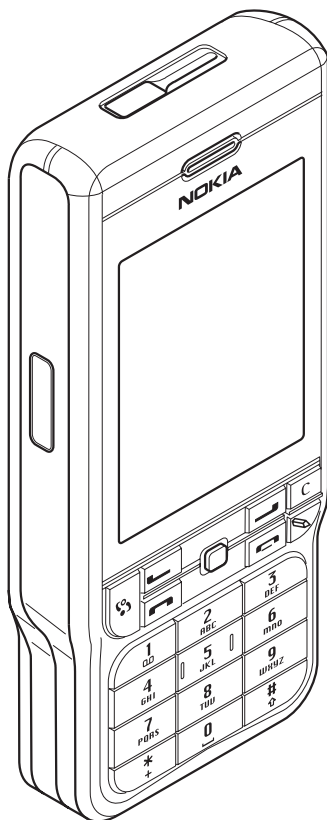


User Guide for Nokia 3230



9234625
Issue 1 EN

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CE 168

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This device may contain commodities, technology, or software that may only be exported in accordance with the U. S. Export Administration regulations. Diversion contrary to U.S. or Canadian law is prohibited.

FCC/INDUSTRY CANADA NOTICE

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

The availability of particular products may vary by region. Check with the Nokia dealer nearest to you.

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Manufactured or sold under one or more following US Patents.
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RE32,580	4558302	4868846	4945633	4969192	5001372
5101175	5151946	5173927	5212834	5230091	5241583
5311151	5317283	5331638	5335362	5353328	5371481
5378935	5384782	5396657	5400949	5416435	5442521
5446364	5479476	5526366	5553125	5557639	5565821
5570369	5581244	5600708	5625274	5677620	5692032
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6400958	6453179	6463278	6470470	6487397	6522670
6198928	4969192	5266782	5390223	5444816	5487084
5640395	5664053	5699482	5701392	5722074	5754976
5805301	5835889	5857151	5859843	5862178	5898925
5930233	5946651	5960354	5960389	5963901	6005857
6011971	6031827	6118775	6128322	6137789	6167248
6285888	6356759	6377803	6430163	6438370	6456237
6170073	6178535	6195338	6199035	6240076	6266321

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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 REFUELLING

Do not use the phone at a refuelling point. Do not use near fuel or chemicals.



SWITCH OFF NEAR BLASTING

Follow any restrictions. Do not use the phone where blasting is in progress.



USE SENSIBLY

Use only in the normal position as explained in the product documentation. Do not 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 start screen. Enter the emergency number, then press the **send** 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 EGSM 900, GSM 1800 and GSM 1900 networks. 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 device must be switched on. Do not switch the device on when wireless device 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.

This device supports WAP 2.0 protocols (HTTP and SSL) that run on TCP/IP protocols. Some features of this device require network support for these technologies.

■ Shared memory

The following features in this device may share memory: contacts, text messages, and multimedia messages, images and ringing tones, video recorder, RealOne Player™, calendar, to-do notes, visual radio, and downloaded applications. Use of one or more of these features may reduce the memory available for the remaining features sharing memory. For example, saving many images may use all of the available memory. Your device 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.

■ Enhancements, batteries, and chargers

Check the model number of any charger before use with this phone. This phone is intended for use when supplied with power from ACP-7.



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 phone and its enhancements may contain small parts. Keep them out of reach of small children.

General information

■ Stickers in the sales package

The stickers included on the warranty card, in the sales package, contain important information for service and customer support purposes. The sales package also includes instructions on how to use the stickers.

■ Access codes

PIN code

The PIN (Personal Identification Number, 4 to 8 digits) code helps to protect your SIM card against unauthorised use. The PIN code is usually supplied with the SIM card.

After three consecutive incorrect PIN code entries, the PIN code is blocked. If the PIN code is blocked, you need to unblock it with the PUK code before you can use the SIM card again.

PIN2 code

The PIN2 code (4 to 8 digits), supplied with some SIM cards, is required to access some functions.

Lock code

The lock code (5 digits) can be used to lock the phone and keypad to avoid unauthorised use.

The factory setting for the lock code is 12345. To avoid unauthorised use of your phone, change the lock code. Keep the new code secret and in a safe place separate from your phone.

PUK and PUK2 codes

The PUK (Personal Unblocking Key, 8 digits) 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 the operator whose SIM card is in your phone for the codes.

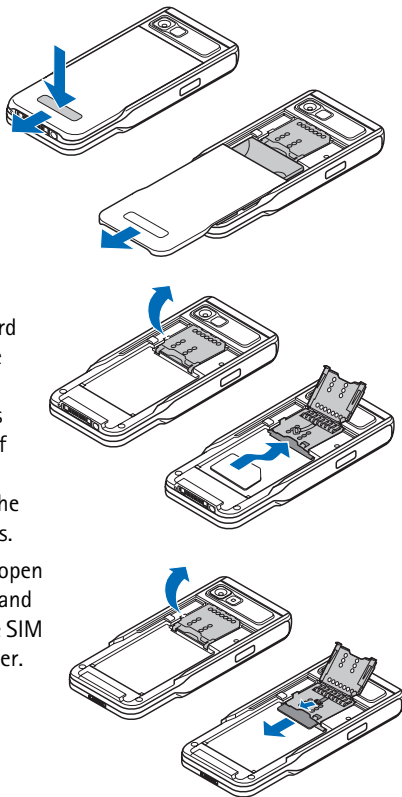
1. Getting started



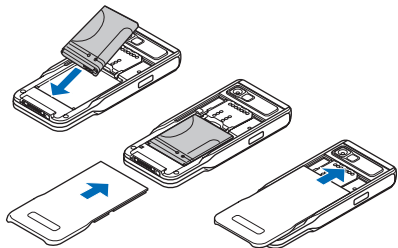
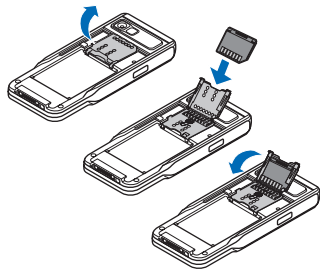
Note: Before removing the cover, always switch off the power and disconnect the charger and any other device. Avoid touching electronic components while changing the covers. Always store and use the device with the covers attached.

■ Inserting a SIM card and a MultiMediaCard

1. To open the phone slide the phone cover towards the bottom of the phone.
2. Open the memory card holder by pulling it up gently. Insert the SIM card into the lower slot. Make sure that the bevelled corner on the SIM card is facing towards the top of the phone and that the golden contact area on the card is facing downwards.
3. To remove the SIM card, open the memory card holder and use the slider to slide the SIM card out of the card holder.



4. Insert the MultiMediaCard (MMC) into the holder's slot. Make sure that the bevelled corner and golden contact area of the MMC are facing downwards.
5. Close the memory card holder by pressing it downwards until locked.
6. Align the golden contacts of the battery with the corresponding connectors on the phone, and push the opposite end of the battery until it snaps into place.
7. Close the phone cover by sliding it towards the top of the phone.



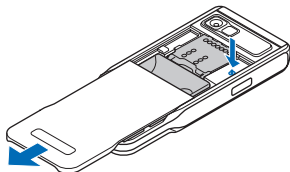
Keep all SIM cards out of the reach of small children. For availability and information on using SIM card services, contact your SIM card vendor. This may be the service provider, network operator, or other vendor.

Use only compatible Multimedia cards (MMC) with this device. The compatible MMC for your device is Reduced Size Dual Voltage MultiMediaCard. Other memory cards, such as Secure Digital (SD) cards, do not fit in the MMC card slot and are not compatible with this device. Using an incompatible memory card may damage the memory card as well as the device, and data stored on the incompatible card may be corrupted.

■ Removing the Multimedia card during phone operation

You can remove or replace the Multimedia card during phone operation without switching the phone off.

1. Open the phone cover.
2. Select **Menu**→**Extras**→**Memory card**, and select **Options**→**Remove mem. card** or press the dip switch right to Multimedia card holder.



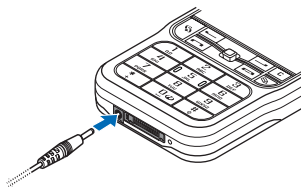
The phone displays the message:

Removing memory card will close all open applications. Remove anyway?

3. Press **Yes** and turn the phone.
4. Open the Multimedia card holder, remove or replace the Multimedia card and close the card holder.
5. Turn the phone and press **Ok**.
6. Close the phone cover.

■ Charging the battery

1. Connect the power cord to the charger.
2. Connect the other end of the power cord from the charger to the base of the phone.
3. Connect the charger to an AC wall outlet. The battery indicator bar on the display starts scrolling. Note that you can use the phone while charging. When the battery is fully charged, the bar stops scrolling. Disconnect the charger first from the phone and then from the AC outlet. See "Battery information" on page 141.



■ Switching the phone on and off

To switch the phone on and off, press and hold the power button on the top of the phone.

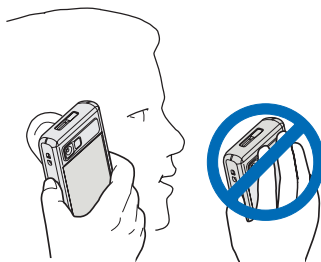


Warning: Do not switch the phone on when wireless phone use is prohibited or when it may cause interference or danger.

Your device has an internal antenna.



Note: As with any other radio-transmitting device, do not touch the antenna unnecessarily when the phone is switched on. Contact with the antenna affects call quality and may cause the phone to operate at a higher power level than otherwise needed. Avoiding contact with the antenna area when operating the phone optimises the antenna performance and the battery life.



NORMAL POSITION: Hold the phone as shown in the picture above.

If the phone requests a PIN code:

The PIN code is usually supplied with the SIM card.

- Enter the code (displayed as ****) and press the left selection key.

If the phone requests a lock code:

- Enter the lock code (displayed as *****) and press the left selection key.

The factory setting for the lock code is 12345. send key

2. Your phone

■ Keys and parts

Front view

1. Earpiece

2. Push to talk (PTT) key

To activate Push to talk. See
See "Push to talk" on page
28.

3. Joystick

Enables scrolling through
names, phone numbers,
menus or settings. The
joystick is also used to move
the cursor up and down,
right and left when writing
text, using the calendar,
and in some game
applications. Pressing the
joystick briefly selects the
function.

4. Menu key opens the main menu.

5. Call key dials a phone number and answers a call. In standby mode it shows the list of most recently called numbers.

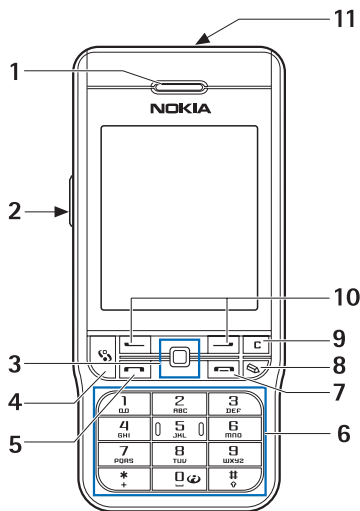
6. - enter numbers and characters.

* and # are used for various purposes in different functions.


7. End key ends an active call. Exits from any function.

8. Edit key opens a list of commands when you are editing a text such as *Copy*, *Cut* and *Paste*.

9. Clear key clears an entry or deletes an item and exits from different functions.



10. Selection keys

The functions of the keys depend on the guiding text shown on the display above the keys. To display the main menu, press .

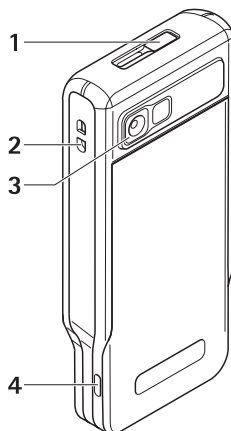
11. Power key

Switches the phone on and off.

When the keypad is locked, pressing the power key turns the phone's display lights on for approximately 15 seconds.

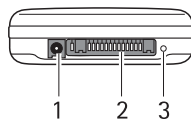
Back, top and side view

1. Power key and Loudspeaker
2. Eyelet for wrist strap
3. Camera lens
4. Infrared (IR) port























Connectors view

1. Charger connector
2. Pop-Port™ connector used, for example, for headsets and the data cable.
3. Microphone




■ Essential indicators

-  - The phone is being used in a GSM network.
-  - You have received one or several messages to the Inbox folder in Messaging.
-  - There are messages waiting to be sent in Outbox. See "Messaging" on page 68.
-  and  - You have missed calls. See "Recent calls register" on page 34.
-  - Shown if *Ringing type* is set to *Silent* and *Message alert tone*, *Chat alert tone*, and *E-mail alert tone* are set to *Off*. See "Profiles" on page 99..
-  - The phone keypad is locked. See "Keypad lock (Keyguard)" on page 21..
-  - You have an active alarm. See "Clock" on page 116.
-  - All calls to the phone are diverted to another number.
-  - A memory card is being read or written to.
-  - A headset is connected to the phone.
-  - A loopset is connected to the phone.
-  - The connection to a Bluetooth headset has been lost.
-  - A data call is active.
-  - A packet data (GPRS) connection is active.
-  - Shown when the packet data connection is on hold. These icons are shown instead of the signal strength indicator (shown in the top left corner in the standby mode). See "GPRS" on page 107.
-  - Bluetooth is active.
-  - An infrared connection is active.
-  - Data is being transmitted using Bluetooth. See "Bluetooth connection" on page 131.
-  - USB connection is active.

■ Keypad lock (Keyguard)

Use the keypad lock to prevent the keys from being accidentally pressed.


To lock: In standby mode press the left selection key and then the **.** key. When the keys are locked,  is shown on the display.


To unlock: Press the left selection key and then **.** key.

When the keypad lock is on, calls still may be possible to the official emergency number programmed into your device. Enter the emergency number and press the call key.

■ Menu



Press  to display the main menu. In the menu you can access all the applications in your phone.

 Options in the Menu: *Open, App. downloads, List view/Grid view, Move, Move to folder, New folder, Memory details, Help* and *Exit*.

Grid view or List view of the Menu

- Select **Options** → *List view* or *Grid view* to change between a list or an ordered grid of the available applications.



Note: The order of the applications can be changed by the user and may therefore differ from the standard order described in this User's Guide.

Moving in the Menu

- Move the joystick up, down left and right to navigate in the menu.


Opening applications or folders

- Scroll to an application or a folder and press the joystick to open it.

Closing applications

- Press **Back** or **Exit** as many times as needed to return to standby mode or select **Options** → *Exit*.

Displaying and switching between open applications

- Press and hold  to switch from one open application to another. The application switching window opens showing a list of

applications that are currently open. Scroll to an application and press the joystick to go to it.

- Numerous open applications may increase the demand on battery power and reduce the battery life. Exit from unused applications.

Shortcuts in idle mode

- To open *Camera*, move the joystick up.
- To open *Contacts*, move the joystick down or press the joystick.
- To open *Calendar*, move the joystick to the right or press the left selection key.
- To write an new text message, move the joystick to the left or press the right selection key.
- To change the profile, press the power key and select a profile.
- To open the last dialled numbers list, press the call key.
- To use voice commands, press and hold the right selection key.
- To start push to talk, press the PTT key.
- To start a connection to Web, press and hold the 0 key.

■ Actions common to all applications

- **Opening items for viewing** - Scroll to an item and press the joystick, or select *Options*→*Open*.
- **Editing items** - Open the item for viewing and select *Options*→*Edit*. Use the joystick to scroll through all fields of the item.
- **Removing, deleting items** - Scroll to the item and select *Options*→*Delete* or press the clear key. To delete many items at a time, you first need to mark them.
- **Marking an item** - There are several ways to select items when you are in a list.
 - To select one item at a time, scroll to the item and select *Options*→ *Mark/Unmark*→*Mark* or press the edit key and move the joystick at the same time. A check mark is placed next to the marked item.

- To select all items in the list, select **Options**→*Mark/Unmark*→*Mark all*.
- To mark multiple items, press and hold the edit key and then move the joystick down or up. As the selection moves, a check mark is placed next to the items. To end the selection, stop the scrolling with the joystick and then release the edit key.

After you have selected all the items that you want, you can move or delete them by selecting **Options**→*Move to folder* or *Delete*.


- **Unmarking an item** - Scroll to the item and select **Options**→*Mark/Unmark*→*Unmark* or press the edit key and the joystick at the same time.
- **Creating folders** - Select **Options**→*New folder*. You are asked to give a name to the folder (max. 35 letters).
- **Moving items to a folder** - Select **Options**→*Move to folder* (not shown if there are no folders available). When you select *Move to folder*, a list of available folders opens and you can also see the root level of the application (for moving an item out of a folder). Select the location that you want the item to be moved to and press **OK**.
- **Sending items** - Scroll to the item and select **Options**→*Send*. Select the method, the choices are *Via multimedia*, *Via bluetooth*, *Via e-mail*, *Via fax* and *Via infrared*.
 - If you choose to send the item in an e-mail or a multimedia message, an editor opens. Press the joystick to select the recipient(s) from the Contacts directory or write the phone number or e-mail address of the recipient in the *To-* field. Add text or sound and select **Options**→*Send*. See "Writing and sending messages" on page 69.
 - *Via Bluetooth*. See "Sending data via Bluetooth technology" on page 132.

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■ Volume control


Voice volume icons:

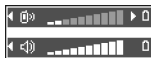
 - for earpiece mode,

 - for loudspeaker mode.

When you have an active call or are listening to a sound, press the joystick to the left or to the right or the volume control side keys to increase or decrease the volume level, respectively.

The loudspeaker allows you to speak and listen to the phone from a short distance without having to hold the phone to your ear, for example, having it on a table nearby. The loudspeaker can be used during a call, with sound and video applications, and when viewing multimedia messages. Sound and video applications use the loudspeaker by default. Using the loudspeaker makes it easier to use other applications during a call.

To start using the loudspeaker during an already active call, select **Options**→*Activate loudsp.*. A tone is played,  is shown in the navigation bar, and the volume indicator changes.



The loudspeaker cannot be activated during a call when you have connected a headset to the phone.





Warning: Do not hold the device near your ear when the loudspeaker is in use, because the volume may be extremely loud.

To turn off the loudspeaker when you have an active call, select **Options**→*Activate handset*.

■ Help

 Select **Menu** → **Help**.



Help provides usage information for many applications on the phone. Move the joystick to the left or to the right to toggle between the help category list  or a list of keywords . Select a category or a keyword by scrolling or use the text input field, to jump to the desired category or keyword. Press the joystick to display the related helptext.

3. Call functions


■ Making a voice call


1. In the standby mode, enter the phone number, including the area code. To remove a number press the **clear** key.

For international calls, press the ***** key twice for the **+** character (replaces the international access code), and enter the country code, area code (omit the leading zero if necessary), and phone number.



2. Press the **call** key to call the number.
3. Press the **end** key to end the call (or to cancel the call attempt).

Pressing the **end** key will always end a call, even if another application is active.

 **Tip:** To increase or decrease the volume during a call, move the joystick to the left or to the right.


Making a call from the Contacts application - Press  and select **Contacts**. Scroll to the desired name; or enter the first letters of the name to the Search field. Matching contacts are listed. Press the **call** key to call.

Calling your voice mailbox (network service) - To call your voice mailbox, press and hold key **1** in the standby mode.

 **Tip:** To change the phone number of your voice mailbox, press  and select **Tools**→ **Voice mailbox** and select **Options**→ **Change number**. Enter the number (obtained from your service provider) and press **OK**.

Calling a recently dialled number - In the standby mode, press the **call** key to access a list of the 20 last numbers you called or attempted to call. Scroll to the number you want, and press the **call** key to call the number.

Speed dialling a phone number


To assign a phone number to one of the speed dialling keys (2 - 9), press  and select **Tools**→**Speed dial**. Key 1 is reserved for the voice mailbox.

To call: In standby mode, press the related key and then the call key or press and hold the related key.

Making a conference call (network service)

1. Make a call to the first participant.
2. To make a call to another participant, select **Options**→**New call**. The first call is automatically put on hold.
3. When the new call is answered, join the first participant in the conference call. Select **Options**→**Conference**.
 - To add a new person to the call, repeat step 2, and select **Options**→**Conference**→**Add to conference**. The phone supports conference calls between a maximum of six participants, including yourself.
 - To have a private conversation with one of the participants, select **Options**→**Conference**→**Private**. Select a participant and press **Private**. The conference call is put on hold on your phone. The other participants can still continue the conference call. Once you have finished the private conversation, select **Options**→**Add to conference** to return to the conference call.
 - To drop a participant, select **Options**→**Conference**→**Drop participant**, scroll to the participant, and press **Drop**.
4. To end the active conference call, press the end key.

■ Answering or rejecting a call

- To answer the call, press the call key.
 - To mute the ringing tone when a call comes in, press **Silence**.
-  **Tip:** If a compatible headset is connected to the phone, press the headset key to answer and end a call.

- If you do not want to answer a call, press the **end** key to reject it. The caller will hear a line busy tone. If you have activated the **Call divert**→ **If busy** function to divert calls, rejecting an incoming call will also divert the call.

Call waiting (network service)

You can answer a call while you have another call in progress if you have activated the Call waiting function in **Settings**→ **Call settings**→ **Call waiting**.

- To answer the waiting call, press the **call** key. The first call is put on hold.
- To switch between the two calls, press **Swap**. Select **Options**→ **Transfer** to connect an incoming call or a call on hold with an active call and to disconnect yourself from the calls. To end the active call, press the **end** key. To end both calls, select **Options**→ **End all calls**.

