



**Samsung
Smartphone
SGH-D710**

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(2004. 10. ??)



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Important safety precautions

Read these guidelines before using your wireless phone. Failure to comply with them may be dangerous or illegal.

Road safety at all times

Do not use a hand-held phone while driving; park the vehicle first.

Switching off when refuelling

Do not use the phone at a refuelling point (service station) or near fuels or chemicals.

Switching off in an aircraft

Wireless phones can cause interference. Using them in an aircraft is both illegal and dangerous.

Switching off near all medical equipment

Switch your phone off near medical equipment. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy. Follow any regulations or rules in force.

Interference

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

Special regulations

Meet any special regulations in force in any area and always switch off your phone whenever it is forbidden to use it, or when it may cause interference or danger (in a hospital for example).

Water resistance

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

Sensible use

Use only in the normal position (held to the ear). Avoid unnecessary contact with the antenna when the phone is switched on.

Emergency call

Key in the emergency number for your present location, then press the  key. Give all the necessary information as accurately as possible. Do not end the call until given permission to do so.

Keeping small children away from your phone

Keep the phone and all its parts including accessories out of the reach of small children.

Accessories and batteries

Use only Samsung-approved accessories and batteries. Use of any unauthorised accessories could damage your phone and may be dangerous.

Use only Samsung-approved batteries and recharge your battery only with Samsung-approved chargers.

Qualified service

Only qualified service personnel may repair your phone.

For more detailed safety information, see page 286.

CAUTION

RISK OF EXPLOSION IF A BATTERY IS REPLACED
BY AN INCORRECT TYPE.
DISPOSE USED BATTERIES ACCORDING TO THE
INSTRUCTIONS.

Getting started

Congratulations on the purchase of your new Smartphone! This chapter helps you set up your Smartphone, charge the Smartphone's batteries, and familiarise yourself with its different components.

■ What's in the box?

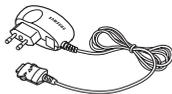
Your package contains the following items:



SGH-D710 Smartphone



Batteries



Travel charger



PC Link CD* + User Manual CD



Quick Reference Guide



PC data link cable

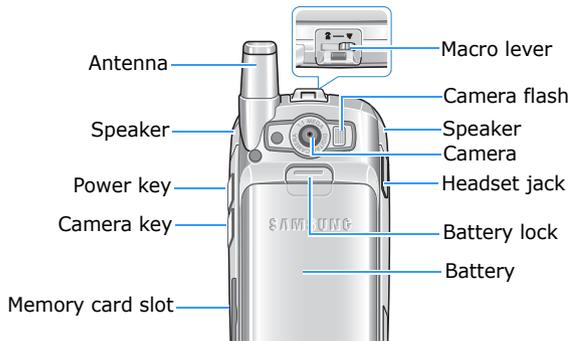
* The PC Link CD contains PC Suite, Add-on software, and applications.

In addition, you can obtain the following accessories for your Smartphone from your local Samsung dealer:

- Standard Battery
- Extended Battery
- PC Data Link Cable
- Straight Headset
- Car Cradle
- Car Charger/Adapter
- Stylish Handsfree Car Kit
- Travel Charger
- PC Link CD
- Hand Strap
- RS-MMC

Note: The items supplied with your Smartphone and available accessories may be different depending on your country or service provider.

Getting to know your Smartphone



Key	Description
	<p>Power key. Press and hold to turn on or off the Smartphone. In Standby mode, displays the list of the profiles.</p>
	<p>Camera key. Press to open the Camera application. In Camera, press to take a picture or to record a video clip.</p>
	<p>Soft keys. Press either soft key to perform the command shown on the screen immediately above the keys.</p>
	<p>ABC key. In Standby mode, press to switch between the Standby screen and Extend view. When entering text, press to change the text input method.</p>
	<p>Menu key. Press to open the main menu screen, which contains a list of available features and applications.</p>
	<p>Navigation keys. Press to scroll through items on a screen. Press to move the cursor in a text input field. In Standby mode, press the Down key to open the Web application and the other keys to access your favourite applications; you can assign applications to each key according to your preferences.</p>
	<p>OK key. Press to confirm your selection. The OK key is similar to the "Enter" key on a keyboard. In Standby mode, press to open the Contacts application.</p>

Key	Description
	<p>Talk/Voice command key. Press to:</p> <ul style="list-style-type: none"> • dial a phone number on the screen. • answer an incoming call. • access call logs. <p>In Standby mode, press and hold to open the Anyvoice application.</p>
	<p>Clear key. Press to clear one or more characters when you are in a text field. Press to delete contents in any application or remove add-on applications.</p>
	<p>End key. Press to end a call. Press to hide the currently activated application.</p>
	<p>Press to enter numbers and characters.</p>
	<p>Press to enter an international prefix or pauses when entering a phone number. Press to display a list of symbols when you are in a text input field.</p>
	<p>Press to change case in a text input field. Press and hold to switch between text and number input modes.</p>

Installing the SIM card

When you subscribe to a cellular network, you are provided with a plug-in SIM card loaded with your subscription details, such as your PIN, any optional services available, and much more.

- Keep all SIM cards out of the reach of small children.
- The SIM card and its contacts can easily be damaged by scratches or bending, so be careful when handling, inserting, or removing the card.
- When installing the SIM card, make sure that your Smartphone is switched off before removing the battery.

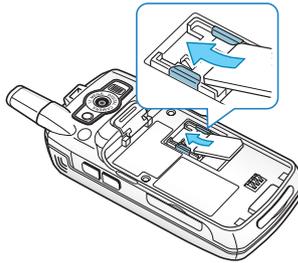
A PIN (Personal Identification Number) is supplied with the SIM card from your network operator and must be entered when you switch on your Smartphone for the first time.

Inserting the SIM card

1. If necessary, remove the battery by referring to page 20.

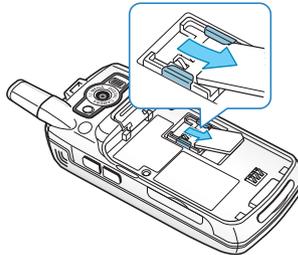
Getting started

2. Insert and slide the SIM card under the two tabs, as shown, ensuring that the gold-coloured contacts of the card face down into the Smartphone.



Removing the SIM card

To remove the SIM card, slide the card out of the holder, as shown.



■ Installing the battery

Your Smartphone is powered by a rechargeable Li-ion battery. Use only approved batteries and chargers. Ask your local Samsung dealer for further details.

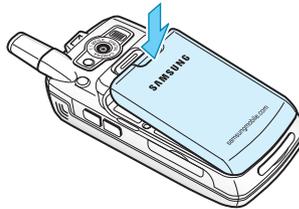
Note: You must fully charge the battery before using your Smartphone for the first time. Fully recharging a discharged standard battery takes approximately 90 minutes.

Installing the battery

1. Insert the tabs at the bottom edge of the battery into the slots on your Smartphone.



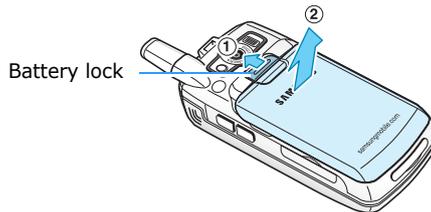
2. Press the top of the battery until it clicks into place.



Make sure that the battery is securely locked before switching on the Smartphone.

Removing the battery

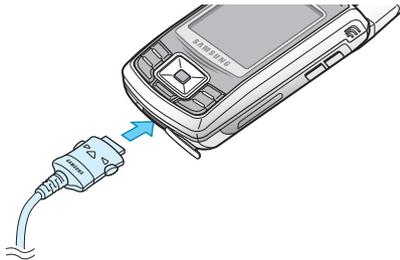
1. If necessary, switch off the Smartphone by pressing and holding  on the right side of the Smartphone until the power-off image displays.
2. To remove the battery, with the back of the Smartphone facing you, press the battery lock upward and lift the battery away, as shown.



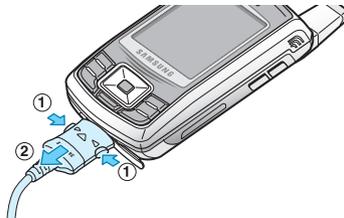
■ Charging the battery

Note: The Smartphone can be used while the battery is being charged, but this causes the battery to charge more slowly.

1. Plug the connector of the travel charger into the bottom of the Smartphone. Check that the arrow on the connector is facing up.



2. Plug the charger into a standard AC wall outlet.
3. When charging is finished, first unplug the charger from the power outlet. Then remove the charger from the Smartphone by pressing the buttons on both sides of the connector and pulling the connector out.



■ Switching on or off the Smartphone

1. Press and hold  on the right side of the Smartphone until the power-on image displays.

If you turn on the smartphone for the first time, you need to set the current time and date.

2. Enter the current time and press the **OK** soft key.
3. Enter the current date and press the **OK** soft key.
4. If the Smartphone asks for a PIN, enter the PIN and press the **OK** soft key. For further details, see page 249.
5. If the Smartphone asks for a lock code, enter the lock code and press the **OK** soft key. The default lock code is "00000000." For further details, see page 249.

The Smartphone searches for your network, and after finding it, the Standby screen appears on the display. Now, you can make or receive a call.



Note: To change the display language, use the **Phone language** option in the **Settings** menu. For further details, see page 232.

6. To switch off the Smartphone, press and hold  until the power-off image displays.

Note: If your Smartphone is closed, you first need to open it to activate the display and the keypad.

Using an optional memory card

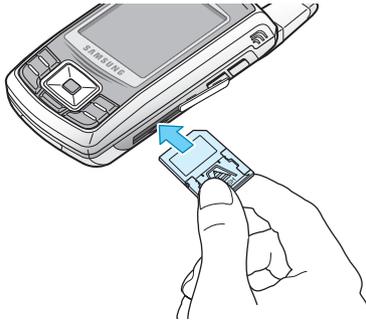
Using a memory card (MMC), you can store your multimedia files, such as video clips, sound files, photos, and messaging data, and back up information from your Smartphone's memory.

Notes:

- Use only compatible memory cards with your Smartphone. Other memory cards, such as Secure Digital (SD) cards, do not fit in the card slot and are not compatible with your Smartphone. Using an incompatible memory card may damage the card, as well as the Smartphone, and data stored on the card.
 - When you insert/remove a locked memory card (indicated as "memory card locked" when you open the **Memory** application), you will not hear the system sound on insertion. Also, you will not hear the system sound and see the note on removal.
-

To insert a memory card:

1. Insert the card into the memory card slot with the label facing up.



2. Push the card in with your thumb until it locks into place. You will hear the system sound.



To remove the memory card:

1. Press  to access the Menu.
2. Scroll to **Extras** using the Navigation keys and press .
3. Scroll to **Memory** and press .
4. Press the **Options** soft key and press the **Select** soft key when **Remove mem. card** highlights.
5. Press the **Yes** soft key.
6. Slide the card out of the card slot and then press the **OK** soft key.



WARNING!

- Removing the memory card without following the procedure above may cause damage to your data or the memory card.
 - If you need to reboot the Smartphone while installing an application on the memory card, do not remove the card until the reboot is complete; otherwise the application files may be lost.
-

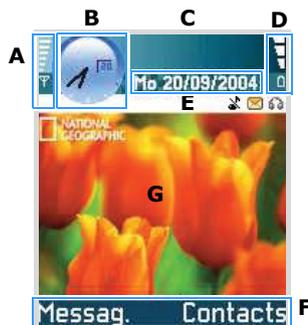
General information

In addition to general phone functions, your Smartphone provides various functions which are very handy for daily use and for entertainment, such as **Camera**, **MP3 Player**, **Messaging**, **Calculator**, and **Calendar**.

This chapter provides some general information to help you use the applications.

■ Standby mode

The components described below are shown when your Smartphone is ready for use, with no characters keyed in. In this state, the Smartphone is in Standby mode.



A	Shows the signal strength of the cellular network at your current location. The more bars, the stronger the signal. The symbol is replaced with the GPRS symbol [] when the GPRS connection has been set to When available and a connection is available on the network or on the current cell. See "Packet data (general packet radio service, GPRS)" on page 240 and "GPRS" on page 246.
B	Shows an analogue clock or a digital clock. See "Date and time settings" on page 248.
C	Indicates in which cellular network the Smartphone is currently being used.
D	Shows the battery charge level. The more bars, the more power left in the battery.
E	Navigation bar: shows the currently active profile. If the selected profile is General , the current date displays instead of the profile name. For further information, see "Navigation bar - moving horizontally" on page 34 and "Profiles" on page 214.
F	Shows the current shortcuts assigned to the soft keys. You can change soft key shortcuts. See "Standby mode" on page 234.
G	Background image: You can select any image to be used as a background image in Standby mode. See page 218.

Note: Your Smartphone has a screen saver. If no key is pressed for 1 minute, the display is cleared and a screen saver becomes visible. See page 235. To deactivate the screen saver, press any key.

Indicators related to actions

One or more of the following icons may be shown when the Smartphone is in Standby mode:

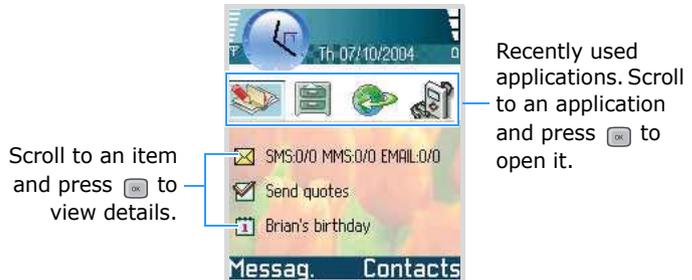
Indicator	Meaning
	Indicates that you have received new text or multimedia messages. When this indicator is blinking, the Smartphone's memory capacity is insufficient to store the message(s) and you must delete some data.
	Indicates that you have received new e-mails.
	Indicates that you have received new chat messages.
	Indicates that you have received voice mail messages. See "Calling your voice mailbox" on page 48.
	Indicates that there are messages waiting to be sent in Outbox . See "Outbox" on page 130.
	Indicates that the Ringing type has been set to Silent in the currently active profile. See "Profiles" on page 214.
	Indicates that the Smartphone's keypad is locked.
	Indicates that you have an active alarm.

Indicator	Meaning
	Indicates that all calls to your Smartphone are being diverted.  indicates that all calls to the Smartphone are being diverted to a voice mailbox. See "Call diverting settings" on page 255. If you have two phone lines, the divert indicator for the first line is  and the indicator for the second line is  .
	Indicates that you can make calls using phone line 2 only (network service). See "Line in use (network service)" on page 237.
	Indicates a data call.
	Appears instead of the signal strength indicator when there is an active GPRS connection.  indicates that there are multiple GPRS connections.  indicates that the GPRS connection is put on hold during a voice call.
	Indicates that an infrared connection is active.
	Indicates that a USB connection with a PC is active.
	Appears when a headset is connected to your Smartphone.

■ Extend view

You will see the Extend view when you press  in Standby mode. On the Extend view, you can see important information for the day, at a glance.

You can also quickly switch to applications you have recently accessed.



■ Menu screen

In the Menu, you can access all of the applications for your Smartphone. Press  to open the Menu screen.



Opening applications or folders

Scroll to an application or a folder using the Navigation keys and press  to open it.

Closing applications

Press the **Exit** soft key or select **Options** → **Exit**. You can also backstep by pressing the **Back** soft key as many times as you need to return to Standby mode. Any unsaved data is saved automatically.

If you press , the Smartphone returns to the Extend view and the application is left open in the background.

Note: Pressing  will always end a call, even if another application is active and displayed on the display.

Rearranging applications

You can rearrange applications or folders on the menu screen, and move applications into folders.

To move an application:

1. On the Menu screen, scroll to the application you want to move.
2. Select **Options** → **Move**.
A check mark is placed beside the selected application.
3. Move the selection to the desired location and press the **OK** soft key.

To move an application to a folder:

1. On the Menu screen, scroll to the application you want to move.
2. Select **Options** → **Move to folder**.
3. Select a folder and press the **OK** soft key.

Note: You can add a new folder by selecting **Options** → **New folder**.

Switching between applications

If you have several applications open and want to switch from one application to another, press and hold . The application switching window opens, showing a list of applications that are currently open.



Scroll to an application using the Up or Down key, and press the **Select** soft key to go to it or press  to close it.

Note: The Telephone application cannot be closed with .

Adding applications

You can add more applications to your Smartphone by downloading installation files from the wireless web or by using the **Manager** application.

To download an application, select **Option** → **App. download**. You can select a bookmark for a preset website which provides you with a variety of applications available for download, or enter the URL address of the website. After accessing the website, search for an application and follow the onscreen instructions.

For details about installing applications by using the **Manager** application, see page 263.

■ Online help

Your Smartphone has a help function that you can access from any application which has the **Options** selection. To access the online help, select **Options** → **Help**.



To access a help function for the Menu, press  to open the Menu and then select **Help**.

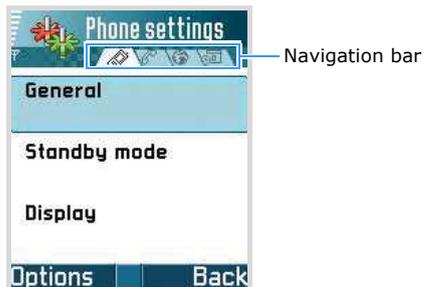
■ Navigation bar - moving horizontally

On the navigation bar, you can see:

- editing indicators. See “Entering text” on page 40.
- other information, for example, in **Images**, numbers like **2/4** mean that the current picture is the second of 4 pictures in the folder. Press the Right key to see the next picture.



- small arrows or tabs which tell you if there are more views, folders, or files you can move to. Press the Right or Left key to move to the next or previous views, folders, or files.



Actions common to all applications

Adding items

When you are in an application, select **Options** and then an option for creating a new item, such as **New contact**, **Create message**, **New entry**, or **New note**. Options for creating an item are different in each application.

For information on how to insert text and numbers, see “Entering text” on page 40.

Opening items

When you are viewing a list of files or folders, to open an item, scroll to it and press  or select **Options** → **Open**.

Editing items

To edit an item, you sometimes need to first open it for viewing and then select **Options** → **Edit**. Then you can change its contents.

Renaming items

To give a new name to a file or folder, scroll to it and select **Options** → **Rename**.

Removing or deleting items

Scroll to the item and select **Options** → **Delete** or press the **C** key. To delete multiple items at one time, you first need to mark them. See the next section, “Marking an item.”

Marking an item

There are several ways to select items on a list:

- To select one item at a time, scroll to it and select **Options** → **Mark/Unmark** → **Mark**. A check mark is placed next to the item.
- To select all of the items on the list, select **Options** → **Mark/Unmark** → **Mark all**.
- To unmark an item, scroll to it and select **Options** → **Mark/Unmark** → **Unmark**.
- To unmark all of the items, select **Options** → **Mark/Unmark** → **Unmark all**.

Sending items

You can send items, such as contact information, pictures, sounds, and calendar entries, via one of various messaging services or via an infrared connection.

1. Open an item and select **Option** → **Send**.
2. Select a method; the choices are: **Via text message**, **Via multimedia**, **Via e-mail**, or **Via infrared**.
 - If you opt to send the item in a text message, the text message editor screen opens. Enter a phone number in the **To:** field and then select **Options** → **Send**. For details, see page 111.
 - If you opt to send the item in a multimedia message, the Multimedia Slide screen opens. Enter the phone number of the recipient in the **To:** field. Add text and then select **Options** → **Send**. For details, see page 114.

- If you opt to send the in an e-mail, the E-mail screen opens. Enter the e-mail address of the recipient in the **To:** field. Enter the message subject and add text, picture(s), video file(s), or sound(s), and then select **Options** → **Send**. For details, see page 117.
- If you opt to send the item via an infrared connection, align your Smartphone's infrared port with the one on the other phone or PC. For details, see page 269.

Arranging items

You can arrange items such as pictures, sounds, and messages, into folders.

Creating folders

To create a new folder, select **Options** → **New folder**. You are asked to name the folder (max. 35 letters).

Moving items to a folder

To move items to a folder or between folders:

1. Select **Options** → **Move to folder** (not shown if there are no folders available).

A list of available folders opens.

2. Select the location to which you want the item moved and press the **OK** soft key.

Searching for items

You can search for a name, file, folder, or shortcut by using the search field. In some situations, the search field is not visible automatically, but you can activate it by selecting **Options** → **Find** or just by starting to enter letters.

1. Start to enter text in the search field. The Smartphone immediately starts to search for matches and highlights the best match.



To make the search more accurate, enter more letters. The Smartphone highlights the selection moves to the item that best matches your input.

2. When you find the correct item, press the **OK** key to open it.

Volume control

When you have an active call or are listening to a sound, press the Left or Right key (Up or Down key in **MP3Player**) to increase or decrease the volume level, respectively.

Keypad lock (Keyguard)

You can open your Smartphone to use the number keypad and close the Smartphone to make it more compact. When you close the Smartphone, it allows you to lock the exposed function keys to keep any accidental key presses from causing problems.

To lock the keypad, close the Smartphone at any time. When a confirmation message displays:

- Press the **No** soft key, or if you do nothing for a second, the Smartphone locks the keypad and  appears on the navigation bar.
- Press the **Yes** soft key to use the exposed keys with the Smartphone closed.

Once the keypad has been locked, to unlock the keypad, press and hold the **Unlock** soft key and then press the **OK** soft key.

Shared memory

Some features in your Smartphone use shared memory: Contacts, text messages, multimedia messages, images and ring tones, camera, RealPlayer™, calendar, to-do notes, and downloaded applications. Using any of these features leaves less memory for other features. This is especially true with heavy use of any of the features. For example, saving many images may use up all of the shared memory and your Smartphone may display that the memory is full. In this case, delete some of the information or items taking up the shared memory.

Entering text

You can enter text in 2 different ways: using the method traditionally used in mobile phones—pressing a key repeatedly until the desired character displays—or Dictionary, which is a predictive text input mode.

Changing the text input mode

You can change the text input mode by pressing  or , as follows:

Note: In the recipient field of the message screen, you must press  first to change text input modes.

- To select the traditional text input mode, press  until the indicator  displays on the top right of the screen. Alternatively, press  and select **Dictionary** → **Off**.
- To select the Dictionary text input mode, press  until the indicator  displays on the top right of the screen. Alternatively, press  and select **Options** → **Dictionary on**.
- To select number mode, press and hold  until the indicator **123** displays on the top right of the screen. Alternatively, press  and select **Options** → **Number mode**. To return to the previous input mode, press and hold .

Using traditional text input

Use the keys  to  to enter text.

1. Press a number key repeatedly until the desired character appears. Note that there are more characters available for a number key than are printed on the key.
2. Select the other letters in the same way.

Note: If the next letter is located on the same key as the present one, wait until the cursor appears or press the Right key to end the time-out period, and then enter the letter.

Tips for traditional text input

- To change cases, **.Abc** (Initial capital) and **abc** (Lower case), press .
- To remove a character, press . Press and hold  to clear more than one character.
- To insert a symbol, press  to open a list of symbols and punctuation marks. Alternatively, press  and select **Insert symbol**. Use the Navigation keys to scroll through the list and press .
- The most common punctuation marks are available under . Press  repeatedly to reach the desired punctuation mark.
- To insert a number quickly, press and hold the corresponding number key.
- To insert a space, press .
- To move the cursor to the next line, press  three times.  displays briefly and then the cursor moves.

Using Dictionary

1. Write the desired word by pressing the keys  to . Press each key only once for one letter. The word changes after every key press.

Note: Do not pay attention to what appears on the display. The word match is evolving. Wait until you have entered the whole word before you check the result.

For example, to enter "Hello" when the English Dictionary is selected, press  for **H**,  for **e**,  for **l**,  for **l**, and  for **o**.

The word suggestion changes after each keypress.

2. When you have finished the word, check that it is correct.
 - If the word is correct, you can confirm it by pressing the Right key or pressing  to insert a space. The underlining disappears and you can begin to enter a new word.
 - If the word is not correct, you have the following options:
 - Press  repeatedly to view other matching words the dictionary has found, one by one.
 - Press  and select **Dictionary** → **Matches** to view a list of matching words. Scroll to the word you want to use and press the **OK** soft key to select it.

- If the **?** character is shown after word, the word you intended to enter is not in Dictionary. To add a word to Dictionary, press the **Spell** soft key, enter the word (max. 32 letters) using traditional text input, and press the **OK** soft key. The word is added to Dictionary. When Dictionary becomes full, a new word will replace the oldest added word.
 - To remove the character and clear characters one by one from the word, press .
3. When the correct word displays, press 0 to insert a space, so that the word is complete.

Tips for using Dictionary

- To change cases, **.Abc** (Initial capital) and **abc** (Lower case), press .
- To remove a character, press . Press and hold  to clear more than one character.
- To insert a number, press and hold the corresponding number key.
- To insert a symbol, press  to open a list of symbols and punctuation marks. Alternatively, press  and select **Insert symbol**. Use the Navigation keys to scroll through the list and press .
- The most common punctuation marks are available under . Press  and then  repeatedly to reach the desired punctuation mark.

