installed mounted device for your wireless phone or a speaker phone accessory, take advantage of these devices if available to you.
- 3 Position your wireless phone within easy reach. Make sure you place your wireless phone within easy reach and where you can grab it without removing your eyes from the road. If you get an incoming call at an inconvenient time, if possible, let your voice mail answer it for you.
- 4 Suspend conversations during hazardous driving conditions or situations. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow and ice

can be hazardous, but so is heavy traffic. As a driver, your first responsibility is to pay attention to the road.

- 5 Do not take notes or look up phone numbers while driving. If you are reading an address book or business card, or writing a "to do" list while driving a car, you are not watching where you are going. It's common sense. Don't get caught in a dangerous situation because you are reading or writing and not paying attention to the road or nearby vehicles.
- 6 Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan your calls before you begin your trip or attempt to coincide your calls with times you may be stopped at a stop sign, red light or otherwise stationary. But if you need to dial while driving, follow this simple tip--dial only a few numbers, check the road and your mirrors, then continue.
- 7 Do not engage in stressful or emotional conversations that may be distracting. Stressful or emotional conversations and driving do not mix--they are distracting and even dangerous when you are behind the wheel of a car. Make people you are talking with aware you are driving and if necessary, suspend conversations which have the potential to divert your attention from the road.
- 8 Use your wireless phone to call for help. Your wireless phone is one of the greatest tools you can own to protect yourself and your family in dangerous situations--with your phone at your side, help is only three numbers away. Dial 9-1-1 or other local emergency number in the case of fire, traffic accident, road hazard or medical emergency. Remember, it is a free call on your wireless phone!
- 9 Use your wireless phone to help others in emergencies. Your wireless phone provides you a perfect opportunity to be a "Good Samaritan" in your community. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.
- 10 Call roadside assistance or a special wireless non-emergency assistance number when necessary. Certain situations you encounter while driving may require attention, but are not urgent enough to merit a call for emergency services. But you still can use your wireless phone to lend a hand. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured or a vehicle you know to be stolen, call roadside assistance or other special non-emergency wireless number.

Careless, distracted individuals and people driving irresponsibly represent a hazard to everyone on the road. Since 1984, the Cellular Telecommunications Industry Association and the wireless industry have conducted educational outreach to inform wireless phone users of their responsibilities as safe drivers and good citizens. As we approach a new century, more and more of us will take advantage of the benefits of wireless telephones. And, as we take to the roads, we all have a responsibility to drive safely.

*The wireless industry reminds you to use your phone safely when driving*

For more information, please call 1-888-901-SAFE.

For updates: <http://www.wow-com.com/consumer/issues/driving/articles.cfm?ID=85>



# Appendix B Message from the FDA (U.S. Food and Drug Administration) to all users of mobile phones

©July 18, 2001 For updates: <http://www.fda.gov/cdrh/phones>

## Consumer Update on Wireless Phones

U.S. Food and Drug Administration

### 1. Do wireless phones pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless phones. There is no proof, however, that wireless phones are absolutely safe. Wireless phones emit low levels of radiofrequency energy (RF) in the microwave range while being used. They also emit very low levels of RF when in the stand-by mode. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low level RF that does not produce heating effects causes no known adverse health effects. Many studies of low level RF exposures have not found any biological effects. Some studies have suggested that some biological effects may occur, but such findings have not been confirmed by additional research. In some cases, other researchers have had difficulty in reproducing those studies, or in determining the reasons for inconsistent results.

### 2. What is FDA's role concerning the safety of wireless phones?

Under the law, FDA does not review the safety of radiation-emitting consumer products such as wireless phones before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless phones are shown to emit radiofrequency energy (RF) at a level that is hazardous to the user. In such a case, FDA could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace or recall the phones so that the hazard no longer exists.

Although the existing scientific data do not justify FDA regulatory actions, FDA has urged the wireless phone industry to take a number of steps, including the following:

- Support needed research into possible biological effects of RF of the type emitted by wireless phones;
- Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and
- Cooperate in providing users of wireless phones with the best possible information on possible effects of wireless phone use on human health.

FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of RF safety to ensure coordinated efforts at the federal level. The following agencies belong to this working group:

- National Institute for Occupational Safety and Health
- Environmental Protection Agency
- Federal Communications Commission
- Occupational Safety and Health Administration
- National Telecommunications and Information Administration

The National Institutes of Health participates in some interagency working group activities, as well.

FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply with FCC safety guidelines that limit RF exposure. FCC relies on FDA

and other health agencies for safety questions about wireless phones. FCC also regulates the base stations that the wireless phone networks rely upon. While these base stations operate at higher power than do the wireless phones themselves, the RF exposures that people get from these base stations are typically thousands of times lower than those they can get from wireless phones. Base stations are thus not the subject of the safety questions discussed in this document.

**3. What kinds of phones are the subject of this update?**

The term wireless phone refers here to hand-held wireless phones with built-in antennas, often called cell mobile or PCS phones. These types of wireless phones can expose the user to measurable radiofrequency energy (RF) because of the short distance between the phone and the user's head. These RF exposures are limited by Federal Communications Commission safety guidelines that were developed with the advice of FDA and other federal health and safety agencies. When the phone is located at greater distances from the user, the exposure to RF is drastically lower because a person's RF exposure decreases rapidly with increasing distance from the source. The so-called cordless phones, which have a base unit connected to the telephone wiring in a house, typically operate at far lower power levels, and thus produce RF exposures far below the FCC safety limits.

**4. What are the results of the research done already?**

The research done thus far has produced conflicting results, and many studies have suffered from flaws in their research methods. Animal experiments investigating the effects of radiofrequency energy (RF) exposures characteristic of wireless phones have yielded conflicting results that often cannot be repeated in other laboratories. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. However, many of the studies that showed increased tumor development used animals that had been genetically engineered or treated with cancer-causing chemicals so as to be pre-disposed to develop cancer in the absence of RF exposure. Other studies exposed the animals to RF for up to 22 hours per day. These conditions are not similar to the conditions under which people use wireless phones, so we don't know with certainty what the results of such studies mean for human health.

Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, glioma, meningioma, or acoustic neuroma, tumors of the brain or salivary gland, leukemia, or other cancers. None of the studies demonstrated the existence of any harmful health effects from wireless phone RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of phone use in these studies was around three years.

**5. What research is needed to decide whether RF exposure from wireless phones poses a health risk?**

A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the data that are needed. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer promoting effect if one exists. Epidemiological studies can provide data that is directly applicable to human populations, but 10 or more years follow-up may be



needed to provide answers about some health effects, such as cancer. This is because the interval between the time of exposure to a cancer-causing agent and the time tumors develop - if they do - may be many, many years. The interpretation of epidemiological studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones. Many factors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

6. What is FDA doing to find out more about the possible health effects of wireless phone RF?

FDA is working with the U.S. National Toxicology Program and with groups of investigators around the world to ensure that high priority animal studies are conducted to address important questions about the effects of exposure to radiofrequency energy (RF).

FDA has been a leading participant in the World Health Organization International Electromagnetic Fields (EMF) Project since its inception in 1996. An influential result of this work has been the development of a detailed agenda of research needs that has driven the establishment of new research programs around the world. The Project has also helped develop a series of public information documents on EMF issues.

FDA and the Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative Research and Development Agreement (CRADA) to do research on wireless phone safety. FDA provides the scientific oversight, obtaining input from experts in government, industry, and academic organizations. CTIA-funded research is conducted through contracts to independent investigators. The initial research will include both laboratory studies and studies of wireless phone users. The CRADA will also include a broad assessment of additional research needs in the context of the latest research developments around the world.

7. How can I find out how much radiofrequency energy exposure I can get by using my wireless phone?

All phones sold in the United States must comply with Federal Communications Commission (FCC) guidelines that limit radiofrequency energy (RF) exposures. FCC established these guidelines in consultation with FDA and the other federal health and safety agencies. The FCC limit for RF exposure from wireless telephones is set at a Specific Absorption Rate (SAR) of 1.6 watts per kilogram (1.6 W/kg). The FCC limit is consistent with the safety standards developed by the Institute of Electrical and Electronic Engineering (IEEE) and the National Council on Radiation Protection and Measurement. The exposure limit takes into consideration the body's ability to remove heat from the tissues that absorb energy from the wireless phone and is set well below levels known to have effects.