Options during a call

Many of the options that you can use during a call are network services. Select **Options** during a call for some of the following options: **Mute** or **Unmute**, **Answer**, **Reject**, **Swap**, **Hold** or **Unhold**, **Activate handset**, **Activate loudsp.**, or **Activate handsfree** (if a compatible Bluetooth headset is attached), **End active call** or **End all calls**, **New call**, **Conference**, and **Transfer**. Select:

- **Replace** - to end an active call and replace it by answering the waiting call.
- **Send DTMF** - to send DTMF tone strings, for example, a password. Enter the DTMF string or search for it in **Contacts**. To enter a wait character (**w**) or a pause character (**p**), press **.** repeatedly. Press **OK** to send the tone.



Tip: You can add DTMF tones to the **Phone number** or **DTMF** fields in a contact card.

■ Push to talk

☞ Select **Menu** → **Push to talk**.

Push to talk over cellular is a two-way radio service (network service) available over a GSM/GPRS cellular network. Push to talk provides direct voice communication connected with pressing the **Push to talk** key.

You can use push to talk to have a conversation with one person or with a group of people having compatible devices. When your call is connected, the person or group you are calling does not have to answer the phone. Besides the GPRS counters, the phone registers only one-to-one calls in the recent calls lists in **Log**. The participants should confirm the reception of any communications where appropriate as there is no other confirmation of whether the recipient(s) has(have) heard the call.

To check availability and costs, and to subscribe to the service, contact your network operator or service provider. Note that roaming services may be more limited than for normal calls.

Before you can use the push to talk service, you must define the required push to talk service settings.

While connected to the push to talk service, you can use the other functions of the phone. The push to talk service is not connected to traditional voice communication, and therefore many of the services available for traditional voice calls (for example, voice mailbox) are not available for push to talk communications.

Settings for push to talk

☞ Select **Options** → **Settings**.

For push to talk service settings, contact your network operator or service provider. You may receive the settings over the air.

- **Notification tone** – A tone for incoming push to talk calls.
- **Default nickname** – Your nickname shown to other users.
- **Show my PTT address** – Select **No** if you want to hide your push to talk address from the receivers of your push to talk group or one-to-one calls.
- **Domain** – The default domain name.

- *Access point name* - The access point name for the push to talk service.
- *Server address* - The push to talk server address.
- *User name* - Your user name used to enter the push to talk service.
- *PTT password* - Your password used to enter the push to talk service.
- *Realm* - The name of the domain used for group user authentication.

After modifying the settings, restart the push to talk application.

Connecting to the push to talk service

☛ Select **Menu** → **Push to talk**. Alternatively, press and hold the **Push to talk** key for a few seconds to connect to the service.

The push to talk application automatically attempts to connect to the push to talk service. If the login is successful, the push to talk sessions view opens.

📞 indicates the push to talk connection. If you have added group(s) to the phone, you are automatically joined to the active groups, and the name of the default group is displayed in standby mode.

📞 indicates that the service is temporarily unavailable. The phone automatically tries to reconnect to the service until you disconnect from the push to talk service.

If the login fails, you get an error note such as *Unable to switch Push to talk on*. Select **Options** → *Switch PTT on* to try to log in again, *Settings* to open the settings view, or *Exit* to close the error note.

To disconnect from the push to talk service, select **Options** → *Switch PTT off*.

▴ Options in the sessions view are: *Deactivate loudsp./Activate loudsp.*, *Active members*, *PTT contacts*, *PTT log*, *Settings*, *Help*, *Switch PTT off*, and *Exit*.

Making a push to talk call

Select **Options**→*Deactivate loudsp./Activate loudsp.* to use either loudspeaker or earpiece for push to talk communication. When the earpiece is selected, you can use the phone normally to your ear.



Warning: Do not hold the device near your ear when the loudspeaker is in use, because the volume may be extremely loud.

To make a push to talk call

1. Select **Options**→*PTT contacts* and search for a contact person or a group.
To open the *Push to talk groups* view, press the joystick to the right.
2. Press the **Push to talk** key or the **call** key. This starts a push to talk call immediately.

OR

Select **Options**→*Send callback req.*. This sends a callback request to the selected push to talk contact or group.

A tone sounds indicating that the access is granted, and the phone displays your nickname and group name.

3. To request a speech turn, press the **Push to talk** key. The phone sends your request. Wait until your phone receives a speech turn signal. When the phone displays *Talk*, you have 30 seconds to talk on your speech turn.
Press and hold the **Push to talk** key the entire time you are talking, and hold the phone in front of you so that you can see the display. When you have finished, release the key. Talking is allowed on a first-come, first-served basis. When someone stops talking, the first person to press the **Push to talk** key can talk next.
4. To switch between several active sessions, select **Swap**.
5. To end the active session, select **Deactiv.**
If you have other active sessions, the phone moves to the next session.
If there are no other sessions, the phone displays a note stating that there are no active sessions.
6. To exit the push to talk application, select **Options**→*Exit*.

Receiving a push to talk call

A short tone notifies you of an incoming group or a one-to-one call. Press **Accept** to receive the call or **Silence** to reject it.

When receiving a group call, the group name and the nickname of the caller are displayed. When receiving a one-to-one call from a person whose information you have saved in **Contacts**, the saved name is displayed if identified; otherwise, only the nickname of the caller is displayed.

Callback requests

↩ Select **Options**→**PTT contacts** or **PTT log**.

Sending a callback request

If you make a one-to-one call and do not get a response, you can send a request for the person to call you back. You can send a callback request in different ways:

- To send a callback request from the contacts list in the **Push to talk** menu, select **Options**→**PTT contacts**. Scroll to a contact and select **Options**→**Send callback req..**
- To send a callback request from the **Contacts**, move the joystick down in standby mode, and scroll to the desired contact. Press **Details**, scroll to the push to talk address and select **Options**→**Send callback req..**
- To send a callback request from the group list in the **Push to talk** menu, select **Options**→**PTT contacts** and move the joystick to the right. Scroll to the desired group and select **Options**→**Send callback req..**
- To send a callback request from the callback request list in the **Push to talk** menu, select **Options**→**PTT log**. Select **Received callback reqs.** and select **Options**→**Open**. Scroll to a contact and select **Options**→**Send callback req..**

Saving the callback request sender

When you receive a callback request from someone who is not in your contacts list, you can save the name to your contacts.

1. To open the request, select **Options**→*PTT log*→*Received callback reqs.*.
2. Scroll to the a contact and select **Options**→*Add to Contacts*.

Using groups

☞ Select **Options**→*PTT contacts*.

When you call a group, all members joined to the group hear the call simultaneously.

Each member in the groups is identified by a user name given by the service provider. Group members can choose a nickname for within each group, which is shown as a caller identification.

Groups are registered with a URL address. One user registers the group URL in the network by joining the group session the first time.

Adding a group

1. Select **Options**→*PTT contacts* and then move the joystick to the right. This opens the *Push to talk groups* view.
2. Select **Options**→*Add group*→*Create new*.
3. Enter a *Group name*, and press **OK**.
4. Select a *Group privacy* level.
5. Enter your own nickname in *Nickname in group*.
6. To add a thumbnail image to the group, select **Options**→*Add thumbnail*.
7. Press **Done**. To add members and to send an invitation to the group, press **Yes** when the phone requests for *Send group invitation to all members now?* This opens a view where you can select members for the group.

The members you invite to the open groups can also invite more members to the group.

Joining an existing group

For group detail information, contact your network operator or service provider. You may receive the details over the air.

1. Press **Menu**→**Push to talk**→**PTT contacts** and then move the joystick to the right. This opens the *Push to talk groups* view.
2. Select **Options**→**Add group**→**Join existing**.
3. Enter the *Group address*, *Group name*, and *Nickname in group*. You can also add a *Group thumbnail*.
4. Press **Done**.

Receiving an invitation

When you receive a text message invitation to a group, select **Options** and one of the following:

- *From* - View the contact information of the person who sent the invitation.
- *Nickname* - View the nickname of the person who sent the invitation.
- *Group name* - View the name of the group if the group is not a secured group.
- *Group address* - View the group address if the group is not a secured group.
- *Save group* - Add the group to your phone. After the group is saved, the phone asks whether you want to connect to the saved group.

To reject the invitation, press **Back** and **Yes**.

■ Call register and general log



☞ Select **Menu**→**Log**.

In the log, you can monitor phone calls, text messages, packet data connections, and fax and data calls registered by the phone. You can filter the log to view just one type of event and create new contact cards based on the log information.

Connections to your remote mailbox, multimedia messaging centre, or browser pages are shown as data calls or packet data connections in the general communications log.

Recent calls register

☞ Select **Menu**→**Log**→**Recent calls**.

The phone registers the phone numbers of missed, received, and dialled calls, and the approximate duration of your calls. The phone registers missed and received calls only if the network supports these functions, and the phone is switched on and is within the network's service area.

▀ Options in the Missed, Received, and Dialled views: *Call*, *Create message*, *Use number*, *Delete*, *Clear list*, *Add to Contacts*, *Help*, and *Exit*.

Missed calls and received calls

To view a list of the last 20 phone numbers from which somebody has tried to call you without success (network service), go to **Log**→**Recent calls**→**Missed calls**.

To view a list of the 20 numbers or names from which you have most recently accepted calls (network service), go to **Log**→**Recent calls**→**Received calls**.

Dialled numbers

To view the 20 phone numbers that you have most recently called or attempted to call, go to **Log**→**Recent calls**→**Dialled nos.**

Erasing recent call lists

- To clear all recent call lists, select **Options**→**Clear recent calls** in the Recent calls main view.

- To clear one of the call registers, open the register you want to erase and select **Options**→*Clear list*.
- To clear an individual event, open a register, scroll to the event, and press the **clear** key.

Call duration

↩ Select **Menu**→**Log**→**Call duration**.

Allows you to view the duration of your incoming and outgoing calls.



Note: The actual time invoiced for calls by your service provider may vary, depending on network features, rounding off for billing, and so forth.

Erasing call duration timers - Select **Options**→*Clear timers*. For this, you need the lock code. See "Security" on page 108.

Viewing the general log

↩ Select **Menu**→**Log** and move the joystick to the right.

In the general log, for each communication event, you can see the sender or recipient name, phone number, name of the service provider, or access point.

Sub-events, such as a text message sent in more than one part and packet data connections, are logged as one communication event.

Filtering the log


1. Select **Options**→*Filter*. A list of filters opens.
2. Scroll to a filter and press **Select**.

Erasing the contents of the log

- To erase all the log contents, Recent calls register, and Messaging delivery reports permanently, select **Options**→*Clear log*. Confirm by pressing **Yes**.

Packet data counter and connection timer

- To view how much data, measured in kilobytes, has been transferred and the approximate length of a certain GPRS connection, scroll to

an Incoming or Outgoing event with the access point icon  and select **Options**→*View details*.

Log settings

- Select **Options**→*Settings*. The list of settings opens.
 - *Log duration* - The log events remain in the phone memory for a set number of days after which they are automatically erased to free memory.
 - If you select *No log*, all the log contents, Recent calls register, and Messaging delivery reports are permanently deleted.
 - *Show call duration*. See "Call duration" on page 35.

GPRS data counter


 Select **Menu**→**Log**→**GPRS counter**.

The GPRS data counter allows you to check the amount of data sent and received during packet data (GPRS) connections.

4. Writing text


You can enter text, for example, when writing messages, using traditional or predictive text input.

■ Using traditional text input

The indicator  is shown on the top right of the display when you are writing text using traditional text input.

- Press a number key (1 - 9), repeatedly until the desired character appears. Note that there are more characters available for a number key than are printed on the key.
- To insert a number, press and hold the number key.
To switch between letter and number mode, press and hold the # key.
- If the next letter is located on the same key as the present one, wait until the cursor appears (or move the joystick to the right to end the time-out period), and then enter the letter.
- To insert a space, press the key 0. To move the cursor to the next line, press the key 0 three times.
- To switch between upper and lower case, press the # key.

■ Using predictive text input

You can enter any letter with a single keypress using predictive text input. To activate predictive text input, press the edit key and select *Dictionary on*. This activates predictive text input for all editors in the phone. The  indicator is shown at the top of the display.

1. Write the desired word by pressing the keys 2 - 9. Press each key only once for one letter. The word changes after every key press.
2. When you have finished the word, check that it is correct.

- If the word is correct, you can confirm it by moving the joystick to the right or by pressing the key **O** to insert a space. The underlining disappears and you can begin to write a new word.
- If the word is not correct, you have the following options:
 - Press the **.** key repeatedly to view the matching words the dictionary has found one by one.
 - Press the edit key and select *Dictionary* → *Matches* to view a list of matching words. Scroll to the word you want to use and press the joystick to select it.
- If the **?** character is shown after the word, the word you intended to write is not in the dictionary. To add a word to the dictionary, press *Spell*, enter the word (max. 32 letters) using traditional text input, and press **OK**. The word is added to the dictionary. When the dictionary becomes full, a new word replaces the oldest added word.
- To remove the **?** and clear characters one by one from the word, press the clear key.

■ Tips for writing text

- To change between the different character cases **Abc**, **abc**, and **ABC**, press the **#** key. Note that if you press the **#** key twice quickly the predictive text input is turned off.
- To insert a number in letter mode, press and hold the desired number key, or press the edit key and select number mode, enter the numbers you want, and press **OK**.
- The most common punctuation marks are available under the key **1**. Press key **1** repeatedly to reach the desired punctuation mark. Press the **.** key to open a list of special characters. Use the joystick to scroll through the list and press *Select* to select a character, or press the edit key and select *Insert symbol*.

The predictive text input tries to guess which commonly used punctuation mark (.,?!) is needed. The order and availability of the punctuation marks depend on the language of the dictionary.

When a word has been entered with predictive text on, you can press the edit key, select *Dictionary* and select:

- *Matches* - To view a list of words that correspond to your key presses. Scroll to the desired word and press the joystick.
- *Insert word* - To add a word (max. 32 letters) to the dictionary by using traditional text input. When the dictionary becomes full, a new word replaces the oldest added word.
- *Edit word* - To open a view where you can edit the word, available only if the word is active (underlined).
- *Off* - To turn off predictive text input for all editors in the phone

Writing compound words

- Write the first half of a compound word and confirm it by moving the joystick to the right. Write the last part of the compound word and complete the compound word by pressing the key **O** to add a space.

■ Copying text to the clipboard

To copy text to the clipboard, the following are the easiest methods:

1. To select letters and words, press and hold the edit key. At the same time, move the joystick to left or to the right. As the selection moves, text is highlighted.
To select lines of text, press and hold the edit key. At the same time move the joystick up or down.
2. To end the selection, release pressing the joystick while still holding the edit key.
3. To copy the text to the clipboard, while still holding the edit key, press *Copy*.
Or, release the edit key and then press it once to open a list of editing commands, for example, *Copy* or *Cut*.
If you want to remove the selected text from the document, press the clear key.
4. To insert the text into a document, press and hold the edit key and press *Paste*.
Or, press the edit key once and select *Paste*.

5. Personal information

■ Contacts



↩ Select **Menu**→**Contacts**.

In Contacts, you can store and manage contact information, such as names, phone numbers, and addresses.

You can also add a personal ringing tone, voice tag, or a thumbnail image to a contact card. You can create contact groups, which allow you to send text messages or e-mail to many recipients at the same time.

Contact information can only be sent to or received from compatible devices.

▶ Options in the Contacts directory: *Open, Call, Create message, New contact, Open conversation, Edit, Delete, Duplicate, Mark/Unmark, Copy to SIM direct., Send, Contacts info, SIM directory, Settings, Help, and Exit.*

Managing contacts

▶ Options when editing a contact: *Add thumbnail/Remove thumbnail, Add detail, Delete detail, Edit label, Help, and Exit.*

1. Press the joystick in standby mode or go to **Menu**→**Contacts**.
2. Select **Options**→*New contact*.
3. Fill in the fields you want and press **Done**.
 - To edit a contact, open it and then select **Options**→*Edit*.
 - To delete a contact, open it and select **Options**→*Delete*.
 - To attach a small thumbnail image to a contact, open the contact card, select **Options**→*Edit* and then select **Options**→*Add thumbnail*.
 - To assign default numbers and addresses to a contact, open the contact card and select **Options**→*Defaults*. A pop-up window opens, listing the different options.

- To copy names and numbers from a SIM card to your phone, select **Options**→*SIM directory*, scroll to the name(s) you want to copy and select **Options**→*Copy to Contacts*.
- To copy a phone, fax, or pager number from Contacts to your SIM card, scroll to the contact card you want to copy and select **Options**→*Copy to SIM direct*.

Adding a ringing tone

You can set a ringing tone for each contact card and group. When that contact or group member calls you, the phone plays the chosen ringing tone (if the caller's telephone number is sent with the call and your phone recognises it).

1. Press the joystick to open a contact card or go to the Groups list and select a contact group.
 2. Select **Options**→*Ringing tone*. A list of ringing tones opens.
 3. Use the joystick to select the ringing tone you wish to use for the contact or group and press **Select**.
- To remove the ringing tone, select *Default tone* from the list of ringing tones.

Voice dialling

↩ Select **Menu**→*Contacts*.

You can make a phone call by saying a voice tag that has been added to a contact card. Any spoken word(s) can be a voice tag.

Before using voice tags, note that:


- Voice tags are not language-dependent. They are dependent on the speaker's voice.
- You must say the name exactly as you said it when you recorded it.
- Voice tags are sensitive to background noise. Record voice tags and use them in a quiet environment.
- Very short names are not accepted. Use long names and avoid similar names for different numbers.



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

Adding a voice tag to a phone number

Voice tags can only be added to phone numbers stored in the phone's memory. See "Managing contacts" on page 40.

1. In the **Contacts** main view, scroll to the contact that you want to add a voice tag to, and press the joystick to open the contact card.
2. Scroll to the number that you want to add the voice tag to, and select **Options**→**Add voice tag**.
3. Press **Start** to record a voice tag. After the starting tone, clearly pronounce the word(s) you want to record as a voice tag.
4. After recording, the phone plays the recorded tag and the note **Playing voice tag** is displayed.
5. When the voice tag has been successfully saved, the note **Voice tag saved** is displayed and a beep sounds. A symbol  can be seen next to the number in the contact card.

Making a call by saying a voice tag

1. In standby mode, press and hold the **right selection key**. A short tone is played and the note **Speak now** is displayed.
2. To make a call by using a voice tag, hold the phone at a short distance away from your mouth and face and pronounce the voice tag clearly.
3. The phone plays the original voice tag, displays the name and number, and after a few seconds dials the number of the recognised voice tag.
 - If the phone plays an incorrect voice tag, or you want to retry voice dialling, press **Retry**.

Voice dialling cannot be used when a data call or a GPRS connection is active.

Assigning speed-dialling keys

Speed dialling is a quick way to call frequently used numbers. You can assign speed-dialling keys to eight phone numbers. The number 1 is reserved for the voice mailbox.

1. Open the contact card for which you want a speed-dialling key and select **Options**→*Assign speed dial*.
2. Scroll to a number and press **Assign**. When you return to the contact information view, you can see the speed-dial icon next to the number.
 - To call the contact by speed-dialling, go to standby mode and press the speed-dialling key and the call key.

■ Presence

↩ Select **Menu**→**Presence**.



Options in the Presence view: *Open, My availability, Viewers, Update presence, Login, Logout, Settings, Help, and Exit*.

Use Presence (network service) to inform others about your availability, that is, when, where and how you want to be contacted. Presence allows you to view and create a dynamic profile of your contact details, visible to other users of the service, to share information or control services. Presence information can include your availability, whether you prefer people to call or send messages, where you are and what you are doing.

Before you can use Presence, you need to find a service that you want to use and then save the settings of that service. You may receive the settings in a special text message, called a smart message, from the service provider that offers the Presence service. See "Receiving smart messages" on page 72. For more information, contact your service provider.

The Presence application allows you to change your own published information and manage who is authorised to see your presence. To view the presence information of others, you must use Contacts. See "Contacts" on page 40.

Changing your availability information

☛ Select **Options**→*My availability* and select:

- *Available* - You are available for people to call or send you messages. For example, when you have chosen this option for your general profile. See "Profiles" on page 99.
- *Busy* - You may be available for people to call or send you messages, for example, when your phone is in meeting profile.
- *Not available* - You are not available for people to call or send you messages, for example, when your phone is in silent profile.

Changing who can view your Presence information

☛ Select **Options**→*Viewers* and select:

- *Public pres.* - Displays limited information, for managing ways for people to contact you. This is available to anyone you have not blocked.
 - *My availability* - Select *Available*, *Busy*, or *Not available*.
 - *Viewers* - Opens the *Current viewers* view of your *Public pres.*. See "Public viewers" on page 45.
 - *Update presence* - Updates your presence information to the presence server.
 - *Login/Logout* - Connect to or disconnect from the presence server. See "Chat and Presence servers" on page 89.
 - *Settings* - Manage the publishing of your presence information.
- *Private pres.* - Displays private information, so you can share more personal information. This is only available to those that you have authorised to view your private information. You can select the following options:
 - *My availability* - Select *Available*, *Busy*, or *Not available*.
 - *Private message* - Write a text message of up to 40 characters to describe your current availability.
 - *My presence logo* - Add a logo to your availability information. Logo files are stored in the Gallery. See "Gallery" on page 51.

- **Viewers** - Opens the *Private list* view of your *Private pres.*. See "Private viewers" on page 45.
- **Update presence** - Updates your presence information on the presence server.
- **Login/Logout** - Connect to or disconnect from the presence server. See "Chat and Presence servers" on page 89.
- **Settings** - Manage the publishing of your presence.
- **Blocked pres.** - Displays a screen containing no personal details. See "Blocked viewers" on page 46.

Public viewers

Select *Public pres.* and select **Options**→**Viewers**→**Current viewers** to see the names, phone numbers, or user IDs of the viewers whom you do not allow to view your private presence messages, but who are currently viewing your public presence. You can scroll to a viewer, press **Options**, and select:

- **Add to private list** - Allows the viewer to also see your private presence.
- **Block** - Prevents the viewer from seeing your presence information.
- **Add to contacts** - Adds the viewer to your Contacts directory.
- **Reload lists** - Connect to the presence server to update the viewer lists. This option is only available when you are offline.