Tip: Dictionary tries to guess which commonly used punctuation mark (., ? ! ') is needed. The order and availability of the punctuation marks depend on the language being used.

- To view matching words the dictionary has found, one by one, press  repeatedly when a word is active (underlined).

You can also press , select **Dictionary** and select:

- **Matches** to view a list of words that correspond to your key presses, which is available only if the word is active (underlined). Scroll to the desired word and press the **OK** key.
- **Insert word** to add a word (max. 32 letters) to Dictionary by using traditional text input. When Dictionary becomes full, a new word will replace the oldest added word.
- **Edit word** to open a view where you can edit the word, which is available only if the word is active (underlined).
- **Off** to deactivate Dictionary.

Editing options

When you press , the following options appear (depending on the text input mode and situation you are in):

- **Dictionary** (predictive text input), **Alpha mode** (traditional text input), **Number mode**.
- **Cut, Copy** - available only if text has been selected first. For details, see the following page.
- **Paste** - available only when text has been either cut or copied to the clipboard.
- **Insert number, Insert symbol**, and
- **Writing language** - changes the input language for all editors in the Smartphone. See page 232.

Copying text

If you want to copy text to the clipboard, the following are the easiest methods:

1. To select letters and words, press and hold . At the same time, press the Right or Left key. As the selection moves, text is highlighted.

To select lines of text, press and hold . At the same time, press the Up or Down key.

2. When you have selected the text that you want, stop pressing the Navigation keys.
3. To copy the text to the clipboard, while still holding , press the **Copy** soft key.

You can also release , press it once to open a list of editing commands, and select **Copy** or **Cut**.

4. To insert the text into a document, while holding , press the **Paste** soft key.

You can also press  and select **Paste**.

Call functions

This chapter gives you information for using your Smartphone's call functions.

Making a call

1. In Standby mode, use the keypad to enter a phone number, including the area code.

Press the Left or Right key to move the cursor. Press  to remove a number.

For international calls, press  twice for the international prefix (the + character replaces the international access code) and then enter the country code, the area code without **0**, and the phone number.

Note: Calls described here as international may in some cases be made between regions of the same nation.

2. Press  to call the number.

Note: To adjust the volume during a call, press the Left or Right key.

3. Press  or close the Smartphone to end the call or to cancel the call attempt. You can also use the **End call** soft key.

Note: Pressing  will always end a call, even if another application is active and displayed.

Options after dialling a number

After entering a number, press the **Options** soft key. You can access the following options:

- **Add to Contacts:** lets you add the number to the Contacts directory. Choices are **Create new** and **Update existing**. For details about the **Contacts** application, see page 58.
- **Call:** dials the number.
- **Send:** lets you send a text or multimedia message to the number.

Making a call using contacts

1. To open **Contacts**, press the **Contacts** soft key in Standby mode.

You can also press  to open the Menu and then select **Contacts**.

2. To find a contact, scroll to the name you want.

Alternatively, enter the first letters of the name in the search field at the bottom of the screen. Matching contacts are listed.

3. Press  or select **Options** → **Call** to start the call.

If the contact has more than one phone number, scroll to the number you want and press  or the **Call** soft key to start the call.

Making a call using name dialling

You can make a phone call by saying the name that has been assigned to a contact card in the Contacts directory. For details, see “Name dialling” on page 165.

Note: To use the Name Dial feature, the name and number that you want to dial must be in your Contacts directory. For details about **Contacts**, see page 58.

Calling your voice mailbox

The voice mailbox is a network service which acts as an answering machine where callers who are unable to reach you can leave voice messages.

To call your voice mailbox, press and hold  in Standby mode.

If the Smartphone asks for the voice mailbox number, enter it and press the **OK** soft key. You can obtain this number from your service provider.

Each phone line may have its own voice mailbox number. See “Line in use” on page 237.

Changing the voice mailbox number

To change the phone number of your voice mailbox, press  to open the Menu, and then select **Tools** → **Voice mail** → **Options** → **Change number**. Enter the number obtained from your service provider and press the **OK** soft key.

Speed dialling a phone number

Once you have stored a number in **Contacts**, you can assign the most frequently-used numbers to the number keypad and quickly and easily dial them with only one keypress.

1. Assign a phone number to one of the speed dialling keys  to . See "Assigning speed dialling keys" on page 64.
2. To call the number:
 - In Standby mode, press the corresponding speed dialling key and .
 - If the **Speed dialling** function is set to **On** (see page 237), press and hold the corresponding speed dialling key until the call is started.

To view the speed dialling assignments, press  to open the Menu, and then select **Tools** → **Speed dial**.



Dialling using a pause

When you call an automated system, like a banking service, you are required to enter a password or an account number. Instead of manually entering the numbers each time, you can enter the necessary DTMF tones separated by pauses before dialling.

Note: DTMF tones are the tones you hear when you press the number keys. DTMF tones allow you to communicate with computerised telephone systems, for example, voice mailboxes or telebanking systems.

1. Enter the phone number you want to dial, such as a bank's teleservice number.
2. Press  repeatedly to insert a pause.
You can use two types of pauses:
 - **p**: inserts a pause of approximately two seconds between numbers. The numbers following "p" are sent automatically.
 - **w**: if you use a pause of this type, the remaining sequence is not sent until you press .
3. Enter a number to be sent after the pause, such as your account number, PIN, etc.
4. Repeat steps 2 and 3 to add more pauses and numbers, if necessary.
5. Press  to make a call.

6. After connecting, wait for a prompt from the system, and then press  at each prompt, if applicable.

The DTMF tones are sent.

Answering a call

1. To answer an incoming call, open the Smartphone if necessary, and press  or the **Answer** soft key.

- To reject a call, press . The caller will hear a "line busy" tone.

Note: If you have activated the **Settings** → **Call divert** → **If busy** function to divert calls, for example, to your voice mailbox, rejecting an incoming call will also divert the call. See "Call diverting settings" on page 255.

- To quickly mute the ringing tone, press the **Silence** soft key.

Note: If the Silent profile is active (see page 214), **Reject** displays in place of **Silence** to allow you to reject a call.

- To adjust the phone tones for different environments and situations, for example, when you want your Smartphone to be silent, see "Profiles" on page 214.

2. To end the call, press  or close the Smartphone.

Using options during a call

While a call is in progress, you can access the following options by pressing the **Options** soft key.

Note: Depending on the status of your call, for example, having a second call or a call on hold, available options vary.

- **Swap:** switch between the active call and the call on hold.
- **End active call:** ends the active call.
- **End all calls:** ends all calls.
- **Hold:** puts the current call on hold.
- **Unhold:** reactivates the call on hold.
- **Mute:** switches your Smartphone's microphone off so that the other person on the phone cannot hear you.
- **Unmute:** switches your Smartphone's microphone on.
- **Mute key:** switches the key tones off.
- **Send key:** switches the key tones on.
- **New call:** allows you to make a new call. When you select this option, the current call is placed on hold.
- **Conference:** allows you to make a conference call. You can have a conversation with up to 5 participants.
 - **Private:** (shows when you have a conference call) Use to talk privately to a person during a conference call. When the list of call participants appears, select one and press the **Private** soft key.

- **Drop participant:** (shows when you have a conference call) Use to drop a person during a conference call. When the list of call participants appears, select one and press the **Drop** soft key.
- **Transfer:** connects an incoming call or a call on hold with an active call and disconnects you from both calls.
- **Send DTMF:** allows you to send DTMF tones for numbers, such as passwords or bank account numbers. You can check or correct the numbers before sending.
- **Help:** shows the help information on the options available during a call.

Viewing the Log

In the **Log** application, you can monitor phone calls, text message call duration, packet data connections, and data calls registered by the Smartphone. You can filter the log to view just one type of event and create new contact cards based on the log information.

Press  to open the Menu, and then select **Log**.

Recent calls

The Smartphone registers the phone numbers of missed, received, and dialled calls. The Smartphone registers missed and received calls only if the network supports these functions.

Press  in Standby mode or press  to open the Menu, and then select **Log** → **Recent calls**.

Missed calls and received calls

These network services allow you to view the 20 most recent calls you have missed and calls you have accepted. To view the 20 most recent missed calls' originating phone numbers, select **Log** → **Recent calls** → **Missed calls**.

When you see a note about missed calls in Standby mode, press the **Show** soft key to access the list of missed calls. To call back, scroll to the number or name you want and press .

To view a list of the 20 numbers or names from which you have most recently accepted calls, select **Log** → **Recent calls** → **Received calls**.

Dialled calls

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

You can also press  in Standby mode to quickly open the Dialled numbers list.

Erasing Recent call lists

- To clear all of the listed recent calls, select **Options** → **Clear recent calls** on the Recent calls screen.
- To clear one of the call log types, open the log whose contents you want to erase and select **Options** → **Clear list**.
- To clear an individual call log, scroll to the log and press  or select **Options** → **Delete**.

Call duration

Press  to open the Menu, and then select **Log** → **Call duration** to view the duration of the last call, dialled and received calls, and total calls.

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

Erasing call duration timers

On the Call duration screen, scroll to the call duration type you want to erase and select **Options** → **Clear timers**. For this you need the lock code. The default lock code is "00000000." See "Security settings" on page 249.

GPRS counter

You can check how much data, measured in bytes, has been transferred to and from your Smartphone.

The display shows the counters for all sent data and all received data, separately.

To reset the counters, select **Option** → **Clear counters**. For this, you need to enter a lock code. The default lock code is "00000000."

Viewing the general log

In the general log, for each communication event, you can see the sender or recipient's name or phone number.

Press  to open the Menu, select **Log** and press the Right key.

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



You can also view each communication event in details. Scroll to an event and press  or select **Options** → **View details**.

Filtering the log

By selecting a filter, you can display only log items of the specified type.

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

Erasing the contents of the log

To erase all the log contents permanently, select **Options** → **Clear log**.

Log settings

Select **Options** → **Settings**. The list of settings opens.



- **Log duration:** The log events remain in the Smartphone's memory for a set number of days, after which they are automatically erased to free up memory.
If you select **No log**, all of the log contents, Recent calls log, and Message delivery reports are permanently deleted.
- **Show call duration:** When this option is set to **Yes**, you will see the call duration timer while you have an active call.

Contacts

In **Contacts**, you can store and manage a person's contact information, such as names, phone numbers, and addresses, as a contact card.

To open **Contacts**, press  to open the Menu, and then select **Contacts**.

You can also press the **Contacts** soft key or  in Standby mode.



You can add a personal ring tone or a thumbnail image to a contact card. You can create contact groups, which allows you to send text messages or e-mails to multiple recipients at the same time.

■ Creating contact cards

You can create contact cards and save them selectively in your Smartphone's memory or the SIM card.

Creating a new contact card in the Smartphone's memory

1. Open **Contacts** and select **Options** → **New contact**. An empty contact card opens.



The screenshot shows a 'New contact' form. The title bar is blue with 'New contact' in white. Below the title bar, there are three input fields: 'First name:', 'Last name:', and 'Company'. At the bottom, there are two buttons: 'Options' with a dropdown arrow and 'Done'.

2. Fill in the fields you want and press the **Done** soft key. The contact card is saved and closed, after which you can see it in **Contacts**.

Note: On the Contacts list, a contact's last name will display first by default. You can set the Contacts list to display the first name first by selecting **Options** → **Settings**.

Creating a contact card on the SIM card

1. Open **Contacts** and select **Options** → **SIM directory**.
2. On the SIM directory screen, select **Options** → **New SIM contact**.
3. Enter a name and a phone number in each field.



4. Press the **Done** soft key.

Note: Once you have stored numbers on the SIM card, you can retrieve them by entering their location numbers, which are automatically assigned in the order in which the numbers are stored, and pressing . For example, pressing  and then  in Standby mode shows the first number stored in the SIM directory. You can then dial the number.

■ Copying contacts

- To copy contacts from the SIM card to your Smartphone's memory, go to **Contacts** and select **Options** → **SIM directory**. Select the contact(s) you want to copy and select **Options** → **Copy to Contacts**.
- To copy contacts from the Smartphone's memory to your SIM card, go to **Contacts**, select the contact(s) you want and select **Options** → **Copy to SIM direct**. Then scroll to the number you want to copy and press the **OK** soft key. If you want to copy all contact information, select **All**.

■ Options when viewing contacts

To view details of a contact card, scroll to the card from the Contacts list and press .

Contact information view () shows all information on the contact card. If you added an image to the contact card, the thumbnail image displays on the top left of the screen. The name field is always displayed in the contact information view, but other fields are only displayed if they contain information.



Note: Only fields that have information are displayed in the contact information view. Select **Options** → **Edit** if you want to see all of the fields and add more data to the contact card.

Changing contact card information

1. On the Contacts list, scroll to the contact card you want to edit and press  to open it.
2. To change the information on the contact card, select **Options** → **Edit**.
3. To save your changes and to return to the Contacts list, press the **Done** soft key.

Adding and removing contact card fields

You can add input fields to the contact card to store more information about a person, or alternatively remove fields.

1. Open a contact card and select **Options** → **Edit**.
2. To add an extra field, select **Options** → **Add detail**.
To delete a field you do not need, select **Options** → **Delete detail**.
To rename the label of a contact card field, select **Options** → **Edit label**.
3. When you have finished, press the **Done** soft key.

Adding a picture to a contact card

You can add a caller ID image to a contact card as a thumbnail image. See “Camera” on page 71 for more information on how to take and store pictures.

1. Open a contact card and select **Options** → **Edit**.
2. Select **Options** → **Add thumbnail**.
3. Select an image from the **Images** folder. The thumbnail image is also shown when the contact is calling you.

After you attach a thumbnail image to a contact card, you can select **Add thumbnail** to replace the image with a different thumbnail or **Remove thumbnail** to remove the thumbnail from the contact card.

Assigning default numbers and addresses

If a person has several phone numbers or e-mail addresses, to speed up calling and sending messages, you can define certain numbers and addresses as defaults.

Open a contact card and select **Options** → **Defaults**. A pop-up window opens, listing the different options.

For example, scroll to **Phone number** and press the **Assign** soft key. A list of phone numbers in the selected contact card is shown. Scroll to the one you want to use as the default and press the **Select** soft key. When you return to the contact card view, you will see the default number underlined.

Assigning speed dialling keys

Speed dialling is a quick way to call frequently-used numbers. You can assign 8 phone numbers speed dialling keys  to . Number **1** is reserved for the voice mailbox.

1. Open the contact card for which you want a speed dialling key.
2. Select the phone number you want.
3. Select **Options** → **Assign speed dial**.

The speed dialling grid opens, showing you the numbers from **2** to **9**.



4. Scroll to a location and press the **Assign** soft key.

When you return to the contact information view, you will see the speed dial icon  on the right side of the number.

To call the contact by speed dialling, go to Standby mode, press the appropriate speed dialling key and then .

Adding a ring tone for a contact card or group

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

1. Open a contact card, or go to the group list and select a contact group.
2. Select **Options** → **Ringtone**. A list of ring tones opens.
3. Select the ring tone you wish to use for the contact or group and press the **Select** soft key.

To remove the ring tone, select **Default tone** from the list of ring tones.

Note: For an individual contact, the Smartphone always uses the ring tone that was assigned last. If you first change a group ring tone and then the ring tone of a single contact that belongs to that group, the ring tone of the single contact is used the next time the contact calls you.

Sending contact information

You can send contact information via text and multimedia messages and via an infrared connection. For details, see page 36.

When you send or receive contact information, the term “business card” is used. A business card is a contact card in a format suitable to be sent in a message, usually in vCard format.

Subscribed contacts

You can create a list for contacts whose presence status you want to be aware of (network service). You can view the contact’s presence information if they allow you to view it and if it is not prevented by the network. You can view the subscribed contacts either by scrolling through the contacts or accessing the subscribed contacts list.

To connect to the Presence service, press  to open the Menu and then select **Presence**. You can also view subscribed contacts when you are not connected to the Presence service, but you cannot see the presence status of the contact.

Adding contacts to the subscribed contacts

1. On the Contacts list, press the Right key once.
2. If you have no contacts on your list, select **Options** → **Subscribe new**. The list of contacts is shown.
If you have not connected to the Presence service, the Smartphone asks if you want to connect now. Select **Yes** soft key.
3. Select a contact from the list and if the contact has an ID saved, the contact is added to the subscribed contacts list. If there is more than one ID, select one of them.

After subscription to the contact, "Subscription activated" is shown.

Viewing subscribed contacts

See also "Viewing the presence of others" on page 229 to view the presence information.

1. On the Contacts list, press the Right key once.
The status information of the first contact on the subscribed contacts list is shown and it may include text and one or more of the following icons:
, , or  indicate that the person is either available, busy, or not available.
 indicates that the person's presence information is not available.
2. Scroll to the desired contact and press  or select **Options** → **Open** to view the details of the selected contact.

3. If you press the **Options** soft key, you can select:
 - **Open** to view the details of the contact.
 - **Call** to make a call.
 - **Create message** to send a text message to the selected contact.
 - **Switch tracking on/off** to activate or deactivate the tracking for the contact's presence status. When the tracking is activated,  appears on the list, and you will be notified if the presence status of the contact changes.  appears when the tracking is deactivated.
 - **Open conversation** to start a chat conversation.
 - **Unsubscribe** to remove the selected contact from the list of subscribed contacts.
 - **Subscribe new** to add a new contact to the list of subscribed contacts.
 - **My presence** to view my presence status.

Unsubscribing a contact

1. On the Contacts list, press the Right key once.
2. Select the contact to unsubscribe and select **Options** → **Unsubscribe**.
3. If you are not logged into the Presence service, press the **Yes** soft key to log in.
4. Press the **Yes** soft key to confirm.

Contact groups

You can create contact groups, which can, for example, be used as distribution lists for sending text messages and e-mail.

Creating contact groups

1. On the Contacts list, press the Right key twice to open the group list.
2. Select **Options** → **New group**.



3. Enter a name for the group or use the default **Group** name and press the **OK** soft key.

Adding members to a group

To add a contact to a group:

1. On the Contacts list, scroll to the contact you want to add to a group and select **Options** → **Add to group**. A list of available groups opens.
2. Scroll to the group to which you want to add the contact and press the **Add** soft key.

To add multiple members at one time:

1. On the groups list, open a group and select **Options** → **Add members**.
2. Scroll to a contact and press the **OK** soft key to mark it. Repeat this action for all the contacts you want to add.

Removing members from a group

1. On the groups list, scroll to the group you want to modify, and press .
2. Scroll to the contact you want to remove and select **Options** → **Remove from group**.
3. When a confirmation message displays, press the **Yes** soft key to remove the contact from the group.

Entertainment

This chapter provides you with information about applications in which you can enjoy the use of multimedia files, such as **Camera**, **MP3 Player**, **RealPlayer**, **Gallery**, and **Game**.

Camera

Using **Camera**, you can take pictures of people or events while on the move.

You can also record video clips with sound.

Taking pictures

The camera produces JPEG pictures. JPEG is a standardised image compression format. JPEG files can be viewed with most common image viewers, image editors, and Internet browsers. You can recognise these files by their JPG extensions.

Important:

- Do not take pictures of people without their permission.
 - Do not take pictures in places where cameras are not allowed.
 - Do not take pictures in places where it may interfere with another person's privacy.
-

1. In Standby mode, press and hold  on the right side of the Smartphone. You can also press  to open the Menu and select **Camera**.

The Camera application opens and the view to be captured on the Image screen displays.



Indicates the camera mode un the memory being used.

2. Locate the image you want by moving the Smartphone and aiming the camera to the subject.
To zoom in on your subject before taking the picture, press the Up key.
To zoom out, press the Down key.
3. When the image you want to capture appears on the screen, press  or  or select **Options** → **Capture**.
Do not move the Smartphone before the camera starts to save the picture. The picture is saved to either the Smartphone's memory or the memory card, depending on the setting of **Memory in use**. See page 75.

After the picture has been saved:

- To view previously saved pictures, go to **Gallery** by selecting **Options** → **Go to Gallery**. See page 90.
- To change the name of the picture, select **Options** → **Rename image**.
- To set the picture as the wallpaper for the Standby screen, select **Options** → **Set as wallpaper**.
- To return to the Image screen to take a new picture, press the **Back** soft key.

You can insert a picture into a contact card. See page 63.

Notes:

- Camera goes into Battery Saving mode, displaying "Camera on Standby," if there have been no key presses within 2 minutes. To continue taking pictures, press the **OK** key.
 - The resolution of a digitally zoomed picture is lower than that of a non-zoomed picture, but the image remains the same size. You may notice the difference in image quality if you view the picture on a PC.
-

Using the self-timer

You can set the camera to take a picture automatically after a predefined time. By delaying taking a picture, you can include yourself in the picture.

1. Select **Options** → **Self-timer**.
2. Select a time delay from **5 seconds**, **10 seconds**, or **15 seconds**.

The  icon and the timer appear on the top right of the screen.

3. Press the **Activate** soft key or  to take a picture. The timer counts down and the camera will take a picture after the selected delay.

Using Macro mode

Use Macro mode to take close-up pictures of small objects, for example, flower or insects.

To activate Macro mode, move the macro lever on the top of the Smartphone to the  icon.

To deactivate Macro mode, move the lever to the  icon.



Using Night mode

When the lighting is dim and the camera needs a longer exposure time for the picture to be of good quality, you can use Night mode.

To activate Night mode, press  or select **Options** → **Activate night mode**.

To deactivate Night mode, press  again or select **Options** → **Deact. night mode**.

Changing Camera settings

You can adjust the image quality, resolution, and flash setting and change the default image name and the memory location of saved images. These settings will be applied to all subsequent pictures that you take.

On the Image screen, select **Options** → **Settings**. You can scroll to the setting you want to change:

- **Image quality** - Select an image quality. The better the image quality, the more memory the image consumes.
- **Image resolution** - Select an image size. The image size is dictated by the resolution. Resolution is a measure of the sharpness and clarity of an image. Resolution is usually measured in pixels, for example, 640 x 480 = 300 kilopixels. The more pixels there are, the more detailed the picture is.
- **Default image name** - By default, the camera names pictures in the format Image.jpg. **Default image name** allows you to set a name for the pictures taken. For example, if you set "beach" as the default image name, **Camera** will name all the pictures you take "beach", "beach (001)", "beach (002)", and so on, until you change the setting again.
- **Memory in use** - Select whether you want to store your images in the Smartphone's memory or on the memory card, if you use one.
- **Camera flash** - Select whether the flash on the right side of the camera lights or not. The flash will light when you press  or  to take a picture.

Recording video clips

You can record video clips. Recorded video clips are in 3GP format, which is the standard video file format for Multimedia Messaging.

1. On the Camera main screen, press the Right key. The Video screen displays.



2. To start recording, press  or  or select **Options** → **Record**. The timer on the top right of the screen shows you the elapsed time and the total time you can record.
3. To pause recording at any time, press the **Pause** soft key or . To resume, press the **Continue** soft key or .

To zoom in on your subject before or during recording, press the Up key. To zoom out, press the Down key.

4. To stop recording before the maximum recording time is up, press the **Stop** soft key.

After the video has been saved, you will see the recording time on the top right of the still image. The video clip is saved to either the Smartphone's memory or on the memory card, depending on the setting of your **Memory in use**. See page 78.

After the video clip has been saved:

- To immediately play the video clip you just recorded, select **Options** → **Play**.
- To play previously saved video clips, go to **Gallery** by selecting **Options** → **Go to Gallery**. See page 90.
- To change the name of the video clip, select **Options** → **Rename**.
- To return to the Video screen to record a new video clip, press the **Back** soft key.

Activating Night mode

When the lighting is dim and the camera needs a longer exposure time for the video to be of good quality, activate Night mode. Press  or select **Options** → **Activate night mode**.

To deactivate the mode, Press  again or select **Options** → **Deactiv. night mode**.

Muting sound

If you don't want to record sound with the video, select **Options** → **Mute**. To deactivate Mute mode, select **Options** → **Unmute**.

Changing Video settings

On the Video screen, select **Options** → **Settings**. You can set the following options to define how videos are recorded:

- **Length:** Select the recording time limit. If you selected **Short**, the Smartphone records a video of up to 100KB or 300 KB, which is the limit for sending an MMS message. If you selected **Maximum**, the Smartphone records a video to the limit of the memory remaining.
- **Video resolution:** Select the image size from **128x96**, **176x144**, or **352x288**.
- **Default video name:** Define the default name of your video clips. For example, if you set "Holiday" as the default video clip name, Camcorder will name all of the video clips you take "Holiday," "Holiday(001)," "Holiday(002)," and so on, until you change the setting again.
- **Memory in use:** Select between **Phone memory** and **Memory card**.

■ MP3 Player

Using **MP3 Player**, you can play MP3 music files from the Smartphone's memory or the memory card. You can download MP3 files from the Internet or transfer ones from a PC. All of the MP3 files in the Smartphone's memory or on the memory card are automatically added to the MP3 file list.

Playing MP3 files

1. Press  to open the Menu and then select **MP3 Player**.

The MP3 Player screen opens.