Manufacturers of wireless phones must report the RF exposure level for each model of phone to the FCC. The FCC website (<http://www.fcc.gov/oet/rfsafety>) gives directions for locating the FCC identification number on your phone so you can find your phone's RF exposure level in the online listing.

8. What has FDA done to measure the radiofrequency energy coming from wireless phones?

The Institute of Electrical and Electronic Engineers (IEEE) is developing a technical standard for measuring the radiofrequency energy (RF) exposure from wireless

phones and other wireless handsets with the participation and leadership of FDA scientists and engineers. The standard, Recommended Practice for Determining the Spatial-Peak Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques, sets forth the first consistent test methodology for measuring the rate at which RF is deposited in the heads of wireless phone users. The test method uses a tissue-simulating model of the human head. Standardized SAR test methodology is expected to greatly improve the consistency of measurements made at different laboratories on the same phone. SAR is the measurement of the amount of energy absorbed in tissue, either by the whole body or a small part of the body. It is measured in watts/kg (or milliwatts/g) of matter. This measurement is used to determine whether a wireless phone complies with safety guidelines.

9. What steps can I take to reduce my exposure to radiofrequency energy from my wireless phone?

If there is a risk from these products--and at this point we do not know that there is--it is probably very small. But if you are concerned about avoiding even potential risks, you can take a few simple steps to minimize your exposure to radiofrequency energy (RF). Since time is a key factor in how much exposure a person receives, reducing the amount of time spent using a wireless phone will reduce RF exposure.

If you must conduct extended conversations by wireless phone every day, you could place more distance between your body and the source of the RF, since the exposure level drops off dramatically with distance. For example, you could use a headset and carry the wireless phone away from your body or use a wireless phone connected to a remote antenna.

Again, the scientific data do not demonstrate that wireless phones are harmful. But if you are concerned about the RF exposure from these products, you can use measures like those described above to reduce your RF exposure from wireless phone use.

10. What about children using wireless phones?

The scientific evidence does not show a danger to users of wireless phones, including children and teenagers. If you want to take steps to lower exposure to radiofrequency energy (RF), the measures described above would apply to children and teenagers using wireless phones. Reducing the time of wireless phone use and increasing the distance between the user and the RF source will reduce RF exposure. Some groups sponsored by other national governments have advised that children be discouraged from using wireless phones at all. For example, the government in the United Kingdom distributed leaflets containing such a recommendation in December 2000. They noted that no evidence exists that using a wireless phone causes brain tumors or other ill effects. Their recommendation to limit wireless phone use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists.

11. What about wireless phone interference with medical equipment?

Radiofrequency energy (RF) from wireless phones can interact with some electronic devices. For this reason, FDA helped develop a detailed test method to measure electromagnetic interference (EMI) of implanted cardiac pacemakers and defibrillators from wireless telephones. This test method is now part of a standard sponsored by the Association for the Advancement of Medical Instrumentation

(AAMI). The final draft, a joint effort by FDA, medical device manufacturers, and many other groups, was completed in late 2000. This standard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from wireless phone EMI. FDA has tested hearing aids for interference from handheld wireless phones and helped develop a voluntary standard sponsored by the Institute of Electrical and Electronic Engineers (IEEE). This standard specifies test methods and performance requirements for hearing aids and wireless phones so that no interference occurs when a person uses a compatible phone and a accompanied hearing aid at the same time. This standard was approved by the IEEE in 2000.

FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occur, FDA will conduct testing to assess the interference and work to resolve the problem.

## 12. Where can I find additional information?

For additional information, please refer to the following resources:

- FDA web page on wireless phones  
<http://www.fda.gov/cdrh/phones/index.html>
- Federal Communications Commission (FCC) RF Safety Program  
<http://www.fcc.gov/oet/rfsafety>
- International Commission on Non-Ionizing Radiation Protection  
<http://www.icnirp.de>
- World Health Organization (WHO) International EMF Project  
<http://www.who.int/emf>
- National Radiological Protection Board (UK)  
<http://www.nrp.org.uk/>

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