Private viewers

Select *Private pres.* and select **Options**→**Viewers**→**Private list** to see the names, phone numbers, or user IDs of the viewers who you allow to view your private presence messages. To prevent a viewer from seeing your private presence messages, scroll to the viewer and press the **clear** key. You can scroll to a viewer, press **Options**, and select:

- **Add new** - Adds a new viewer manually or from your Contacts directory. You can only select a contact who has a user ID in the contact card.
- **Block** - Prevents the viewer from seeing your presence information.
- **Add to contacts** - Adds the viewer to your Contacts directory.

- *Remove from list* - Removes the viewer from the private list. The option is available also when there are marked items selected. If the list is empty, the option is not available.
- *View details* - Shows the user ID information of the viewer.
- *Reload lists* - Connect to the presence server to update the viewer lists. This option is only available when you are offline.

Blocked viewers

Select **Options**→**Viewers**→**Blocked pres.** to see the viewers you prevented from seeing your public and private presence messages. To allow a viewer to see your presence information, scroll to a viewer and press the clear key. You can scroll to a viewer, press **Options**, and select:

- *Add to private list* - Allows the viewer to also see your private presence.
- *Add new* - Add a new viewer manually or from your Contacts directory. You can only select a contact who has a user ID in the contact card.
- *Add to contacts* - Adds the viewer to your Contacts directory.
- *View details* - Shows the user ID information of the viewer.
- *Reload lists* - Connect to the presence server to update the viewer lists. This option is only available when you are offline.

Updating your Presence information

☛ Select **Menu**→**Presence**.

Once the connection has been established:

1. Enter your user ID and password and press the joystick to login. You obtain the user ID and password from your service provider.
2. Select **Options**→**Update presence**. The option is available when you are logged into the server and have changed your presence information in either the *Private pres.* or *Public pres.* view and not updated it.
3. To log out, select **Options**→**Logout**.

Presence settings

↩ Select **Options** → **Settings**.

See "Chat and Presence servers" on page 89.

- *Show presence to* - Select:
 - *Private & public* - Both public and private presence is published.
 - *Private viewers* - Only private viewers can see your presence information.
 - *Public viewers* - Both public and private viewers see your public presence information.
 - *No one* - Your presence information is not published.
- *New viewer status* - Specifies what level of presence new viewers are allowed to see.
- *Sync. with Profiles* - Defines which Presence attributes are changed when you change your profile. Select:
 - *Off* - The presence attributes are not changed, even if you change your profile.
 - *On* - Both *My availability* and *Private message* are changed when you change your profile.
 - *Availability only* - *Private message* is not changed when you change your profile.
 - *Private msg. only* - *My availability* is not changed when you change your profile.

■ Positioning

↩ Select **Menu** → **Positioning**.



Positioning (network service) allows the network to detect the approximate position of your phone. By enabling or disabling positioning, you choose when your position information is provided to the network.

To enable positioning in your phone, select **Settings** → **Positioning** → **On**.

When you receive a *Position request*, a message is displayed showing the service that is making the request. Press **Accept** to allow your position information to be sent, or press **Reject** to deny the request.

Position request messages are logged in the *Recv. requests* list.

To view them, select **Menu**→*Positioning*→*Recv. requests*. The icon beside each request indicates whether the request is new, rejected, or accepted. To see details of a request, scroll to the request and press the joystick. To clear the *Recv. requests* list, select **Options**→*Clear list*.

■ Calendar

↩ Select **Menu**→*Calendar*.



In the Calendar, you can keep track of your appointments, meetings, birthdays, anniversaries, and other events. You can also set a calendar alarm to remind you of upcoming events. The Calendar function uses shared memory. See "Shared memory" on page 11.

Creating calendar entries


1. Select **Options**→*New entry* and select:
 - *Meeting* - Reminds you of an appointment that has a specific date and time.
 - *Memo* - Write a general entry for a day.
 - *Anniversary* - Reminds you of birthdays or special dates. Anniversary entries are repeated every year.
2. Fill in the fields. Use the joystick to move between fields.
 - *Subject/Occasion* - Write a description of the event.
 - *Location* - The place of a meeting, optional.
 - *Start time*, *End time*, *Start date*, and *End date*.
 - *Alarm* - Press the joystick to activate the fields for *Alarm time* and *Alarm date*.
 - *Repeat* - Press the joystick to change the entry to be repeated. Shown with ☺ in the Day view.

- *Repeat until* – Set an ending date for the repeated entry, for example, the last date of a weekly course you are taking. This option is shown only if you have selected to repeat the event.
- *Synchronisation - Private* – After synchronisation the calendar entry can be seen only by you and it will not be shown to others even if they have online access to view the calendar. *Public* – The calendar entry is shown to others who have access to view your calendar online. *None* – The calendar entry will not be copied when you synchronise your calendar.

3. To save the entry, press **Done**.







To edit or delete a repeated entry, choose how you want the changes to take effect: *All occurrences* – all repeated entries are changed *This entry only* – only the current entry is changed.

Calendar views

 Options in the different calendar views: *Open*, *New entry*, *Week view*/*Month view*, *Delete*, *Go to date*, *Send*, *Settings*, *Help*, and *Exit*.

Press the # key in the Month, Week, or Day views to automatically highlight today's date.

To write a calendar entry, press any number key (1 - 0) in any calendar view. A Meeting entry is opened and the characters you keyed in are added to the *Subject* field.

- To go to a certain date, select **Options**→*Go to date*. Write the date and press **OK**.
- Icons in Day and Week views:  – *Memo* and  – *Anniversary*.
- Synchronisation icons in Month view:  – *Private*,  – *Public*,  – *None*, and  – the day has more than one entry.

■ To-do



↩ Select **Menu**→**To-do**.

In To-do, you can keep a list of tasks that you need to do. The To-do list uses shared memory. See "Shared memory" on page 11.

1. To start to write a to-do note, press any number key (1 - 0). The editor opens and the cursor blinks after the letters you have keyed in.
2. Write the task in the *Subject* field. Press the . key to add special characters.
 - To set the due date for the task, scroll to the *Due date* field and enter a date.
 - To set a priority for the to-do note, scroll to the *Priority* field and press the joystick.
3. To save the to-do note, press **Done**. If you remove all characters and press **Done**, the note is deleted, even if you edit a previously saved note.
 - To open a to-do note, scroll to it and press the joystick.
 - To delete a to-do note, scroll to it and select **Options**→**Delete** or press the clear key.
 - To mark a to-do note as completed, scroll to it and select **Options**→**Mark as done**.
 - To restore a to-do note, select **Options**→**Mark as not done**.

■ Importing data from compatible phones

You can move calendar, contacts, and to-do data from compatible Nokia phones to your phone using the Nokia PC Suite Content Copier application on a compatible PC.

6. Media

■ Gallery



↩ Select **Menu**→**Gallery**.

Use the Gallery to store and organise your images, sound clips, playlists, video clips, streaming links and RAM files.

The Gallery uses shared memory. See "Shared memory" on page 11.

Open the Gallery to see a list of the folders in the phone memory. Move the joystick to the right to see the folders on the memory card, if you use one.

Select a folder *Images*, *Sound clips*, or *Video clips* (or other folder that you have created) and press the joystick to open it.

In the open folder you can see:

- an icon depicting the type of each file in the folder, or in the case of an image, a small thumbnail picture which is a preview of the image
- the name of the file
- the date and time a file was saved or the size of the file
- subfolders, if present.

▶ Options: *Open* (folder or item), *Gallery downloads*, *Send*, *Delete*, *Create new*, *Move to folder*, *New folder*, *Mark/Unmark*, *Rename*, *Image uploader*, *Receive via infrared*, *View details*, *Add to 'Go to'*, *Settings*, *Help*, and *Exit*.

You can browse, open, and create folders, as well as mark, copy and move items to folders. See "Actions common to all applications" on page 22.

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

Opening files

Select any file and press the joystick to open it. Each file opens in its corresponding application as follows:


- Images - open in the Image viewer. See "Viewing images" on page 56.
- Sound clips - open and play in the RealPlayer application. See "RealPlayer™" on page 63.
- Video clips, RAM files, and streaming links - Open and play in the RealPlayer application. See "RealPlayer™" on page 63.
- Subfolders - open to display contents.

Other default folders

Picture messages folder

Use this folder to store pictures sent to you in picture messages.

- Select the folder *Images*→*Picture msgs.*

 Options in the Picture messages folder: *Open*, *Send*, *Delete*, *Mark/Unmark*, *Rename*, *View details*, *Help*, and *Exit*.

To save a picture that you have received in a picture message, go to *Messaging*→*Inbox*, open the message, and select *Options*→*Save picture*.

Wallpapers folder

Use this folder to store pictures that you want to use as background images for multimedia messages.


- Select the folder *Images*→*Wallpapers*.

Presence logos folder

Use this folder to store logos for Presence. See "Presence" on page 43.

- Select the folder *Images*→*Presence logos*.

Downloading files

 Select *Options*→*Gallery downloads*.

Choose from *Graphic downloads*, *Video downloads*, or *Tone downloads*.

The browser opens and you can choose a bookmark for the site to download from. See "Viewing bookmarks" on page 125.

To download files, you must first configure your default access point. See "Access points" on page 104. For more information on downloading, See "Downloading" on page 128..

Once items have been downloaded, the browser closes and the phone returns to Gallery view.

Uploading images to an image server

↩ Select **Options** → *Image uploader*.

You can send your pictures to an image server to allow others to share your pictures online (network service).

Before you can upload images, you must enter the settings for the image server. You can get these settings from your service provider.

Setting up the image server

1. Select **Settings** → *Image servers* and press the left selection key. Fill in the details for each field. See "Access points" on page 104.
2. Press the right selection key.

Uploading images

1. To begin an upload, mark the images and select *Upload*.
2. Enter the name of the folder on the image server that the images are stored in and press the left selection key.

■ Camera



↩ Select **Menu** → **Camera**.

You can take photos and record video clips with the phone's built-in Camera application. The images are automatically saved in the Gallery application, where you can rename and organise them in folders. See "Gallery" on page 51. The phone memory or memory card is used to store the image or video, depending on the *Memory in use* setting. See "Camera settings" on page 55.

You can also send images in a multimedia message, as an e-mail attachment, or via Bluetooth technology or infrared connection. The camera produces images in JPEG and video clips in 3GP file format.

Taking a picture or recording a video clip

Options available before taking a picture / a video clip: *Capture/Record, New, Activate night mode, Self-timer/Mute, Go to Gallery, Settings, Help, and Exit.*

1. Move the joystick to left to select the still image mode or to the right to activate the video mode .
2. Move the joystick up to zoom in on your subject before or while taking the picture or recording a video clip. Move the joystick down to zoom out. The zoom indicator on the display shows the zoom level.
3. To take a picture, press the joystick (**Capture**). When you are taking a picture, do not move the phone before the Camera application starts to save the image. The camera shows the image and saves it automatically in Gallery. To return to the viewfinder, press **Back**. To take another picture, press the joystick (**Capture**) again.
4. To start recording a video clip, make sure you have first selected the video mode. Then press the joystick (**Record**) quickly to start recording. To pause recording at any time, press **Pause**. To resume recording, press **Continue**. When recording, you can see the recording counter, which shows the recorded time.
5. To stop recording, press **Stop**.

The camera goes into battery saving mode if there has been no key presses within a minute. To continue taking pictures, press the joystick. You can insert an image into a contact card. See "Managing contacts" on page 40.

Night mode

If the lighting is dim and the camera needs a longer exposure time for the picture to be of good quality use the option *Activate night mode*. Note that, in dim conditions, any movement while taking a picture may cause it to be blurred.

Self timer

To trigger the camera in image mode automatically after a certain time select **Options**→ *Self-timer* and select a trigger time of 10, 20 or 30 seconds. To start the *Self-timer* press **Activate**. A beep is played once

in a second and during the last three seconds before trigger twice a second.

Camera settings

☞ Select **Options** → **Settings**.

In the **Camera** application settings, you can adjust the *Image* and *Video* settings.

Image settings

- *Show captured image*: Select *No* to be able to make pictures with a short repetition rate. The captured image is not displayed.
- *Image quality* - *High*, *Normal*, and *Basic*. The better the image quality, the more memory the image consumes.
- *Default image name* - By default, the camera names images in the format 'Image.jpg'. *Default image name* allows you to set a name for the images stored.
- *Memory in use* - Select whether you want to store your images in the phone memory or on the memory card, if you use one.

Video settings

- *Length* - With *Maximum* the length of the recorded video is only restricted by the available memory. With *Short* the recording time is optimized for MMS-sending.
- *Video resolution* - Select between two video resolutions:
 - 128x96 for standard resolution
 - 176x144 for high resolution
- *Default video name* - By default, the camera names video clips in the format 'Video.3gp'. *Default video name* allows you to set a name for the video clips stored.
- *Memory in use* - Select whether you want to store your video clips in the phone memory or on the memory card, if you use one.

Viewing images

☛ Select **Menu**→**Gallery**.

Pictures taken with the **Camera** application are stored as images in the Gallery. See "Gallery" on page 51. Images can be sent to you in a multimedia or picture message, as an e-mail attachment, or via a Bluetooth connection. After receiving an image in the Inbox, you need to save it in the phone memory or on a memory card. You can save graphics sent to you in picture messages to the Picture messages folder. See "Picture messages folder" on page 52.

▀ Options when viewing an image: *Send*, *Set as wallpaper*, *Rotate*, *Zoom in*, *Zoom out*, *Full screen*, *Delete*, *Rename*, *View details*, *Add to 'Go to'*, *Help*, and *Exit*.

Select an image from the list of images in the *Images* folder in the Gallery to start the image viewer and display the image.

When viewing an image, moving the joystick to right or to the left takes you to the next or previous image in the current folder.

In the images thumbnail view:

1. Move the joystick right or left to move between the phone and memory card.
2. To browse the list of images, move the joystick up and down.
3. Press the joystick to open an image. When the image is open, you can see the name of the image.

You can view animated GIF files in the same way as other images.

Zooming on a saved image

1. Select **Options**→*Zoom in* or *Zoom out*. You can see the zooming ratio at the top of the display. See "Shortcuts during zooming" on page 57.
2. Press **Back** to return to the initial view. The zooming ratio is not stored permanently.

When you select **Options**→*Full screen*, the panes around the image are removed so that you can see more of the image. Press the **right** selection key to return to the initial view.

When you are zooming in on an image, use the joystick to move the focus to the left, right, up, or down, so that you can take a closer look at one part of the image, for example, its upper right corner.

Shortcuts during zooming

- Press key 1 to rotate by 90° anticlockwise, press key 3 to rotate by 90° clockwise. The rotation status is not stored permanently.
- Press key 5 to zoom in and key 0 to zoom out, press and hold key 0 to return to normal view.
- Press the * key to change between full screen and normal view.

■ Visual Radio

You can use the Visual Radio™ application as a traditional FM radio with automatic tuning and preset channels, or with parallel visual information related to the radio program on the display, if you tune in to stations that offer Visual Radio service. The Visual Radio service uses GPRS (network service). You can listen to the FM radio while using other device applications.



To use the Visual Radio service, the following conditions are required:

- The station you listen to and the network operator you use must support this service.
- The device must be switched on.
- The device must have a valid SIM card fitted.
- Your Internet access point must be defined for access to the operator's visual radio server.
- The preset radio channel must have the correct Visual Radio service ID defined and have Visual Radio service enabled. See "Visual Radio settings" on page 62. for details.

If you do not have access to the Visual Radio service, the operators and radio stations in your area may not support Visual Radio. The Visual Radio service may not be available in all areas and countries.



Note: The radio uses the wire of the headset as an antenna. A compatible headset needs to be attached to the device for the radio to function properly.

You can listen to FM radio on your phone by the built-in loudspeaker or a compatible headset. When using the loudspeaker, keep the headset plugged into the phone. The lead of the headset functions as the antenna of the radio, so let it hang freely.



Warning: Listen to music at a moderate level. Continuous exposure to high volume may damage your hearing.






You can normally make a call or answer an incoming call while listening to the radio. The radio is turned off when there is an active call. When the call is finished, you may need to turn the radio back on manually.

Note, that the quality of the radio broadcast depends on the radio station's coverage in that particular area.

Turning on the radio

 Select **Menu** → **Vis. Radio**.

The phone displays:

- Channel location number and the name of the radio channel.
- Frequency of the last used radio channel.
- Six graphic buttons:
 -  and . Select to scroll to the next or previous saved channel. The buttons are inactive if there are no saved channels.
 -  and . Select to start automatic tuning upwards or downwards.
 -  Starts Visual Radio content feed if the Visual Service ID is defined or asks for Visual Radio ID if the Visual Service ID is not defined. See "Access to Channel Directory through Visual Radio button" on page 62.



If you have previously saved radio channels, scroll to the channel you want to listen to, or select the memory location of a channel by pressing the corresponding key 1 to 9.

When using a compatible headset, press the headset key to scroll to the desired saved radio channel.


Adjust the volume by pushing the joystick to the right or to the left.

To turn the radio off, press **Exit**.

Tuning and saving a radio channel

To start the channel search when the radio is on, select  or . Searching stops when a channel is found. To save the channel, select **Options** → *Save channel*. Select a location for the channel with the joystick and press **Select**. Enter the name of the channel and press **OK**.

Using the radio

 When the radio is on, select **Options** and select from the following options:

- *Start visual service* - Launch viewing of visual content. See "View Visual Content" on page 61..
- *Save channel* - Save the radio channel you have found. See "Tuning and saving a radio channel" on page 59. Up to 20 radio channels can be saved.
- *Channels* - Open the channel list. See "Using the channel list" on page 60.
- *Manual tuning* - Set the channel frequency manually. To move the channel search 0.05 MHz upwards or downwards, press briefly the joystick up or down. To search quickly upwards or downwards for a channel press and hold the joystick up or down. If you know the frequency of the radio channel you would like to listen to (between 87.5 MHz and 108.0 MHz), enter it and press **OK**.
- *Activate loudsp.* - Listen to the radio using the integrated handsfree (IHF). The integrated handsfree allows you to speak and listen to radio or audio files without having to hold the phone to the ear. When the integrated handsfree is activated, the headset is muted.
- *Deactivate loudsp.* - Listen to the radio using the headset.
- *Settings* - to control Visual Radio settings. See "Visual Radio settings" on page 62..
- *Help* - Open the context-sensitive help.
- *Exit* - Turn off the radio.

Using the channel list

When the radio is on, select **Options** → *Channels*.

The channel list is used for managing the saved radio channels. The list contains 20 channels. When you open the list, the currently active channel is highlighted if it is saved. Otherwise, the first saved channel is highlighted.

 Select **Options** and select from the following options:

- *Channel* → *Listen* - Listen to the selected channel.
- *Channel* → *Edit* - Views the settings of the highlighted channel. See "Channel setup" on page 60.
- *Channel* → *Move* - Moves a channel to another position within the channel list: Highlight the channel to be moved, press **Move** and then highlight the position where the selected channel is to be moved. Press **OK** to move the channel.
- *Channel* → *Delete* - Delete the highlighted channel from the channel list.
- *Channel directory* - Activates Channel directory (network service) to seek available Visual Radio Stations from network and save them for later use. See "Channel Directory" on page 62..
- *Activate loudsp.* - Listen to the radio using the integrated handsfree (IHF).
- *Deactivate loudsp.* - Listen to the radio using the headset.
- *Help* - Open the context-sensitive help.
- *Exit* - Turn off the radio.

Channel setup

Highlight a channel in the channel list, select **Options** → *Edit* to change following channel parameters:

- *Name* - Select **Options** → *Change* to edit the name of the channel.
- *Location* - Select **Options** → *Change* to edit the location of the radio station.


- *Frequency* - Select **Options** → *Change* to edit the frequency of the channel.
- *Visual service ID* - Select **Options** → *Change* to edit the Visual Service ID.
- *Enable visual service* - Select **Options** → *Change* to allow (*Yes*) or prevent (*No*) the viewing of visual content of the current radio channel.

Press **Back** to return to the channel list.

View Visual Content

Visual Content can be viewed if the relating channel is saved in the channel list and Visual Service is enabled for this channel. See "Using the channel list" on page 60..

To check availability and costs, and to subscribe to the service, contact your network operator or service provider.

To view Visual Content of the current channel select the Visual Radio button  or select **Options** → *Start visual service*.

If the Visual Service ID was not saved in the channel list, you are asked for the Visual Service ID. Enter the Visual Service ID and press **OK**.

If you do not have the Visual Service ID, press **Retrieve** to access the Channel Directory (network service). See "Channel Directory" on page 62..

When the connection to the Visual Service is established, the display shows the current Visual Content and the GPRS signal icon **G**. The Visual Content can consist of images, text, buttons and entry fields and is designed by the content provider.

To navigate through the displayed content, push the joystick up or down. The focus will jump from item to item.

If no valid Visual Content is available from the service the radio station logo or the Visual Radio background is displayed.



Options in the Visual Content view: *Activate loudsp.*, *Deactivate loudsp.*, *Display settings*, *Help*, and *Exit*.

To terminate the Visual Content feed but not the FM radio press **Close**.

To terminate both select **Options** → *Exit*.

To set the mode of lights and the screensaver timeout select **Options** → *Display settings*.

Visual Radio settings


When the radio is on, select **Options** → *Settings* to control following Visual Radio settings:

- *Auto-start service* - Select **Options** → *Change* to enable (*Yes*) or disable (*No*) the automatic start of Visual content.
- *Access point* - Select **Options** → *Change* to edit the access point address.