2. Press  to play the first MP3 file stored in the play list.
3. While listening to a file:
 - To adjust the volume, press the Up or Down key.
 - To pause playback, select . Select  to resume.
 - To stop the current file and listen to the previous or the next file in the play list, select  or .

- To repeat all of the MP3 files in the play list, select .
- To view details about the current file, such as the file name, size, date received, and the file format, select **Options** → **View details**.

Using the MP3 play list

Before using **MP3 Player**, first add the MP3 files from the MP3 file list to the play list. For details on how to add the files to the play list, see page 81.

1. In the MP3 Player screen, select **Options** → **Go to play list**. The list of MP3 files displays.

Indicates that the file will play.



2. On the play list:
 - To play a file from the list, scroll to the file you want to play, and then press the **OK** key to play it. **MP3 Player** opens and the selected file plays.
 - To adjust the play order of the file on the list, select **Options** → **List move up** or **List move down**.
 - To remove a file from the list, scroll to the file and select **Options** → **Delete**.

- To remove all of the files from the list, select **Options** → **Delete all**.
- To view detailed information of the selected file, such as the name, size and format of the file, scroll to the file and select **Options** → **View details**.

Using the MP3 file list

MP3 files are automatically saved in the MP3 file list, regardless of where they are stored. Using the MP3 file list, you can add MP3 files to the play list and delete files permanently.

Adding MP3 files to the play list

1. Select **Options** → **Go to file list**.

A list of the MP3 files saved on your memory card or Smartphone's memory displays.



You can view indicators, telling you the memory where the file is stored, next to the file name (📱 for the Smartphone's memory and 🗃️ for the memory card).

Note: When you save MP3 files in your Smartphone's memory, the **C** directory, you need to copy them to the **Nokia** folder to let them display on the MP3 file list.

2. On the file list:
 - To add a file to the play list, select the file you want and press . A check mark displays beside the selected file.
 - To add all of the MP3 files to the play list, select **Options** → **Mark all**.
3. To go to the MP3 Player screen, press  or the **Player** soft key. The checked files are added to the play list.

Changing MP3 Player settings

On the MP3 Player screen, select **Options** → **Settings**. You can set the following options:

- **Auto start:** Choose **On** to automatically play the first file added to the play list without having to press  each time you open **MP3 Player**.
- **Repeat:** Choose **On** to repeat all of the mp3 files in the play list in order.
- **Shuffle:** Choose **On** to play the files randomly.
- **Quick play:** Choose **On** to play the MP3 files without adding the files to the play list.

RealPlayer

With **RealPlayer**, you can play media files stored in the Smartphone's memory or on a memory card, play music, video files, and stream live content from the Internet.

Media files are video, music, or audio clips which you can play on a media player like **RealPlayer**. Files with extensions .3gp, .mp4, .amr, .rm, .ram, .ra, and .rv. are supported by **RealPlayer**.

Press  to open the Menu, and then select **RealPlayer**.

Playing media files

You can play any music or video file from the list shown when you start **RealPlayer**, or play a file directly from the Internet.

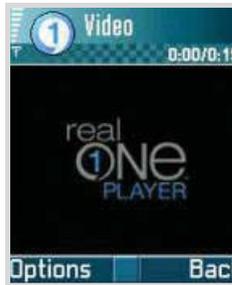
To play a media file stored in your Smartphone's memory or on the memory card:

1. Select **Options** → **Open** and select:

- **Most recent clips** to play one of the 6 most recent files played in RealPlayer. Select a file from the list.
- **Saved clip** to play a file saved in the Smartphone's memory or on the memory card, if available. Select a memory and then select a file from the memory directory.
- **Mem.card sound clips** to play sound files saved on the memory card. Enter a track list name and press the **OK** soft key. A new track list is created and all of the sound files in the memory card are retrieved. This option is only available when a memory card is inserted into the Smartphone.

2. Use the following options during playback:

If you are playing a video file:



- To adjust the volume, press the Left or Right key.
- To move forward or backward in a video file, press and hold the Left or Right key.
- To pause playback, press the **Pause** soft key. To resume, select **Options** → **Continue**.
- To stop playback, press the **Stop** soft key.

If you are playing a sound file:



- To adjust the volume, press the Left or Right key.
- To pause playback, select . To resume, select .

- To access the previous file, select .
- To access the next file, select .
- To move backward in a file, select . The player moves by 5-second increments.
- To move forward in a file, select . The player moves by 5-second increments.
- To stop playback, select  or press the **Stop** soft key.

If you are playing an MP3 file, see page 79.

To play a stream live content from the Internet:

1. Select a streaming link from the web browser or a file containing the address for the streaming content.

The display shows a confirmation message for connecting to the server.

2. Press the **Yes** soft key to confirm.

Notes:

- You cannot connect to a site unless you have configured an access point. See page 241.
 - Many service providers will 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.
 - In RealPlayer, you can only open an rtsp:// URL address. You cannot open an http:// URL address. However, RealPlayer will recognise an http link to a .ram file since a .ram file is a text file containing an rtsp link.
-

3. Once you are connected to the server, playback begins with buffering of the streaming content.
 - To adjust the volume, press the Left or Right key.
 - To pause playback, press the **Pause** soft key. To resume, select **Options** → **Continue**.
 - To stop playback, press the **Stop** soft key.

Using a track list

You can make your own track list.

Creating a track list

1. From the RealPlayer main screen, select **Options** → **New track list**.
2. Select a folder or site and then the directory to which you want to save the track list.
3. Enter a list name and press the **OK** soft key.
4. Select a folder from which you want to retrieve files and then select a file from the directory.

Once a file is selected, the Music player screen appears.
5. To add more files, select **Options** → **Edit track list**. The track list opens.
6. Select **Options** → **Add sound clip** and then select a folder and then a file.
7. Repeat step 6 until you have finished adding files.

8. Press the **Back** soft key and then the **Yes** soft key to save the changes.

Opening a track list

1. From the RealPlayer main screen, select **Options** → **Open** → **Saved clip**.
2. Select the site where the list you want is stored and search for the list.
3. When you find the list, press the **Select** soft key.
The Music player screen opens and the first song begins playing.

Editing a track list

1. Open a track list and select **Options** → **Edit track list**.
The Music player screen opens and the track list opens.
2. Press the **Options** soft key and select:
 - **Add sound clip** to add more sound files to the list
 - **Delete** to remove the currently selected file from the list.
 - **Move** to change the file order. A check mark is placed to the right of the file. Move the selection to the place you want and press the **OK** soft key to move the file.
3. Press the **Back** soft key and then the **Yes** soft key to save the changes.

Viewing clip details

You can view details of the currently selected file, such as the name, format, duration, file size, and the time and date when the file was saved. Access a file and select **Options** → **Clip details**.

Sending media files

You can send media files via multimedia message and e-mail services, and via the infrared connection. For details, see page 36.

Changing RealPlayer settings

When you select one of the settings, a tab view is opened. Press the Right or Left key to move between the different setting tabs.

To change the Video settings, select **Options** → **Settings** → **Video** to open the following list of settings:

- **Contrast** - Adjust the brightness of video clips by pressing the Left or Right key.
- **Repeat** - Choose **On** to have a currently playing video file restart automatically once it has finished.

To change the Audio settings, select **Options** → **Settings** → **Audio** to open the following list of settings:

- **Repeat** - Choose **On** to have a currently playing audio file restart automatically once it has finished.
- **Random play** - Choose **On** to play audio files randomly.

To change the Connection settings for accessing video streaming services, select **Options** → **Settings** → **Connection** to open the following list of settings:

- **Proxy** - Choose whether or not a proxy is used.
- **Network** - Change items from the following list of network settings:
 - **Default access point** - Enter the default access point.
 - **Online time** - Select the length of time **RealPlayer** stays online when inactive. After the specified period of inactivity, RealPlayer will disconnect from the server.
 - **Bandwidth usage**: Select the network bandwidth you want to use.
 - **Connection time-out** - Select the time **RealPlayer** waits for a response from the network to connect to a corresponding server when you select a link. If there is no response within the specified period of time, the connection attempt will be cancelled.
 - **Server time-out** - Select the length of time **RealPlayer** waits for a response from the corresponding server when you send a request to the server, for example, pausing and resuming playback. After the specified period of time, **RealPlayer** gives you an alert message of no response, and disconnects from the server.
 - **Lowest UDP port** - Enter the lowest port number of the server's port range.
 - **Highest UDP port** - Enter the highest port number of the server's port range.

Gallery

Use **Gallery** to store and organise your images, sound clips, video clips, streaming live contents from the Internet, and RAM files.

Press  to open the Menu, and then select **Gallery**.



Select the phone or memory card using the Left or Right key.

1. Open **Gallery** to see a list of the folders in the Smartphone's memory. Press the Right key to see the folders on the memory card, if you use one.
2. Select **Images**, **Sound clips**, or **Video clips** (or one of other folders that you have created) and press  to open it.
3. 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,
 - the name of the file,
 - the date and time the file was saved, or the size of the file, and
 - subfolders and the number of items inside them, if any.

Opening files

In a folder, select any file and press  to open the file. Each file will open in its corresponding application as follows:

- Images - open in the Image viewer. See “Images” on page 91.
- Sound clips - open and play in the Music Player or MP3 Player application. See “Sound clips” on page 97.
- Video clips, RAM files, and streaming live content - open and play in the RealPlayer™ application. See “RealPlayer” on page 83.
- Subfolders - open to display contents.

Images

In this folder, you can access pictures you have taken using the camera and images you have downloaded from the Internet or received in multimedia messages.

Viewing an image

1. From the Gallery screen, select **Images**.



2. To browse through the pictures, press the Up or Down key.

3. Press  to open a picture.

When you are viewing a picture, pressing the Left or Right key takes you to the next or previous picture in the current folder.

Options in an image view

You can use the following options while you are viewing a picture:

- **Zooming:** To zoom in or out, select **Options** → **Zoom in** or **Zoom out**.
- **Switching to Full Screen mode:** To view the picture on the full screen, select **Options** → **Full screen**. To go back to the normal view, press the right soft key.
- **Moving the focus:** When you are zooming the picture, press the Navigation keys to move the focus up, down, right, or left.
- **Rotating:** To rotate the picture 90 degrees clockwise, select **Options** → **Rotate** → **Right**. To rotate the picture 90 degrees counterclockwise, select **Options** → **Rotate** → **Left**.

Notes:

- Because these options are only for viewing, changes made in the image view are not saved.
 - You can also use the keypad shortcuts for these options. See below.
-

Keypad shortcuts

In an image view, you can use the following keys:

-  : rotates the picture 90 degrees counterclockwise.
-  : scrolls up.
-  : rotates the picture 90 degrees clockwise.
-  : scroll to the left.
-  : zooms in.
-  : scrolls to the right.
-  : zooms in. Pressing this key once again switches the display to Full screen view.
-  : scrolls down.
-  : zooms out.
-  : switches the view mode between the full screen view and the normal view.

Image details view

To view detailed information about an image, select **Options** → **View details**. A list of image information appears:

Format - JPEG, GIF, PNG, TIFF, MBM, BMP, WBMP, OTA, WMF, **Unsupported**, or **Unknown**

Date and Time - when the image was created or saved,

Resolut. - the size of the image in pixels,

Size - in bytes or kilobytes (kB),

Colour - True colour, 65536 colours, 4096 colours, 256 colours, 16 colours, Greyscale, or Black/white.

Other default folders

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

Select the **Images** folder → **Picture msgs.**. The six default pictures display.

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

- **Presence logos folder** - Use this folder to store user logos for the Presence service.

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

- **Wallpapers folder** - Use this folder to store pictures that you want to use as background images.

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

Editing a picture

You can edit pictures by changing the image settings, applying a special effect, or adding decoration items.

1. Open the picture you want to edit and select **Options** → **Edit**.

Note: The size of the picture displayed in Edit mode is fixed to 176 x 144 or 144 x 176.

2. Press the Right key to select an edit option from the Navigation bar; **Adjust**, **Effect**, and **Add** are available.
3. Press the **Options** soft key and select an option.

For **Adjust**, you can use:

- **Rotate** to rotate the picture 90 degrees clockwise or counterclockwise. You can also change to its mirror image.
- **Brightness** to adjust the image brightness by pressing the Left or Right key.
- **Contrast** to adjust the image contrast by pressing the Left or Right key.

For **Effect**, you can use:

- **Tone** to select a colour tone.
- **Magic effect** to apply an effect, such as Negative, Creamy, Sharp, Noise, Emboss, Mosaic, Edge, Blur, or Fisheye lens.
- **Special effect** to apply a special effect, such as B/W movie, Old movie, Warm, Fresh, or Horror.

For **Add**, you can use:

- **Add frame** to select a decorative frame. After selecting, press the **Insert** soft key to add the frame to the picture.
- **Add icon** to select an icon and move it to the place you want by pressing the Navigation keys. Press the **Insert** soft key to add the icon to the picture.
- **Add text** to enter text to be displayed on the picture. While entering, you can change the colour or size of the text by pressing the **Options** soft key. After completing the text, press the **OK** key or select **Options** → **Insert** to add the text to the picture. You can move the text position by pressing the Navigation keys. Then select **Options** → **Fasten** to fix the text.

- **Focus** to change the focus to one of the added items and then replace it with another one and/or change its position.

Note: You can cancel your action by selecting **Options** → **Undo**.

4. When you are finished, select **Options** → **Save**.
5. Enter a name, if necessary, and press the **OK** soft key.

If you use an existing name, the Smartphone asks you if you want to replace. Press the **OK** soft key to confirm, or the **Cancel** soft key and then enter another name.
6. Press the **Back** soft key to return to the file list.

Sending a picture

You can send pictures via multimedia message and e-mail services, and via an infrared connection. For details, see page 36.

Setting a picture as wallpaper

You can use your pictures as wallpaper (background images) for Standby mode. Select **Options** → **Set as wallpaper**

Sound clips

In this folder, you can access sound clips you have recorded in the **Recorder** menu, and audio files you have downloaded from the Internet or received in multimedia messages.

Playing sound clips

1. From the Gallery screen, select **Sound clips**.
2. Select the subfolder you want.
3. Press the Up or Down key to scroll to a sound clip or track list and press . The Music player screen opens and the sound clip plays.



If you select an MP3 file, the MP3 Player application opens and the MP3 file plays. For details, see page 79.

4. During playback, you can use the following options:
 - To adjust the volume, press the Left or Right key.
 - To pause playback, select . To resume, select .

- To access the previous file, select .
- To access the next file, select .
- To move backward in a file, select . The player moves by 5-second increments.
- To move forward in a file, select . The player moves by 5-second increments.
- To stop playback, select  or press the **Stop** soft key.

Sending a sound clip

You can send sound clips via multimedia message and e-mail services, and via an infrared connection. For details, see page 36.

Video clips

In this folder, you can access video clips you have recorded using the camera or video files you have downloaded from the Internet or received in multimedia messages.

Playing video clips

The recorded video clips are stored in **Gallery**. You can play the video clips on your Smartphone.

1. From the Gallery screen select **Video clips**.



From the Video clips list, you will see:

- the size (kB) and file name of the video clip
- subfolders and the number of the items inside them, if any

2. Press the Up or Down key to scroll to a video clip and press .

The RealPlayer application opens and the video clip plays. For details, see page 84.

Sending a video clip

You can send video sound clips via multimedia message and e-mail services, and via an infrared connection. For details, see page 36.

Downloading files

To download files into **Gallery** using the browser:

Select **Options** → **Gallery downloads** and choose from **Graphic downloads**, **Video downloads**, or **Tone downloads**. The browser opens and you can choose a bookmark for the website from which to download or enter a URL address of the website. See “Viewing bookmarks” on page 205.

To download files, you must first configure your default access point. See “Access point” on page 241.

Uploading images to an image server (network service)

You can send your pictures to an image server to allow others to share your pictures online.

Note: You can upload only .JPG files to an image server.

Before you can upload images, you must enter the settings for the image server. See “Setting up the image server” on page 101. You can get these settings from your service provider.

Uploading an image

1. To begin an upload, select an image. If you want to upload more than one image or all of your images, select **Options** → **Mark/Unmark**.
2. Select **Images** → **Options** → **Image uploader**.

3. Select **Upload**.
4. Enter a name for the folder on the image server where the images will be stored, and press .

Setting up the image server

1. Select **Options** → **Image uploader** → **Settings**.
2. Select **Image servers** and press . Fill in the details for each field.
3. When you are finished, press the **Back** soft key.

Games

In **Games**, you can enjoy 2 default Java games, **Ziogolf** and **BubbleSmile**.

Press  to open the Menu, and then select **Games**.

Notes:

- Running certain games may consume the Smartphone's battery faster (and you may need to connect the Smartphone to the charger.)
 - You can download MIDlets from various sources and store them in your Smartphone. See "Installing Java™ applications" on page 265.
-

Ziogolf

You can enjoy a golf game on your Smartphone.

1. In **Games**, select **Ziogolf** and press .
2. On the Ziogolf main screen, scroll to an option using the Up or Down key. The following options are available:
 - **New Game**: allows you to start a new game.
 - **Load Game**: allows you to restart a saved game.
 - **Best Score**: shows you the high score table.
 - **Credits**: shows you information about the developers of ZioGolf.
 - **Help**: displays the key helper screen to show you the keys used to play the game.
 - **Quit**: allows you to exit the game screen.
3. Select **New Game** and press .
4. Select a player using the Left or Right key and press .
5. Enter a name for the player and press .
6. To start the game, press  or the right soft key.
7. Press the right soft key and select a club. Then press .
8. Press the left soft key and then select the direction of the stroke by pressing the Left or Right key, and press .

Note: You can check the course of the ball by pressing the Navigation keys.

9. Press  to select the stroke power level, and press  again when the white line is near the "0" mark.
10. Press  to continue the next stroke.
11. Repeat steps 9 and 10 until you are on the green.
12. When you are on the green, select the direction of your putt, depending on the level of the surface displayed on the top right of the game screen, by pressing the Left or Right key. Then press .
13. Press  when the white line is near the flag mark.

Each time you finish a hole, the display shows your score. When you have finished 18 holes, the game is over.

While playing the game, press  to access the following options:

- **Resume Game:** returns you to the game screen.
- **Sound:** switches the game sound on or off.
- **Volume:** adjusts the volume level for the game sound.
- **Save Game:** saves the current game.
- **End Game:** ends the game.

BubbleSmile

The goal of this game is to score as many points as possible by rotating adjacent bubbles to create a row, either horizontally or diagonally, of 3 or more identical bubbles.

1. In **Games**, scroll to **BubbleSm...** and press .
2. On the main screen of the BubbleSmile game, scroll to an option using the Up or Down key. The following options are available:
 - **TIMED MODE:** is the game mode for beginners. In this mode, you play until time runs out. You set more time than in the Skilled Mode game.
 - **SKILLED MODE:** is the game mode for more skilled users. In this mode, the more rotations you make, the faster the time passes.
 - **HIGH SCORE:** shows the high score table.
 - **HOW TO PLAY:** shows how to play the game.
 - **CREDITS:** shows you information about the developers of BubbleSmile.
 - **EXIT:** ends the game.
3. Select a game mode by pressing the Up or Down key and press .
4. Press the Navigation keys to move the band currently surrounding 3 bubbles to the desired location.

5. Press the Left or Right soft key to rotate the bubbles within the band clockwise or counterclockwise.

When a set of 3 or more identical bubbles are aligned, they disappear.

While playing the game, press  to access the following options:

- **RESUME GAME:** returns you to the game screen.
- **EFFECT:** switches on or off the game sound.
- **NON-SAVED N' END:** ends the game without saving it.
- **SAVED N' EXIT:** saves the game and then exits it.

Message services

Your Smartphone provides you with various message service applications:

- Messaging
- Voice mail
- Chat

Messaging

In **Messaging**, you can create, send, receive, view, edit, and organise:

- text messages,
- multimedia messages,
- e-mails, and
- smart messages: special text messages containing data.

In addition to these avenues, you can receive messages and data via an infrared connection, receive service messages and cell broadcast messages, as well as send service commands.

To go to **Messaging**, press  to open the Menu, and then select **Messaging**. You can also press the **Message** soft key in Standby mode.

Message folders

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



Inbox - contains received messages other than 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. You can organise your messages by adding new folders within **My folders**.



Mailbox - When you open this folder, you can either connect to your remote mailbox to retrieve new e-mails or view previously retrieved e-mails offline. See page 126 for further information about online and offline modes. After you have defined settings for a new mailbox, the name given to that mailbox replaces **Mailbox** in the main view. See "Settings for e-mails" on page 138.



Drafts - stores draft messages that have not been sent.



Sent - stores the 20 most recent messages that have been sent. To change the number of messages to be saved, see "Settings for other folders" on page 141.



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



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

Notes:

- Receiving a delivery report for a multimedia message that has been sent to an e-mail address might not be possible.
 - Before you can create a multimedia message, write an e-mail, or connect to your remote mailbox, you must have the correct connection settings. See "Settings needed for e-mail" on page 117 and "Settings needed for multimedia messaging" on page 114.
-

When you have opened one of the default folders, for example, **Sent**, you can easily move between folders: pressing the Right key will open the next folder (**Outbox**), and pressing the Left key will open the previous folder (**Drafts**).

General information

The status of any message is always either draft, sent, or received. Messages can be saved to the **Drafts** folder before they are sent. Messages are temporarily placed in **Outbox** to wait for sending. After a message has been sent, you can find a copy of the message in the **Sent** folder. Received and sent messages are in read-only state until you select **Reply** or **Forward**, which copies the message to an editor. Note that you cannot forward e-mails you yourself have sent.

Note: Messages or data that have been sent via an infrared connection are not saved in the **Drafts** or **Sent** folder.

Opening a received message

- When you receive a message,  and the note "1 new message" are shown in Standby mode. Press the **Show** soft key to open the message. Press the **Exit** soft key to close the note.
- If you have more than one new message, press the **Show** soft key to open **Inbox** to see the message headings. To open a message in **Inbox**, scroll to it and press .

Creating and sending new messages

You can start to create a message in two ways:

- By selecting **New message** → **Text message**, **Multimedia message**, or **E-mail** in the Messaging main view, or
- By starting to create a message while using an application that has the option **Send** or **Create message**. In this case, the file that was selected, such as an image or text, is added to the message.

Note: When sending messages, your Smartphone may display the word "Sent." This is an indication that the message has been sent by your Smartphone to the message centre number programmed into your Smartphone. This is not an indication that the message has been received at the intended destination.

Adding a recipient to a message

When you create a message, there are several ways to add a recipient:

- add recipients from the Contacts directory. To open the Contacts directory, press the **OK** key in the **To:** or **Cc:** field, or select **Options** → **Add recipient**. Scroll to a contact and press  to mark it. You can mark several recipients at a time. Press the **OK** soft key to return to the message. The recipients are listed in the **To:** field and automatically separated with a semicolon(;).
- enter the phone number or e-mail address of the recipient in the **To:** field, or
- copy the recipient information from another application and then paste it in to the **To:** field. See "Copying text" on page 45.

Press  to delete a recipient to the left of the cursor.

Sending options

To change how a message is sent, select **Options** → **Sending options** when you are editing a message. When you save the message, its sending settings are also saved. For details, see page 134.

Viewing message details

To view details of a message, select **Options** → **Details**. The display shows the subject, the time and date the message was saved, message type, and the sender or recipient's number or address.

Text messages

You can create and send a simple text message or a picture message containing small images.

Writing and sending text messages

1. Select **New message** → **Text message**. The editor opens with the cursor in the **To:** field.
2. Press  to select recipient(s) from the Contacts directory or enter the phone number of the recipient. Add a semicolon (;) to separate each recipient.
3. Press the Down key to move to the message field.
4. Enter the message.
 - To add a message template, select **Options** → **Insert** → **Template**.

Note: Your Smartphone supports the sending of multiple text messages at the same time. Therefore, the normal 160-character limit for one text message can be exceeded. If your text exceeds 160 characters, it is sent as two or more messages, and sending the message may cost you more.

On the navigation bar at the top of the display, 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.

- To set sending options for the message, select **Options** → **Sending options**. See page 134.

5. To send the message, select **Options** → **Send** or press .

Creating and sending picture messages

Your Smartphone allows you to send and receive picture messages. Picture messages are text messages that contain small black-and-white graphics. There are several default pictures available in the **Picture msgs.** folder in **Images**.

Note: This function can be used only if it is supported by your network operator or service provider. Only phones that offer picture messaging features can receive and display picture messages.

To send a picture message:

1. There are two possibilities; either:
 - Open the Menu → **Gallery** → **Images** → **Picture msgs.** and select a picture to be sent. Select **Options** → **Send**,
or
 - Open the Menu → **Messaging** → **New message** → **Text message** → **Options** → **Insert** → **Picture**. Select a picture to be sent.
2. Enter recipient information and add text.
3. Select **Options** → **Send** or press .

Note: Each picture message is made up of items worth several text messages' worth of information. Therefore, sending one picture message may cost more than sending one text message.

Sending smart messages

Smart messages are special text messages that can contain data. You can send smart messages, such as:

- picture messages. See page 112.
- business cards containing contact information in generic (vCard) format.
- calendar notes (vCalendar format).