Channel Directory

With the Channel Directory (network service) you can select Visual Radio enabled or traditional radio stations from a list, grouped in several folders. A folder may represent geographical locations, for example continents, countries, regions or cities and can contain other folders or data of radio stations.

To check availability and costs, and to subscribe to the service, contact your network operator or service provider.

To access the Channel Directory select the  button and press the joystick or select *Options* in the channel list (see Using the channel list, 60) and select *Channel directory*.

Access to Channel Directory through Visual Radio button

To fetch the Visual service ID and to start Visual content for the currently tuned in radio station, select the  button and press the joystick. After the connection to the Channel Directory you are requested to select the nearest location to your current position from a list of folders marked by . Highlight the desired location and press the joystick.

The device compares the frequencies of the listed radio stations with the currently tuned in frequency. If a matching frequency is found, the


Visual Service ID of the tuned radio station is displayed. Press **OK** to start viewing the Visual content. See "View Visual Content" on page 61..

If there are more than one radio stations with matching frequencies, the relating radio stations and their Visual Service ID are displayed in a list.

Highlight the desired radio station in the list and press **Select**. The tuned radio station and the Visual Service ID are displayed. Press **OK** to start viewing the Visual content. See "View Visual Content" on page 61..



Access to Channel Directory through options List

To access the Channel Directory (network service) select **Options** in the channel list (see Using the channel list, 60) and select **Channel directory**.

After the connection to the Channel Directory you are requested to select the nearest location to your current position from a list of folders marked by . Highlight the desired location and press the joystick.

Repeat this process until you reach the list of radio stations near to your current position.



Note: Radio stations, which provide Visual content are marked with , traditional radio stations are marked with .

Highlight the desired radio station by pushing the joystick up or down and press the joystick to open the selection menu for radio stations:

- Select **Listen** to tune to the highlighted radio station.
To confirm the frequency setting press **Yes** or the joystick. Press **No** to go back to previously tuned frequency. The list of radio stations is displayed again and you may select an other radio station.
- Select **Start visual service** to open the Visual Content of the selected radio station (if available). See "View Visual Content" on page 61.
- Select **Save** to save the details of the selected radio station to the channel list.

RealPlayer™

 Select **Menu** → **RealPlayer**.




With RealPlayer™, you can play local media files stored in the phone memory, or memory card, or stream media files over the air from

a streaming link. The streaming link can be activated during a browsing session or stored in the phone memory or memory card.

Media files are video, music or audio clips. Files with the extensions .3gp, .aac, .amr, .mp3, .mp4, .rm and .ram are supported by RealPlayer.

RealPlayer does not necessarily support all file formats or all the variations of a file formats. For example, RealPlayer attempts to open all .mp4 files. However, some .mp4 files may include content that is not compliant with 3GPP standards and, therefore, is not supported by this phone. In this case, the operation might fail and result in partial playback or in an error message.

RealPlayer uses shared memory. See "Shared memory" on page 11.

 Options in RealPlayer when a clip has been selected: [Play](#), [Continue](#), [Stop](#), [Mute](#), [Unmute](#), [Clip details](#), [Send](#), [Settings](#), [Help](#), and [Exit](#).

Playing media files

To play a media file stored in your phone's memory or memory card, scroll to the file and press the joystick to play it, or go to RealPlayer and select [Options](#)→ [Open](#) and:

- [Saved clip](#) - To play a file saved in the Gallery. See "Gallery" on page 51.
- [Mem. card sound clips](#) - To play sound clips stored on the memory card.

To stream content over the air:

- Select a streaming link saved in the Gallery. Before your live content begins streaming, your phone connects to the site and loads the file.
- Open the link to a file in the browser.

To stream live content, you must first configure your default access point. See "Access points" on page 104.

Many service providers require you to use an Internet Access Point (IAP) for your default access point. Other service providers allow you to use a WAP access point. Contact your service provider for more information.



Note: In RealPlayer, you can only open an `rtsp://` URL address. You cannot open an `http://` URL address; however, RealPlayer recognises an `http` link to a `.ram` file since a `.ram` file is a text file containing an `rtsp` link.




Warning: Do not hold the device near your ear when the loudspeaker is in use, because the volume may be extremely loud.

Shortcuts during play

When a media file is playing use the joystick to seek (move quickly through the media file), and to mute the sound, as follows:

Move the joystick up to seek forwards, or down to seek backwards through the media file.

Move the joystick left, until the  indicator is displayed to mute the sound.

Move the joystick right until you see the  indicator to turn on the sound.

Changing the settings

 Select **Options** → **Settings** → **Video** or **Connection**.

Move the joystick to the right or to the left to move between the different setting tabs for **Video** and **Connection**.

Select **Video** to change the following list of settings:

- **Contrast** - Open the slider view to change the contrast.
- **Repeat** - Choose **On** to have the currently playing video or audio file restart automatically once it has finished.




Select **Connection** to change the connection settings.


■ Movie Director



"muvees" are short, edited video clips that can contain video, music and text. An **Quick muvee** is created automatically by the Movie director after you have selected the style for the muvee. Movie director uses the default music and text associated with the chosen style. Every style has, for example, its own font style, colour, music, and pace. With **Custom muvee** you can select your own video and

music clips, images and style, and you can also add an opening and closing message. muvees can be sent using MMS.

↩ Select **Menu** → **Movie** and move the joystick to the right or to the left to move between the  director and  muvee-clip views. To return to the main view from the  muvee-clip view, press **Done**.

The  muvee-clip view contains a list of muvee video clips that you can *Play*, *Send*, *Rename*, and *Delete*.

💡 **Tip:** To download new styles to your phone, select *Style downloads* from the **Movie director** main view.

- To create a quick muvee, select *Quick muvee*, and press the joystick. Select a style for the muvee from the style list, and press the joystick. The created muvee will be saved in the Movie director muvee list. The muvee will be played automatically after saving.
- To create a custom muvee, select *Custom muvee*. With *Video*, *Image*, *Style*, or *Music*, choose the clips you want to include in your muvee. With *Message* you can add an opening text and a closing text to a muvee. Select *Create muvee* and select the length of the muvee:
 - *Multimedia message* - the length of the muvee is optimised for MMS sending.
 - *Same as music* - to set the muvee duration to be the same as the music clip chosen.
 - ▶ Options in the muvee list options menu: *Play*, *Send*, *Rename*, *Delete*, *Help* and *Exit*.
 - *User defined* - to define the length of the muvee.

Press **OK** to start the muvee creation.

- To preview the custom muvee before saving it, in *Preview muvee* view, select **Options** → *Play*.
- To create a new custom muvee by using the same style settings, select **Options** → *Recreate*.
- To add an opening text and a closing text to a custom muvee when you are creating it, in *Create muvee* view select *Message*. Enter the opening message and the closing message, and select **Done**.

Settings

Select *Settings* to edit the following options:

- *Memory in use* - Select where to store your muvees.
- *Resolution* - Select the resolution of your muvees.
- *Default muvee name* - Set a default name for the muvees.

■ Photo Share

Photo Share enables the upload of images taken with the phone camera to a service in a simple way. With this service you can store your pictures, order prints and share the pictures with any computer or photo-ready phone.

To use this service you must sign in as a member. For details see www.kodakmobile.com.

☛ Select **Menu** → **Photo Share** and follow the instructions on the display.

7. Messaging



↩ Select **Menu** → **Messaging**.

In Messaging you can create, send, receive, view, edit, and organise text messages, multimedia messages, e-mail messages, presentations, documents, smart messages, and special text messages containing data. You can also receive messages and data via an infrared or Bluetooth technology connection, receive service messages, cell broadcast messages, and send service commands.

Note that only devices that offer picture message features can receive and display picture messages.

Text messages and multimedia messages use shared memory. See "Shared memory" on page 11.


Your device supports the sending of text messages beyond the normal 160-character limit. If your message exceeds 160 characters, it will be sent as a series of two or more messages. Note that each message will be invoiced separately according to your service provider's rates.

In the navigation bar, you can see the message length indicator counting backwards from 160. For example, 10 (2) means that you can still add 10 characters for the text to be sent as two messages.


Note that using special (Unicode) characters such as ã, 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 pressing **Cancel** or you can save the message in the inbox.

▶ Options in the Messaging main view are: *Create message*, *Connect* (shown if you have defined settings for the mailbox), or *Disconnect* (shown if there is an active connection to the mailbox), *SIM messages*, *Cell broadcast*, *Service command*, *Settings*, *Help*, and *Exit*.


When you open Messaging, you can see the *New message* function and a list of default folders:

 **Inbox** - Contains received messages except e-mail and cell broadcast messages. E-mail messages are stored in the *Mailbox*. You can read cell broadcast messages by selecting **Options**→*Cell broadcast*.


 **My folders** - For organising your messages into folders.


 **Mailbox** - When you open this folder, you can either connect to your remote mailbox to retrieve your new e-mail messages or view your previously retrieved e-mail messages offline. After you have defined settings for a new mailbox, the name given to that mailbox replaces *Mailbox* in the main view. See "E-mail messages" on page 80.

 **Drafts** - Stores draft messages that have not been sent.

 **Sent** - Stores the last 20 messages that have been sent. You can change the number of messages to be saved. See "Settings for the Other folder" on page 82.

Messages or data that have been sent via an infrared or Bluetooth technology connection are not saved in the Draft or Sent folders.

 **Outbox** - Is a temporary storage place for messages waiting to be sent.

 **Reports** (network service) - You can request the network to send you a delivery report of the text messages, smart messages, and multimedia messages you have sent. To turn on delivery report reception, select **Options**→*Settings*→*Text message* or *Multimedia message*, scroll to *Receive report*, and select *Yes*.


Receiving a delivery report of a multimedia message that has been sent to an e-mail address might not be possible.

■ Writing and sending messages

 Select **Menu**→*Messaging*.

 Options in the text message editor: *Send*, *Add recipient*, *Insert*, *Delete*, *Check contacts*, *Message details*, *Sending options*, *Help*, and *Exit*.

Before you can create a multimedia message, or write an e-mail, or connect to your remote mailbox, you must have the correct connection settings in place. See "Settings for e-mail" on page 71. See "Settings for multimedia" on page 71.

1. Select *New message*. A list of message options opens. Select:
 - *Create*→*Text message* to create a text message.
To send a picture message, select *Options*→*Insert*→*Picture*. Each picture message is made up of several text messages. Therefore, sending one picture message may cost more than sending one text message.
 - *Create*→*Multimedia message* to send a multimedia message (MMS).
Copyright protection may prevent some images, ringing tones, and other content from being copied, modified, transferred or forwarded.
 - *Create*→*E-mail* to send e-mail. If you have not set up your e-mail account, you are prompted to do so.
To add a media object to an e-mail, select *Options*→*Insert*→*Image, Sound clip, Video clip, Note* or *Template*.
2. Press the joystick to select the recipient(s) from the Contacts directory or write the phone number or e-mail address of the recipient in the *To:* field if you are sending an MMS or e-mail to the recipient. Press the # key to add a semicolon (;) to separate each recipient.
3. Move the joystick down to move to the message field.
4. Write the message.
 - To add a media object to a multimedia message, select *Options*→*Insert object*→*Image, Sound clip* or *Video clip*. To add a new media object, select *Options*→*Insert new*→*Image, Sound clip, Video clip* or *Slide*. Select the item you wish to add. When sound has been added, the  icon is shown in the navigation bar. If you select *Insert new*→*Sound clip*, Recorder opens and you can record a new sound. The sound is automatically saved and a copy is inserted in the message.
5. To send the message, select *Options*→*Send* or press the call key.



Note: Picture message function can be used only if it is supported by your network operator or service provider. Only devices that offer picture message features can receive and display picture messages. Only devices that offer compatible multimedia message or e-mail features can receive and display multimedia messages.

Settings for multimedia

↩ Select [Options](#) → [Settings](#) → [Multimedia message](#).

Open [Access point in use](#) and select the access point you created. See "Multimedia messages" on page 79.

You may receive the settings as a smart message from your network operator or service provider. See "Receiving smart messages" on page 72.

For availability of and subscription to data services, contact your network operator or service provider.

The default setting of the multimedia message service is generally on.

The appearance of a multimedia message may vary depending on the receiving device.

Settings for e-mail

Before you can send, receive, retrieve, reply to, and forward e-mail to a separate e-mail account, you must:

- Configure an Internet Access Point (IAP) correctly. See "Connection settings" on page 104.
- Define your e-mail settings correctly. See "E-mail messages" on page 80.

Follow the instructions given by your remote mailbox and Internet service provider.

Inbox – receiving messages



☛ Select **Menu**→**Messaging**→**Inbox**.

▶ Options in the Inbox: *Open*, *Create message*, *Reply*, *Delete*, *Message details*, *Move to folder*, *Mark/Unmark*, *Help*, and *Exit*.

When there are unread messages in Inbox, the icon changes to .

In Inbox, the message icons tell you what kind of a message it is. Here are some of the icons that you may see:

indicates an unread text message and indicates an unread smart message

indicates an unread multimedia message

indicates an unread WAP service message

indicates data received via infrared

indicates data received via Bluetooth technology

indicates an unknown message type.

Viewing multimedia objects


▶ Options in the Objects view are: *Open*, *Save*, *Send*, *Call*, and *Exit*.

To see what kinds of media objects have been included in the multimedia message, open the message and select **Options**→**Objects**. In the Objects view you can view files that have been included in the multimedia message. You can choose to save the file in your phone or to send it, for example, via infrared or Bluetooth technology to another compatible device.

Important: Exercise caution opening messages. Messages may contain malicious software or otherwise be harmful to your device or PC.

Receiving smart messages

Your phone can receive many kinds of smart messages, text messages that contain data (also called Over-The-Air (OTA) messages). See "Settings for multimedia" on page 71. and See "Settings for e-mail" on page 71. for more information on your phone settings. To open a

received smart message, open the Inbox, scroll to the smart message () , and press the joystick.

- *Picture message* - To save the picture in the *Picture messages* folder in the Gallery for later use, select **Options**→*Save picture*.
- *Business card* - To save the contact information, select **Options**→*Save business card*.
- *Ringing tone* - To save the ringing tone to the Gallery, select **Options**→*Save*.
- *Operator logo* - To save the logo, select **Options**→*Save*. The operator logo can now be seen in standby mode instead of the network operator's own identification.
- *Calendar entry* - To save the invitation to the Calendar, select **Options**→*Save to Calendar*.
- *Web message* - To save the bookmark, select **Options**→*Save to bookmarks*. The bookmark is added to the Bookmarks list in browser services.

If the message contains both browser access point settings and bookmarks, to save the data select **Options**→*Save all*. Or, select **Options**→*View details* to view the bookmark and access point information separately. If you do not want to save all the data, select a setting or bookmark, open the details, and select **Options**→*Save to Settings* or *Save to bookmarks* depending on what you are viewing.

- *E-mail notification* - Tells you how many new e-mails you have in your remote mailbox. An extended notification may list more detailed information such as subject, sender, attachments, and so on.
- In addition, you can receive a text message service number, voice mailbox number, profile settings for remote synchronisation, access point settings for the browser, multimedia messaging or e-mail, access point login script settings, or e-mail settings.

To save the settings, select **Options**→*Save to SMS sett.*, *Save to Voice mail*, *Save to Settings*, or *Save to e-mail sett.*

Receiving service messages

Service messages (network service) are notifications of, for example, news headlines, and they may contain a text message or the address of a browser service. For availability and subscription, contact your service provider.

■ My folders

☛ Select **Menu**→**Messaging**→**My folders**.



In My folders, you can organise your messages into folders, create new folders, and rename and delete folders.

■ Mailbox

☛ Select **Menu**→**Messaging**→**Mailbox**.



When you open this folder, you can connect to your remote mailbox (network service) to:

- retrieve new e-mail headings or messages, or
- view your previously retrieved e-mail headings or messages offline.

When you scroll to your mailbox and press the joystick, the phone asks you if you want to **Connect to mailbox?** Select **Yes** to connect to your mailbox or **No** to view previously retrieved e-mail messages offline.

Another way to start a connection is to select **Options**→**Connect**.

If you select **New message**→**Create:**→**E-mail** or **Mailbox** in the Messaging main view and you have not set up your e-mail account, you are prompted to do so. See "Settings for e-mail" on page 71.

When you create a new mailbox, the name you give to the mailbox automatically replaces **Mailbox** in the Messaging main view. You can have several mailboxes (max. six).

When you are online, select **Options**→**Disconnect** to end the data call or GPRS connection to the remote mailbox.


Retrieving e-mail messages from the mailbox

↩ Select **Options** → **Connect**.

This starts a connection to a remote mailbox.

1. When you have an open connection to a remote mailbox, select **Options** → **Retrieve e-mail** →:
 - **New** - To retrieve all new e-mail messages to your phone.
 - **Selected** - To retrieve only the e-mail messages that have been marked. Use the **Mark/Unmark** → **Mark/Unmark** commands to select messages one by one. See "Actions common to all applications" on page 22.
 - **All** - To retrieve all messages from the mailbox.

To cancel retrieving, press **Cancel**.

2. After you have retrieved the e-mail messages, you can continue viewing them online. Select **Options** → **Disconnect** to close the connection and to view the e-mail messages offline.
3. To open an e-mail message, scroll to the e-mail you want to view and press the joystick. If the e-mail message has not been retrieved (arrow in the icon is pointing outwards) and you are offline and select **Open**, you are asked if you want to retrieve this message from the mailbox.
 - To view e-mail attachments, open a message that has the attachment indicator  and select **Options** → **Attachments**. In the Attachments view, you can retrieve, open, or save attachments, in supported formats. You can also send attachments via infrared or Bluetooth technology.

If your mailbox uses the IMAP4 protocol, you can decide whether to retrieve e-mail headings only, messages only, or messages and attachments. With the POP3 protocol, the options are e-mail headings only or messages and attachments. See "E-mail messages" on page 80.



Important: Exercise caution opening messages. Messages may contain malicious software or otherwise be harmful to your device or PC.

Deleting e-mail messages

- To delete an e-mail from the phone while still retaining it in the remote mailbox:

Select **Options**→*Delete*→*Phone only*.

The phone mirrors the e-mail headings in the remote mailbox. So, although you delete the message content, the e-mail heading stays in your phone. To remove the heading as well, delete the e-mail message from your remote mailbox first and then make a connection from your phone to the remote mailbox again to update the status.

- To delete an e-mail from both the phone and the remote mailbox:

Select **Options**→*Delete*→*Phone and server*.

If you are offline, the e-mail is deleted first from your phone. During the next connection to the remote mailbox, it is automatically deleted from the remote mailbox. If you are using the POP3 protocol, messages marked to be deleted are removed only after you have closed the connection to the remote mailbox.

- To cancel deleting an e-mail from both the phone and server, scroll to an e-mail that has been marked to be deleted during the next connection, and select **Options**→*Undelete*.

■ Outbox

☛ Select **Menu**→*Messaging*→*Outbox*.



The Outbox is a temporary storage place for messages that are waiting to be sent.

Status of the messages in the Outbox:

- *Sending* - A connection is being made and the message is being sent.
- *Waiting/Queued* - For example, if there are two similar types of messages in the Outbox, one of them waits until the first one is sent.
- *Resend at ...* (time) - Sending has failed. The phone tries to send the message again after a time-out period. Press *Send* if you want to restart the sending immediately.

- *Deferred* - You can set documents to be 'on hold' while they are in the Outbox. Scroll to a message that is being sent and select **Options**→*Defer sending*.
- *Failed* - The maximum number of sending attempts has been reached. If you were trying to send a text message, open the message and check that the Sending settings are correct.



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 centre 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.

■ Viewing messages on a SIM card

Before you can view SIM messages, you need to copy them to a folder in your phone. See "Actions common to all applications" on page 22.

■ Cell broadcast

↩ Select **Menu**→**Messaging**→**Options**→**Cell broadcast**.



You may be able to receive messages on various topics, such as weather or traffic conditions from your service provider (network service). For available topics and relevant topic numbers, contact your service provider. In the main view, you can see:

- the status of the topic: - for new, subscribed messages and - for new, unsubscribed messages.

Options in Cell broadcast: *Open, Subscribe/Unsubscribe, Hotmark/Remove hotmark, Topic, Settings, Help, and Exit.*

- the topic number, topic name, and whether it has been flagged () for follow-up. You will be notified when messages belonging to a flagged topic have arrived.

A packet data (GPRS) connection may prevent cell broadcast reception. Contact your network operator for the correct GPRS settings.

■ Service command editor



☛ Select **Menu**→**Messaging**→**Options**→**Service command**. Enter and send service requests (also known as USSD commands) such as activation commands, for network services, to your service provider.

■ Messaging settings

☛ Select **Menu**→**Messaging**→**Options**→**Settings**.

Text messages

☛ Select **Text message**. The following list of settings opens:

- **Message centres** - Lists all the defined message centres.

▶ Options when editing message centre settings: **New msg. centre**, **Edit**, **Delete**, **Help**, and **Exit**.

- **Msg. centre in use** (Message centre in use) - Defines which message centre is used for delivering text messages and smart messages such as picture messages.
- **Receive report** (delivery report) - When this network service is set to **Yes**, the status of the sent message (**Pending**, **Failed**, **Delivered**) is shown in the Reports (Network Service).

Receiving a delivery report of a multimedia message that has been sent to an e-mail address might not be possible.

- **Message validity** - If the recipient of a message cannot be reached within the validity period, the message is removed from the message service centre. Note that the network must support this feature. **Maximum time** is the maximum amount of time allowed by the network for which the message remains valid.
- **Message sent as** - The options are **Text**, **Fax**, **Paging**, and **E-mail**. For further information, contact your network operator.
- **Preferred connection** - You can send text messages via the normal GSM network or via GPRS, if supported by the network.

- *Reply via same ctr.*(network service) – By setting this option to *Yes*, if the recipient replies to your message, the return message is sent using the same message service centre number. Note that not all network services provide this option. For availability, contact your network operator or service provider.