For details about sending items from an application, see page 36.

Multimedia messages

A multimedia message can contain a combination of text and video clips, or text, images, and sound clips, but not a combination of images and video clips. You can send multimedia messages phone to phone or phone to e-mail.

Note: This function can be used only if it is supported by your network operator or service provider. Only devices that offer compatible multimedia message or e-mail features can receive and display multimedia messages. Devices that don't have these features may receive details as a link to a web page.

Settings needed for multimedia messaging

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

1. Go to **Tools** → **Settings** → **Connection** → **Access points** and define the settings for a multimedia messaging access point. For further information on different data connections, see also "Connection settings" on page 238.
2. Go to **Messaging** → **Options** → **Settings** → **Multimedia message**. Open **Access point in use** and select the access point you created to be used as the preferred connection. See also "Settings for multimedia messages" on page 136.

Note: You may receive the settings as a smart message from your network operator or service provider. See "Receiving smart messages" on page 122.

Creating multimedia messages

Note: When you are sending a multimedia message to any phone other than an SGH-D710, you should use smaller image sizes and sound clips that are no longer than 1 minute. When you are sending a multimedia message to an e-mail address or to another SGH-D710, use a larger image size (network dependent).

1. In **Messaging**, select **New message** → **Multimedia message**.

2. Add a recipient in the **To** field.
3. Press the Down key to move to the next field.
4. You can add objects to the multimedia message in any order you want.
 - To add an image, select **Options** → **Insert object** → **Image**. If you select **Insert new** → **Image**, Camera opens and you can take a new picture.

Note: When sending a multimedia message to another phone, set the default image size to **Small**. See page 138.

- To add sound, select **Options** → **Insert object** → **Sound clip**. If you select **Insert new** → **Sound clip**, Voice recorder opens and you can record a new sound. The new picture or sound is automatically saved and a copy is inserted into the message. When sound has been added, the melody indicator  is shown on the navigation bar.

Note: If you opt to add a video file, the resolution of the video must be smaller than 176 x 144.

- To add video, select **Options** → **Insert object** → **Video clip**. If you select **Insert new** → **Video clip**, Camera opens and you can record a new video.
- To enter text, press the Down key.
- To add more slides to your message, select **Insert new** → **Slide**. After adding slides, select **Options** → **Move** to scroll to another slide.

- To make a multimedia presentation using one of the image or sound templates, select **Options** → **Create presentation**. For a presentation, you can apply a colour and add an image to the background.
- To remove an added item, select **Options** → **Remove**, and select the item you want.
- To set the sending options for the multimedia message, select **Option** → **Sending options**. See page 136.

Note: When you add more than one image, sound, or video clip to a multimedia message, a slide is automatically added. You can scroll through the slides by pressing the Up and Down keys.

5. To send the message, select **Options** → **Send** or press .

Previewing a multimedia message

To see what the multimedia message will look like, select **Options** → **Preview message**.

Working with different media objects

- To see all of the different media objects included in a multimedia message, open a multimedia message and select **Options** → **Objects** to open the Objects view. A list of different objects and their file sizes displays. You can change the order of the objects, delete objects, or open an object in a corresponding application.
- To remove a multimedia object, select **Options** → **Remove** → **Image**, **Video clip**, **Slide** or **Sound clip**. Press  to remove text.

E-mail

Settings needed for e-mail

Before you can send, receive, retrieve, reply to, or forward e-mail, you must:

- Configure an Internet Access Point (IAP) correctly. See "Connection settings" on page 238.
- Define your e-mail settings correctly. See "Settings for e-mails" on page 138.

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

Writing and sending e-mails

1. Select **New message** → **E-mail**. The editor opens.
2. Press  to select the recipient(s) from **Contacts**, or enter the e-mail address of the recipient in the **To:** field.

Add a semicolon (;) to separate each recipient. If you want to send a copy of your e-mail to someone, enter the address in the **Cc:** field.
3. Press the Down key to move to the next field.
4. Enter the e-mail subject and press the Down key to move to the next field.

5. Enter the e-mail text.

- If you want to add an attachment to the e-mail, select **Options** → **Insert** → **Image, Sound clip, Video clip**, or **Note**.  appears on the navigation bar to indicate that the e-mail has an attachment.
- **Template** adds pre-written text to the e-mail.
- You can also add an attachment to an e-mail by selecting **Options** → **Attachments** in an open e-mail. The Attachments view opens where you can add, view, and remove attachments.

Note: When you add an attachment, you need to select whether the image is stored in the Smartphone's memory or on the memory card, if one is used.

- To remove an attachment, on the Attachments view screen scroll to the attachment and select **Options** → **Remove**.
- To set the sending options for the e-mail, select **Options** → **Sending options**. See page 138.

6. To send the e-mail, press  or select **Options** → **Send**.

Important: Copyright protections may prevent some images, sounds, and their contents from being copied, modified, transferred, or forwarded.

Note: E-mails are automatically placed in **Outbox** before sending. If something goes wrong while the Smartphone is sending the e-mail, the e-mail is left in **Outbox** with the status **Failed**.

Inbox - receiving messages

Messages and data can be received using text message or multimedia service, via an infrared connection. 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:

-  for an unread text message and  for an unread smart message,
-  for an unread multimedia message,
-  for an unread service message,
-  for data received via infrared, and
-  for an message of unknown type.

Viewing messages in Inbox

To open a message, scroll to the message and press .

Use the Up or Down key to move up and down in the message. When you view a message, press the Left or Right key to move to the previous or next message in the folder.

Options in different message viewers

To use message options, press the **Options** soft key in a message view. Available options depend on the type of the message you have opened:

- **Save picture** - saves the picture to the **Picture messages** folder in **Gallery**.
- **Save business card** - saves the contact card in a smart message to **Contacts**.

- **Save to Calendar** - saves the memo in a smart message to **Calendar**.
- **Play presentation** - plays the multimedia presentation from a multimedia message.
- **Reply** - copies the address of the sender to the **To:** field. Select **Reply** → **To all** to copy the addresses of the sender and **Cc:** field recipients to the new message.
- **Forward** - copies the message contents to an editor.
- **Call** - allows you to call the sender by pressing .
- **Delete** - allows you to delete a message.
- **View image** - allows you to view an image in a multimedia message.
- **Play sound clip:** plays the sound in a multimedia message.
- **Play video clip:** plays the video in a multimedia message.
- **Objects** - shows you a list of all the different multimedia objects in a multimedia message.
- **Message details** - shows detailed information about a message.
- **Move to folder** - allows you to move message(s) to **My folders** or other folders you have created. See "Moving items to a folder" on page 37.
- **Add to Contacts** - allows you to copy the phone number or e-mail address of the message sender to the Contacts directory. Choose whether you want to create a new contact card or add the information to an existing contact card.

- **Find** - searches the message for phone numbers, e-mail addresses, and URL addresses. After the search, you can make a call or send a message to the found number or e-mail address, or save the data to **Contacts** or as a browser bookmark.

Viewing multimedia messages in Inbox

You can recognise multimedia messages by their icon



To open a multimedia message, scroll to it and press the **OK** key. You can see an image, read a message, and hear a sound, simultaneously.

If a sound is playing, press the Left or Right key to increase or decrease the volume. If you want to mute the sound, press the **Stop** soft key.

Multimedia message objects

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 Smartphone or to send it, for example, via infrared to another device.

To open a file, scroll to it and press .

Important: Multimedia message objects may contain viruses or otherwise be harmful to your Smartphone or PC. Do not open any attachment if you are not sure of the trustworthiness of the sender. For more information, see "Certificate management" on page 252.

Receiving smart messages

Your Smartphone can receive many kinds of smart messages, which are text messages that contain data (also called Over-The-Air (OTA) messages). To open a received smart message, open **Inbox**, scroll to the smart message , and press .

- **Picture message** - to save a picture in the **Picture msgs.** folder in **Gallery** for later use, select **Options** → **Save picture.**
- **Business card** - to save contact information, select **Options** → **Save business card.**

Note: If certificates or sound files are attached to business cards, they are not saved.

- **Ringing tone** - to save a ring tone to **Gallery**, select **Options** → **Save.**
- **Operator logo** - to save a 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 an entry to Calendar, select **Options** → **Save to Calendar.**
- **WAP message** - to save a bookmark, select **Options** → **Save to bookmarks.** The bookmark is added to the Bookmarks list. 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 of 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 looking at.

- **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.**

Tip: To later change the default access point settings for browser service or multimedia messaging, go to **Services** → **Options** → **Settings** → **Default access point** or **Messaging** → **Options** → **Settings** → **Multimedia message** → **Access point in use**.

Service messages

You can order service messages (push messages) from service providers. Service messages are notifications of, for example, news headlines, and they may contain a text message or an address for a browser service. For availability and subscription, contact your service provider.

Service providers can update an existing service message every time a new service message is received. Messages can be updated even if you have moved them to a folder other than **Inbox**. When service messages expire, they are deleted automatically.

Viewing service messages in Inbox

1. In **Inbox**, scroll to a service message  and press .
2. To download or view the service, press **Download message**. The note **Downloading message** is displayed. The Smartphone starts to make a data connection, if needed.
3. Press the **Back** soft key to return to **Inbox**.

Viewing Service Messages in the Browser

When you are browsing, select **Options** → **Read service msgs.** to download and view new service messages.

My folders

In **My folders**, you can create new folders, and rename and delete folders. Select **Options** → **New folder** or **Rename folder**. For more information, see "Moving items to a folder" on page 37.

Templates folder

You can use text templates to avoid rewriting messages that you send often.

- To create a new template, select **Options** → **New template**.
- To send a message using a template, select **Options** → **Send**.

Mailbox

When you open this folder, you can connect to your Mailbox:

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

If you select **Mailbox** or **New message** → **Email** in the Messaging main view and you have not set up your e-mail account, you will be prompted to do so. See "Settings for e-mails" on page 138.

When you create a new mailbox, the name you give to the mailbox automatically replaces **Mailbox** in the Messaging main view. You can have up to 6 mailboxes.

Opening a mailbox

When you open a mailbox, you can choose whether you want to view the previously retrieved e-mails and e-mail headings offline, or connect to the e-mail server.

- When you scroll to your mailbox and press the **OK** key, the Smartphone asks you if you want to **Connect to mailbox?**. Select **Yes** to connect to your mailbox or **No** to view previously retrieved e-mails offline.
- Another way to start a connection is to select **Options** → **Connect**.

Viewing e-mails when online

When you are online, you are continuously connected to your mailbox via a data call or a packet data connection. See page 29 for data connection indicators and page 238 for general information about data connections.

Note: If you are using the POP3 protocol, e-mails are not updated automatically in online mode. To see the newest e-mails, you need to disconnect and then make a new connection to your mailbox.

Viewing e-mails when offline

When you view e-mails offline, your Smartphone is not connected to your mailbox. This mode may help you to save on connection costs.

To view e-mails offline, you must first retrieve e-mails from your mailbox. See the next section. After you have retrieved the e-mails to your Smartphone, to end the data connection, select **Options** → **Disconnect**.

You can continue reading the retrieved e-mail headings and/or the retrieved e-mails offline. You can enter new e-mails, reply to the retrieved e-mails, and forward e-mails. You can order the e-mails to be sent the next time you connect to the mailbox. When you open **Mailbox** the next time and you want to view and read the e-mails offline, answer **No** to the **Connect to mailbox?** query.

Retrieving e-mails from a mailbox

If you are offline, select **Options** → **Connect** to start a connection to your mailbox.

The mailbox view is similar to the **Inbox** folder in **Messaging**. You can move up and down on the list by pressing the Up or Down key. The following icons are used to show the status of e-mails:

-  - new e-mail (offline or online mode), whose content has not been retrieved from the mailbox to your Smartphone (the arrow on the icon is pointing downward).
-  - new e-mail, whose content has been retrieved from the mailbox (arrow pointing upward).
-  - e-mails that are read and the content has been retrieved from the mailbox.
-  - e-mail headings that have been read and the message content has been deleted from the Smartphone and the server.

To retrieve e-mails:

1. When you have an open connection to your mailbox, select **Options** → **Retrieve e-mail** →
 - **New** to retrieve all new e-mails to your Smartphone.
 - **Selected** to retrieve the selected e-mail.
 - **All** to retrieve all messages from the mailbox.

To cancel retrieval, press the **Cancel** soft key.

2. After you have retrieved the e-mails, you can continue viewing them online or select **Options** → **Disconnect** to close the connection and view the e-mails offline.

Opening e-mails

When you are viewing e-mail boxes either in online or offline mode, scroll to the e-mail you want to view and press  to open it. If the e-mail has not been retrieved (arrow on the icon is pointing downward) and you are offline, you are asked to retrieve e-mails. Press the **Yes** soft key. If you are online, the e-mail is automatically retrieved from the mailbox. Note that the data connection is left open after the e-mail has been retrieved. Select **Options** → **Disconnect** to end the data connection.

Disconnecting from a mailbox

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

Viewing e-mail attachments

Open a message that has the attachment indicator  and select **Options** → **Attachments** to open the Attachments view. In the Attachments view, you can retrieve, open, or save attachments. You can also send attachments using an infrared connection.

Important: E-mail attachments may contain viruses or otherwise be harmful to your Smartphone or PC. Do not open any attachment if you are not sure of the trustworthiness of the sender. For more information, see "Certificate management" on page 252.

Opening an attachment

1. In the Attachments view, scroll to an attachment and press  to open it.

The attachment is opened in the corresponding application.

2. Press the **Back** soft key to return to the e-mail viewer.

Saving attachments separately

To save an attachment, select **Options** → **Save** in the Attachment view. The attachment is saved in the corresponding application. For example, sounds can be saved in **Recorder** and text files (.TXT) in **Notes**.

Note: Attachments such as images can be saved on the memory card, if one is used.

Deleting e-mails

- To delete an e-mail from the Smartphone while still retaining it in your mailbox:

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

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

- To delete an e-mail from both the Smartphone and from your mailbox:

Select **Options** → **Delete** → **Phone and server**. The e-mail icon change to .

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

Undeleting e-mails when offline

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

Outbox

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

Status of the messages in 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 **Outbox**, one of them is waiting until the first one is sent.
- **Resend at (time)** - Sending has failed. The Smartphone tries to send the message again after a time-out period. Select **Option** → **Send** if you want to restart the sending immediately.

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

Messages are placed in **Outbox** when your Smartphone is outside the network coverage area. You can also schedule e-mails to be sent the next time you connect to your mailbox.

Reports

In **Reports**, you can view delivery reports for your text and multimedia messages, if you set the **Receive report** option to **Yes** in the **Text message** and **Multimedia message** settings.

Note: No delivery reports can be received for messages sent to e-mail addresses.

Tip: You can define the receipt of delivery reports in the **Text message** and **Multimedia message** settings. For details, see page 134 and page 137 respectively.

- To call a message recipient, scroll to the delivery report and press  or select **Options** → **Call**.
- To clear a report,  scroll to the report and select **Options** → **Clear deliv. reports**.

Viewing messages on a SIM card

Sometimes, text messages may be stored on the SIM card, depending on their specifications.

Before you can view the messages stored on the SIM card, you need to copy them to a folder in your Smartphone.

1. In the Messaging main view, select **Options** → **SIM messages**.
2. Select **Options** → **Mark/Unmark** → **Mark** or **Mark all** to mark messages.
3. Select **Options** → **Copy**. A list of folders opens.
4. Select a folder and press . Go to the folder to view the messages.

Cell broadcast

Cell broadcast is a network service that allows you to receive messages on various topics, such as the weather or traffic conditions, from your service provider. For available topics and relevant topic numbers, contact your service provider.

In the Messaging main view, select **Options** → **Cell broadcast**. The screen shows:

- the status of the topic:  - for new, subscribed messages and  - for new, unsubscribed messages.
- the topic number, topic name, and whether it has been flagged  for Hotmark. You are notified when messages belonging to a flagged topic have arrived.

On the topic list:

- To add a topic, select **Options** → **Topic** → **Add manually**. Then enter the topic name and number.
- To change the name and number of a topic, scroll to it and select **Options** → **Topic** → **Edit**.
- To remove a topic, scroll to the topic and select **Options** → **Topic** → **Delete**. To delete all of topics, select **Options** → **Delete all**.
- To subscribe to a topic, scroll to the topic and select **Options** → **Subscribe**. To cancel the subscription to the topic, select **Options** → **Unsubscribe**.
- To receive a notification when a message related to a topic arrives, scroll to the topic and select **Options** → **Hot mark**. To remove the hotmark setting, select **Options** → **Remove hotmark**.

Note: A packet data (GPRS) connection may prevent cell broadcast reception. Contact your network operator for the correct GPRS settings. For further information on the GPRS setting, see "GPRS" on page 246.

Service command editor

You can send requests, such as activation commands for network services (also known as USSD commands), to your service provider. For more information, contact your service provider.

To send a request, enter the command number(s) in Standby mode or when you have an active call, and press **Send**.

If you need to enter letters as well as numbers in **Messaging**, select **Options** → **Service command**.

Messaging settings

The Messaging settings have been divided into groups according to the different message types. Scroll to the settings you want to edit and press .

Settings for text messages

Go to **Messaging** and select **Options** → **Settings** → **Text message** to open the following list of settings:

- **Message centres** - Lists all the text message service centres that have been defined. See "Adding a new text message centre" on page 135.
- **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** - When this network service is set to **Yes**, the network informs you whether or not a message has been delivered. Delivery reports are saved in the **Reports** folder.
- **Message validity** - If the recipient of a message cannot be reached within the validity period, the message is removed from the text message service centre. Note that the network must support this feature. **Maximum time** is the maximum amount of time allowed by the network for the message to remain active.
- **Message sent as** - You can convert your text messages to another format. The options are **Text**, **Fax**, **Paging**, and **E-mail**. For further information, contact your network operator.

Note: Change this option only if you are sure that your service centre is able to convert text messages into these other formats.

- **Preferred connection** - You can send text messages via the normal GSM network or via GPRS, if supported by the network. See "GPRS" on page 246.
- **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 text message service centre number. Note that this may not work between all operators.

Adding a new text message centre

1. Open **Message centres** and select **Options** → **New msg. centre**.
2. Press , enter a name for the service centre, and press the **OK** soft key.
3. Press the Down key and , and then enter the number of the message service centre.

You need the message centre number to send text and picture messages. You can get the number from your service provider.
4. Press the **OK** soft key.
5. To use the new settings, go back to the settings view. Select **Msg. centre in use** and select the new service centre.

Settings for multimedia messages

Go to **Messaging** and select **Options** → **Settings** → **Multimedia message** to open the following list of settings:

- **Access point in use** (Must be defined) - Select which access point is used as the preferred connection for the multimedia message centre. See "Settings needed for multimedia messaging" on page 114.

Note: If you receive multimedia message settings in a smart message and save them, the received settings are automatically used for the Preferred connection. See "Receiving smart messages" on page 122.

- **Multimedia reception** - Select:

Only in home net. if you want 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 if you want to receive multimedia messages regardless of where you are.

Off if you do not want to receive multimedia messages or advertisements at all.

Important: When you are outside your home network, sending and receiving multimedia messages may cost you more.

If the settings **Only in home net.** or **Always on** have been selected, your Smartphone can make an active data call or GPRS connection without your knowledge.

- **On receiving msg.** - Select:
 - Retr. immediately** if you want the Smartphone to retrieve multimedia messages instantly. If there are Deferred status messages, they are retrieved as well.
 - Defer retrieval** if you want the multimedia messaging centre to save the message to be retrieved later.
 - Reject message** if you want to reject multimedia messages. The multimedia messaging centre will delete the waiting messages.
- **Allow anon. messages** - Select **No**, if you want to reject messages coming from an anonymous sender.
- **Receive adverts** - Define whether you want to receive multimedia message advertisements or not.
- **Receive report** - When this network service is set to **Yes**, the network informs you whether or not your message has been delivered. Delivery reports are saved in the **Reports** folder.

Note: It may not be possible to receive a delivery report for a multimedia message that has been sent to an e-mail address.

- **Deny report sending** - Select **Yes**, if you do not want your Smartphone to send delivery reports for received multimedia messages.
- **Message validity** - If the recipient of a message cannot be reached within the validity period, the message is removed from the multimedia messaging centre. Note that the network must support this feature. **Maximum time** is the maximum amount of time allowed by the network before a message is deleted.

- **Image size** - Define the size of images in multimedia messages. The options are: **Small** (max. of 160x120 pixels) and **Large** (max. 640x480 pixels). When you send a message to an e-mail address, the image size is set to **Small**.

Settings for e-mails

Go to **Messaging** and select **Options** → **Settings** → **E-mail**.

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

Settings for Mailboxes

Select **Mailboxes** to open a list of mailboxes that have been defined. If no mailboxes have been defined, you are prompted to do so. The following list of settings is shown:

- **Mailbox name** - Enter a name for the mailbox.
- **Access point in use** (Must be defined) - This is the Internet Access Point (IAP) used for the mailbox. Choose an IAP from the list. For more information on how to create an IAP, see also "Connection settings" on page 238.
- **My e-mail address** (Must be defined) - Enter 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) - Enter the IP address or host name of the mail server that sends your e-mails.

- **Send message** - Define how e-mail is sent from your Smartphone. When you select **Immediately**, a connection to the mailbox is started immediately after you have made this selection. When you select **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 mailbox and to the address defined in **My e-mail address**.
- **Include signature** - Select **Yes** if you want to attach a signature to your e-mails, and to enter or edit a signature text.
- **User name** - Enter your user name, given to you by your mail service provider.
- **Password** - Enter your password. If you leave this field blank, you are prompted for the password when you try to connect to your remote mailbox.
- **Incoming mail server** (Must be defined) - The IP address or host name of the mail server that receives your e-mails.
- **Mailbox type** - Define the e-mail protocol your mail service provider recommends. The options are **POP3** and **IMAP4**.

Note: This setting can be selected only once and cannot be changed if you have saved or exited from the mailbox settings.

- **Security** - Select **On** to secure the connection to the remote mailbox.
- **Retrieve attachment** (not shown if the e-mail protocol is set to POP3) - Select **Yes** to retrieve e-mails with or without attachments.

- **Retrieve headers** (not shown if the e-mail protocol is set to POP3) - Limit the number of e-mail headers you want to retrieve to your Smartphone. The options are **All** and **User defined**.
- **APOP secure login** - (not shown if the e-mail protocol is set to IMAP4) - Select **On** to encrypt the sending of passwords to the remote e-mail server.

Settings for service messages

When you go to **Messaging** and select **Options** → **Settings** → **Service message**, the following list of settings opens:

- **Service messages** - Choose whether or not you want to receive service messages.
- **Download messages** - Choose **Automatically** if you want the Smartphone to automatically connect to the server to receive service messages, or **Manually** if you want to manually connect to the server.

Settings for cell broadcast messages

Check with your service provider to see if Cell Broadcast (CB) messaging is available and what the available topics and related topic numbers are. Go to **Messaging** and select **Options** → **Settings** → **Cell broadcast** to change the settings:

- **Reception** - Select **On** to receive CB messages.
- **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 CB messages. If the language you want is not found in the list, select **Other**.

- **Topic detection - On** allows you to save a topic number automatically when you receive a CB message that does not belong to any of the existing topics. 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 other folders

Go to **Messaging** and select **Options** → **Settings** → **Other** to open the following list of settings:

- **Save sent messages** - Choose if you want to save a copy of every text message, multimedia message, or e-mail that you have sent. Messages will be saved to the **Sent** folder.
- **No. of saved msgs.** - Define how many sent messages can be saved to the **Sent** folder at a time. When the limit is exceeded, the oldest message(s) will be deleted.

Voice mail

In **Voice mail**, you can access the voice mailbox to check incoming voice mails.

Press  to open the Menu and then select **Tools** → **Voice mail**.

Connecting to the voice mail server

You first need to define the number of your voice mailbox. Enter the number obtained from your service provider and press the **OK** soft key.

Now, you can access the voice server by selecting **Tools** → **Voice mail** → **Voice mailbox** or on the Voice mailbox main view, select **Options** → **Call voice mailbox**. You can also press and hold  in Standby mode. Follow instructions from the server to check your voice mails.

Changing the voice mail server number

If you need to change the number of the voice mail server, go to **Voice mail** and select **Options** → **Change number**. Enter a new number.

Chat

Note: This function can be used only if it is supported by your network operator or service provider. Only phones that offer compatible chat features can receive and display chat messages.

Chat is a way of sending short text messages that are delivered over TCP/IP protocols to online users (network service). Your contact list shows you when the contacts on the list are online and available to participate in a chat conversation.

When you have written and sent your message, it stays on the display. The reply message appears below your original message.

You can use the other functions of the Smartphone while you have an active chat session in the background. Depending on the network, the active chat session may consume the Smartphone's battery faster and you may need to connect the Smartphone to a charger.

Press  to open the Menu and then select **Chat**.

Before starting Chat

To access a chat service you need to set up a chat server and other settings for **Chat**. You may receive the settings from the service provider that offers the service; see "Receiving smart messages" on page 122. You can also set up the settings manually; see "Settings for chat" on page 152.