Multimedia messages

☞ Select **Multimedia message**. The following list of settings opens:

- *Access point in use (Must be defined)* – Select which access point is used as the preferred connection for the multimedia message centre. See "Settings for multimedia" on page 71.

If you receive multimedia message settings in a smart message and save them, the received settings are automatically used for the Access point. See "Receiving smart messages" on page 72.

- *Multimedia reception* – Select:
 - *Only in home net.* – To receive multimedia messages only when you are in your home network. When you are outside your home network, multimedia message reception is turned off.
 - *Always on* – To always receive multimedia messages.
 - *Off* – Not to receive multimedia messages or advertisements at all.
- *On receiving msg.* – Select:
 - *Retr. immediately* – To let the phone try to retrieve multimedia messages instantly. If there are messages with Deferred status, they are retrieved as well.
 - *Defer retrieval* – To let the multimedia messaging centre save the message to be retrieved later. To retrieve the message, set *On receiving msg.* to *Retr. immediately*.
 - *Reject message* – To reject multimedia messages. The multimedia message centre deletes the messages.
- *Allow anon. messages* – Select *No* to reject messages coming from an anonymous sender.

- **Receive adverts** - Define whether you want to allow reception of multimedia message advertisements or not.
- **Reports** - Set to *Yes*, if you want the status of the sent message (*Pending, Failed, Delivered*) to be shown in the Reports.
- **Deny report sending** - Choose *Yes*, if you do not want your phone to send delivery reports of received multimedia messages.
- **Message validity** (network service) - If the recipient of a message cannot be reached within the validity period, the message is removed from the multimedia message centre. *Maximum time* is the maximum amount of time allowed by the network for which the message remains valid.
- **Image size** - Define the size of the image in a multimedia message. The options are: *Small* (max. of 160x120 pixels) and *Large* (max. 640x480 pixels).

The default setting of the multimedia message service is generally on.

The appearance of a multimedia message may vary depending on the receiving device.

E-mail messages

☛ Select **E-mail**.

Open *Mailbox in use* to select which mailbox you want to use.

Settings for Mailboxes

▶ Options when editing e-mail settings: *Editing options, New mailbox, Delete, Help, and Exit*.

Select *Mailboxes* to open a list of defined mailboxes. If no mailboxes have been defined, you are prompted to do so. The following list of settings is shown (this information is available from your e-mail service provider):

- **Mailbox name** - Write a descriptive name for the mailbox.
- **Access point in use (Must be defined)** - The Internet Access Point (IAP) used for the mailbox. Choose an IAP from the list. See "Connection settings" on page 104.

- **My e-mail address (Must be defined)** – Write the e-mail address given to you by your service provider. The address must contain the @ character. Replies to your messages are sent to this address.
- **Outgoing mail server: (Must be defined)** – Write the IP address or host name of the computer that sends your e-mail.
- **Send message** (network service) – Define how e-mail is sent from your phone. **Immediately** – The phone tries to connect to the mailbox immediately after you have selected **Send**. **During next conn.** – E-mail is sent the next time you connect to your remote mailbox.
- **Send copy to self** – Select **Yes** to save a copy of the e-mail to your remote mailbox and to the address defined in **My e-mail address**.
- **Include signature** – Select **Yes** to attach a signature to your e-mail messages and to start to write or edit a signature text.
- **User name:** – Write your user name, provided by your service provider.
- **Password:** – Write your password. For increasing security, you can leave this field blank, so that every time you try to connect to your remote mailbox, you are prompted for the password. Otherwise the password is sent automatically.
- **Incoming mail server: (Must be defined)** – The IP address or host name of the computer that receives your e-mail.
- **Mailbox type:** – Defines the e-mail protocol your remote mailbox service provider recommends. The options are **POP3** and **IMAP4**.
This setting can be selected only once and cannot be changed if you have saved or exited from the mailbox settings.
- **Security** – Used with the POP3, IMAP4, and SMTP protocols to secure the connection to the remote mailbox.
- **APOP secure login** – Used with the POP3 protocol to encrypt the sending of passwords to the remote e-mail server. Not shown if IMAP4 is selected for **Mailbox type:**
- **Retrieve attachments** (not shown if the e-mail protocol is set to POP3) – To retrieve e-mail with or without attachments.

- *Retrieve headers* - To limit the number of e-mail headers you want to retrieve to your phone. The options are *All* and *User defined*. Used with the IMAP4 protocol only.

Service messages

☞ Select *Service message*. The following list of settings opens:

- *Service messages* - Choose whether or not you want to allow reception of service messages.
- *Authentic. needed* - Choose to receive service messages only from authorised sources.

Cell broadcast

Check with your service provider whether Cell broadcast (network service) is available and what the available topics and related topic numbers are.

☞ Select *Cell broadcast* to change the settings:

- *Reception - On or Off*.
- *Language - All* allows you to receive cell broadcast messages in every possible language. *Selected* allows you to choose in which languages you wish to receive cell broadcast messages. If the language you prefer could not be found in the list, select *Other*.
- *Topic detection* - If you receive a message that does not belong to any of the existing topics, *Topic detection*→*On* allows you to save the topic number automatically. The topic number is saved to the topic list and shown without a name. Choose *Off* if you do not want to save new topic numbers automatically.

Settings for the Other folder

☞ Select *Other*. The following list of settings opens:

- *Save sent messages* - Choose to save a copy of every text message, multimedia message, or e-mail that you have sent to the Sent items folder.

- *No. of saved msgs.* - Define how many sent messages are saved to the Sent items folder at a time. The default limit is 20 messages. When the limit is reached, the oldest message is deleted.

■ Chat



☛ Select **Menu**→**Chat**.

▴ Options in the Chat main view are: *Open, Login, Logout, Settings, Help, and Exit.*

Chat (network service) allows you to converse with other people using instant messages, and join discussion forums (chat groups) with specific topics. Once you have registered with a chat service, you can log into the service provider's chat server.

Check the availability of chat services, pricing, and tariffs with your network operator and/or service provider. Service providers also give you instructions on how to use their services.

To access a chat service you need to save the settings for that service. You may receive the settings from the network operator or service provider that offers the service. See "Receiving smart messages" on page 72. You can also enter the settings manually. See "Chat and Presence servers" on page 89.

Connecting to a chat server

☛ Select **Menu**→**Chat**.

1. The phone automatically tries to connect to a chat server. You can change the chat server to connect to. See "Chat and Presence servers" on page 89.
2. Once the connection has been established, enter your user ID and password and press the joystick, or press *Cancel* to stay offline. When you are offline, your phone is not connected to the chat server and you cannot send or receive messages. To log in later, select **Options**→*Login*.

You obtain the user ID and password from your service provider.

To log out, select **Options**→*Logout*.

Modifying your chat settings

☞ Select **Options**→**Settings**→**Chat settings**.






- **Use screen name** - Select **Yes** to enter a nickname (max. 10 characters).
- **Chat presence** - Prevent others from seeing if you are online, select **Not active**.
- **Allow messages from** - Select **All**, **From chat contacts** or **None**.
- **Allow invitations from** - Select **All**, **From chat contacts** or **None**.
- **Message speed** - Select the speed at which new messages are displayed.
- **Availability reloading** - Choose how to update information about whether your chat contacts are online or offline. Select **Automatic** or **Manual**.
- **Reload availab. for** - Select **All contacts** or **Selected contacts**.

Joining and leaving a chat group

☞ Select **Menu**→**Chat**→**Chat groups**.

A list of chat groups that you have saved or are currently joined to is shown. The icon next to a group indicates what type it is:

▀ Options in the Chat groups view are: **Open**, **Join group**, **Create new group**, **Leave chat group**, **Chat group**, **Search**, **Settings**, **Help**, and **Exit**.

-  - A group that you have created and are currently joined to.
-  - A group that you have created but are not currently joined to.
-  - A group that you have saved and are currently joined to.
-  - A group that you have saved but are not currently joined to.
-  - A group that you are currently joined to but have not saved.

To join a chat group: Scroll to a group on the list and press the joystick. To join a chat group not on the list but for which you know the group ID, select **Options**→**Join group**. Enter the group ID and press the joystick.

You can scroll to a group, select **Options**→*Chat group* and then select: *Save group*, *Delete*, *View members* to see which members are currently joined to the group, *Chat group details* to see the group ID, topic, members, editing rights in the group, and whether sending private messages is allowed in the group, and *Chat group settings* to view and edit the chat group's settings. See "Editing chat group settings" on page 88.

To leave the chat group: Select **Options**→*Leave chat group*.

Searching for chat groups and users

↩ Select **Chat groups**→**Options**→**Search**→**Groups** or **Users**.

- You can search for **Groups** by *Group name*, *Topic*, and *Members* (user ID). For groups that you have found you can select *New search*, *Join* and *Save group*.
- You can search for **Users** by *User's name*, *User ID*, *Phone number*, and *E-mail address*. For users that you have found you can select *New search*, *Open conversation*, *Add to Chat contact* to save the contact, *Send invitation*, and *Add to blocked list* to block (or unblock) messages from the contact.

When the search result is displayed, you can select **Options**→*New search*, *More results* from the same search, and *Previous results* to see your previous search result.

Chatting in a chat group

↩ Select **Menu**→**Chat**→**Chat groups**.

Once you have joined a chat group, you can view the messages that are exchanged in the group, and send your own messages.

▶ Options while chatting: *Send*, *Send private msg.*, *Reply*, *Send invitation*, *Leave chat group*, *Save group*, *Record convers./Stop recording*, *Help*, and *Exit*.

- To send a message, write the message and press the joystick.

- To send a private message to a member (if allowed in the group), select **Options**→*Send private msg.*, select the recipient, write the message, and press the joystick.

To reply to a private message sent to you, select **Options**→*Reply*.

To invite chat contacts who are online to join the chat group (if allowed in the group), select **Options**→*Send invitation*, select the contacts you want to invite, write the invitation message, and press **Done**.

Recording messages

To record the messages that are exchanged in a chat group or during an individual conversation, select **Options**→*Record convers.*. Enter the name for the message file and press the joystick. To stop recording, select **Options**→*Stop recording*.

The recorded message files are saved to Notes. See "Notes" on page 114.

Blocking messages

To prevent receiving messages from certain chat users, select **Options**→*Blocking options* and then select:

- *Add to blocked list* - To block messages from the currently selected user.
- *Add ID to list manually* - Enter the user ID of the user and press the joystick.
- *View blocked list* - To see the users whose messages are blocked.
- *Unblock* - Select the user that you want to remove from the blocked list and press the joystick.

Starting and viewing individual conversations

☛ Select **Menu**→**Chat**→**Conversations**.

This shows a list of the chat users with whom you have an ongoing conversation.


▶ Options in the Conversations view are: *Send*, *Add to chat contact*, *Forward*, *Record convers./Stop recording*, *Blocking options*, *End conversation*, *Help*, and *Exit*.

To start a new conversation, select **Options**→*New conversation* and then select:

- *Select recipient* – To see a list of your saved chat contacts that are currently online. Scroll to the contact and press the joystick.
- *Enter user ID* – Enter the user ID and press the joystick. The user ID is provided by the service provider to those who register to the service.

To view an ongoing conversation, scroll to the user and press the joystick. To continue the conversation, write your message and press the joystick. To return to the conversations list without closing the conversation, press **Back**.

To close the conversation, select **Options**→*End conversation*.

Icon:  next to a user indicates that you have received a new message from that user.

Ongoing conversations are automatically closed when you exit Chat.



To save a user to your chat contacts, scroll to the user and select **Options**→*Add to Chat contact*.

To send automatic replies to incoming messages, select **Options**→*Set auto reply on*. Enter the text and press **Done**.

Chat contacts

☛ Select **Menu**→**Chat**→**Chat contacts**.

▴ Options in the Chat contacts view are: *Open*, *Open conversation*, *Switch tracking on*, *Belongs to groups*, *New Chat contact*, *Edit*, *Delete*, *Reload user availab.*, *Blocking options*, *Search*, *Settings*, *Help*, and *Exit*.

This shows a list of your saved chat contacts.  is shown next to contacts that are currently online, and  indicates contacts that are offline.

To create a new contact, select **Options**→*New chat contact*. Fill in the *Name* and *User ID* fields and press **Done**.

You can scroll to a contact and press the joystick to view contact details. Press **Options** and select:

- *Edit* – Edit the contact's details.

- *Open conversation* – Start a new conversation or continue an ongoing conversation with the contact.
- *Switch tracking on* – Be notified every time the chat contact goes online or offline.
- *Belongs to groups* – See which groups the chat contact has joined.
- *Reload user availab.* – Update information about whether contacts are online or offline. This option is not available if you have set the *Availability reloading* to *Automatic* in *Chat settings*.

Creating a new chat group

☞ Select *Chat groups*→*Options*→*Create new group*. Enter the settings for the group:

- *Group name, Group topic*, and a *Welcome note* that the participants see when they join the group.
- *Group size* – Maximum number of members allowed to join the group.
- *Allow search* – Define if others can find the chat group by searching.
- *Editing rights* – Scroll to the chat group members to whom you want to give editing rights and permission to invite contacts to join the group.
- *Group members* – See "Restricting access to a chat group" on page 89.
- *Banned* – Displays a list of banned users.
- *Allow private msgs.* – Allow or prevent private messaging between members.
- *Group ID* – Is created automatically and cannot be changed.

Editing chat group settings

☞ Select *Menu*→*Chat*→*Chat groups*.

You can edit the settings for a chat group if you have created the group or if the creator of the group has given you editing rights. In the *Chat groups* view, scroll to the desired group and select *Options*→*Chat group*→*Chat group settings*. See "Creating a new chat group" on page 88.

Restricting access to a chat group

You can make a chat group closed by creating a **Group members** list. Only the users on the list are allowed to join the group. Select the **Chat groups** view, scroll to the group and select **Options**→**Chat group**→**Chat group settings**→**Group members**→**Selected only**.

- To add a user to the list, select **Add** and **Chat contact** or **Enter user ID**.
- To remove a user from the list, scroll to the user and select **Remove**.
- To clear the list and allow all chat users to join the group again select **Remove all**.

Chat and Presence servers

↩ Select **Options**→**Settings**→**Server settings**. You may receive the settings as a smart message from the service provider that offers the chat service.

- To change the chat or presence server you wish to connect to, select **Default server**.
- To change the Presence login type, select **Login type** and select **Automatic**, **Aut. in home net.**, or **Manual**.
- To change the Chat login type, select **Login type** and select **Automatic** or **Manual**.
- To add a new server, select **Options**→**New server**. Enter or select the settings: **Server name** and **Access point in use** to connect to the server, **Web address** of the chat server, your **User ID** and login **Password**. See "Connection settings" on page 104.

You obtain the user ID and password from your service provider when you register for the service. If you do not know your user ID or password, contact your service provider.

8. Tools

■ Applications



↔ Select **Menu**→**Tools**→**Manager**.



You can install new compatible Symbian operating system applications (SIS files) and Java™ applications (Java MIDlets and MIDlet suites) on your phone. You can also update and uninstall applications from the phone, and monitor the installation history.

Your phone supports J2ME™ Java applications. Do not download PersonalJava™ applications to your phone as they cannot be installed.

► Options in the Application manager main view are: *Install, View details, View certificate, Update, Go to web address, Remove, View log, Send log, Settings, App. downloads, Help, and Exit.*

Applications in the Application manager use shared memory. See "Shared memory" on page 11.

When you open the Application manager, you can see a list of:

- Applications saved in the Application manager.
- Partially installed applications (indicated by .
- Fully installed applications that you can remove (indicated by .

You can only use Symbian operating system applications with a .SIS extension.

Downloading an application

Your phone supports J2ME™ Java applications. Make sure that the application is compatible with your phone before downloading it. You can download new Java applications in different ways:

- Select **Menu**→**Tools**→**Manager**→**App. downloads** and the list of available bookmarks is shown.

Select the appropriate bookmark to connect to the desired page. If the connection fails, you may not be able to access the page from the service whose connection settings are currently active. In this case,

enter the *Web* menu and activate another set of service settings. See "Making a connection" on page 125. Try again to connect to the page.

For the availability of different services, pricing and tariffs, contact your network operator and/or the service provider.

- Select *Menu*→*Web*→*Download*. Select to download an appropriate application or game.
- Use the Nokia Application installer from PC Suite to download the applications to your phone.



Important: Only install and use applications and other software from sources that offer adequate security and protection against harmful software.

Note that when downloading an application, it may be saved in the *Games* menu instead of the *Web* menu.

Installing an application

You can install applications that are specifically intended for this phone and suitable for the Symbian operating system.

If you install an application that is not intended specifically for this phone, it may function and look different from what was originally intended.

- Open the Application manager, scroll to the application, and select *Options*→*Install* to start the installation.
- Alternatively, search the phone memory or the memory card, select the application, and press the joystick to start the installation.

Applications may be downloaded to your phone during browsing, received as attachments in multimedia messages or e-mails, or received via infrared or Bluetooth technology from another device, for example, a phone or a compatible PC.



Important: Use only services that you trust and that offer adequate security and protection against harmful software.

To increase protection, the application installation system uses digital signatures and certificates for applications. Do not install the

application if the Application manager gives a security warning during installation.

If you install an application that contains an update or repair to an existing application, you can only restore the original application if you have the original application or a full backup copy of the removed application. To restore the original application, first remove the updated or repaired application and then re-install it from the original application or the backup copy.

During installation, the phone checks the integrity of the application to be installed. The phone shows information about the checks being carried out and you are given options whether to continue or cancel the installation. Once the phone has checked the integrity of the application, it is installed on your phone.

Installing a Java™ application

The .JAR file is required for installation. If it is missing, the phone may ask you to download it. If there is no access point defined for the Application manager, you are asked to select one. When downloading the .JAR file, you may need to enter a user name and password to access the server. You obtain these from the supplier or manufacturer of the application.

- To start a data connection and to view extra information about the application, scroll to it and select **Options**→*Go to web address*.
- To start a data connection and to check if there is an update available for the application, scroll to it and select **Options**→*Update*.

Java settings

- To change the default access point that a Java application uses for downloading extra data, select **Options**→*Settings*→*Access point*. See "Access points" on page 104.
- To change the security settings that determine the actions that a Java application is permitted to perform, select **Options**→*Settings*.

Not all Java applications permit you to change the security settings.

Launching an application

1. Select **Menu**→**Web**→**Applications**→**Select application**:
2. Scroll to an application or an application set (the name depends on the application).
3. Select **Options** → **Open** or press the call key. If the selection is a single application it is launched.

Otherwise, a list of applications in the selected application set is displayed. To launch a single application, scroll to the desired application and select **Options** → **Open**, or press the call key.

Note that running some applications may consume the phone's battery faster (and you may need to connect the phone to the charger).

Other options available for an application or application set

- **Delete** - Delete the application or application set from the phone.
- **Application access** - Restrict the application from accessing the network. Select **Ask first** and the phone asks for net access, **Always allowed** to allow the net access, or **Not allowed** not to allow the net access.
- **Update** - Check if a new version of the application is available for download from the services (network service).
- **Go to web address** - Provide further information or additional data for the application from an Internet page. This feature needs to be supported by the network. It is only shown if an Internet address has been provided with the application.
- **Details** - Give additional information about the application.

Memory status for applications

↔ Select **Menu**→**Extras**→**Memory**.

This shows the amount of memory available for game and application installations.

The applications use shared memory. See "Shared memory" on page 11.

Removing an application

1. To remove an application, scroll to it and select **Options**→*Remove*.
2. Press **Yes** to confirm the removal.

If you remove an application, you can only re-install it if you have the original application or a full backup of the removed application. If you remove an application, you may no longer be able to open documents created with that application. If another application depends on the application that you removed, the other application may stop working. Refer to the documentation of the installed application for details.

■ File manager



☞ Select **Menu**→**Tools**→**File manager**.

In the File manager, you can browse, open, and manage files and folders in the phone memory or on the memory card, if you use one.

▶ Options in the File manager main view are: *Open*, *Send*, *Delete*, *Move to folder*, *Copy to folder*, *New folder*, *Mark/Unmark*, *Rename*, *Find*, *Receive via infrared*, *View details*, *Memory details*, *Help*, and *Exit*.

Open the File manager to see a list of the folders in the phone memory. Move the joystick to the right to see the folders on the memory card, if you use one.

You can browse, open, and create folders, mark, copy and move items to folders. See "Actions common to all applications" on page 22.

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

Receiving files via Infrared

☞ Select **Options**→*Receive via infrared*.

Files are automatically received into the root level of the folder structure and can be moved or copied to other folders. See "Infrared connection" on page 135.

Viewing memory consumption

↩ Select **Options** → *Memory details*.

If you have a memory card installed in your phone, you have a choice of two memory views, one for the phone memory and one for the memory card.

Move the joystick to the right or to the left to move from one memory tab to another.

To check memory consumption of the current memory select **Options** → *Memory details*.

The phone calculates the approximate amount of free memory for storing data and installing new applications.

In the memory views, you can view the memory consumption of the different data groups: *Calendar, Contacts, Documents, Images, Sound files, Video clips, Messages, Applications, Mem. in use, and Free memory*.

If the phone memory is getting low, remove some files, or move them to the memory card. See "Troubleshooting" on page 140.

■ Voice commands

↩ Select **Menu** → **Tools** → *Voice com..*



You can use Voice commands to start applications and profiles, and to dial numbers from Contacts, without having to look at your phone's display. You record a word, or words (voice command) and then pronounce this voice command to open an application, activate a profile, or dial a number.

You can have only one voice command per item.

▴ Options in the Voice commands main view are: *Add voice command, Open, New application, Playback, Change, Delete, Delete all, Help, and Exit*.

Any spoken word(s) can be a voice command.

- When recording, hold the phone at a short distance away from your mouth. After the starting tone, clearly pronounce the word, or words, you want to record as a voice command.

Before using voice tags, note that:

- Voice tags are not language-dependent. They are dependent on the speaker's voice.
- You must say the name exactly as you said it when you recorded it.
- Voice tags are sensitive to background noise. Record voice tags and use them in a quiet environment.
- Very short names are not accepted. Use long names and avoid similar names for different numbers.




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

Adding a voice command to an application

1. In the Voice commands main view, scroll to the application that you want to add a voice command to, and select **Options**→*Add voice tag*.

To add a voice command to a profile, the Profiles folder must be opened and a specific profile selected.


To add an application to the list of applications in the Voice commands main view, select **Options**→*New application*, scroll to the application that you want to add and press **Select**.

2. The text *Press 'Start', then speak after tone* is displayed.
 - Press **Start** to record a voice command. The phone sounds a starting tone and the note *Speak now* is displayed.
3. Pronounce the voice command. The phone stops recording after approximately 5 seconds.
4. After recording, the phone plays the recorded command and the note *Playing voice command* is displayed. If you do not want to save the recording, press **Quit**.
5. When the voice command has been successfully saved, the note *Voice command saved* is displayed and a beep sounds. A symbol  can be seen next to the application.

Starting an application using a voice command

1. In standby mode, press and hold the right selection key. A short tone is played and the note *Speak now* is displayed.
2. When you are starting an application by saying a voice command, hold the phone a short distance away from your mouth and pronounce the voice command clearly.
3. The phone plays the original voice command and starts the application. If the phone plays an incorrect voice command, press **Retry**.

Replaying, erasing, or changing a voice command

To replay, erase, or change a voice command, scroll to the item that has a voice command (indicated by ) , select **Options**, and then either:

- *Playback* - Listen to the voice command again.
- *Delete* - Erase the voice command.
- *Change* - Record a new voice command. Press **Start** to record.

■ Device manager

☛ Select **Menu**→**Tools**→**Device mgr.**

Device manager allows a third party, such as your service provider, to assist you directly with phone settings. To allow device management, your phone must establish a connection and synchronise with the third party's server. You can start the synchronisation session from your phone, and you can accept or reject server-initiated synchronisation attempts.

▀ Options in the Device manager main view are: *Start configuration*, *New server profile*, *Edit profile*, *Delete*, *Enable config.* / *Disable config.*, *View log*, *Help*, and *Exit*.

This feature is operator dependent and may not be available on all phones. Contact your service provider for information and availability.

A device manager profile must be defined before you can connect to a server. The third party who is assisting you can help define the profile settings:

- *Server name* – Display name of the server.
- *Server ID* – Remote device manager server ID.
- *Server password* – Password used in server alerts. Enter the password that must be provided by the device manager server when synchronising with your phone.
- *Access point* – Internet access point your phone uses to establish the server connection. Choose from the list of access points defined in your phone.
- *Host address* – Device management server URL.
- *Port* – Device management server port.
- *User name* – Your user name for this profile.
- *Password* – Your password for this profile.
- *Allow configuration* – Device management allowed on this server. Select *Yes* or *No*.
- *Auto-accept all reqs.* – Automatic or approved device management on this server. Select *Yes* to allow synchronisation without your verification, or select *No* to verify each synchronisation attempt.

9. Personalising your phone

■ Profiles




↩ Select **Menu**→**Profiles**.

▴ Options in the Profiles main view are: *Activate*, *Personalise*, *Create new*, *Delete profile*, *Help*, and *Exit*.

In Profiles, you can adjust and customise the phone tones for different events, environments, or caller groups. You can see the currently selected profile at the top of the display in standby mode. If the General profile is in use, only the current date is shown.

To change the profile, scroll to a profile and select **Options**→*Activate*.

To modify a profile, scroll to the profile in the Profiles list and select **Options**→*Personalise*. To create a new profile, select **Options**→*Create new*. A list of profile settings opens. Scroll to the setting you want to change and press the joystick to open the choices:

- *Ringing tone* - Set the ringing tone for voice calls, choose a ringing tone from the list. Press any key to stop the sound. If a memory card is used, tones stored on it have the  icon next to the tone name. Ringing tones use shared memory. See "Shared memory" on page 11. You can also change ringing tones in Contacts. See "Adding a ringing tone" on page 41.
- *Ringing type* - When *Ascending* is selected, the ringing volume starts from level one and increases level by level to the set volume level.
- *Ringing volume* - Set the volume level for the ringing and message alert tones.
- *Message alert tone* - Set the tone for messages.
- *Chat alert tone* - Set the tone for instant messages.
- *Vibrating alert* - Set the phone to vibrate at incoming voice calls and messages.
- *Keypad tones* - Set the volume level for keypad tones.

- *Warning tones* - The phone sounds a warning tone, for example, when the battery is running low.
- *Alert for* - Set the phone to ring only upon calls from phone numbers that belong to a selected contact group. Phone calls coming from people outside the selected group have a silent alert. The choices are *All calls* or (a list of contact groups, if you have created them).

■ Themes



↩ Select **Menu**→**Themes**.

▾ Options in the Themes main view are: *Preview*, *Apply*, *Edit*, *Help*, and *Exit*.

You can change the look of your phone's display by activating a theme. A theme can include the idle screen wallpaper, colour palette, screen saver, and background image in 'Go to'. Edit a theme for more detailed personalisation.

When you open **Themes** you see a list of the available themes. The currently active theme is indicated by a check mark. Move the joystick to the right to see the themes on the memory card, if you use one.

To preview a theme, scroll to the theme and select **Options**→*Preview* to view the theme. Press *Apply* to activate the theme. You can activate the theme without previewing it by selecting **Options**→*Apply* from the main view.

Group together elements from other themes, or images from the Gallery to personalise themes further.

Editing a theme:

1. Scroll to a theme, select **Options**→*Edit*, and select:
 - *Wallpaper* - Select an image from one of the available themes, or select your own image from the Gallery, to use as a background image in standby mode.
 - *Colour palette* - Change the colour palette used on the display.
 - *Screen saver* - Select what is shown on the screen saver bar: the time and date or a text that you have written yourself. The location and background colour of the screen saver bar changes

in 1-minute intervals. Also, the screen saver changes to indicate the number of new messages or missed calls. You can set the time that elapses before the screen saver is activated. See "Phone settings" on page 101.

- *Image in 'Go to'* - Select an image from one of the available themes, or select your own image from the Gallery, to use as a background image in Go to.
2. Scroll to the element to be edited and select **Options**→*Change*.
 3. Select **Options**→*Set* to select the current setting. To preview the selected element, select **Options**→*Preview*. Note that you cannot preview all elements.

To restore the currently selected theme to its original settings, select **Options**→*Restore orig. theme* when editing a theme.

■ Settings



Changing general settings

↔ Select **Menu**→**Settings**

1. Scroll to a setting group and press the joystick to open it.
2. Scroll to a setting you want to change and press the joystick to:
 - switch between options if there are only two (**On/Off**),
 - open a list of options or an editor,
 - open a slider view and move the joystick to the right or to the left to increase or decrease the value respectively.

You may be able to receive some settings from your service provider in a short message. See "Receiving smart messages" on page 72.

Phone settings

↔ Select **Phone**.



General



- *Phone language* - Change the language for the display texts in your phone. This change may also affect the format used for date and

time and the separators used, for example, in calculations. If you select *Automatic*, the phone selects the language according to the information on your SIM card. After you have changed the display text language, you must restart the phone.

Changing the settings for *Phone language* or *Writing language* affects every application in your phone and the change remains effective until you change these settings again.

- *Writing language* - Change the writing language of your phone. Changing the language affects:
 - the characters available when you press any key 1 - key 9
 - the predictive text dictionary used
 - the special characters that are available when you press the . key and key 1.
- *Dictionary* - Set predictive text input *On* or *Off* for all editors in the phone. Select a language for entering predictive text from the list available. You can also change this setting when you are in an editor. Press the # key and select *Dictionary*→*Dictionary on* or *Off*.
- *Welcome note or logo* - The welcome note or logo is displayed briefly each time you switch on the phone. Select *Default* if you want to use the default image or animation. Select *Text* to write a welcome note (max. 50 letters). Select *Image* to select a photo or picture from the Gallery.
- *Orig. phone settings* - Reset some of the settings to their original values. To do this, you need the lock code. See "Security" on page 108. After resetting the settings, the phone may take a longer time to power up. All documents and files that you have created are left as they are.

Standby mode

- *Left selection key* and *Right selection key* - Change the shortcuts that appear over the left  and right  selection keys in standby mode. In addition to the applications, you can have the shortcut point to a function, for example, *New message*.

You can only have shortcuts to pre-installed applications and functions.

Display

- *Brightness* - Adjust the brightness of the display.
- *Screen saver timeout* - The screen saver is activated when the screen saver time-out period is over. When the screen saver is active, the display is cleared and you can see the screen saver bar.
 - To deactivate the screen saver press any key.

Call settings



☞ Select **Call**.

Send my caller ID (network service)

- Set your phone number to be displayed (*Yes*) or hidden (*No*) from the person whom you are calling. Or, the value may be set by your network operator or service provider when you make a subscription.

Call waiting (network service)

- The network notifies you of a new incoming call while you have a call in progress. Select *Activate* to request the network to activate call waiting, *Cancel* to request the network to deactivate call waiting, or *Check status* to check if the function is active or not.

Automatic redial

- When this setting is activated, your phone makes a maximum of ten attempts to connect the call after an unsuccessful call attempt. Press the end key to stop automatic redialling.

Summary after call

- Activate this setting if you want the phone to briefly display the approximate duration of the last call.

Speed dialling

- Select *On*, and the numbers assigned to the speed-dialling keys (2 - 9) can be dialled by pressing and holding the key. See "Assigning speed-dialling keys" on page 43.

Anykey answer

- Select *On*, and you can answer an incoming call by briefly pressing any key, except the **right selection key** \rightarrow , the **power key**, and the **end key**.

Line in use (network service)

- This setting is shown only if the SIM card supports two subscriber numbers, that is, two phone lines. Select which phone line (*Line 1* or *Line 2*) you want to use for making calls and sending short messages. Calls on both lines can be answered irrespective of the selected line.



Note: You cannot make calls if you select *Line 2* and have not subscribed to this network service.

To prevent line selection, select *Line change* \rightarrow *Disable* if supported by your SIM card. To change this setting, you need the PIN2 code.

Connection settings



Select **Connection settings**.



Access points

Here you can see a short explanation for every setting that may be needed for different data connections and access points. If you have not yet used your phone to make a WAP connection, you may need to contact your service provider for assistance with the first-time connection.

Many service providers require you to use an IAP for your default access point. Other service providers allow you to use a WAP access point. Contact your service provider for more information.

Start to fill in the settings from the top since, depending on the data connection you select (*Data bearer*), only certain fields are available.

- *Connection name* - Give a descriptive name for the connection.
- *Data bearer* - The options are *GPRS* or *Data call*. Depending on what data connection you select, only certain setting fields are available. Fill in all fields marked with **Must be defined**, or with an asterisk. Other fields can be left empty, unless you have been instructed otherwise by your service provider.

To be able to use a data connection, the network operator or service provider must support this feature, and if necessary, activate it for your SIM card

- *Access point name* (for packet data only) - The access point name is needed to establish a connection to the GPRS network. You obtain the access point name from your network operator or service provider.
- *Dial-up number* (for data call only) - The modem telephone number of the access point.
- *User name* - Write a user name if required by the service provider. The user name may be needed to make a data connection, and is usually provided by the service provider. The user name is often case-sensitive.
- *Prompt password* - If you must enter a new password every time you log onto a server, or if you do not want to save your password to the phone, choose *Yes*.
- *Password* - A password may be needed to make a data connection, and is usually provided by the service provider. The password is often case-sensitive. When you are writing the password, the characters you enter are shown briefly and then changed to asterisks (*). The easiest way to enter numbers is to press and hold the digit you want to enter, and then continue entering letters.
- *Authentication - Normal/Secure*.
- *Homepage* - Depending on what you are setting up, enter either:
 - the service address, or
 - the address of the multimedia messaging centre.
- *Data call type* (for data call only) - *Analogue, ISDN v.110, or ISDN v.120* defines whether the phone uses an analogue or digital connection. This setting depends on both your GSM network operator and Internet Service Provider (ISP), because some GSM networks do not support certain types of ISDN connections. For details, contact your ISP. If ISDN connections are available, they establish connections more quickly than analogue methods.

- *Maximum data speed* (for data call only) – The options are *Automatic*, 9600, 14400, 19200, 28800, 38400 or 43200, depending on the chosen *Data call type*. This option allows you to limit the maximum connection speed when GSM data are used. Higher data rates may cost more, depending on the service provider.

The speeds above represent the maximum speed at which your connection operates. During the connection, the operating speed may be less, depending on network conditions.

Options → Advanced settings

- *Network type* – The internet protocol (IP) version of the network.
- *Phone IP address* – The IP address of your phone.
- *Name servers* – The IP address of the primary and secondary DNS servers.
- *Proxy serv. address* – The IP address of the proxy server.
- *Proxy port number* – The port number of the proxy server.

To enter these settings, contact your Internet service provider.

The following settings are shown if you have selected data call as the connection type:

- *Use callback* – This option allows a server to call you back once you have made the initial call. Contact your service provider to subscribe to this service.

The phone expects the callback call to use the same data call settings that were used in the callback-requesting call. The network must support that type of call in both directions, to and from the phone.

- *Callback type* – The options are *Use server no./Use other no.*. Ask your service provider for the correct setting to use.
- *Callback number* – Enter your phone's data phone number which the dial-back server uses. Usually, this number is the data-call phone number of your phone.
- *Use PPP compression* – When set to *Yes*, this option speeds up data transfer, if supported by the remote PPP server. If you have problems

with establishing a connection, try setting this to *No*. Contact your service provider for guidance.

- *Use login script* - The options are *Yes/No*.
- *Login script* - Insert the login script.
- *Modem initialisation* (Modem initialisation string) - Controls your phone using modem AT commands. If required, enter characters specified by your service provider or Internet service provider.

GPRS

↔ Select *GPRS*.

The GPRS settings affect all access points using a packet data connection.

GPRS connection - If you select *When available* and you are in a network that supports packet data, the phone registers to the GPRS network and short messages are sent via GPRS. Also, starting an active packet data connection, for example, to send and receive e-mail, is quicker. If you select *When needed*, the phone uses a packet data connection only if you start an application or action that needs it. The GPRS connection can be closed when it is not needed by any application.

If there is no GPRS coverage and you have chosen *When available*, the phone periodically tries to establish a packet data connection.

Access point - The access point name is needed when you want to use your phone as a packet data modem to your computer.

Data call

↔ Select *Data call*.

The *Data call* settings affect all access points that use a GSM data call.

Online time - If there are no actions the data call is dropped automatically after a time-out period. In the option *Change* select *User defined* to enter a time, or *Unlimited*.

Date and time



☞ Select **Date and time**.

The *Date and time* settings allow you to define the date and time used in your phone, as well as change the date and time format and separators.

- *Time* and *Date* - to set the time and date.
- *Date format* - to choose between European, US and Japanese format.
- *Date separator* - to choose between several separators.
- *Time format* - to choose between *24-hour* and *12-hour* time format.
- *Time separator* - to choose between several separators.
- *Clock type* → *Analogue* or *Digital* - To change the clock shown in standby mode. See "Clock" on page 116.
- *Clock alarm tone* - To change the tone played when the clock alarm time is reached.
- *Auto time update* - To allow the network to update time, date, and time zone information to your phone (network service). For the *Auto time update* setting to take effect, the phone needs to be restarted. Check any alarms as these may be affected by *Auto time update*.
- *GMT offset* - To change the time zone for the clock time.
- *Daylight-saving* - To turn daylight saving time on or off.

Security



☞ Select **Security**.

Phone and SIM

You can change the following codes: lock code, PIN code, and PIN2 code. These codes can only include the numbers from 0 to 9.

Avoid using access codes similar to emergency numbers, such as 112, to prevent accidental dialling of the emergency number.

PIN code request - When the PIN code request is active, the code is requested each time the phone is switched on. Note that some SIM cards may not allow the PIN code request to be deactivated.

PIN code/PIN2 code/Lock code - Open this setting if you want to change the code.

Autolock period - You can set an autolock period, a time-out after which the phone is automatically locked and can be used only if the correct lock code is entered. Enter a number for the time-out in minutes or select *None* to turn off the autolock period.

- To unlock the phone, enter the lock code.

Lock if SIM changed - Select *Yes* if you want the phone to prompt for the lock code when an unknown, new SIM card is inserted into your phone. The phone maintains a list of SIM cards that are recognised as the owner's cards.

Options in the Fixed dialling view are: *Open, Call, Activ. fixed dialling, Deact. fixed dialling, New contact, Edit, Delete, Add to Contacts, Add from Contacts, Find, Mark/Unmark, Help, and Exit.*

Fixed dialling - You can restrict your outgoing calls to selected phone numbers, if supported by your SIM card. You need the PIN2 code for this function. When this function is active, you can only call those phone numbers that are included in the fixed-dialling list or which begin with the same digit(s) as a phone number on the list.

- Press the joystick to set *Fixed dialling* on.
- To add new numbers to the Fixed dialling list, select *Options* → *New contact* or *Add from Contacts*.

Closed user group (network service) - You can specify a group of people whom you can call and who can call you. For more information, contact your network operator or service provider. Select: *Default* to activate the default group agreed on with the network operator, *On* if you want to use another group (you need to know the group index number), or *Off*.

When security features that restrict calls are in use (such as call barring, closed user group and fixed dialling) calls still may be possible to the official emergency number programmed into your device.

Confirm SIM services (network service) - To set the phone to display confirmation messages when you are using a SIM card service.

Certificate management

Options in the certificate management main view are: *Certificate details*, *Delete*, *Trust settings*, *Mark/Unmark*, *Help*, and *Exit*.

In the certificate management main view, you can see a list of authority certificates that have been stored in your phone. Move the joystick to the right to see a list of personal certificates, if available.

Authority certificates are used by some browser services, such as banking services, for checking signatures or server certificates or other authority certificates.

Server certificates are used to improve security in the connection between the phone and the gateway. The phone receives the server certificate from the service provider before the connection is established and its validity is checked using the authority certificates saved in the phone. Server certificates are not saved.

Server certificates may be needed when you, for example:

- want to connect to an online bank or another site or remote server for actions that involve transferring confidential information, or
- want to be sure of the authenticity of software when downloading and installing software.



Important: Note that even if the use of certificates considerably reduces the risks involved in remote connections and software installation, they must be used correctly in order to benefit from increased security. The existence of a certificate does not offer any protection by itself; the certificate manager must contain correct, authentic, or trusted certificates for increased security to be available. Certificates have a restricted lifetime. If Expired certificate or Certificate not valid yet is shown even if the certificate should be valid, check that the current date and time in your device are correct.

Before changing any certificate settings, you must make sure that you actually trust the owner of the certificate and that the certificate really belongs to the listed owner.

Changing the trust settings of an authority certificate

- Scroll to an authority certificate and select *Options* → *Trust settings*. Depending on the certificate, a list of the applications that can use the selected certificate is shown. For example:

Application manager/Yes - The certificate is able to certify the origin of new software.

Internet/Yes - The certificate is able to certify e-mail and imaging servers.

Call barring



➡ Select **Call barring**.

Call barring (network service) allows you to restrict the making and receiving of calls with your phone. For this function, you need the barring password obtainable from your service provider.

1. Scroll to one of the barring options.
2. Select **Options**→*Activate* to request the network to set call restriction on, *Cancel* to set the selected call restriction off, or *Check status* to check if the calls are barred or not.
 - Select **Options**→*Edit barring passw.* to change the barring password.
 - Select **Options**→*Cancel all barring* to cancel all active call barrings.

Call barring and call diverting cannot be active at the same time.

When calls are barred, calls still may be possible to certain official emergency numbers.

Network



➡ Select **Network**.

Operator selection

- *Automatic* - Set the phone to automatically search for and select one of the cellular networks available in your area.
- *Manual* - Select the desired network manually from a list of networks. If the connection to the manually selected network is lost, the phone sounds an error tone and asks you to select a network again. The selected network must have a roaming agreement with your home network, that is, the operator whose SIM card is in your phone.

Cell info display

- *On* - Set the phone to indicate when it is used in a cellular network based on Micro Cellular Network (MCN) technology and to activate cell info reception (network service).

Enhancement



☛ Select **Enhancement**.

Scroll to an enhancement folder and open the settings:

- *Default profile* - Select the profile you want to activate each time you connect a certain enhancement to your phone.
- *Automatic answer* - Set the phone to answer an incoming call automatically after 5 seconds after you connect this enhancement to your phone. If the *Ringling type* is set to *Beep once* or *Silent*, automatic answer cannot be used, and you must answer the phone manually.




Go to



☛ Select **Menu**→**Go to** or press **Go to** in standby mode.

Options in the Go to main view are: *Open*, *Edit shortcut name*, *Shortcut icon*, *Delete shortcut*, *Move*, *List view/Grid view*, *Help*, and *Exit*.

Use Go to for storing shortcuts, links to your favourite photos, video clips, notes, Recorder sound files, and browser bookmarks.

The default shortcuts are:  - opens the Notes editor,  - opens the Calendar at the current date, and  - opens the Messaging Inbox.

Shortcuts can be added only from some of the functions. Applications do not have this functionality.

Adding and using shortcuts:

1. Open the application and scroll to the item that you want to add as a shortcut.
2. Select **Options**→**Add to 'Go to'** and press **OK**.
 - **To open a shortcut**, scroll to the icon and press the joystick. The file is opened in the corresponding application.