Connecting to and disconnecting from the chat service

To connect to the chat service, go to **Chat**, and select **Options** → **Login**. When the Smartphone has successfully connected, "Login completed" is displayed.

Tip: To set the Smartphone to automatically connect to the chat service each time you access the **Chat** menu, select **Options** → **Settings** → **Server settings** → **Chat login type** → **On app. start-up**.

To disconnect from the chat service, select **Logout**.

Starting a chat session

When you enter **Chat** and connect to the chat service, you can select:

- **Conversations** to view the list of new and read chats or invitations to chats during the active chat session. Scroll to the message or invitation that you want and press  or select **Options** → **Open** to read the message.

 indicates new chat messages and  indicates invitations.

On the Conversations list, scroll to a conversation, press the **Options** soft key and select:

- **Open** to open the conversation to start a chat session.
- **Delete** to delete the invitation, if the selected item is an invitation.

- **New conversation** to start a new conversation. You can select a participant from the Conversations list or enter the participant's ID manually, and then the Smartphone sends an invitation to her/him.
- **Set auto reply on** to set the Smartphone to send a preset reply automatically when a participant sends you a message or invitation.
- **Blocking options** → **Add to blocked list** to block messages from the current participant. Select **Add ID to list manually** to add a contact to the Blocked contacts list, or **View blocked list** to view blocked contacts. To unblock the contact, select **Unblock**.
- **Chat contacts** to view the contacts that you have added. You can also view the contacts provided from the server by selecting **Options** → **My server contacts**.

If you have received a new message from a contact, it is indicated by .

 indicates the online contacts and  indicates the offline contacts in the Smartphone's contacts directory.  indicates a blocked contact.



Scroll to a contact and press  or select **Options** → **Open conversation** to start a chat.

For details, see "Contacts for chat" on page 149.

- **Chat groups** to view the list of bookmarks to public groups provided by the network operator or service provider.

To start a chat session with a group, scroll to a group and select **Options** → **Open** or press . You can also select **Options** → **Join group** and enter a group ID. Enter the screen name that you want to use in the conversation.

When you start a group chat, press the **Options** soft key and select:

- **Send private msg.** to send a private message to a specific member of the chat group.
- **Send invitation** to send your invitation to the members of the chat group.
- **Leave chat group** to leave the chat group.
- **Chat group** to view information about the group. You can view the members and group details and change the group settings.
- **Record convers.** to save the current conversation in **Notes**.
- **Stop recording.** to stop saving the conversation.
- **Options** → **Search** from the contacts list to search for other chat users or public groups on the network.

If you select **Users**, you can search for a user by name, ID, phone number, or e-mail address.

If you select from the Chat groups list, you can search for a group by a group member, group name, or topic.

- To start a chat session from **Contacts**, see "Viewing subscribed contacts" on page 67.

After joining a chat session, you can write your message and press  to send it. Your message displays on the message list and the reply message displays below your message.

During a conversation, press the **Options** soft key and select:

- **Send** to send the entered message.
- **Add to Chat contact** to add the current partner to the Chat contacts list.
- **Forward** to send the selected message on the message list.
- **Record convers.** to save the current conversation in **Notes**.
- **Stop recording** to stop saving the conversation.
- **Blocking options** → **Add to blocked list** to block messages from the current participant. Select **Add ID to list manually** to add a contact to the Blocked contacts list, or **View blocked list** to view blocked contacts. To unblock the contact, select **Unblock**.

Ending a chat session

To end the chat session, select **Options** → **End conversation**.

Accepting or rejecting a chat invitation

In Standby mode, when you have connected to the chat service and you receive an invitation, "1 new chat message" is displayed. Press the **Show** soft key to read it.

If you receive more than one invitation, the number of messages followed by new invitations received is displayed. Press the **Show** soft key, scroll to the invitation you want to view, and press the **OK** soft key.

- To join a private group conversation, select **Options** → **Join**. Enter the screen name that you want to use in the conversation.
- To reject or delete the invitation, select **Options** → **Reject** or **Delete**.

Reading a chat message

In Standby mode, when you have connected to the chat service and you receive a message from a person who is not taking part in the conversation, "1 new chat message" is displayed. Press the **Show** soft key to read it and start a conversation.

New messages received during an active chat session are held in **Conversations** in the **Chat** application.

If the message is from a person whose contact information is not in the contact list in **Chat contacts**, the sender's ID is shown. If the contact information can be found in the Smartphone's memory for contacts and the Smartphone recognises it, the sender's name is shown. To save a new contact in the Smartphone's memory, Select **Options** → **Add to Chat contact** and add details and press the **Done** soft key.

Contacts for chat

In the Chat contacts list, you can save information about chat participants, check their availability, and set tracking to recognise when they log into or out of the Chat service.

When you open the Chat contacts list, the saved chat participants display.  indicates that the participant has logged into the service and  indicates that the one has logged out.  indicates that the participant is blocked.

Select **Chat contacts** → **Options**, and:

- **New Chat contact** → **Enter manually** or **Add from Contacts**. Create a new contact card or select one from the Contacts list.
- **Reload user availab.** to update the connection status of the contacts.
- **My server contacts** to view the contacts list provided by your network operator or service provider.
- **Search** to search for a contact or chat group.
- **Settings** to edit the Chat menu or server settings.

Scroll to a contact, and press the **OK** key to start to chat, or press the **Options** soft key and select:

- **Contact details** to view the details of the selected contact. You can also edit the details.
- **Switch tracking on** to receive a note when the connection status of the contact changes.  appears on the chat contacts list to indicate that tracking is activated for that participant.
- **Belongs to groups** to view which group the contact belongs to.

- **Edit** to change the contact information.
- **Delete** to remove a contact from the Chat contacts list.
- **Blocking options** → **Add to blocked list** to block the messages from the selected contact or **Add ID to list manually** to add a contact to the block contacts list. To view the blocked contacts list, select **View blocked list**. To unblock the contact, select **Unblock**.

Chat groups

You can create your own private groups for a chat session, or use the public groups provided by the service provider. The private groups exist only during an active chat session. You can add only the contacts that are in your Contacts list to a private group. See page 59 for details on creating a new contact.

Accessing Public groups

You can bookmark public groups that your service provider may maintain. Connect to the chat service, select **Chat groups**. Scroll to a group that you want to chat with and select **Options** → **Open** or press the **OK** key. If you are not in the group, key in your screen name as your identity for the group. If you press the **Options** soft key, you can select **Delete group** to delete a group from your group list.

Creating a private group

1. Connect to the chat service, select **Chat groups** → **Options** → **Create new group**.
2. When a confirmation message to connect to the server display, press the **Yes** soft key. You need to enter your ID and password.
3. Enter the group information.
 - **Group name:** Enter the group name.
 - **Group topic:** Enter the topic of the group chat.
 - **Welcome note:** Enter a welcome greeting that group members will see when they join the group.
 - **Group size:** Enter the maximum number of members who can join the group.
 - **Allow search:** Select **Yes** to allow the chat users to search for the group.
 - **Editing rights:** Assign rights for editing the group information to the creator of the group or the selected member(s).
 - **Group members:** Select **All** to allow all chat users to join the group or **Selected only** to add the selected users to the group.

When you chosen **Selected only**, In the Group members view, select **Options** → **Add member** → **Chat contact** or **Enter User ID**.

- If you selected **Chat contact**, scroll to a contact and press the **OK** key to place a check mark. When you have finished checking the contact(s) you want, press the **Select** soft key.
- If you selected **Enter User ID**, enter the ID of the contact you want and press the **OK** soft key.

To remove a contact from the private group list, scroll to it and select **Options** → **Remove**. To remove all contact, select **Options** → **Remove all**.

When you are finished, you need to press the **Back** soft key from the private group list.

- **Banned list:** When you choose **Selected users**, you can set up the list of the chat contacts to be banned to join the group.
- **Allow private msg.:** Select **Yes** to allow sending private messages to the members of the group.

4. When you have finished, press the **Done** soft key.

Settings for chat

To change the settings for chatting, go to **Chat** and select **Options** → **Settings**.

Chat settings

- **Use screen name:** Enter the screen name to be displayed on the chat screen as your identity.
- **Chat presence:** Select if you want your presence to be active for all members of a conversation, or only for the contacts stored in your Chat contacts list.
- **Allow messages from:** Select if you want to receive chat messages from all members of a conversation or only from the contacts stored in your Chat contacts list.
- **Allow invitations from:** Select if you want to receive invitations from all chat users or only from the contacts on your Chat contacts list.

- **Message speed:** Press  and adjust the speed of the message transmission.
- **Availability reloading:** Select if you want to automatically or manually reload other chat users' availability status to indicate whether they are online or offline.
- **Reload availab. for:** Select whose availability status will be reloaded automatically or manually, depending on the setting in **Availability reloading**.

Server settings

- **Servers:** Add a new server or edit an existing server. To add a new server, press  when **New server** highlights or select **Options** → **New server**.
 - **Server name:** Enter a name for the server.
 - **Access point in use:** Select an access point. You can add or edit an access point; for details, see page 241.
 - **Web address:** Enter your web address.
 - **User ID:** Enter your User ID.
 - **Password:** Enter your password.

Note: You can get the web address, user ID, and password from your network operator or service provider.

- **Default server:** Select the server you want to use.
- **Presence login type:** You can change the setting for the Presence login; for details about the presence service, see page 227. Select:

- **Automatic** to automatically log in to the presence service when you switch on the Smartphone, regardless of your location.
- **Aut. in home net.** to automatically log in to the presence service when you are in your home network.
- **On app. start-up** to automatically log in to the presence service when you enter the **Presence** menu.
- **Manual** to display a confirmation message when you access the **Presence** menu.
- **Chat login type:** Select **On app. start-up** to automatically log in to the chat service when you access the **Chat** menu. Select **Manual** to display a confirmation message when you access the menu.

Scheduler

This chapter gives you information on how to keep track of your schedule and how to make a list of tasks you need to do.

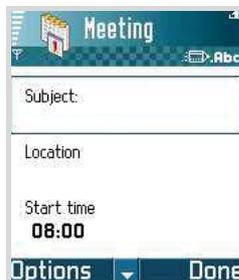
Calendar

In **Calendar**, you can keep track of appointments, meetings, birthdays, anniversaries, and other events. You can also set a calendar alarm to remind you of upcoming events.

Press  to open the Menu, and then select **Calendar**.

Creating calendar entries

1. On the calendar, scroll to the date you want.
2. Select **Options** → **New entry** and select:
 - **Meeting** to remind you of an appointment that has a specific date and time.
 - **Memo** to write a general entry for a day.
 - **Anniversary** to remind you of birthdays or special dates. Anniversary entries are repeated every year.



The screenshot shows a form titled "Meeting" with a calendar icon and a keyboard icon labeled "Abc". The form has the following fields:

- Subject:
- Location:
- Start time: **08:00**

At the bottom, there are two buttons: "Options" with a dropdown arrow and "Done".

3. Fill in the fields. Use the Up or Down key to move between fields.
 - **Subject/Occasion** - Enter a description of the event.
 - **Location** - Enter the place of a meeting.
 - **Start time, End time, Start date, and End date.**
 - **Alarm** - Select **On** to activate the fields for the alarm time and alarm date. Once an alarm has been set for the entry,  displays in the day view.
 - **Repeat** - Press  to change the entry to repeat.  displays in the day view. The repeat function is handy if you have a recurring event, a weekly class, a biweekly meeting, or a daily routine you need to remember.
 - **Repeat until** - You can set an ending date for the entry to repeat, for example, the ending date of a weekly course you are taking. This option is shown only if you have selected to repeat the event.
 - **Synchronisation** - If you select **Private**, after synchronisation the particular calendar entry can be seen only by you. It will not be available to those with online access to view your calendar. This is useful when, for example, you synchronise your calendar with a calendar on a compatible computer at work. If you select **Public**, the calendar entry is visible to those who have access to view your calendar online. If you select **None**, the calendar entry will not be copied to your PC when you synchronise your calendar.
4. To save the entry, press the **Done** soft key.

Viewing Calendar

You can view the calendar in the month, week, or day view.

Month view

When you access Calendar, you can see your appointments in the month view. You can change the default view screen. See page 160.

In the month view, one row equals one week. Today's date is underlined. Dates that have calendar entries are marked with icons at the right bottom corner.

In **Calendar**, select **Options** → **Month view**.

There is a frame around the currently selected date.



Synchronisation icons in the month view:

- ■ - Private,
- ■ - Public,
- 🏠 - None, and
- || - the day has more than one entry.

To move to the day view, scroll to the date you want to open and press .

To go to a certain date, select **Options** → **Go to date**. Enter the date and press the **OK** soft key.

Tip: If you press  in the month, week, or day view, today's date is automatically highlighted.

Week view

In the week view, the calendar entries for the selected week are shown in seven day boxes. Today's day of the week is underlined. Memos and Anniversaries are placed before 8 o'clock. Meeting entries are marked with coloured bars according to starting and ending times.

The colour of the bars varies depending on the synchronisation type.

In **Calendar**, select **Options** → **Week view**.



To view or edit an entry, scroll to the cell that has the entry and press  to move to the day view, then scroll to the entry and press  to open it.

Calendar entry icons in the day and week views:

- No icon - Meeting,
- 📄 - Memo, and
- 🎂 - Anniversary.

Synchronisation icons in Week view:

- ■ : Private
- ■ : Public
- ■ : None

Day view

In the day view, you can see the calendar entries for the selected day. The entries are grouped according to their starting times. Memos and Anniversaries are placed before 8 o'clock.

In the month view or week view, scroll to the date you want to open and press .



To open an entry for editing, scroll to it and press .

Editing calendar entries

1. In the day view, scroll to the entry and press .
2. Edit the entry fields and press the **Done** soft key.

Setting calendar alarms

1. Create a new Meeting or Anniversary entry, or open a previously created entry.
2. Scroll to **Alarm** and select **On** to open the **Alarm time** and **Alarm date** fields.
3. Set the alarm time and date.
4. Press the **Done** soft key. An alarm indicator  is shown next to the entry in the day view.

Stopping a calendar alarm

The alarm duration is one minute. When the alarm sounds, press the **Stop** soft key to end the calendar alarm. If you press the **Snooze** soft key, after 5 minutes, the Smartphone will remind you of the alarm.

Sending calendar entries

You can send Calendar entries via text and multimedia messages, and e-mail services, as well as via the infrared connection. For further information, see page 36.

Deleting calendar entries

When you delete a repeated entry, you can choose how you want the change to take effect:

- **All occurrences** - all repeated entries are deleted.
- **This entry only** - only the current entry is deleted.

Changing calendar settings

Select **Options** → **Settings** and select:

- **Calendar alarm tone** - To select a personalised alarm tone, or no tone at all.
- **Default view** - To select the view that is shown when you first open **Calendar**.
- **Week starts on** - To change the starting day of the week.
- **Week view title** - To change the title of the Week view to be the week number or the week dates.

To-do

In **To-do**, you can keep a list of notes regarding things that you need to do.

Press  to open the Menu, and then select **To-do**.



Creating to-do notes

1. To create a to-do note, press any key ( to ). The editor opens and the cursor blinks after the letters you have keyed in.

You can also select **Options** → **New to-do note** to open the editor.

2. Enter the task in the **Subject** field.
3. To set the due date for the note, scroll to the **Due date** field and enter a date.
4. To set a priority for the to-do note, scroll to the **Priority** field and press .
5. To save the to-do note, press the **Done** soft key.

Note: When you remove all characters and press the **Done** soft key, the previously saved note is deleted.

Viewing to-do notes

When you open **To-do**, a list of notes displays. The task list shows your “things to do” list. The note’s priority icons display as follows:

 - **High**,  - **Low**, and No icon - **Normal**.

- To open a to-do note, scroll to it and press  or select **Options** → **Open**.
- To delete a to-do note, scroll to it and select **Options** → **Delete** or press .
- To mark a to-do note as completed, scroll to it and select **Options** → **Mark as done**. You can also press . The check mark displays beside the note;  - task completed and - not completed
- To restore a to-do note, select **Options** → **Mark as not done**.

Anyvoice

Your Smartphone provides a set of powerful voice-enabled features that enhance the hands-free capabilities of your Smartphone.

Using **Anyvoice**, you can:

- make a call by saying any name from **Contacts**, without having to train the system to recognise names.
- retrieve contact information for a person on the Contacts list by saying the person's name.
- launch applications by voice.
- change settings that affect the way **Anyvoice** works on your Smartphone.

To start **Anyvoice** and access the voice features of your Smartphone:

Press and hold  in Idle mode, or press  to open the Menu, and then select **Usefulness** → **Anyvoice**.

When the Smartphone prompts you with displaying "Please say a command," say one of the commands:

- Call [person's name]
- Open [application]
- Name dial
- Name search

Name dialling

You can make a phone call by saying the name that has been assigned to a contact card in the Contacts directory.

Note: To use the Name Dial feature, the name and number that you want to dial must be in your Contacts directory. For details about **Contacts**, see page 58.

To place a call using Name Dial:

1. Go to **Anyvoice** or press and hold . The Anyvoice main screen opens and the Smartphone says "Please say a command."
2. Say "Name dial" after a beep sounds.

Note: The Smartphone counts down the time. If you don't say anything in 10 seconds or until the progress bar moves to the end, it prompts you one more time.

3. Say the full name of the contact card, the first name followed by the last name.

Note: You can say "Call" and then a person's name stored in **Contacts** to make a call by voice command; for example, say "Call James Bond." This will save you a step for name dialling.

4. If there are similar names, the Smartphone displays the 3 best candidates and then recites the name that most closely matches your command and the first available number type. If the name or type is not what you wanted, say "Next" or press the Right or Down key.

To go back to the name or type recited previously, say "Previous" or press the Left or Up key.

Repeat until you hear what you want.

5. If you press  or say nothing for 3 seconds, the Smartphone dials the currently selected number.

Searching for contacts

Anyvoice lets you retrieve contact information for any name in the Contacts directory by saying that name. Your Smartphone displays the information.

To view contact information by saying the name:

1. Go to **Anyvoice**. The Anyvoice main screen opens and the Smartphone prompts you, saying "Please say a command."
2. Say "Name search" after a beep sounds.
3. Say the full name of the contact card, the first name followed by the last name.
4. If there are similar names follow step 4 above.
5. If you press  or say nothing for 3 seconds, the Smartphone displays the contact card.

Opening applications by voice

Anyvoice lets you use your voice to launch applications on your Smartphone. By default, you can launch the applications displayed on the Anyvoice screen by voice. You can customise the applications list by adding or removing the applications to be launched by voice.

To open an application by saying the name of the application:

1. Go to **Anyvoice**. The Anyvoice main screen opens and the Smartphone prompts you, saying "Please say a command."
2. Say "Open" and then the name of the application that you want to open; for example, say "Open Contacts."
3. If the smartphone found several applications, follow step 4 on page xx.

The Smartphone automatically opens the Contacts application.

Customising the applications list

To add or remove an application to be launched by voice:

1. Go to **Anyvoice** and select **Options** → **Settings**.
2. Press the Right key to display the Application settings screen.

A list of the applications displays. A check mark displays next to the applications which are currently on the Applications list for voice activation.

3. Scroll to an application you want to add and press the **OK** key. A check mark displays next to the selected application and the application is added to the Application list.

If you want to cancel the selection, press  again. A check mark disappears.

Note: Application names for recognition can be changed by selecting **Option** → **Rename**.

4. When you are finished, press the **Back** soft key.

Synchronising with Contacts

Synchronisation with **Contacts** must be done if contact cards have been changed. **Anyvoice** automatically detects contacts change and notifies it. You can synchronise with **Contacts** manually by selecting **Options** → **Synchronize**.

Changing the voice recognition settings

To change the settings for using the **Anyvoice** application, select **Options** → **Settings**. The General settings screen displays.

- **Time limit:** sets the time limit your Smartphone waits for your voice command. The default setting is 10 seconds.
- **Voice guide:** turns on or off the voice message guiding you through the voice command procedure.
- **Voice volume:** adjusts the volume for the voice guide message.

- **Num. of results:** sets the number of the best candidates the Smartphone will display when there are similar names in **Contacts**.
- **Accuracy level:** adjusts the sensitivity in which your Smartphone recognises a voice command. Change the setting if your Smartphone has difficulty recognising a name, application, or command.

Notes

In **Notes**, you can create notes that are not associated with records in **Calendar**, **Contacts**, or **To-do**. The number of memos you can store depends on the memory available on your Smartphone.

Press  to open the Menu, and then select **Extras** → **Notes**.

Creating a note

1. On the Notes main screen, select **Options** → **New note**.



2. Enter the text you want using the number keypad.
3. Press the **Done** soft key to save.

Sending notes

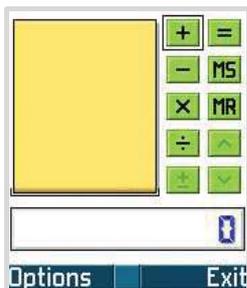
You can send notes via text and multimedia message, and via the infrared connection. For details, see page 36.

Setting as a Go to item

You can set a note as a Go to item so that you can quickly access it. Scroll to a note and select **Options** → **Add to 'Go to.'**

Calculator

Press  to open the Menu, and then select **Extras** → **Calculator**.



1. Enter the first number of your calculation. Press  to erase a mistake in the number.
2. Scroll to a function and press  to select it.
Use **+** to add, **-** to subtract, **x** to multiply, or **÷** to divide.

3. Enter the second number.
4. To execute the calculation, scroll to = and press .

Note: Calculator has limited accuracy and rounding errors may occur, especially in long division.

Tips for using the calculator

- To add a decimal, press .
- To change a function, for example from + to -, press .
- Press  to clear the result of the previous calculation.
- Select **MS** or select **Options** → **Memory** → **Save** to save a number to the memory, indicated by **M**. To retrieve the number from the memory, select **MR** or select **Options** → **Memory** → **Recall**.
- To delete the number from the memory, select **Options** → **Memory** → **Clear**.
- To delete all of the calculations on the sheet, select **Options** → **Clear screen**.
- To retrieve the result of the last calculation, select **Options** → **Last result**.

Converter

In **Converter**, you can convert measurements such as **Length** from one unit (Yards) to another (Metres).

Press  to open the Menu, and then select **Extras** → **Converter**.



Note: **Converter** has limited accuracy and rounding errors may occur.

Converting units

Note: You first need to set the currency rates. See page 173.

1. Scroll to the **Type** field and press  to open a list of measurement units.
2. Scroll to the measurement type you want to use and press the **OK** soft key.
3. Scroll to the first **Unit** field and press  to open a list of available units.

4. Select the unit from which you want to convert and press the **OK** soft key.
5. Scroll to the first **Amount** field and enter the value you want to convert.
Press  to add a decimal and press  for the **+**, **-** (for temperature), and **E** (exponent) symbols.
6. Scroll to the second **Unit** field and select the unit to which you want to convert.
The other **Amount** field changes automatically to show the converted value.

Note: The conversion order changes if you enter 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 make currency conversions, you need to choose a base currency (usually your domestic currency) and enter exchange rates.

Note: 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 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..**

Important: When you change the base currency, all previously set exchange rates are reset to 0 and you need to enter new rates.

3. To enter 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. See the example below:

If you set the Euro (EUR) as the base currency, a United Kingdom Pound (GBP) is approximately 1.63575 EUR. Thus, you would enter 1.63575 as the exchange rate for the GBP.

4. When you have finished, press the **Done** soft key.
5. Press the **Yes** soft key to save the changes.

After you have inserted all necessary exchange rates, you can make currency conversions, see "Converting units" on page 172.

Recorder

Recorder allows you to record telephone conversations and voice memos of up to 1 minute. If you are recording a telephone conversation, both parties hear a tone every five seconds during recording.

Press  to open the Menu, and then select **Extras** → **Recorder**.

Note: Obey all local laws governing recording of calls.
Do not use this feature illegally.

To record voice memos or anything else, press  when  highlights. You can also select **Options** → **Record sound clip**.



Use:  - to record,  - to pause,  - to stop,  - to fast forward,  - to fast rewind, or  - to play an opened sound file.

The recorded sound clip is automatically saved in **Gallery**.

After a sound clip has been saved:

- To play back the sound clip, press .
- To change the name of the sound clip, select **Options** → **Rename sound clip**.
- To open Gallery to access previously saved clips, select **Options** → **Go to Gallery**.

You can change the saving location from the Smartphone's memory to the memory card by selecting **Options** → **Settings**.

Note: Recorder cannot be used when a data call or a GPRS connection is active.

Clock

In **Clock**, you can set up the display of the time and date information and set an alarm to ring at a specified time.

Press  to open the **Menu**, and then select **Extras** → **Clock**.

The current time and date displays on the Clock screen.

Changing clock settings

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

The following setting options are available:

- **Time:** Enter the current time. Use  to change am/pm.
- **Date:** Enter the current date.
- **Date format:** Select the date display format, either **dd mm yyyy** (day, month, year), **mm dd yyyy** (month, day, year), or **yyyy mm dd** (year, month, day).
- **Date separator:** Select a separator for the date display.
- **Time format:** Select the time format, either **12-hour** or **24-hour**.
- **Time separator:** Select a separator for the time display.
- **Clock type:** Select a clock type to be displayed on the top of the Standby screen and Extend view, either **Analogue** or **Digital**.
- **Autopower:** Select **On** to set the Smartphone to automatically switch on to ring an alarm if the time for the alarm comes while the Smartphone is switched off.

- **Auto time update:** Select **On** if you want the mobile phone network to update the time and date, and time zone information to your Smartphone.
- **GMT offset:** Set the time difference between GMT (Greenwich Mean Time) and your time zone.
- **Daylight-saving:** Select **On** to use daylight savings. The indicator  is shown on the Clock screen.

Setting an alarm

Press the Right key in the Clock main screen. You can set the several alarm modes:

- **Once alarm:** the alarm rings just once and is then deactivated.
- **Daily alarm:** the alarm rings every day at the same time.
- **Morning call:** the alarm rings to wake you up in the morning.

To set an alarm:

1. On the Alarm screen, scroll to the type of alarm to be set and press .
2. Press  when the **Set time** field highlights, enter the time for the alarm to sound, and press .
3. Select **Alarm sound** and choose an alarm tone from the ringing tone list. Press the **Select** soft key.
4. After you have finished, press the **OK** soft key to save your selection.

The alarm is active and the indicator  is shown in Standby mode.

To change the alarm:

1. On the Alarm screen, select the type of alarm you want and press .
2. To change the alarm, select the option you want from the list and press .
3. Change the option and press the **OK** soft key.

To remove the alarm:

1. On the Alarm screen, select the type of alarm you want and press .
2. Scroll to **Remove alarm** and press the **OK** soft key.
3. When a confirmation message appears, press the **Yes** soft key.

You can also select **Options** → **Remove once alarm**, **Remove daily alarm**, or **Remove morning call** on the Alarm screen.

Turning off the alarm

When the alarm time comes, the Smartphone will sound an alarm tone and flash “Once alarm,” “Daily alarm,” or “Morning call,” the alarm icon, and the current time on the display.

- Press the **Stop** soft key to turn off the alarm.
- When the alarm tone sounds, press any key, or the **Snooze** soft key, or  to stop the alarm for 5 minutes, after which it will resume. You can do this a maximum of 5 times.

If the alarm time comes while your Smartphone is switched off, the Smartphone switches itself on and starts sounding the alarm tone. If you press the **Stop** soft key, the Smartphone asks whether you want to activate the Smartphone for calls. Press the **No** soft key to leave the Smartphone switched off or the **Yes** soft key to switch it on.

Note: You can select whether or not the Smartphone rings the alarm tone while the Smartphone is switched off using the **Autopower** option. See page 176.

WorldMate

Whether you're travelling on business or for pleasure, going to one city or around the world, **WorldMate** will serve all of your travel needs, providing you with World Clocks, Weather Forecasts from the Weather Channel, a World Map, and a currency converter.

Press  to open the Menu, and then select **Extras** → **WorldMate**.

Note: When you first access this application, you are asked to select your home city. Press the **OK** soft key, select the home city you want using the Up or Down key, and then press the **OK** soft key.

Clocks screen

The Clocks screen allows you to compare your home time with 4 other world clocks selected from the cities list.



To change the city of a clock:

1. Select **Options** → **Change city**.
2. Select one types, either home city or one of the 4 other cities. Press the **Select** soft key.
3. Scroll through the city list using the Up or Down key.
 Alternatively, enter the first letter(s) of the country or city. Starting entering letters displays the search field.
 This will search for countries and cities by their first letter(s). For example, entering "P" will match "France, Paris" as well as "Paraguay, Asuncion," as both contain entries that start with "P."
4. Select the city from the list and press the **OK** soft key.

Weather screen

The Weather screen shows up to 5 days of weather forecasts from the Weather Channel. On the WorldMate main screen, press the Right key once. When you first access this screen, update forecasts and then select a city you want to view. For details about updating forecasts, see page 181.



To change a city, do one of the following:

- Press the Up or Down key on the Weather main screen.
- Select **Options** → **Change city**. Select the city from the city list using the Up or Down key. Press the **OK** soft key.
- Enter the first letter(s) of the country and city and select the city from the list. This will search for countries and cities by their first letter(s). For example, entering "P" will match "France, Paris" as well as "Paraguay, Asuncion," as both contain entries that start with "P". Press the **OK** soft key.

To update weather forecasts, select **Options** → **Weather update**. This will update weather forecasts for all cities.

Note: Before updating weather forecasts, you need to register on the WorldMate website. For details, visit **subs.mobimate.com**. If you don't register at the website as a subscribed user, you can update weather forecasts only one time. To continue updating weather forecasts, please register at the website.

Map screen

The Map screen enables you to check the time and date all over the world. On the WorldMate main screen, press the Right key twice.



On the world map, the cross-hairs indicate the currently selected city. The dark area is currently night and the light area is day. On the bottom, the time clock and the weather for the selected city displays.

To change a city, do one of the following:

- Press the Up or Down key on the World map screen.
- Select **Options** → **Change city**. Select the city from the list using the Up or Down key and press the **OK** soft key. See page 181 for changes to this entry.

Currency screen

The currency screen allows you to do the following:

- Compare 3 different currencies at the same time.
- Get updated exchange rates online.

On the WorldMate main screen, press the Right key three times. To access the Currency screen repeatedly, you must register at the WorldMate website. For details, visit **subs.mobimate.com**.

Note: If you don't register at the website as a subscribed user, you can access the Currency screen only 5 times.



To use the Currency screen, press the Up or Down key to move the cursor to the desired currency field and enter values.

To change selected currencies:

1. Select **Options** → **Change currency**.
2. Select the currency type and press the **Select** soft key.

3. Select the city from the list using the Up or Down key. See page 181 for changes to this entry.

For currency changes, you can search for countries or currency names (e.g, USD or EUR).

To update currency exchange rates, select **Options** → **Currency update**.

Notes:

- Before updating the currency rates, you need to register to the WorldMate website. Visit at **subs.mobimate.com**. If you don't register to the website as a subscribed user, you can update currency rates only one time. To continue the updating currency rates, please register to the website.
 - **WorldMate** comes with a preset currencies and rates database. These rates are probably not up-to-date, and you should update the rates from time to time.
-

Settings

You can set general application preferences (options). Select **Options** → **Settings**.



The following options are available:

- **Temperature:** Select how to display temperatures. You can select either **Celsius** or **Fahrenheit**.
- **Access point:** Select between the available connections on your Smartphone. For details about access points, see page 241.
- **Confirm connection:** Select **Yes** to confirm a connection to the Internet each time you choose to update weather forecasts or currency exchange rates.
- **Auto update:** (Only available when you register at the WorldMate website) Select how often you want **WorldMate** to automatically update weather forecasts and currency exchange rates. You can select from **Never**, **Twice a day**, **Every day**, or **Every other day**. This feature will not prompt you that an online connection is about to take place as this feature works in the background.
- **Summer time:** Select **Automatic** to let **WorldMate** automatically handle Summer Time (or Daylight Savings Time) changes.

Memory

If you have a memory card, you can use it to store your multimedia files like video clips and sound files, pictures, and messaging information, and to back up information from your Smartphone's memory. For details about inserting the memory card, see page 24.

To open the **Memory** menu, press  to open the Menu, and then select **Extras** → **Memory**. The display shows information about the currently installed memory card.

Important:

- Keep all memory cards out of the reach of small children.
- After formatting the memory card as FAT32 on your PC, if you insert the card into the Smartphone and access the Memory application, the system will inform you that the memory card is corrupted and ask whether you will format it or not. This is because the system supports only FAT12 and FAT16 formats. Therefore, to use the memory card with your Smartphone, you must format the card as FAT12 or FAT16.

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

Removing the memory card

To remove the memory card from the Smartphone safely, select **Options** → **Remove mem. card**. Then follow the instructions on the screen.

Backing up and restoring information

- You can back up information from your Smartphone's memory to the memory card.
Select **Options** → **Backup phone mem..** When a confirmation message appears, press the **Yes** soft key.
- You can restore information from the memory card to the Smartphone's memory.
Select **Options** → **Restore from card.** When a confirmation message appears, press the **Yes** soft key.

Formatting the memory card

You must format the memory card before you can use it for the first time.

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

You will be asked to confirm your request. Once you confirm, formatting starts.

Renaming the memory card

You can change the memory card name. Select **Options** → **Memory card name** and enter the name you want. Press the **OK** soft key to save the name.

Setting a memory card password

You can set a password to lock your memory card against unauthorised use.

Notes:

- Once a password for the memory card has been set, devices that does not support a feature related to the memory card password, such as Microsoft Windows, cannot read the card. You first need to remove the password on the Smartphone.
 - The password is stored in your Smartphone and you don't have to enter it again while you are using the memory card on the same phone. When you use the memory card on another phone, you are asked for the password.
-

To set, change, or remove your password:

Select **Options** → **Set password**, **Change password**, or **Remove password**.

For every option, you are asked to enter and confirm your password. The password can be up to 8 characters long.

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

Unlocking the memory card

When you insert another password-protected memory card in your Smartphone, you are prompted to enter the password of the card.

To unlock the card, select **Options** → **Unlock memory card**. You are asked to enter the password.

Checking memory consumption

Using the **Memory details** option, 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

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.

Press  to open the Menu, and then select **Extras** → **Wallet**.



The information stored in the wallet can be easily retrieved while browsing, to automatically fill in online forms on browser pages, for example, when a service asks for credit card details. Data in the wallet is encrypted and protected with the wallet code that you have defined.

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

Due to the nature of the wallet, it will automatically close after 5 minutes of inactivity. Enter the wallet code to regain access to the contents. You can change this automatic time-out period, if required. See "Changing Wallet settings" on page 195.

Entering the 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 the **OK** soft key.
2. You will be prompted to verify the code. Enter the same code and press the **OK** soft key. Do not give your wallet code to anyone else.

Each time you open the wallet you will be prompted for a wallet code. Enter the code that you have created and press the **OK** soft key.

Note: If you enter the wallet code incorrectly on 3 consecutive occasions, the wallet application will be blocked for 5 minutes. The block time increases if further incorrect wallet codes are entered.

Important: If you forget your wallet code, you will have to reset the code, and you will lose all information stored in the wallet. See "Resetting the wallet and wallet code" on page 195.

Storing personal card details

1. Select **Cards** from the Wallet main screen and press .
2. Select a type of card from the list and press .
 - **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 Payment card form opens.
4. Fill in the fields and press the **Done** soft key.

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

Once you have stored card information, you can open, edit, or delete fields in the cards. Any changes will be saved upon the exiting cards.

Creating a wallet profile

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

1. Select **Wallet profiles** from the Wallet main screen and press .
2. Select **Options** → **New profile**. A Wallet profile form opens.
3. Fill in the fields, as indicated below.

Some of the fields must contain data selected from the wallet. You must 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 cards category.
- **Loyalty card** - Select a card from the Loyalty cards category.
- **Online access card** - Select a card from the Online acc. cards category.
- **Shipping address** - Select a shipping address from the Address cards category.
- **Billing address** - By default this is the same as the shipping address. If you require a different address, select a billing address from the Address cards category.
- **User info card** - Select your personal information card from the User info cards category.

- **Receive e-receipt** - Select a destination to which receipts for online transactions are delivered from the Address cards category.
- **Deliver e-receipt** - Select whether or not receipts for online transactions are delivered to a phone number, e-mail address, or both.
- **RFID sending** - Select whether or not your unique phone identification (ID) is sent with the wallet profile (for future development dependent on RFID-based ticketing) to services that require it.

4. When you are finished, press the **Done** soft key.

Viewing ticket details

You can receive notifications of items purchased online via the browser.

Received notifications are stored in the wallet. To view the notifications:

1. Select **Tickets** from the Wallet main screen and press  .
2. Scroll to the ticket you want and press  .

You can view the validity dates, price, or other information about the ticket.

Note: None of the fields within the notification can be modified.

To delete a ticket, scroll to the ticket and select **Options** → **Delete**.

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.

1. Select **Personal notes** from the Wallet main screen and press the **OK** key.
2. Select **Options** → **New note**. A Personal notes screen opens.
3. Press  to  to start writing.
4. Press the **Done** soft key to save the note.
5. Enter the note title and press the **OK** soft key.

Retrieving information from 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 key in 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.

Changing Wallet settings

On the Wallet main screen, select **Options** → **Settings**. You can set the following options:

- **Wallet code** - Change your wallet code. You will be 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. Key in ``*#7370925538#`` in Standby mode.
2. Enter the Smartphone's lock code, and press the **OK** soft key. See "Security settings" on page 249.

Note: This operation erases all contents of the wallet.

When opening the wallet again, you must enter a new wallet code. See "Entering the wallet code" on page 190.

Viewer

Viewer is a revolutionary product for document browsing on thin-client computing platforms. It allows you to view content on your Smartphone without any file-conversion or loss of content. Simply by using the Navigation keys, you can scroll through your document sideways or vertically to view larger pages on a smaller screen, and zoom in or out to view intricate details or overviews.

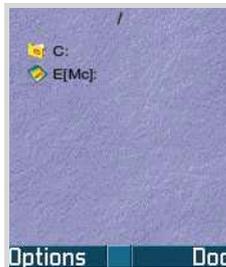
To view a document, you must transfer documents from a PC. If you have installed the memory card, you can view the files stored in it.

Viewer supports most common desktop document formats including PDF, Word, Excel, and PowerPoint.

Press  to open the Menu, and then select **Usefulness** → **Viewer**. Once it is running, you will see the default blank page.

Viewing a document

1. On the Viewer main screen, select **Options** → **Open file(*)**. The Explore view opens. It shows the directories, such as **C** or **E**.



The “E” directory indicates the installed memory card. The “C” directory indicates your Smartphone’s memory.

2. Select the directory you want to open and press .

The name of the current folder’s path location is shown at the top of the screen and the folders and documents in the selected driver appear. The folders, which contain further documents, are shown in yellow.

Documents look like sheets of paper in various colours, depending on their type. The following document formats are supported:

Adobe PDF: , Microsoft Word: , Microsoft Power Point: , Microsoft Excel: , Plain Text: .

3. Select the folder or document you want to view using the Navigation keys, and press .
4. If you selected a folder icon, you will be shown the contents of that folder.

If you selected a document icon, it will be opened.

Options in the document view

You can use the following options while you are viewing a document.

- **Rotating:** To rotate the screen 90 degrees counterclockwise, select **Options** → **Page** → **Rotate**.

Note: You can change the direction of the rotation in the **Preferences** option. See page 200.

- **Zooming:** To zoom in or out, press the **Mode** soft key until the  icon displays on the bottom right of the screen. Press the Navigation keys to zoom in or out.
- **Fitting to width:** To fit the width of the page on screen, select **Options** → **Page** → **Fit to Width**.
- **Panning:** To pan to a different part of the document, press the **Mode** soft key until the  icon displays on the bottom right of the screen. Press the Navigation keys to move in the direction you want.
- **Navigating:** To navigate pages, select **Options** → **Page** → **Goto Page**, **Next Page**, **Previous Page**, **First Page**, or **Last page**.

Keypad shortcuts

In the document view, you can use the following keys:

-  : navigates to the previous page.
-  : pans up.
-  : navigates to the next page.
-  : pans left.
-  : zooms in.
-  : pans right.
-  : fits to the width of the page.
-  : pans down.
-  : rotates the screen.
-  : opens a file.
-  : zooms out.
-  : allows you to go to the page you want to view.

Viewing History

The history view shows you previously visited documents as small thumbnail-images of the document, and the document's name, location, and the date of your visit.

To open the history view, select **Options** → **History**.

- To view information about a document, scroll to the document you want and press the **Info** soft key.
- To return to any of the documents from the history view, select the thumbnail image of that page by pressing the Up or Down key to highlight it. The thumbnail grows to indicate that you have selected it. Press .

Note: Documents will remain on the History list until a certain number of days have passed. You can control this period in the Preferences option. See page 200.

Viewing Favourites

For your favourite documents, you can keep a list in the favourites view. This looks similar to the history view, but includes only those pages you have explicitly added. Before viewing favourites, you must first add the pages to your favourites. To open the favourites view, select **Options** → **Favourites**.

- To add the current page to your favourites, select **Options** → **Add favourite** and enter the name you want. Press the **OK** soft key.
- To view information about a document, scroll to the document you want and press the **Info** soft key.

- To return to one of your favourites, select the thumbnail image of the page, as described for the history view, by pressing the Up or Down key. Press .
- To delete one of your favourites, select the favourite and select **Options** → **Delete favourite**.

Changing Viewer settings

On the Viewer main screen, select **Options** → **Preferences**.



You can use the following options:

- **Start from:** Select what is displayed in the document view when you first launch viewer. By default, when you first open the Viewer application, a blank page displays on the screen.
- **Keep history:** Set the period after which the thumbnail pictures and descriptions of pages are purged from the history memory.
- **Rotate:** Select the direction the screen will be rotated when the Rotate option is used.

Internet

This chapter describes how to get access to the Internet and how to use the Internet applications.

Your Smartphone has the following browser applications:

- Web - A browser in Wireless Application Protocol (WAP) format for accessing various types of information, entertainment, and other services provided by various WAP operators. WAP is suited to mobile devices with small screen displays and limited amounts of memory. WAP uses mainly text but does support pictures.
- Operator menu - WAP services provided by your network operator.

To connect to the Internet,

- the wireless network you use must support data calls,
- the data service must be activated for your SIM card,
- you must have obtained an Internet access point from an Internet Service Provider (ISP), and
- you must have entered the proper Browser settings.

Note: Your Smartphone is suited for access to the Internet by default, so that you can easily use the Internet Service. If the Internet browser doesn't work properly, you can download and update the browser setting from your service provider's website.

Your ISP can give you instructions on how to configure the Internet settings. Follow the instructions carefully.

Web

Various service providers on the Internet maintain pages specifically designed for mobile phones, offering services such as news and weather reports, banking, travel information, entertainment, and games. With the web browser you can view these services as web pages written in WML, XHTML pages written in XHTML, or a mixture of both.

To open **Web**, press  to open the Menu, and then select **Web**.

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

Basic steps for accessing the browser service

- Save the settings that are needed to access the web service that you want to use. See the next section “Setting up the Smartphone for the browser service.”
- Make a connection to the service. See page 204.
- Start browsing web pages. See page 207.
- End the connection to the service. See page 211.

Setting up the Smartphone for the browser service

Receiving settings in a smart message

You may receive service settings in a special text message, a smart message, from the network operator or service provider that offers the service. See "Receiving smart messages" on page 122. For more information, contact your network operator or service provider.

Tip: Settings may also be available at the website of a network operator or service provider.

Entering settings manually

Follow the instructions given to you by your service provider.

1. Go to **Tools** → **Settings** → **Connection** → **Access points** and define the settings for an access point. See "Connection settings" on page 238.
2. Go to **Web** → **Options** → **Bookmark manager** → **Add bookmark**. Enter 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, or
- Press the keys **2 - 9** to start to enter the address of a browser service. The Go to field at the bottom of the display is immediately activated and you can continue entering the address there.

After you have selected a page or entered the address, press  to begin downloading the page.

Connection security

If the security indicator  is displayed during a connection, the data transmission between the Smartphone and the browser gateway or server is encrypted.

Note: The security icon does not indicate that data transmission between the gateway and the content server (place where the requested resource is stored) is completely secure. It is up to the service provider to secure data transmission between the gateway and the content server.

Viewing bookmarks

A bookmark consists of an Internet address (mandatory), bookmark title, WAP access point, and if the service requires, a user name and password.

Note: Your Smartphone may have some pre-installed bookmarks for sites not affiliated with your Smartphone. Your Smartphone does not warrant 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 site.

To access the Bookmarks list while browsing, press and hold .

To return to the browser view again, select **Options** → **Back to page**.

In **Bookmarks**, you can see bookmarks for different kinds of web pages.



Bookmark status is indicated by the following icons:

-  - The starting page defined for the browser access point. If you use another web access point for browsing, the starting page is changed accordingly.
-  - The folder of automatic bookmarks. When you have activated the **Automatic bookmarks** option (see page 212), the web pages you have visited will be automatically bookmarked and the bookmarks will be saved in this folder.
-  - A folder you created.
-  - A default folder. You cannot delete folders of this type.
-  - A bookmark.

When you scroll through bookmarks, you see the address of the highlighted bookmark in the Go to field at the bottom of the display. On the left of a bookmark title, the data connection type indicator appears.

-  - a packet data (GPRS) connection
-  - GSM data connection

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 none is selected. Press the * key to enter special characters such as /, ., :, and @.
3. Select **Options** → **Save** to save the bookmark.

Sending bookmarks

You can send a bookmark via text message. For details, see page 36.

Browsing

On a browser page, links appear underlined in blue. Images that act as links have a blue border around them.

Keys and commands used in browsing

- To open a link, press .
- To scroll, use the Navigation keys.
- To enter letters and numbers in a field, press  to . Press  to enter special characters, such as /, ., :, and @. Press  to clear characters.
- To go to the previous page while browsing, press the **Back** soft key. If the **Back** soft key is not available, select **Options** → **Navigation options** → **History** to view a chronological list of the pages you have visited during the current browsing session. The history list is cleared each time a session is closed.
- To check boxes and make selections, press .
- To retrieve the latest content from the server, select **Options** → **Navigation options** → **Reload**.
- To change the display mode of the browser, select **Options** → **Advanced options** → **Small screen**. To return to the original status, select **Options** → **Advanced options** → **Original screen**.
- To open the Bookmarks screen and search for a bookmark, select **Options** → **Bookmarks**.

- To save a bookmark while browsing, select **Options** → **Save as bookmark**.
- To find a phone number, e-mail address, or URL address from web pages, select **Options** → **Find**.
- To view session and security details of the current browser page, select **Options** → **Details**.

Viewing new service messages while browsing

To download and view new service messages while browsing:

1. Select **Options** → **Advanced options** → **Read service msgs.** (shown only if there are new messages).
2. Scroll to the message and press  to download and open it.

For more information about service messages, see page 123.

Viewing saved pages

If you regularly browse pages containing information which doesn't change very often, for example a train timetable, you can save and then browse those pages when offline. If you have a memory card, you can save web pages to it, instead of to the Smartphone's memory.

To save a page, while browsing select **Options** → **Advanced options** → **Save page**. Enter the page name and press .

The following icons are available on the Saved pages view:

-  - A saved web page. In the Saved pages view you can also create folders in which to store your saved web pages.
-  - A folder containing saved web pages.

To open the Saved pages view, press the Right key in the Bookmarks view. In the Saved pages view, press  to open a saved page.

If you want to start a connection to the web service and retrieve the page again, select **Options** → **Reload**.

Note: The Smartphone stays online after you reload the page.

You can arrange the pages into folders by selecting **Options** → **Saved pages mngr..**

Downloading items

You can download items such as ring tones, images, operator logos, and video clips through the mobile browser. These items may be provided free, or for a price.

Once downloaded, items are handled by the respective applications on your Smartphone; for example, a downloaded picture will be saved in **Images**.

Note: Digital Rights Management (DRM) is a system for protecting the copyright of digital content that is distributed online. Copyright protections may prevent some images, ring tones, and other content from being copied, modified, transferred, or forwarded.

Downloading directly from the web page

To download an item directly from a web page:

1. Scroll to a link and select **Options** → **Open**.
2. Choose the appropriate option to download the item, for example, **Buy** or **Download**.
3. Follow the onscreen instructions.

Using Wallet information for purchasing items

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

1. Select **Open wallet**. You will be prompted for your wallet code.
2. Enter the wallet code and press the **OK** soft key.
3. Select the appropriate card category from your wallet.
4. Select **Fill in**. This will upload the selected wallet information.

If the wallet does not contain all information necessary for the purchase, you will be requested to enter the remaining details manually.

Ending a connection

To end a connection to the network:

- Select **Options** → **Disconnect**, or
- Select **Option** → **Exit** to quit browsing and to return to Standby mode.

Emptying the cache

The information or services you have accessed are stored in the cache memory of the Smartphone.

A cache is a buffer memory that is used to store data temporarily.

If you have tried to access or have accessed confidential information requiring passwords (for example, your bank account), empty the cache of your Smartphone after each use. To empty the cache, select **Options** → **Navigation options** → **Clear cache**.

Changing browser settings

In the Bookmarks view, select **Options** → **Settings**.

- **Default access point** - If you want to change the default access point, press the **OK** key to open a list of available access points. The current default access point is highlighted. For more information, see "Connection settings" on page 238.
- **Show images** - Choose if you want to view pictures when you are browsing. If you choose **No**, you can later load images during browsing by selecting **Options** → **View images**.
- **Font size** - You can choose 5 text sizes in the browser: **Largest**, **Large**, **Normal**, **Small**, and **Smallest**.