- To delete a shortcut, scroll to the shortcut that you want to remove and select **Options**→*Delete shortcut*. Removing a shortcut does not affect the file it is referring to.
- To change the shortcut name, select **Options**→*Edit shortcut name*. Write the new name. This change affects only the shortcut, not the file or the item that the shortcut refers to.

10. Extras

■ Notes



↩ Select **Menu** → **Extras** → **Notes**.


You can link notes to Go to and send them to other devices. Plain text files (TXT format) you receive can be saved to Notes.

- Press keys 1 - 9 to start to write. Press the **clear** key to clear letters. Press **Done** to save.


■ Calculator





↩ Select **Menu** → **Extras** → **Calculator**.

1. Enter the first number of your calculation. If you make a mistake, press the **clear** key to erase it.
2. Scroll to an arithmetic function and press the joystick to select it.
3. Enter the second number.
4. To execute the calculation, scroll to  and press the joystick.

▶ Options in Calculator are: *Last result*, *Memory*, *Clear screen*, *Help*, and *Exit*.

 **Note:** This calculator has limited accuracy and is designed for simple calculations.

- To add a decimal, press the **#** key.
- Press and hold the **clear** key to clear the result of the previous calculation.
- Use  and  to view previous calculations and move in the sheet.

■ Converter



↩ Select **Menu**→**Extras**→**Converter**.

In Converter, you can convert measurement parameters such as *Length* from one unit to another, for example, *Yards* to *Metres*.

The Converter has limited accuracy and rounding errors may occur.

Converting units

▶ Options in Converter: *Conversion type*, *Currency rates* (not applicable to other units), *Help*, and *Exit*.

To make currency conversion you must first set the exchange rate. See "Setting a base currency and exchange rates" on page 115.

1. Scroll to the *Type* field and press the joystick to open a list of measurement parameters. Scroll to the measurement parameter you want to use and press **OK**.
2. Scroll to the first *Unit* field and press joystick to open a list of available units. Select the unit from which you want to convert and press **OK**.
3. Scroll to the next *Unit* field and select the unit to which you want to convert.
4. Scroll to the first *Amount* field and enter the value that you want to convert. The other *Amount* field changes automatically to show the converted value.

Press the # key to add a decimal and press the . key for the +, - (for temperature), and E (exponent) symbols.

The conversion order changes if you write a value in the second *Amount* field. The result is shown in the first *Amount* field.

Setting a base currency and exchange rates

Before you can carry out currency conversions, you need to choose a base currency (usually your domestic currency) and add exchange rates.

The rate of the base currency is always 1. The base currency determines the conversion rates of the other currencies.

1. Select *Currency* as the measurement parameter type and select *Options*→*Currency rates*. A list of currencies opens and you can see the current base currency at the top.
2. To change the base currency, scroll to the currency (usually your domestic currency), and select *Options*→*Set as base curr.*
3. Add exchange rates, scroll to the currency, and enter a new rate, that is, how many units of the currency equal one unit of the base currency you have selected.
4. After you have inserted all the required exchange rates, you can make currency conversions. See "Converting units" on page 115.

Recorder









☛ Select *Menu*→*Extras*→*Recorder*.

The voice recorder allows you to record telephone conversations and voice memos. If you are recording a telephone conversation, both parties hear a tone every 5 seconds during recording.

Recorded files are stored in the Gallery. See "Gallery" on page 51.

▀ Options in Recorder are: *Record sound clip*, *Delete*, *Rename sound clip*, *Send*, *Go to Gallery*, *Settings*, *Add to 'Go to'*, *Help*, and *Exit*.

- Select *Options*→*Record sound clip* and scroll to a function and press the joystick to select it. Use:  - to record,  - to pause,  - to stop,  - to fast forward,  - to rewind, or  - to play an opened sound file.

The recorder cannot be used when a data call or GPRS connection is active.

Clock



☛ Select *Menu*→*Extras*→*Clock*.

Changing clock settings

▀ Options in Clock: *Set alarm*, *Reset alarm*, *Remove alarm*, *Settings*, *Help*, and *Exit*.

- To change the time or date, select *Options*→*Settings* in Clock.

Setting an alarm

1. To set a new alarm, select **Options**→*Set alarm*.
2. Enter the alarm time and press **OK**. When the alarm is active, the 📌 indicator is shown.
- To cancel an alarm, go to Clock and select **Options**→*Remove alarm*.

Turning off the alarm

- Press **Stop** to turn off the alarm.
- Press **Snooze** to stop the alarm for 5 minutes, after which it resumes. You can do this a maximum of five times.

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 press **Stop**, the device asks whether you want to activate the device for calls. Press **No** to switch off the device or **Yes** to make and receive calls. Do not press **Yes** when wireless phone use may cause interference or danger.

Personalising the alarm tone

1. To personalise the alarm tone, select **Options**→*Settings*.
2. Scroll to *Clock alarm tone* and press the joystick.
3. When you scroll through the list of tones, you can stop on a tone to listen to it before you make your selection. Press **Select** to select the current tone.

■ Memory card

➡ Select **Menu**→*Extras*→*Memory card*.



▶ Options in the memory card: *Remove mem. card*, *Backup phone mem.*, *Restore from card*, *Format mem. card*, *Memory card name*, *Set password*, *Change password*, *Remove password*, *Unlock memory card*, *Memory details*, *Help*, and *Exit*.

For details on inserting a memory card into the phone, see the Getting Started section. You can use it to store your multimedia files such as video clips and sound files, photos, and messaging data, and to back up information from your phone's memory.

Included with your Nokia phone is a Reduced Size MultiMedia Card (RS-MMC) that may contain add-on applications from independent developers. These applications are designed by the developers to be compatible with your phone.

Use only compatible MultiMediaCard (MMC) with this device. The compatible MMC for your phone is Reduced Size Dual Voltage MultiMediaCard. Other memory cards, such as Secure Digital (SD) cards, do not fit in the MMC card slot and are not compatible with this device. Using an incompatible memory card may damage the memory card as well as the device, and data stored on the incompatible card may be corrupted.

Details of how you can use the memory card with other features and applications of your phone are given in the sections describing these features and applications.

Keep all memory cards out of the reach of small children.

Formatting the memory card

When a memory card is formatted, all data on the card are permanently lost.

Some memory cards are supplied pre-formatted and others require formatting. Consult your retailer to find out if you must format the memory card before you can use it.

- Select **Options**→ *Format mem. card*.

Select **Yes** to confirm. When formatting is complete, enter a name for the memory card (max. 11 letters or numbers).

Backing up and restoring information

To back up information from your phone's memory to the memory card, select **Options**→ *Backup phone mem*.

To restore information from the memory card to the phone's memory, select **Options**→ *Restore from card*.

You can only back up the phone memory and restore it to the same phone.

Locking the memory card

To set a password to lock your memory card to help prevent unauthorised use, select **Options**→*Set password*.

You are asked to enter and confirm your password. The password can be up to eight characters long.

The password is stored in your phone and you do not have to enter it again while you are using the memory card on the same phone. If you want to use the memory card on another phone, you are asked for the password.

Unlocking a memory card

If you insert another password-protected memory card into your phone, you are prompted to enter the password of the card. To unlock the card:

- Select **Options**→*Unlock memory card*.



Note: Once the password is removed, the memory card is unlocked and can be used on another phone without a password.

Checking memory consumption

You can check the memory consumption of different data groups and the available memory for installing new applications or software on your memory card:

- Select **Options**→*Memory details*.

■ **Wallet**

↩ Select **Menu**→*Extras*→**Wallet**.



▶ Options in the wallet main view are: *Open*, *Settings*, *Help*, and *Exit*.

Wallet provides you with a storage area for your personal information, such as credit and debit card numbers, addresses and other useful data, for example, user names and passwords.

The information stored in the wallet can be easily retrieved while browsing to automatically complete online forms on browser pages, for

example, when the service asks for credit card details. Data in the wallet are encrypted and protected with a wallet code that you define.

You can group wallet data into profiles that can be accessed, for example, when making purchases online.

Due to the nature of the wallet, it automatically closes after 5 minutes. Enter the wallet code to regain access to the contents. You can change this automatic time-out period, if required. See "Presence settings" on page 47.

Entering the wallet code

Each time you open the wallet you are prompted for a wallet code.

When you open the wallet for the first time, you must create your own access code:

1. Enter a code of your choice (4 - 10 alphanumeric characters), and press **OK**.
2. You are prompted to verify the code. Enter the same code and press **OK**. Do not give your wallet code to anyone else.
3. Enter the code that you have created and press **OK**.

If you enter the wallet code incorrectly on three consecutive occasions, the wallet application is blocked for 5 minutes. The block time increases if further incorrect wallet codes are entered.

If you forget your wallet code, you have to reset the code, and you will lose all information stored in the wallet. See "Resetting the wallet and wallet code" on page 123.


Storing personal card details

1. Select the *Cards* category from the main wallet menu and press the joystick.
2. Select a type of card from the list and press the joystick.
 - *Payment cards* - Credit and debit cards.
 - *Loyalty cards* - Membership and store cards.

- *Online acc. cards* – Personal user names and passwords to online services.
 - *Address cards* – Basic contact details for home/office.
 - *User info cards* – Customised personal preferences for online services.
3. Select **Options**→*New card*. A blank form opens.
 4. Fill in the fields and press **Done**.

You can also receive card information directly to the phone from a card issuer or service provider (if they offer this service). You are notified which category the card belongs to. Either save or discard the card. You can view and rename a saved card, but you cannot edit it.

You can open, edit or delete the fields in the card. Any changes are saved upon exiting.

 Options when viewing or editing card details: *Delete*, *Help*, and *Exit*.

Creating personal notes

Personal notes are a means of storing sensitive information, for example, a bank account number. You can access the data in a personal note from the browser. You can also send a note as a message.

- Select the *Personal notes* category from the main wallet menu and press the joystick.
- Select **Options**→*New card*. A blank note opens.
- Press key 1 – 9 to start writing. Press the clear key to clear characters. Press **Done** to save.

Creating a wallet profile

Once you have stored your personal details, you can combine them together into a wallet profile. Use a wallet profile to retrieve wallet data from different cards and categories to the browser.

1. Select the *Wallet profiles* category from the main wallet menu and press the joystick.

2. Select **Options**→*New card*. A new wallet profile form opens.
3. Fill in the fields as indicated below and press **Done**.

Some of the fields must contain data selected from the wallet. Save the data under the relevant category before creating a wallet profile, or the profile cannot be created.

- *Profile name* - Choose and enter a name for the profile.
- *Payment card* - Select a card from the Payment card category.
- *Loyalty card* - Select a card from the Loyalty card category.
- *Online access card* - Select a card from the Online access card category.
- *Shipping address* - Select an address from the Address card category.
- *Billing address* - By default this is the same as the Shipping address. If you require a different address, select one from the Address card category.
- *User info card* - Select a card from the User info card category.
- *Receive e-receipt* - Select a destination from the Address card category.
- *Deliver e-receipt* - Select *To phone*, *To e-mail*, or *To pho. & e-mail*.
- *RFID sending* - Set to *On* or *Off*. Defines whether or not your unique phone identification is sent with the wallet profile (for future development dependent on RFID-based ticketing).

Retrieving information from the wallet to your browser

When using online mobile services supporting the wallet functionality, you can upload the data stored in your wallet to automatically enter your details into an online form. For example, by uploading your payment card details you do not need to enter the card number and expiry date each time you need them (depending on the content being browsed). Also, you can retrieve your user name and password stored as an access card when connecting to a mobile service that requires authentication. See "Purchasing an item" on page 128.

A cache is a memory location that is used to store data temporarily. If you have tried to access or have accessed confidential information requiring passwords, empty the cache after each use. The information or services you have accessed is stored in the cache. To empty the cache, select **Menu**→**Web**→**Options**→**Navigation options**→**Clear Cache**.

Viewing ticket details

Options in the Tickets main view are: **View**, **Delete**, **Rename**, **Mark/Unmark**, **Help**, and **Exit**.

You can receive notifications of tickets purchased online via the browser. Received notifications are stored in the wallet. To view the notifications:

1. Select the **Tickets** category from the main wallet menu and press the joystick.
2. Select **Options**→**View**.

Wallet settings

Select **Options**→**Settings** from the main wallet menu:

- **Wallet code** - Change your wallet code. You are prompted to enter the current code, create a new code, and verify the new code.
- **RFID** - Set the phone ID code, type, and sending options (for future development dependent on RFID-based ticketing).
- **Automatic close** - Change the automatic time-out period (1 - 60 minutes). After the time-out period has elapsed, the wallet code must be re-entered to gain access to the contents.

Resetting the wallet and wallet code

To reset both the contents of the wallet and the wallet code:

1. Enter ***#7370925538#** in standby mode.
2. Enter the phone lock code, and press **OK**. See "Security" on page 108.
3. You are asked to confirm the erasing of data. Press **OK**.

When opening the wallet again, you must enter a new wallet code. See "Entering the wallet code" on page 120.

11. Services and Applications

■ Web (Mobile browser)

↔ Select **Menu**→**Web** or press and hold key 0 in standby mode.



Various service providers maintain pages specifically designed for mobile phones, offering services that can be, for example, news, weather reports, banking, travel information, entertainment, and games. With the mobile browser, you can view these services as WAP pages written in HTML, WML, and XHTML pages written in XHTML, or a mixture of WML and XHTML. If you have not yet used your phone to make a WAP connection, you may need to contact your service provider for assistance with the first-time connection.

Check the availability of services, pricing, and tariffs with your network operator and/or service provider. Service providers also give you instructions on how to use their services.

Basic steps for accessing

- Save the settings that are needed to access the browser service that you want to use. See "Setting up the phone for the browser service" on page 124.
- Make a connection to the service. See "Making a connection" on page 125.
- Start browsing the web pages. See "Browsing" on page 126.
- End the connection to the service. See "Ending a connection" on page 129.

Setting up the phone for the browser service

Receiving settings in a smart message

You may receive service settings in a special text message, a so-called smart message, from the network operator or service provider that

offers the service. See "Receiving smart messages" on page 72. For more information, contact your network operator or service provider.

Entering the settings manually


Follow the instructions given to you by your service provider.

1. Select **Menu**→**Settings**→**Connection**→**Access points** and define the settings for an access point. See "Connection settings" on page 104.
2. Select **Menu**→**Web**→**Options**→**Bookmark manager**→**Add bookmark**. Write a name for the bookmark and the address of the browser page defined for the current access point.

Making a connection

Once you have stored all the required connection settings, you can access browser pages.

There are three different ways to access browser pages:

- Select the homepage () of your service provider.
- Select a bookmark from the Bookmarks view.
- Press the keys 2 - 9 to start to write the address of a browser service. The Go to field at the bottom of the display is immediately activated and you can continue writing the address there.

After you have selected a page or written the address, press the joystick to start to download the page.

Viewing bookmarks

Your device may have some bookmarks loaded for sites not affiliated with Nokia. Nokia does not guarantee or endorse these sites. If you choose to access them, you should take the same precautions, for security or content, as you would with any Internet site.

Options in the Bookmarks view (when a bookmark or folder is selected): *Open*, *Download*, *Back to page*, *Bookmark manager*, *Mark/Unmark*, *Navigation options*, *Advanced options*, *Send*, *Find bookmark*, *Details*, *Settings*, *Help*, and *Exit*.

In the Bookmarks view, you can see bookmarks pointing to different kinds of browser pages. Bookmarks are indicated by the following icons:



- The starting page defined for the browser access point. If you use another browser access point for browsing, the starting page is changed accordingly.



- The last visited page. When the phone is disconnected from the service, the address of the last visited page is kept in memory until a new page is visited during the next connection.

When you scroll through bookmarks, you can see the address of the highlighted bookmark in the Go to field at the bottom of the display.



- A bookmark showing the title.

Adding bookmarks manually

1. In the Bookmarks view, select **Options**→*Bookmark manager*→*Add bookmark*.
2. Start to fill in the fields. Only the address must be defined. The default access point is assigned to the bookmark if no other one is selected. Press the . key to enter special characters such as /, ., :, and @. Press the clear key to clear characters.
3. Select **Options**→*Save* to save the bookmark.

Browsing

On a browser page, new links appear underlined in blue and previously visited links in purple. Images that act as links have a blue border around them.



Options when browsing: *Open*, *Service options*, *Bookmarks*, *Save as bookmark*, *View image*, *Navigation options*, *Advanced options*, *Send bookmark*, *Find*, *Details*, *Settings*, *Help*, and *Exit*.

Keys and commands used in browsing


- To open a link, press the joystick.
- To scroll the view, use the joystick.

- To enter letters and numbers in a field, press the keys 0 - 9. Press the . key to enter special characters such as /, ., :, and @. Press the clear key to clear characters.
- To go to the previous page while browsing, press **Back**. If **Back** is not available, select **Options**→*Navigation options*→*History* to view a chronological list of the pages you have visited during a browsing session. The history list is cleared each time a session is closed.
- To check boxes and make selections, press the joystick.
- To retrieve the latest content from the server, select **Options**→*Navigation options*→*Reload*.
- To open a sub-list of commands or actions for the currently open browser page, select **Options**→*Service options*.
- To disconnect from a browser service and to quit browsing, press and hold the end key.

Saving bookmarks

- To save a bookmark while browsing, select **Options**→*Save as bookmark*.
- To save a bookmark received in a smart message, open the message in the Inbox in Messaging and select **Options**→*Save to bookmarks*. See "Receiving smart messages" on page 72.

Viewing saved pages

 Options in the Saved pages view are: *Open*, *Back to page*, *Reload*, *Saved pages*, *Mark/Unmark*, *Navigation options*, *Advanced options*, *Details*, *Settings*, *Help*, and *Exit*.

If you regularly browse pages containing information which doesn't change very often, you can save and then browse them when offline.

- To save a page, while browsing select **Options**→*Advanced options*→*Save page*.


Saved pages are indicated by the following icon:



- The saved browser page.

In the saved pages view you can also create folders to store your saved browser pages.

Folders are indicated by the following icon:

 - Folder containing saved browser pages.

- To open the Saved pages view, move the joystick to the right in the Bookmarks view. In the Saved pages view, press the joystick to open a saved page.

To start a connection to the browser service and to retrieve the page again, select **Options**→*Navigation options*→*Reload*.

The phone stays online after you reload the page.

A cache is a memory location that is used to store data temporarily. If you have tried to access or have accessed confidential information requiring passwords, empty the cache after each use. The information or services you have accessed is stored in the cache. To empty the cache, select **Menu**→ *Web*→**Options**→*Navigation options*→*Clear Cache*.

Downloading

You can download items such as ringing tones, images, operator logos, software, and video clips using the mobile browser. These items can be provided free or you can purchase them.

Once downloaded, items are handled by the respective applications on your phone, for example, a downloaded photo is saved in the Gallery.



Important: Only install and use applications and other software from sources that offer adequate security and protection against harmful software.

Purchasing an item

To download the item:

1. Scroll to the link and select **Options**→*Open*.
2. Choose the appropriate option to purchase the item, for example, Buy.

Carefully read all the information provided.

If the online content is compatible, you can use your wallet information to make the purchase:

1. Select *Open wallet*. You are prompted for your wallet code. See "Entering the wallet code" on page 120.

2. Select the appropriate card category from your wallet.
3. Select *Fill in*. This uploads the selected wallet information.

If the wallet does not contain all information necessary for the purchase, you are requested to enter the remaining details manually.

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

Checking an item before downloading

You can see details about an item before you download it. Details about an item may include the price, a brief description and size.

- Scroll to the link and select **Options**→*Open*.
Details about the item are displayed on your phone.
- If you want to continue with the downloading, press *Accept*, or if you want to cancel the download, press *Cancel*.

Ending a connection

- Select **Options**→*Advanced options*→*Disconnect*, or
- Press and hold the end key to quit browsing and to return to standby mode.

Browser settings

Select **Options**→*Settings*:

- *Default access point* - To change the default access point, press the joystick to open a list of available access points. The current default access point is highlighted. See "Connection settings" on page 104.
- *Show images* - Choose whether to view pictures when you are browsing. If you choose *No*, you can later load images during browsing by selecting **Options**→*Show images*.
- *Text wrapping* - Choose *Off* if you do not want the text in a paragraph to automatically wrap, or *On* if you do. If text is not wrapped, the ends of lines may be truncated.
- *Font size* - You can choose five text sizes in the browser: *Smallest*, *Small*, *Normal*, *Large*, and *Largest*.

- **Default encoding** - To make sure your browser pages display text characters correctly, select the appropriate language type.
- **Automatic bookmarks** - Choose *On* if you want the bookmarks to be automatically saved in the *Auto. bookmarks* folder when you visit a page. When you select *Hide folder*, the bookmarks are still automatically added to the folder.
- **Screen size** - Choose how to use the display area for viewing pages.
- **Rendering** - Choose the image quality for the pages. With the high image quality, the page download speed is slower, and vice versa.
- **Cookies - Allow/Reject**. You can enable or disable the receiving and sending of cookies (a means for content providers to identify users and their preferences for frequently used content).
- **Security warnings** - Choose to hide or show security notifications.
- **Conf. DTMF sending - Always/First time only**. Choose whether you want to confirm before the phone sends DTMF tones during a voice call. See "Options during a call" on page 27. For example, you can make a voice call while you are viewing a browser page, send DTMF tones while a voice call is in progress, and save a name and phone number from a browser page into Contacts.
- **Wallet** - Choose *On* to open the wallet automatically when a compatible browser page is opened.

■ Games

↩ Select **Menu** → **Games**.

To start a game, scroll to the game icon and press the joystick. For instructions on how to play the game, select **Options** → **Help**.

12. Connectivity

■ PC Suite

You can use your phone with a variety of PC connectivity and data communications applications. With PC Suite you can synchronize contacts, calendar and to-do notes and notes between your phone and the compatible PC, or a remote Internet server (network service).

You may find more information about PC Suite and the download link in the support area on the Nokia's Web site, <www.nokia.com/support>.