- **Default encoding** - To make sure your browser pages display text characters correctly, select the appropriate language type.
- **Automatic bookmarks** - You can turn **On** or **Off** the automatic completion of address in the Bookmarks view. Once you have activated this option, when you enter an address, the list of the addresses containing the character(s) you entered, which are stored in the **Auto.bookmarks** folder, appears. You can quickly select the address you want.

To hide the **Auto.bookmarks** folder in the Bookmarks view, select **Hide folder**.

- **Screen size** - You can select how to view web pages. To enable the display of the browser on the full screen of your Smartphone, select **Full screen**.
- **Rendering** - You can select how to browse the web page. Select:
 - **By speed** to download pages faster, but have with lower image quality.
 - **By quality** to get good image quality while browsing, but a slower page download speed.
- **Cookies** - You can enable or disable the receiving and sending of cookies.
- **Security warnings** - You can enable or disable viewing the security warnings you may get during browsing.
- **Conf. DTMF sending** - The browser supports functions you can access while browsing. You can make a voice call while you are on a browser page, send DTMF tones while a voice call is in progress, and save a name and phone number from a browser page. Choose whether you want to confirm before the Smartphone sends DTMF tones during a voice call.

- **Wallet** - Select whether or not you use Wallet data to fill in forms for online transactions or provide a service with your personal information.

Operator Menu

Using **Operator Menu**, you can access the WAP services provided by your network operator.

Press  to open the Menu, and then select **Operator....**

Operator menu launches the browser as embedded with a predefined URL. To access a service, select an embedded link and press .

For further details about browsing the services, see "Web" on page 202.

Personalisation

You can customise your Smartphone to suit your preferences and needs by using various tools, such as:

- **Profile**- sound settings for various environments
- **Theme**- display theme settings
- **Go to**- shortcuts for your favourite menus
- **Mounut**- fun character images to show the frequency of your Smartphone use, among other things.

Profiles

In **Profiles**, you can adjust and customise the phone tones for different events, environments, or caller groups. There are 6 preset profiles: **General**, **Silent**, **Meeting**, **Outdoor**, **Pager**, and **Offline**, which you can customise to meet your needs.

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.

The tones can be default ring tones, tones received in a message or transferred to your Smartphone via infrared or from a PC connection, and then saved to your Smartphone.

Press  to open the Menu, and then select **Profiles**. A list of profiles opens.

Changing profiles

On the Profiles list, scroll to a profile and select **Options** → **Activate**.

You can quickly change the profile, press the $\text{\textcircled{1}}$ key on the right side of the Smartphone in Standby mode. Scroll to the profile you want to activate and press the **OK** soft key.

Customising profiles

1. To modify a profile, scroll to the profile on the Profiles list and select **Options** → **Personalise**.

A list of profile settings opens.



2. Scroll to the setting you want to change and press $\text{\textcircled{OK}}$ to open the choices:
 - **Ringing tone** - To set the ring tone for voice calls, choose a ring tone from the list. When you scroll through the list, you can stop on a tone to listen to it before you make your selection. Press any key, except for the soft keys, $\text{\textcircled{ABC}}$, $\text{\textcircled{Envelope}}$, and $\text{\textcircled{Q}}$, to stop the sound. If a memory card is used, tones stored on it have the icon $\text{\textcircled{MC}}$ next to the tone name.

Note: You can change ring tones in two places: Profiles or Contacts. See "Adding a ring tone for a contact card or group" on page 65.

- **Ringing type** - Use to select the ringing type. When **Ascending** is selected, the ringing volume starts from level one and increases to the set volume level.
- **Ringing volume** - Use to set the volume level for the ring and message alert tones.
- **Message alert tone** - Use to choose the tone for messages.
- **Chat alert tone** - Use to choose the tone for chat messages.
- **Vibrating alert** - Use to set the Smartphone to vibrate at incoming voice calls and messages.
- **Keypad tones** - Use to set the volume level for keypad tones.
- **Warning tones** - The Smartphone sounds a warning tone, for example, when the battery is running out of power.
- **Alert for** - Use to set the Smartphone 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 the list of contact groups, if you have created them. See "Creating contact groups" on page 69.
- **Profile name** - You can rename a profile and give it any name you want. The General profile cannot be renamed.

3. When you are finished, press the **Back** soft key.

Creating a new profile

You can create a new profile by selecting **Options** → **Create new**. For further details about customising each option, see page 215. At the last option, you can enter a name for the profile.

Offline profile

The Offline profile lets you use the phone without connecting to the GSM wireless network to use the phone's applications.

Important:

In the Offline profile you cannot make any calls, including emergency calls, or use other features that require network coverage.

To activate the Offline profile:

On the Profiles list, scroll to **Offline** and select **Options** → **Activate**.

The GSM is turned off, as indicated by the signal strength indicator . All GSM wireless phone signals to and from the device are disabled.

To leave the Offline profile, activate any other profile. When the confirmation message appears, press the **Yes** soft key. The phone re-enables GSM wireless transmissions (providing there is sufficient signal strength).

Theme

In **Themes**, 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 and background image in **Go to**. Edit a theme for more detailed personalisation.

Press  to open the Menu, and then select **Usefulness** → **Themes**. You will see a list of the available themes. The currently active theme is indicated by a check mark. Press the Right key to see the themes on the memory card, if you use one.

Changing the theme

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

Editing themes

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

1. Scroll to a theme, select **Options** → **Edit**.

You can use the following options:

- **Wallpaper** - Use to select an image from one of the available themes, or select your own image from **Gallery**, to use as a background image in Standby mode.

- **Colour palette** - Use to change the colour palette used on the display.
- **Screen saver** - Use to select what is shown on the screen saver bar: the time and date or text 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 232.
- **Image in 'Go to'** - Use to select an image from one of the available themes, or select your own image from **Gallery**, to use as a background image in **Go to**.

2. Scroll to the option to edit and press .
3. Change the current setting.
4. When you have finished, press the **Back** soft key.

Restoring themes

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

Downloading themes

You can download themes from the web browser. Select **Options** → **Theme downloads**. Then you can enter a URL address or a bookmark for the web site providing you with theme downloads.

Go to

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

Press  to open the **Menu**, and then select **Go to**.



You will see the following default shortcuts:

-  - opens the Calendar with the current date selected.
-  - opens the Inbox in **Messaging**.
-  - opens the Notes editor.

Adding shortcuts

Shortcuts can be added only from the individual application. Not all applications have this feature.

1. Open the application and scroll to the item that you want to add as a shortcut to **Go to**.

2. Select **Options** → **Add to 'Go to'** and press the **Select** soft key.

Note: A shortcut in **Go to** is automatically updated if you move the item it is pointing to, for example, from one folder to another.

Using shortcuts

In **Go to**:

- To open a shortcut, scroll to the icon and press the **OK** key. The item is opened in the corresponding application.
- To delete a shortcut, scroll to the shortcut you want to remove and select **Options** → **Delete shortcut**. Removing a shortcut does not affect the file it is referring to. You cannot delete the default shortcuts.
- To change the shortcut heading, select **Options** → **Edit shortcut name**. Enter the new name. This change affects only the shortcut, not the file or item the shortcut refers to.
- To change the shortcut icon, select **Options** → **Shortcut icon**. Select an icon on the list. You cannot change the default shortcuts' icons.
- To change the order of shortcut items, select an item to move and select **Options** → **Move**. Select the position by pressing the Navigation keys and press the **OK** soft key.
- To change to the list view, select **Options** → **List view**.
- To return to the normal view, select **Options** → **Grid view**.

Mounut

Mounut is a system that shows a fun character expressing an emotion, depending on the frequency of your Smartphone use, i.e., making and receiving calls and messages, adding contact cards or applications, or using the camera. You can also send the character along with your messages to enhance the message.

Press  to open the **Menu**, and then select **Usefulness** → **Mounut**.

Selecting a Mounut character

1. On the Mounut main screen, select **My Mounuts**.
The currently selected Mounut character displays.
2. Press the Left or Right key to select one of the Mounut characters stored on your phone.
3. Press the **OK** key, or select **Options** → **Giving life**.
Once you have changed the Mounut character, a confirmation message displays to inform you that the emotion status will reset.
4. Press the **OK** soft key to confirm.

Viewing the emotional status of the Mounut character

1. On the Mounut main screen, select **My Mounuts**. You can view the selected Mounut character.
2. Select **Options** → **Emotion status**.



The display shows the value of the emotion status of your Mounut character with a bar graph. The value of the emotion status changes depending on the frequency of use of the phone. The emotion of the Mounut character is made up of Popularity, Sensibility, and Intelligence.

- **Popularity**: the value of the emotion status increases or decreases depending on the number of sent and received SMS/MMS messages, and incoming or outgoing calls.
- **Sensibility**: the value of the emotion status increases or decreases depending on the frequency in sending or receiving MMS/CBM messages, changing themes, taking pictures, and recording videos.

- **Intelligence:** the value of the emotion status increases or decreases depending on the frequency in adding, deleting, or editing contact cards, receiving SMS messages, sending MMS messages, and installing SIS files.

3. When you are finished, press the **Back** soft key to exit.

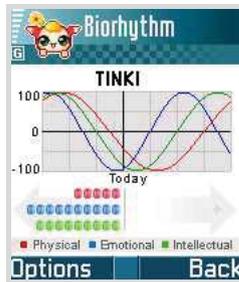
Each time the value of the emotion status is changed, the following events happen on your phone:

- **Emotion:** your phone checks the value of the Mounut's emotion twice a day (11:00~13:00 and 17:00~19:00) and displays the emotion of the Mounut character. See page 223.
- **Level changing:** When the total number of the 3 bar graphs exceeds 30, the level of the Mounut character is raised from Level 1 to Level 2. In this case, an animated image showing the change of level appears, and the image of the Mounut character is upgraded. When the total number of the 3 bars drops below 30, the level of the Mounut character returns to the previous level status, Level 1.
- **Ending:** When it has been 100 days since you set up the Mounut character or the level of each bar graph is 20, an ending event happens on your phone. After the ending event, the Mounut character automatically is changed to another one.

Note: You can reset the emotion of the Mounut character. On the Emotion Status screen, select **Options** → **Reset emotion**. When the confirmation message appears, press the **OK** soft key. After resetting the emotion, the number of each bar is changed to 6.

Viewing the biorhythms of the Mounut character

1. On the Mounut main screen, select **My Mounuts**. You can view the selected Mounut character.
2. Select **Options** → **Biorhythm**.



You can view the biorhythms of the Mounut character. This biorhythm affects the change of emotion of the Mounut character.

3. When you are finished, press the **Back** soft key to exit.

Changing Mounut settings

You can define or edit the general settings of your Mounut system.

1. On the Mounut main screen, select **Settings**.

2. Set the following options:

- **SMS action:** When this option is selected, your phone informs you when an SMS message is delivered with your Mounut character. Also, by adding action emotions to your SMS message, you can control the Mounut character's behaviour on the recipient's phone.

The followings are corresponding emoticons and behaviour;

- Happy behaviour: :-), :) , :-)), :))

- Sad behaviour: :<, :(, :C, :-((

- Angry behaviour: X-(, X(, :-L, :-@

- Tired behaviour: (:|, :S, :-&, :Z

If the received SMS message has specified behaviour emoticons, your Mounut character shows the proper behaviour corresponding with the emoticons.

- **Help:** When selected, your phone shows all help information in your phone with the Mounut character.
- **Event notification:** When selected, you can check events with the Mounut character when various events, such as incoming calls and SMS messages, or alarms, occur on your phone.
- **Emotion:** When selected, you can view emotion status of the Mounut character with animation and text, twice a day (11:00~13:00 and 17:00~19:00).

When **Emotion** is highlighted, press the Right key to use the following options:

- **Permanent smile:** allows you to view the Mounut character always smiling regardless of the emotion status.
- **Show at idle:** allows you to view an expression of the Mounut's emotion in Standby mode.
- **Holiday event:** When selected, your phone informs you of the defined holiday, such as May Day, New Year, and Christmas, with the Mounut character.

3. When you are finished, press the **Back** soft key to save your settings.

Presence

Presence (network service) provides you with enhanced communication services that you can share, for example, with your family, friends, and colleagues using compatible devices. You can share your current presence status with those who have access to the service and request the information. The requested information is shown on the subscribed contacts list in **Contacts**. You can control and personalise the information that you want to share with others, and control the list of persons who can view your presence status.

For the availability of the presence service, contact your network operator or service provider. You need to access the presence service before you can share your presence status with others. Other viewers need access to the presence service and a compatible phone to share your presence status.

Press  to open the **Menu** and select **Presence**.



Logging in to the Presence service

To log in to the Presence service, go to **Presence** and select **Options** → **Login**. You need to enter your user ID and password.

To disconnect from the service, select **Options** → **Logout**.

Viewing the presence of others

Go to **Presence** and select **Public pres.** → **Options** → **Viewers** to view all of the persons who have subscribed to your presence information.

- To add a person to the Private viewers list, scroll to the one you want and select **Options** → **Add to private list**.
- To block allowing a person to view your presence information, scroll to the one you want and select **Options** → **Block**.

To view the list of the people who are allowed to view your personalised presence information, from the Presence main screen, select **Private pres.** → **Options** → **Viewers**.

To view all of the people you have blocked from viewing your presence information, from the Presence main screen, select **Blocked pres.** → **Options** → **Viewers**.

Changing your presence information

You can change your presence status, presence message, and logo to be displayed on the other private viewers' phones.

Go to **Presence** and select:

- **Public pres.** or **Private pres.** → **Options** → **My availability** to set your availability status to **Available** (indicated by ) , or to **Busy** (indicated by ) , or to **Not available** (indicated by ) .
- **Private pres.** → **Options** → **Private message** to set the text to be shown to others. Select **Write message** to enter a new message or select **Previous messages** to select one of the old messages as the status message.

- **Private pres.** → **My presence logo** → **On** to personalise an image from the Images folder in **Gallery**. To select the default logo of the availability status, select **Off**.

Settings for Presence

Go to **Presence** and select **Options** → **Settings**.

- **Show presence to** to select the groups with whom you want to share your presence status. Select **Private & public**, **Private viewers**, **Public viewers**, or **No one**.
- **Sync. with Profiles** to select whether you want to link your private message and availability setting to **Profiles**. Note that you cannot link a personalised status logo to a profile. See also "Profiles" on page 214.
- **Server settings** to change the server setting. Note that Presence shares the server with **Chat**. For details, see "Settings for chat" on page 152.

Settings

You can change various settings for your Smartphone.

Changing the settings

Press  to open the **Menu**, and then select **Tools** → **Settings**.

1. Scroll to a setting group and press  to open it.
2. Scroll to a setting you want to change and press  to
 - switch between options if there are only two (**On/Off**).
 - open a list of options or an editor.
 - open a slider view. Then press the Right or Left key to increase or decrease the value.



Note: You may be able to receive some settings from your service provider in a text message. See "Receiving smart messages" on page 122.

■ Phone settings

Select **Tools** → **Settings** → **Phone** to change the general phone settings.

General



- **Phone language:** You can change the language for the display text of your phone. This change also affects the format used for the date and time and the separators used, for example, in calculations. There are three languages installed on your phone. If you select **Automatic**, the phone selects the language according to the information on your SIM card. After you have changed the phone language, you must restart the phone.

Note: 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:** You can change the writing language for writing on your phone. Changing the language affects:

- the characters available when you press any key ( to .

- the predictive text dictionary used, and

- the special characters that are available when you press  and .

For example, you are using a phone where the phone language is in English but you want to enter all of your messages to French. After you change the language, the special characters or punctuation marks used in the French language are available when you press  and .

- **Dictionary:** You can turn the Dictionary **On** or **Off** for all of the editors in the phone. You can also change this setting when you are in an editor. Press the **ABC** key and select **Dictionary on**, or **Dictionary** → **Insert word** or **Off**.

Note: **Dictionary** is not available for all languages.

- **Welcome note or logo:** The welcome note or logo displays briefly each time you switch on the phone. Press the **OK** key to open the setting. Select **Default** if you want to use the default image or animation. Select **Text** to enter a welcome note (max, 50 letters). Select **Image** to select a photo or picture from **Images** in **Gallery**.

- **Orig. phone settings:** You can reset some of the settings to their original values. To do this, you need the lock code. See page 250. After resetting the settings, you must restart the phone.

Note: All documents and files that you have created are left as they are.

Standby mode



- **Extend view:** You can turn on the extended phone view. When it is on, Standby mode changes to the Extend view and the most recently-accessed applications display so that you can quickly access them. Also, message and scheduler information displays.
- **Left selection key** and **Right selection key:** You can change the shortcuts that appear over the left and right soft keys in Standby mode. In addition to an application, you can have the shortcut point to a function, for example, **New message**.

Note: You cannot create a shortcut to an application that you have installed.

- **Left key, Up key, and Right key:** You can change the shortcuts assigned to the Left, Right, and Up keys. In Standby mode, you can access specific menu directly using the Navigation keys.

Display

- **Brightness:** Use to change the brightness of the display.
- **Screen saver timeout:** The screen saver is activated when the screen saver time-out period expires. 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.
- **Backlight timeout:** A backlight illuminates the display and the keypad. When you press any key or open the phone, the backlight turns on and remains on for the backlight time-out period. You can select the length of time the backlight is on.
- **Service light:**  backlights to serve as a service light. It flashes at regular intervals when services are available on the phone. You can turn this service light feature **On** or **Off**.

■ Call settings

Select **Tools** → **Settings** → **Call** to change the call-related settings.



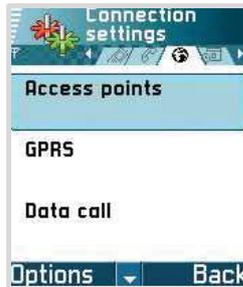
- **Send my caller ID:** This network service allows you to set your phone number to be displayed (**Yes**) or hidden (**No**) from the person whom you are calling. Or, the value may be set by your network operator or service provider when you make a subscription (**Set by network**).
- **Call waiting:** This network service allows the network to notify 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 10 attempts to connect the call after an unsuccessful call attempt. Press  to stop automatic redialling.

- **Summary after call:** Activate this setting if you want the phone to briefly display the duration of each call.
- **Speed dialling:** When this setting is activated, the numbers assigned to the speed dialling keys  to  can be dialled by pressing and holding the key. See also "Assigning speed dialling keys" on page 64.
- **Connect tone:** Select **On**, and you can hear a tone when your call is connected to the system.
- **Anykey answer:** When this setting is activated, you can answer an incoming call by briefly pressing any key, except  and .
- **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 will not be able to make calls if you select Line 2 and have not subscribed to this network service. To prevent line selection, select **Line change** → **Disable** if supported by your SIM card.

■ ■ Connection settings

Select **Tools** → **Settings** → **Connection** to change the connection settings.



General information about data connections and access points

An access point is the point where your phone connects to the Internet by way of a data call or packet data connection. An access point can be provided, for example, by a commercial Internet service provider for mobile devices, or by a network operator.

To define the settings for access points, press  to open the **Menu**, and then select **Tools** → **Settings** → **Connection** → **Access points**.

A data connection is required to connect to an access point. Your phone supports the following data connections:

- GSM data call (.
- Packet data (GPRS) connection (.

There are three different kinds of access points that you can define: MMS access point, browser access point, and Internet access point (IAP). Check with your service provider for what kind of an access point is needed for the service you wish to access. You need to set access point settings to:

- send and receive multimedia messages,
- send and receive e-mail,
- browse pages,
- download Java™ applications,
- use image upload, or
- use your phone as a modem.

Data calls

A data call enables data transmission rates to a maximum of 9.6 Kbps. For availability and subscription to data services, contact your network operator or service provider.

Minimum settings needed to make a data call

To insert a set of basic data call settings, press  to open the Menu, and then select **Tools** → **Settings** → **Connection** → **Access points** → **Options** → **New access point** → **Use default settings** → **Data bearer** → **Data call**.

See "Creating an access point" on page 241 for further information.

Packet data (general packet radio service, GPRS)

Packet data, or General Packet Radio Service (GPRS), uses packet data technology where information is sent in short bursts of data over the mobile network. The benefit of sending data in packets is that the network is occupied only when sending or receiving data. Because GPRS uses the network efficiently, it allows for quick data connection set up and fast data transmission speeds.

Minimum settings needed to make a packet data connection

You need to subscribe to the GPRS service. For availability and subscription to GPRS, contact your network operator or service provider.

Press  to open the Menu, and then select **Tools** → **Settings** → **Connection** → **Access points** → **Options** → **New access point** → **Use default settings** → **Data bearer** → **GPRS**.

See "Creating an access point" on page 241 for further information.

Pricing for packet data and applications

Both the active GPRS connection and the applications used over GPRS require fees, for example, using services, sending and receiving data, and text messages. For more detailed information on fees, contact your network operator or service provider.

Access point

Select **Tools** → **Settings** → **Connection** → **Access points**.

Creating an access point

You may have preset access point settings in your mobile phone. Or, you may receive access point settings in a smart message from a service provider. See "Receiving smart messages" on page 122.

If there are no access points defined when you open **Access points**, you are asked if you want to create one.

If there already are access points defined, to create a new access point, select **Options** → **New access point** and select:

- **Use default settings** to use the default settings. Make the needed changes and press the **Back** soft key to save the settings.
- **Use existing settings** to use existing setting information as the basis for the new access point settings. A list of existing access points is opened. Select one and press the **Select** soft key. Access point settings are opened with some fields already filled.

Fill in the following fields:

Notes:

- Begin filling in the settings from the top because depending on what data connection you select (**Bearer type**), only certain setting fields are available.
 - Follow the instructions given to you by your service provider very carefully.
-

- **Connection name:** Enter a descriptive name for the connection.
- **Data bearer:** The options are **GPRS** and **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 a red asterisk. Other fields can be left empty, unless you have been instructed otherwise by your service provider.

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

Tip! Also see "Settings for multimedia messages" on page 136, and "Settings for e-mails" on page 138.

- **Access point name** (for GPRS 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 is needed.
- **User name:** Enter 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 on to 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 entering the password, the characters you enter are shown briefly and then changed to asterisks (*).
- **Authentication:** Choose **Normal** or **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**, and **14400**, depending on what you have chosen in **Data call type**.

Note: The speeds above represent the maximum speed at which your connection can operate. During any given connection, the operating speed may be less, depending on network conditions.

If you select **Options** → **Advanced settings**, you can set the following options:

- **Phone IP address:** Enter the IP address of your phone.
- **Primary name server:** Enter the IP address of the primary DNS server.
- **Second. name server:** Enter the IP address of the secondary DNS server.
- **Proxy serv. address:** Enter the IP address of the proxy server.
- **Proxy port number:** Enter the port number of the proxy server.

Note: If you need to change the settings above, contact your Internet service provider to obtain these parameters.

DNS (Domain Name System) is an Internet service that translates domain names, such as **www.samsung.com**, into IP addresses, like **211.45.27.231**.

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, so that you have a connection without paying for the call. Contact your service provider to subscribe to this service.

Notes:

- Charges may apply for certain types of received calls, such as roaming calls. Contact your GSM network operator for more information.
 - The phone expects the callback call to use the same data call settings that were used in the callback - request call. The network must support that type of call in both directions, to and from the phone.
-

- **Callback type:** Choose **Use server no.** or **Use other no.**. Ask your service provider for the correct setting to use. This depends on the service provider's configuration.
- **Callback number:** Enter your phone's data phone number for the dial back server to use. Usually, this number is the data call phone number of your phone.
- **Use PPP compression:** PPP (Point-to-Point Protocol) is a common networking software protocol that enables any computer with a modem and a phone line to connect directly to the Internet. When set to **Yes**, this option speeds up the 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:** Choose **Yes** or **No**.
- **Login script:** Insert the login script.
- **Modem initialisation** (Modem initialisation string): This controls your phone using modem AT commands. If required, enter characters specified by your GSM network service provider or Internet service provider.

Editing an access point

When you open Access points, the list of already available access points opens. Scroll to the access point you want to edit, and press .

Deleting an access point

On the list of access points, scroll to the access point you want to remove and select **Options** → **Delete**.

GPRS

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

Select **Tools** → **Settings** → **Connection** → **GPRS**.

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 sending text messages is done 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 is closed once it is not used by any application.

Note: 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 for your computer. For more information on modem connections, see the User's Guide for the Internet Access programme included on the supplied Software CD-ROM.

Data call

The data call settings affect all access points using a data call.

Select **Tools** → **Settings** → **Connection** → **Data call**.

- **Online time:** If there are no actions, the data call is dropped automatically after a time-out period. The options are **User defined**, in which case you enter a time, or **Unlimited**.

Configurations

You may receive configuration parameters for network settings by message from your service provider so that you can apply the parameters simply by opening the message. A configuration message can contain the settings for the web browser, chat, multimedia messages, and streaming video services. In this menu, you can access configuration messages you have received.

Select **Tools** → **Settings** → **Connection** → **Configurations**.

Scroll to the configuration message you want and press  to open the message. To apply the configuration to the corresponding menu, select **Options** → **Save**.

Note: For opening some messages, you may need to enter the PIN code.

■ ■ Date and time settings

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

Select **Tools** → **Settings** → **Date and time**.