■ Bluetooth connection

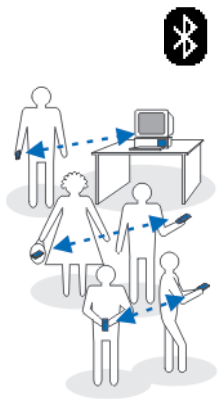
↔ Select **Menu**→**Connectivity**→**Bluetooth**.

This device is compliant with Bluetooth wireless technology Specification 1.1 supporting the following profiles: Hands-free, Object Push Profile, File Transfer Profile, Dial Up Networking Profile and Fax Profile. To ensure interoperability between other devices supporting Bluetooth wireless technology, use Nokia approved enhancements for this model. Check with the manufacturers of other devices to determine their compatibility with this device.

There may be restrictions on using Bluetooth technology in some locations. Check with your local authorities or service provider.

Features using Bluetooth wireless technology, or allowing such features to run in the background while using other features, increase the demand on battery power and reduces the battery life.

Bluetooth technology enables wireless connections between electronic devices within a maximum range of 10 metres. A Bluetooth connection can be used to send images, videos, texts, business cards, calendar notes, or to connect wirelessly to compatible devices using Bluetooth technology, such as computers. Please note that not all computers using Bluetooth technology are necessarily compatible.



Since devices using Bluetooth technology communicate using radio waves, your phone and the other devices do not need to be in direct line-of-sight. The two devices only need to be within a maximum of 10 metres of each other, although the connection can be subject to interference from obstructions such as walls or from other electronic devices. Using Bluetooth technology consumes the battery and the phone's operating time is reduced. Take this into account when performing other operations with your phone. There may be restrictions on using devices using Bluetooth technology. Check with your local authorities.

When you activate Bluetooth technology for the first time, you are asked to give a name to your phone.

Bluetooth connection settings


- *Bluetooth - On/Off.*
- *My phone's visibility - Shown to all* - Your phone can be found by other Bluetooth devices or *Hidden* - Your phone cannot be found by other devices. For security reasons it is advisable to use the hidden mode whenever possible.
- *My phone's name* - Define a name for your phone.

After you have set the Bluetooth connection as active and changed *My phone's visibility* to *Shown to all*, your phone and this name can be seen by other Bluetooth device users.

Sending data via Bluetooth technology

There can be only one active Bluetooth connection at a time.

1. Open an application where the item you wish to send is stored. For example, to send a photo to another device, open the Gallery application.
2. Scroll to the item you want to send and select **Options**→*Send*→*Via Bluetooth*.
3. The phone starts to search for devices within range. Devices using Bluetooth technology that are within range start to appear on the





display one by one. You can see a device icon, the device's name, the device type, or a short name. Paired devices are shown with . A paired device is one where a Bluetooth connection already exists between your phone and the other device.

- To interrupt the search, press **Stop**. The device list freezes and you can start to form a connection to one of the devices already found.
4. When searching for devices, some devices may show only the unique device addresses. To find out the unique address of your phone, enter the code ***#2820#** in standby mode when the Bluetooth connection is active.

If you have searched for devices earlier, a list of the devices that were found previously is shown first. To start a new search, select **More devices**. If you switch off the phone, the list of devices is cleared and the device search needs to be started again before sending data.




5. Scroll to the device you want to connect with and press **Select**. The item you are sending is copied to Outbox and the note **Connecting** is shown.
6. Pairing (if not required by the other device, go to step 7.)
 - If the other device requires pairing before data can be transmitted, a tone sounds and you are asked to enter a passcode.
 - Create your own passcode (1-16 characters long, numeric) and agree with the owner of the other device to use the same code. This passcode is used only once and you do not have to memorise it.
 - After pairing, the device is saved to the Paired devices view.
7. When the connection has been successfully established, the note **Sending data** is shown.

Data received via Bluetooth connection can be found in the Inbox folder in Messaging. See "Inbox - receiving messages".



Icons for different devices:  - **Computer**,  - **Phone**,  - **Audio/video**, and  - **Bluetooth device**.

If sending fails, the message or data are deleted. The Drafts folder in Messaging does not store messages sent via Bluetooth connection.

Checking the status of the Bluetooth connection


- When  is shown in standby mode, the Bluetooth connection is active.
- When  is blinking, your phone is trying to connect to the other device.
- When  is shown continuously, the Bluetooth connection is active.

Paired devices view


Paired devices are easier to recognise, they are indicated by  in the search result list. In the Bluetooth main view, move the joystick to the right to open a list of paired devices ().

- **To pair with a device:** Select **Options**→**New paired device**. The phone starts a device search. Scroll to the device you want to pair with and press **Select**. Exchange passcodes. The device is added to the Paired devices list.
- **To cancel pairing:** Scroll to the device whose pairing you want to cancel and press the clear key or select **Options**→**Delete**. If you want to cancel all pairings, select **Options**→**Delete all**.

If you are currently connected to a device, and delete the pairing with that device, the pairing is removed and the device connection is terminated, but Bluetooth connection remains active on the handset.

- **To set a device to be authorised or unauthorised:** Scroll to the device and select **Options**→**Set as authorised** - Connections between your phone and this device can be made without your knowledge. No separate acceptance or authorisation is needed. Use this status only for your own devices that others do not have access to, for example your PC, or devices that belong to someone you trust. The icon  is added next to authorised devices in the Paired devices view. **Set as unauthorised** - Connection requests from this device need to be accepted separately every time.

Receiving data via Bluetooth wireless technology

When you receive data via Bluetooth wireless technology, a tone sound is played and you are asked if you want to accept the message. If you accept, the item is placed in the Inbox folder in Messaging. Messages received via Bluetooth technology are indicated by . See "Inbox - receiving messages" on page 72.

Disconnecting Bluetooth connection

A Bluetooth connection is disconnected automatically after sending or receiving data.

■ Infrared connection




↔ Select **Menu**→**Connectivity**→**Infrared**.


Via infrared, you can send or receive data such as business cards and calendar notes to and from a compatible phone or data device.

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



Sending and receiving data via infrared

1. Make sure that the infrared 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 is 1 metre at most. See "Keys and parts" on page 18.
2. The user of the receiving device activates the infrared port.
To activate the infrared port of your phone to receive data via infrared, go to **Menu**→**Connectivity**→**Infrared**.
3. The user of the sending device selects the desired infrared function to start data transfer.
To send data via infrared, select **Options**→**Send**→**Via infrared** in an application.
If data transfer is not started within 1 minute after the activation of the infrared port, the connection is cancelled and must be started again.

All items that are received via infrared are placed in the Inbox folder in Messaging. New infrared message are indicated by .

 **Tip:** Microsoft Windows 2000: To be able to use infrared to transfer files between your phone and a compatible computer, go to Control Panel and select Wireless Link. In the Wireless Link File Transfer tab, check the Allow others to send files to your computer using infrared. After transferring the files, it is advisable to change back the default settings to prevent unauthorized file transfer.


Checking the status of the infrared connection

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

■ Connection manager

 Select **Menu** → **Connectivity** → **Connection manager**.






 Options in the Connection manager main view when there are one or more connections are: *Details*, *Disconnect*, *Disconnect all*, *Help* and *Exit*.

In the Connection manager, you can identify the status of multiple data connections, view details on the amount of data sent and received, and end unused connections.

You can view details of data connections only. Voice calls are not listed.

When you open the Connection manager, you can see a list of:

- Open data connections,  - *Data call*,  - *GPRS*.
- The status of each connection.
- Amount of data uploaded and downloaded for each connection (GPRS connections only).
- The duration of each connection (Data call connections only).

 **Note:** The actual time invoiced for calls by your service provider may vary, depending on network features, rounding off for billing, and so forth.

Viewing connection details

To view the details of a connection, scroll to a connection and select **Options**→**Details**. The following is displayed:

- **Name** - The name of the Internet Access Point (IAP) in use.
- **Bearer** - The type of data connection: **Data call** or **GPRS**.
- **Status** - The current status of the connection.
- **Received** - The amount of data, in bytes, received to the phone.
- **Sent** - The amount of data, in bytes, sent from the phone.
- **Duration** - The length of time that the connection has been open.
- **Speed** - The current speed of both sending and receiving data in KB/s (kilobytes per second).
- **Dial-up** (GSM) - The dial-up number used, or **Name** (GPRS) - access point name used.
- **Shared** (not displayed if the connection is not shared) - The number of applications using the same connection.

Ending connections

- Scroll to a connection and select **Options**→**Disconnect** to end that connection only.
- Select **Options**→**Disconnect all** to close all currently open connections.

■ Connecting your phone to a compatible computer

For further information on how to make a connection to a compatible computer via USB, infrared or Bluetooth technology, and how to install Nokia PC Suite, see the Quick Guide for Nokia PC Suite. For further information on how to use Nokia PC Suite, see the help function on PC Suite or visit the support pages at www.nokia.com.

■ Using your phone as a modem

☛ Select **Menu**→**Connectivity**→**Modem**.

Use your phone as a modem to connect to the Internet with a compatible PC, or to send and receive faxes.

Detailed installation instructions can be found in the PC Suite user guide. You can find more information about PC Suite and the download link in the support area on the Nokia's Web site, <www.nokia.com/support>.

■ Remote synchronisation



☛ Select **Menu**→**Connectivity**→**Sync**.

The Sync application enables you to synchronise your calendar or contacts with various calendar and address book applications on a compatible computer or on the Internet. Synchronisation takes place over a GSM data call or packet data connection.

The synchronisation application uses SyncML technology for synchronisation. For information on SyncML compatibility, contact the supplier of the calendar or address book application you want to synchronise your phone data with.

Creating a new synchronisation profile

▀ Options in the Remote sync main view are: *Synchronise*, *New sync profile*, *Edit sync profile*, *Delete*, *View log*, *Help*, and *Exit*.

1. If no profiles have been defined, the phone asks you if you want to create a new profile. Select **Yes**.

To create a new profile in addition to existing ones, select **Options**→*New sync profile*. Choose whether you want to use the default setting values or copy the values from an existing profile to be used as the basis for the new profile.

2. Define the following:

Sync profile name - Write a descriptive name for the profile.

Access point – Select an access point you want to use for the data connection.

Host address – Contact your service provider or system administrator for the correct values.

Port – Contact your service provider or system administrator for the correct values.

User name – Your user ID for the synchronisation server. Contact your service provider or system administrator for your correct ID.

Password – Write your password. Contact your service provider or system administrator for the correct value.

Move the joystick to the right and select the application that you wish to synchronise.

The available applications that you can synchronise may vary. Contact your service provider for more information.

3. Press **Done** to save the settings.

Synchronising data

In the Sync main view, you can see the different profiles, and what kind of data are synchronised: Calendar, Contacts, or both.

1. In the main view, scroll to a profile and select **Options**→*Synchronise*. The status of the synchronisation is shown at the bottom of the screen.

To cancel synchronisation before it is finished, press **Cancel**.

2. You are notified when the synchronisation has been completed.
 - After synchronisation is complete, select **Options**→*View log* to open a log file showing the synchronisation status (*Complete* or *Incomplete*) and how many calendar or contact entries have been added, updated, deleted, or discarded (not synchronised) in the phone or on the server.

13. Troubleshooting

Memory low

When the following notes are shown, the phone memory is low and you must start to delete some data: *Not enough memory to perform operation. Delete some data first.* or *Memory low. Delete some data.* To view what kind of data you have and how much memory the different data groups consume, go to **File manager** and select **Options**→**Memory details**.

You may want to delete the following items regularly to avoid memory getting low:

- Messages from the Inbox, Drafts, and Sent folders in Messaging.
- Retrieved e-mail messages from the phone memory.
- Saved browser pages.
- Images and photos in Images.

To delete contact information, calendar notes, call timers, call cost timers, game scores, or any other data, go to the respective application to remove the data.

If you are deleting multiple items and another of the following notes are shown: *Not enough memory to perform operation. Delete some data first.* or *Memory low. Delete some data.* try deleting items one by one (starting from the smallest item).

Clearing the calendar memory - To remove more than one event at a time, go to the Month view and select **Options**→**Delete entry**→ and either:

- **Before date** - to delete all calendar notes which take place before a certain date. Enter the date before which all calendar notes are deleted.
or
- **All entries** - to delete all calendar notes.

Erasing log information – To erase all the log contents, Recent calls register, and Messaging delivery reports permanently, go to Logs and select **Options**→**Clear log** or go to **Settings**→**Log duration**→**No log**.

Different ways to store data:

- Use Nokia PC Suite to make a backup copy of all data to a compatible computer.
- Send images to your e-mail address and then save the images to your computer (network service).
- Send data via infrared or Bluetooth technology to a compatible device.
- Store data on a compatible memory card.

■ Q&A

Phone display

- Q. Why do missing, discoloured or bright dots appear on the screen every time I turn on my phone?
A. This is a characteristic of this type of display. Some displays may contain pixels or dots that remain on or off. This is normal, not a fault.

Camera

- Q: Why do images look smudgy?
A: Check that the camera lens protection window is clean.

Bluetooth

- Q: Why can't I end a Bluetooth connection?
A: If another device is connected to your phone, you can either end the connection using the other device or by deactivating Bluetooth. Select Bluetooth and select the setting **Bluetooth**→**Off**.
- Q: Why can't I find my friend's Bluetooth-enabled device?
A: Check that both you and your friend have activated Bluetooth. Check that the distance between the two devices is not over 10 metres or that there are no walls or other obstructions between the devices.

Check that the other device is not in 'Hidden' mode.

Check that both devices are compatible.

Multimedia messaging

- Q: What should I do when the phone tells me that it cannot receive a multimedia message because the memory is full?

A: The amount of memory needed is indicated in the error message: *Not enough memory to retrieve message. Delete some data first.* To view what kind of data you have and how much memory the different data groups consume, go to **File manager** and select **Options**→**Memory details**.

- Q: How can I end the data connection when the phone starts a data connection again and again? The brief notes on the display state that the phone is retrieving or trying to retrieve a message. What is happening?

A: The phone is trying to retrieve a multimedia message from the multimedia messaging centre.

Check that the settings for multimedia messaging have been defined correctly and that there are no mistakes in phone numbers or addresses. Select **Messaging** and select **Options**→**Settings**→**Multimedia message**.

To stop the phone from making a data connection, you have the following options. Select **Messaging** and select **Options**→**Settings**→**Multimedia message**, and then:

- Select **On receiving msg.**→**Defer retrieval** if you want the multimedia messaging centre to save the message to be retrieved later, for example, after you have checked the settings. After this change, the phone still needs to send information notes to the network. To retrieve the message later, select **Retr. immediately**.
- Select **On receiving msg.**→**Reject message** - if you want to reject all incoming multimedia messages. After this change, the phone needs to send information notes to the network and the multimedia-messaging centre deletes all multimedia messages that are waiting to be sent to you.

- Select *Multimedia reception*→*Off* - if you want to ignore all incoming multimedia messages. After this change, the phone will not make any network connections related to multimedia messaging.

Messaging

- Q: Why can't I select a contact?

A: If you cannot select a contact in the Contacts directory, the contact card does not have a phone number or an e-mail address. Add the missing information to the contact card in the Contacts application.

Calendar

- Q: Why are the week numbers missing?

A: If you have changed the Calendar settings so that the week starts on a day other than Monday, then the week numbers are not shown.

Browser Services

- Q: *No valid access point defined. Define one in Web settings.*

A: Insert proper browser settings. Contact your service provider for instructions.

Log

- Q: Why does the log appear to be empty?

A: You may have activated a filter, and no communication events fitting that filter have been logged. To see all events, select *Options*→*Filter*→*All communication*.

PC connectivity

- Q: Why do I have problems in connecting the phone to my PC?

A: Make sure that Nokia PC Suite is installed and running on your PC. See the Quick Guide for Nokia PC Suite . For further information on how to use Nokia PC Suite, see the help function on PC Suite or visit the support pages at www.nokia.com/support.

Access codes

- Q: What is my password for the lock, PIN, or PUK codes?


A: The default lock code is **12345**. If you forget or lose the lock code, contact your phone dealer.

If you forget or lose a PIN or PUK code, or if you have not received such a code, contact your network service provider.

For information about passwords, contact your access point provider, for example, a commercial Internet Service Provider (ISP), service provider, or network operator.

Application not responding

- Q: How do I close an application that is not responding?

A: Open the application switching window by pressing and holding . Then scroll to the application, and press the **clear** key to close the application.

14. Technical Information

Weight	110 grams (3.2 ounces) incl. BL-5B battery
Battery	760 mAh Li-Ion Battery
Networks	Wireless networks GSM 900, 1800 and 1900
Size	Volume: 5.5 cubic inches (90 ccm) Length: 4.3 in (109 mm) Width: 1.9 in (49 mm) Thickness: 0.75 in (19 mm)
Frequency range (Rx)	GSM 850: 869–894 MHz GSM 900: 925–960 MHz GSM1800: 1805–1865 MHz GSM1900: 1930–1990 MHz
Frequency range (Tx)	GSM 850: 824–894 MHz GSM 900: 880–915 MHz GSM 1800: 1710–1785 MHz GSM1900: 1850–1910 MHz
Tx output power	2 W (max)
Battery voltage	3.7 V DC
Number of channels	299

Care and Maintenance

Your device is a product of superior design and craftsmanship and should be treated with care. The suggestions below help you protect your warranty coverage.

- Keep the device dry. Precipitation, humidity and all types of liquids or moisture can contain minerals that 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. Unauthorised 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 enhancements approved by Nokia for use with this device. When the device is on and being worn on the body, always use an approved holder or carrying case.

Parts of the device are magnetic. Metallic materials may be attracted to the device, and persons with a hearing aid should not hold the device to the ear with the hearing aid. Always secure the device in its holder, because metallic materials may be attracted by the earpiece. Do not place credit cards or other magnetic storage media near the device, because information stored on them may be erased.

■ 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 device 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 in. (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. Persons with pacemakers should:

- always keep the device more than 6 in. (15.3 cm) from their pacemaker when the device is switched on;
- not carry the device in a breast pocket; and
- hold the device to the ear opposite the pacemaker to minimise the potential for interference.

If you have any reason to suspect that interference is taking place, switch off your device immediately.

Hearing aids

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 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.

Using your device while flying in aircraft is prohibited. Switch off your device before boarding an aircraft. The use of wireless teledevices in an aircraft may be dangerous to the operation of the aircraft, disrupt the wireless telephone network, and may be illegal.

■ 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.

■ Safety information about video games

About photosensitive seizures

A very small percentage of people may experience a seizure when exposed to certain visual images, including flashing lights or patterns that may appear in video games. Even people who have no history of seizures or epilepsy may have an undiagnosed condition that can cause photosensitive epileptic seizures while watching video games. These seizures may have a variety of symptoms, including lightheadedness, altered vision, eye or face twitching, jerking or shaking of arms or legs, disorientation, confusion, or momentary loss of awareness. Seizures may also cause loss of consciousness or convulsions that can lead to injury from falling down or striking nearby objects.

Immediately stop playing and consult a doctor if you experience any of these symptoms. Adults who allow teenagers (or children) to play the games should watch for or ask their children about these symptoms as they are more likely than adults to experience these seizures. The risk of photosensitive epileptic seizures may be reduced by playing in a well-lit room and by not playing when you are drowsy or fatigued. If you or any of your relatives have a history of seizures or epilepsy, consult a doctor before playing.

Play safely

Take a break from playing games at least every half hour. Stop playing immediately if you begin to feel tired or if you experience an unpleasant sensation or pain in your hands and/or arms. If the condition persists, consult a doctor.

Use of vibration can aggravate injuries. Do not turn vibration on if you have any ailment in the bones or joints of your fingers, hands, wrists, or arms.

■ Emergency calls



Important: Wireless phones, including this device, 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 device for essential communications like medical emergencies.

To make an emergency call:

1. If the device 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 device.
2. Press the end key as many times as needed to clear the display and ready the device for calls.
3. Enter the official emergency number for your present location. Emergency numbers vary by location.
4. Press the call key.

If certain features are in use, you may first need to turn those features off before you can make an emergency call. If the device is in offline or flight mode you must change the profile to activate the phone function before you can make an emergency call. Consult this guide or your service provider for more information.

When making an emergency call, give all the necessary information as accurately as possible. Your wireless device 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 DEVICE MEETS THE GOVERNMENT'S REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

Your mobile device is a radio transmitter and receiver. It is designed and manufactured not to exceed the limits for exposure to radio frequency (RF) energy adopted by the governments of the USA through the Federal Communications Commission (FCC) and Canada through Industry Canada (IC). These limits 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 guidelines for mobile devices employ a unit of measurement known as the Specific Absorption Rate or SAR. The SAR limit adopted by the USA and Canada is 1.6 watts/ kilogram (W/kg) averaged over one gram of tissue. The limit incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements. Tests for SAR are conducted using standard operating positions with the device transmitting at its highest certified power level in all tested frequency bands. The actual SAR level of an operating device can be well below the maximum value because the device is designed to use only the power required to reach the network. That amount

changes depending on a number of factors such as how close you are to a network base station.

The highest SAR value reported to the FCC and IC for this device type when tested for use at the ear is 0.81 W/kg, and when properly worn on the body is 0.23 W/kg. SAR information on file with the FCC can be found under the Display Grant section of <http://www.fcc.gov/oet/fccid> after searching on FCC ID PPIRM-51. SAR values reported in other countries may vary depending on differences in reporting and testing requirements and the network band. Additional SAR information may be provided under product information at <http://www.nokia.com>.

APPENDIX

■ A message from the CTIA

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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"

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 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.

9. 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!
10. 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.
11. 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>

■ A message from the 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?

- 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;

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.

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.

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.nrpb.org.uk/>

July 18, 2001

For updates: <http://www.fda.gov/cdrh/phones>