In addition, the following options are available:

- **Clock type:** Choose **Analogue** or **Digital** to change the clock shown in Standby mode.
- **Autopower:** When this option is **On**, set alarms ring at the specified time, even if the phone is switched off.
- **Auto time update:** Choose if you want the mobile phone network to update time, date, and time zone information to your phone (network service).

Note: For the **Auto time update** setting to take effect, the phone needs to be restarted.

- **GMT offset:** Set the time difference between GMT (Greenwich Mean Time) and your time zone.
- **Daylight-saving:** Turn on or off Daylight Savings Time.

Security settings

Select **Tools** → **Settings** → **Security**.

Phone and SIM

Explanations for the different security codes that may be needed:

- **PIN code (4 to 8 digits)**: The PIN (Personal Identification Number) code protects your SIM card against unauthorised use. The PIN code is usually supplied with the SIM card.

After 3 consecutive incorrect PIN code entries, the PIN code is blocked. If the PIN code is blocked, you need to unblock the PIN code before you can use the SIM card again. See the information about the PUK (PIN Unblocking Key) code.

- **PIN2 code (4 to 8 digits)**: The PIN2 code, supplied with some SIM cards, is required to access some functions, such as call cost counters.
- **Lock code (4 to 8 digits)**: The security code can be used to lock the phone and keypad to avoid unauthorised use.

Note: The factory setting for the lock code is **00000000**. 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 (8 digits):** The PUK (PIN Unblocking Key) 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.

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

Note: 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 deactivating the PIN code request may not be allowed by some SIM cards.
- **PIN code/PIN2 code/Lock code:** Open these settings if you want to change the codes.
- **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.

Notes:

- When the phone is locked, you may be able to call the emergency number programmed into your phone (e.g., 112 or other official emergency numbers).
 - To lock the phone manually, press . From the list of commands, select **Lock phone**.
-

To unlock the phone, enter the lock code.

- **Lock if SIM changed:** Select **Yes** if you want the phone to ask 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.
- **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 on the fixed dialling list or which begin with the same digit(s) as a phone number on the list.

To activate the Fixed dialling feature, select **Options** → **Activ. fixed dialling**.

To add new numbers to the Fixed dialling contacts list, select **Options** → **New contact** or **Add from Contacts**.

Note: When Fixed dialling is set on, calls may be possible to certain emergency numbers in some networks (e.g., 112 or other official emergency numbers).

- **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**.

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

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

Certificate management

In the Certificate management main view, you can see a list of authority certificates that have been stored in your phone.

Digital certificates are used to verify the origin of browser pages and installed software. However, they can only be trusted if the origin of the certificate is known to be authentic.

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

User certificates are issued to users by a Certifying Authority.

Digital certificates are needed if you:

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

Important: Note, however, that even if the use of certificates makes the risks involved in remote connections and software installation considerably smaller, they must be used correctly in order for you 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.

Viewing certificate details - checking authenticity

You can only be sure of the correct identity of a browser gateway or a server when the signature and the period of validity of a browser gateway or server certificate have been checked.

You will be notified on the phone's display:

- if the identity of the browser server or gateway is not authentic or
- if you do not have the correct security certificate in your phone.

To check certificate details, scroll to a certificate and select **Options** → **Certificate details**. When you open certificate details, Certificate management checks the validity of the certificate and one of the following notes may appear:

- **Certificate not trusted** - You have not set an application to use the certificate. For more information, see the next section "Changing the trust settings of an authority certificate."
- **Expired certificate** - The period of validity has ended for the selected certificate.
- **Certificate not valid yet** - The period of validity has not begun for the selected certificate.
- **Certificate corrupted** - The certificate cannot be used. Contact the certificate issuer.

Important: Certificates have a restricted lifetime. If **Expired certificate** or **Certificate not valid yet** is shown even though the certificate should be valid, check that the current date and time in your phone are correct.

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:

- **Symbian installation/Yes** - the certificate is able to certify installation of native applications running on Symbian OS, which have an SIS extension.

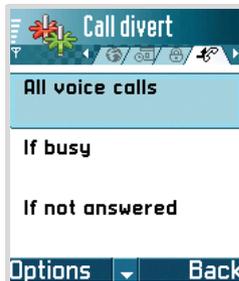
- **Internet/Yes** - the certificate is able to certify Internet servers.
- **App. installation/Yes** - the certificate is able to certify installation of any other add-on applications.

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

Call diverting settings

Call diverting is a network service that allows you to direct your incoming calls to another number, for example, to your voice mailbox number. For details, contact your service provider.

1. Select **Tools** → **Settings** → **Call divert**.



2. Scroll to one of the following diverting options.
 - **All voice calls** - all calls are diverted.
 - **If busy** - calls are diverted when you are already on another call.
 - **If not answered** - calls are diverted when you do not answer the phone.
 - **If out of reach** - calls are diverted when your phone is out of a service area.
 - **If not available** - calls are diverted when your phone is turned off.
 - **All data calls** - all data calls are diverted.
3. Select **Options** → **Activate** to activate the divert setting, **Cancel** to deactivate the divert setting, or **Check status** to check whether diverting is activated or not.

To cancel all active diverts, select **Options** → **Cancel all diverts**.
4. Select where you want to divert your calls to; your voice mail box or to another number.
5. Enter your voice mailbox number or the phone number you want and press the **OK** soft key. The phone sends your setting to the network.

Call barring settings

Call barring is a network service that allows you to restrict the making and receiving of calls with your phone. For this function, you need the barring password, which you can obtain from your service provider.

1. Select **Tools** → **Settings** → **Call barring**.



2. Scroll to one of the following barring options.
 - **Outgoing calls** - calls cannot be made.
 - **International calls** - international calls cannot be made.
 - **International calls except to home ctry.** - When abroad, calls can be made only to numbers within the current country and to your home country, which is the country where your home network provider is located.
 - **Incoming calls** - calls cannot be received.
 - **Incoming calls when abroad** - calls cannot be received when you are using your phone outside of your home country.

3. Select **Options** → **Activate** to request the network to activate call barring, **Cancel** to deactivate the selected call barring, or **Check status** to check if calls are barred or not.
 - Select **Options** → **Edit barrings passw.** to change the barring password.
 - Select **Options** → **Cancel all barrings** to cancel all active call barrings.
4. Enter the barring password and press the **OK** soft key.

The phone sends your setting to the network.

Notes:

- When calls are barred, calls may be possible to certain emergency numbers in some networks (e.g., 112 or other official emergency numbers).
 - Call barring affects all calls, including data calls.
 - You cannot have barring of incoming calls and Call diverting or Fixed dialling active at the same time.
-

Network settings

Select **Tools** → **Settings** → **Network**.



Operator selection

Choose **Automatic** to set the phone to automatically search for and select one of the cellular networks available in your area, or choose **Manual**, if you want to select the desired network manually from a list of networks. When the connection to a 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.

Tip: A roaming agreement is an agreement between two or more network service providers to enable the users of one service provider to use the services of other service providers.

Cell info display

Select **On** to set the phone to indicate when it is used in a cellular network based on Micro Cellular Network (MCN) technology and to activate the reception of cell information.

Band selection

You can use your phone in any of the following networks: GSM 900, GSM 1800, and GSM 1900.

To use a network dependant feature, or when you travel abroad, you may need to change the band.

Enhancement settings

You can change the Headset settings.

Select **Tools** → **Settings** → **Enhancement** → **Headset**.

Then select:

- **Default profile** to select the profile you want to be activated each time when you connect the headset to your phone. See "Profiles" on page 214.
- **Automatic answer** to set the phone to answer an incoming call automatically after five seconds time when you connect the headset to your phone. If the incoming call alert is set to **Off**, **Automatic answer** cannot be used.

Managers

This chapter gives you information about using manager applications to allow you to manage multimedia files, add-on applications, and your device.

■ File manager

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

Press  to open the **Menu** and then select **Tools** → **File mngr..**



Select the phone's memory or memory card using the Left or Right key.

Open **File manager** to see a list of the folders in the phone memory. Press the Right key 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 35.

Receiving files via an infrared connection

Files are automatically received at the root level of the folder structure. Move or copy them to other folders.

Select **Options** → **Receive via infrared**. See "Sending and receiving data via infrared" on page 269.

Viewing memory consumption

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

1. Press the Left or Right key to move from one memory tab to another.
2. To check memory consumption for 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, Messages, Images, Sound files, Video clips, Applications, Mem. in use, and Free memory.

Note: If the phone memory is getting low, remove some files, or move them to the memory card, if you use one, or your PC by using PC Suite.

■ Application manager

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

Press  to open the **Menu**, and then select **Tools** → **Manager**.

When you open **Manager**, you can see a list of:

- installation packages that have been saved to the phone's memory (indicated by ) ,
- partially installed applications, and
- fully installed applications that you can remove.



Notes:

- You can only use Symbian operating system applications with an SIS extension.
 - Your phone supports J2ME™ Java applications. Do not download PersonalJava™ applications to your phone as they cannot be installed.
-

General information for installing applications

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

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

Applications may be downloaded to your phone during browsing, received as attachments in multimedia messages or e-mails, or received via infrared from another device, for example a phone or a compatible PC. If you are using PC Suite to transfer an application, place it in the **Installed files** folder in the **File manager**.

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

To increase protection, the application installation system uses digital signatures and certificates for applications. Do not install the application if Application manager gives a security warning during installation.

Important: 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 back-up copy of the removed application. To restore the original application, first remove the updated or repaired application and then install again from the original application or the back-up 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 applications

Open **Manager**, scroll to an application installation package, and select **Options** → **Install** to start the installation.

Alternatively, search the phone's memory or the memory card, select an application, and press  to start the installation.

Some applications may give the option of partial installation, allowing you to select the particular components of the application that you want to install. If you are installing an application without a digital signature or a certificate, the phone warns you of the risks. Continue installation only if you are absolutely sure of the origin and contents of the application.

Installing Java™ applications

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 Application manager, you will be asked to select one. When you are 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.

Java settings

To change the security settings that determine the actions that a Java application is permitted to do, select **Options** → **Settings**.

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

Removing an application

1. To remove an application, scroll to it and select **Options** → **Remove**.

2. Press the **Yes** soft key 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.

Once you have removed 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.

Note: To send your installation log to a help desk so that they can see what has been installed or removed, select **Options** → **Send log** → **Via text message** or **Via e-mail** (available only if the correct e-mail settings are in place).

Device manager

Device manager allows a third party, such as your service provider, to assist you directly with phone settings. To allow device management, your Smartphone 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.

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

Press  to open the Menu and select **Tools** → **Device manager**.

Creating a new profile

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

When you open **Device manager**, you are asked if you want to create a new server profile. Press the **Yes** soft key. You can set up the following options:

- **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**.

To add a new profile, select **options** → **New server profile**.

- **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.

Starting a configuration

To start a configuration session, select **Options** → **Start configuration**. To disable or enable configurations from the server, select **Options** → **Disable/Enable config**.

Connectivity

You can transfer data from your phone to another compatible device, for example, a phone or computer, via an infrared port or a PC data link cable.

Infrared connections

Using Infrared, you can send or receive data, such as business cards and calendar notes, to and from a compatible phone or data device. You can also use your Smartphone as a modem for your data device.

Sending and receiving data via infrared

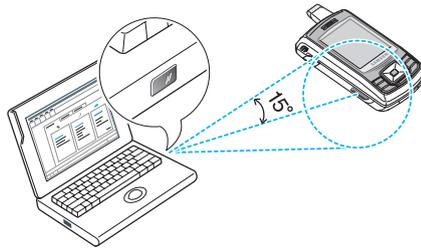
To use the infrared connection, press  to open the Menu, and then select **Connect.** → **Infrared.** The infrared port on the phone is activated and the phone begins searching for another compliant device.

Important: Do not point the IR (infrared) beam at anyone's eyes or allow it to interfere with other IR devices. This device is a Class 1 Laser product.

Note: All items which are received via infrared are placed in the **Inbox** folder in **Messaging.** New infrared messages are indicated by  in **Inbox** and  is shown on the top right of the display. See page 119 for further information.

1. Make sure 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.



2. The user of the receiving device activates the infrared port.

To activate the infrared port of your phone to receive data via infrared, press  and then select **Connect**.
→ **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 initiated within 1 minute after the activation of the infrared port, the connection is cancelled and must be started again.

Tip! You can also play phone-to-phone games via the infrared port.

Note: 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 the infrared port.

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.

Using your Smartphone as a modem for a PC

To use your Smartphone as a modem for connecting to the Internet on a computer, press  and select **Connect** → **Modem** → **Connect**.

Note: You can also use a PC data link cable to connect the Smartphone to your PC.

To access the Internet on your PC after a network connection is established, use the Internet Access programme supplied on the software CD-ROM.

For details, see the User's Guide for the programme included on the CD-ROM.

PC Suite

For further information on how to make a connection to a compatible computer via the infrared port or using a PC data link cable, and how to install the PC Suite for the Samsung SGH-D710, see the PC Suite Install Remove on the CD-ROM. You can find it in the "Software for PC" Manual section. For further information on how to use the PC Suite for the Samsung SGH-D710, see the PC Suite online help.

Installing PC Suite

1. Insert the PC Link CD into the CD-ROM drive of your compatible PC.

The CD-ROM should launch itself after you have inserted it into the CD-ROM drive. If not, proceed as follows:

- a. Click the Windows **Start** button and select **Programs** → **Windows Explorer**.
 - b. On the CD-ROM drive, locate a file named **Setup** and double-click it. The CD-ROM interface opens.
2. Double-click **PC Suite for Samsung SGH-D710** in the "Software for PC" section.
 3. Follow the instructions on the installation wizard screen.

The wizard will guide you through the installation process.

Remote synchronisation

The **Sync** application enables you to synchronise your calendar, notes, or contacts with various calendar and address book applications on the Internet.

Synchronisation takes place over a GSM data call or packet data connection.

Sync uses SyncML technology for synchronisation. For information on SyncML compatibility, please contact the supplier of the calendar, notes, or address book application with which you want to synchronise your phone data.

To open the **Sync** application, press  and select **Connect.** → **Sync.**

Creating a new synchronisation profile

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** - Enter a descriptive name for the profile.
 - **Data bearer** - Select the method to synchronise. Select **Web** to synchronise with a server on the Internet.

- **Access point** - Select the access point you want to use for the data connection.
 - **Host address** - Enter the URL address of the server on the Internet. Contact your service provider or system administrator for the correct values.
 - **Port** - Enter the port number of the server. Contact your service provider or system administrator for the correct values.
 - **User name** - Enter your user ID for the synchronisation server. Contact your service provider or system administrator for your correct ID.
 - **Password** - Enter your password. Contact your service provider or system administrator for the correct password.
 - **Allow sync requests** - You can enable or disable the acceptance of all received synchronisations installed by this server. To choose the items that you want to synchronise press and select **Yes** in the appropriate fields.
 - **Accept all sync reqs.** - You can enable or disable requiring that your phone ask for your confirmation before accepting synchronisation from this server.
3. Press the Right key and define which applications will be synchronised, **Contacts**, **Calendar**, and/or **Notes**.
 4. Press the **Back** soft key to save the settings.

Synchronising data

In the Sync main view, you can see the different profiles, and what kind of data will be synchronised:

Calendar, Contacts, Notes, or all.

1. In the Sync 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, notes, or contact entries have been added, updated, deleted, or discarded (not synchronised) in the phone or on the server.

Connection manager

To open the **Connection manager** application, press  and select → **Connect.** → **Conn. mgr..**

In **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.

Note: You can view details of data connections only. Voice calls are not listed.

When you open **Connection manager**, you will see a list of:

- open data connections, **D** - Data call, **G** - GPRS
- the status of each connection, or
- the amount of data uploaded and downloaded for each connection (GPRS connections only), or
- the duration of each connection (GSM connections only).

Note: The actual time invoiced for calls by your service provider may vary, depending upon 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, or **Modem connection** if the connection is a dial-up connection.
- **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 by 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) - the 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. Press the **Yes** soft key to confirm.

Appendix A: Troubleshooting

General problems

“Insert SIM card” displays

- Check that the SIM card is correctly installed.

“No network coverage,” “Unable to connect. No network coverage.” or “Message sending failed” displays

- The network connection has been lost. You may be in a weak signal area (in a tunnel or surrounded by buildings). Move and try again.
- You are trying to access an option for which you have not taken out a subscription with your service provider. Contact the service provider for further details.

The bars above disappears

- If you have just turned on your Smartphone, wait about 2 minutes, until your Smartphone finds the network and receives a signal from the network.
- If you are in a tunnel or in an elevator, the Smartphone may not be able to receive the signal properly from the network. Move to an open place.
- This may appear when you move between different service areas. It is normal.

The display is not clear

- In direct sunlight, you will not see the display clearly. Move to a place in a proper lighting condition.

White lines appear on the display

- This may happen if you turn on the Smartphone after a long period of time of power-off or after removing the battery without turning off the Smartphone. This is not related the Smartphone's life or performance. Wait until the to display functions correctly.

“Locked” displays

- The automatic locking feature has been enabled. You must press the **Unlock** soft key and enter the lock code before you can use the Smartphone. To disable the feature, go to **Settings** → **Security** → **Phone and SIM** and set **Auto lock period** to **None**.

“PIN code” appears

- You are using your phone for the first time. You must enter the Personal Identification Number (PIN) supplied with the SIM card.
- The PIN check feature is enabled. Each time the phone is switched on, the PIN has to be entered. To disable this feature, go to **Settings** → **Security** → **Phone and SIM** and set **PIN code request** to **Off**.

“PUK code” appears

- The PIN code was entered incorrectly three times in succession and the phone is now blocked. Enter the PUK supplied by your service provider.

I forgot the lock, PIN, or PUK codes

- The default lock code is **00000000**. 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 provider. For information about passwords, contact your access point provider, for example, a commercial Internet Service Provider (ISP), service provider, or network operator.

Call problems

I have entered a number but it was not dialed

- Have you pressed  ?
- Check if you have accessed the right cellular network.
- You may have set an outgoing call barring option.

My correspondent cannot reach me

- Is your phone switched on ( pressed for more than one second)?
- Check if you have accessed the right cellular network. You may have set an incoming call barring option.

My correspondent cannot hear me speaking

- Have you switched off the microphone?
- Are you holding the phone close enough to your mouth? The microphone is located at the bottom of the phone.

The audio quality of the call is poor

- Adjust the voice volume by pressing the Up or Down key.
- Check the signal strength indicator on the display (📶); the number of bars indicates the signal strength from strong to weak.
- Try moving the phone slightly or moving closer to a window if you are in a building.

Calls to and from the Smartphone are not connected properly, and a call is easily disconnected.

- Signals from the network are weak. Move to another area.
- Touching the antenna may lower the call quality. Be careful not to touch the antenna while using the Smartphone.

 **Power and charging problems****"Battery low" appears on the display**

- Your battery is insufficiently charged. Recharge the battery.

While charging, the LED on the travel charger blinks

- Disconnect the travel charger from the Smartphone, remove the battery, and then replace it.
- If the problem persists, clean the metal contacts on the battery and the Smartphone.
- If the actions above does not clear the problem, contact a Samsung service representative.

The Smartphone malfunctions or does not function

- Remove the battery and then replace it. Turn on the Smartphone. If the problem persists, contact a Samsung service representative.

The LED on the travel charger turns to yellow

- The travel charger is overheated. Disconnect the charger from the Smartphone or unplug it from the power outlet. Wait a moment until the charger is cool down and then recharge the Smartphone

The battery's standby time is shorter than expected

- Batteries are subject to wear and tear. Standby time may grow shorter as time passes.
- Leaving the fully charged battery in a cold or hot place for a long period of time may reduce the battery life.
- Standby time depends on where you use the Smartphone. The actual time may differ from the battery specification.

Is it OK if I leave the Smartphone connected to the power outlet when it is fully charged (indicated by the green LED on the charger)

- Remove the charger from the Smartphone or unplug it from the power outlet.

The Smartphone becomes hot

- This may happen during a call or while using applications, such as games, Internet, or camera, because the Smartphone needs more power at those times, regardless the Smartphone's life and performance.

The battery level is efficient, but the Smartphone does not turn on

- Remove the battery from the Smartphone and reinstall it. Then turn on the Smartphone.
- Clean the metal contacts both on the battery and the Smartphone. Reinstall the battery and turn the Smartphone.

The Smartphone turns off when the charger is connected

- Some dust on the contacts may cause unexpected power-off or charging problems. Clear the metal contacts both on the battery and the Smartphone.

Application problems

"Not enough memory to perform operation. Delete some data first." or "Memory low. Delete some data." displays

- To view what kind of data you have and how much memory the different data groups consume, go to the File manager and select **Options** → **Memory details**. Delete old items in applications. If necessary, make a backup copy of your data using PC Suite or the memory card.

Browser - “No valid access point defined. Define one in Services settings.” displays

- Insert proper browser settings. Contact your service provider for instructions.

Calendar - Week numbers are missing

- If you have changed the Calendar settings so that the week starts on a day other than Monday, the week numbers will not be shown.

Camera - Images look smudgy

- Check that the camera lens protection window is clean.

Contacts - No number is dialed when you recall a contact card

- Check that a number has been stored in the contact card.
- Re-store the number, if necessary.

Log- The log appears empty

- 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**.

Messaging - I cannot select a contact card when creating a message

If the contact card does not have a phone number or e-mail address, you cannot select it. Add the missing information to the contact card in **Contacts**.

PC connectivity- Problems occur when connecting the Smartphone to a PC.

- Make sure that PC Suite is installed and running on your PC. See the user's guide for PC Suite on the CD-ROM. For further information on how to use PC Suite, see the help function on PC Suite or visit www.samsungmobile.com.

Application does not respond

- Open the application switching window by pressing and holding the **ABC** key. Then scroll to the application and press the **C** key to close the application.

If the above guidelines do not help you to solve the problem, take note of:

the model and serial numbers of your phone

your warranty details

a clear description of the problem

Then contact your local dealer or Samsung after-sales service.

Health and Safety Information

Exposure to Radio Frequency (RF) Signals

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on the safety standards that were developed by independent scientific organizations through periodic and through evaluation of scientific studies.

The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless phones employs a unit of measurement known as Specific Absorption Rate (SAR). The SAR limit recommended by the FCC is 1.6W/kg.*

* In the U.S. and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

SAR tests are conducted using standard operating positions specified by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output of the phone.

Before a new model phone is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of <http://www.fcc.gov/oet/fccid> after searching on FCC ID printed in the label on the phone.

For Body Operation

For body worn operation, this model phone has been tested and meets the FCC RF exposure guidelines when used with a Samsung-supplied or approved accessory designated for this product or when used with an accessory that contains no metal and that positions the handset a minimum from the body.

The minimum distance for this model phone is written in the FCC certification information from the body. None compliance with the above conditions may violate FCC RF exposure guidelines.

For more information concerning exposure to radio frequency signals, see the following websites:

Federal Communications Commission (FCC)
<http://www.fcc.gov>

Cellular Telecommunications Industry Association (CTIA):
<http://www.wow-com.com>

U.S. Food and Drug Administration (FDA)
<http://www.fda.gov/cdrh/consumer>

World Health Organization (WHO)
<http://www.who.int/peh-emf/en>

Precautions When Using Batteries

- Never use any charger or battery that is damaged in any way.
- Use the battery only for its intended purpose.
- If you use the phone near the network's base station, it uses less power; talk and standby time are greatly affected by the signal strength on the cellular network and the parameters set by the network operator.

- Battery charging time depends on the remaining battery charge, the type of battery and the charger used. The battery can be charged and discharged hundreds of times, but it will gradually wear out. When the operation time (talk time and standby time) is noticeably shorter than normal, it is time to buy a new battery.
- If left unused, a fully charged battery will discharge itself over time.
- Use only Samsung-approved batteries and recharge your battery only with Samsung-approved chargers. When a charger is not in use, disconnect it from the power source. Do not leave the battery connected to a charger for more than a week, since overcharging may shorten its life.
- Extreme temperatures will affect the charging capacity of your battery: it may require cooling or warming first.
- Do not leave the battery in hot or cold places, such as in a car in summer or winter conditions, as you will reduce the capacity and lifetime of the battery. Always try to keep the battery at room temperature. A phone with a hot or cold battery may temporarily not work, even when the battery is fully charged. Li-ion batteries are particularly affected by temperatures below 0 °C (32 °F).
- Do not short-circuit the battery. Accidental short-circuiting can occur when a metallic object (coin, clip or pen) causes a direct connection between the + and - terminals of the battery (metal strips on the battery), for example when you carry a spare battery in a pocket or bag. Short-circuiting the terminals may damage the battery or the object causing the short-circuiting.
- Dispose used batteries in accordance with local regulations. Always recycle. Do not dispose batteries in a fire.

Road Safety

Your wireless phone gives you the powerful ability to communicate by voice, almost anywhere, anytime. But an important responsibility accompanies the benefits of wireless phones, one that every user must uphold.

When driving a car, driving is your first responsibility. When using your wireless phone behind the wheel of a car, practice good common sense and remember the following tips:

- Get to know your wireless phone and its features, such as speed dial and redial. If available, these features help you to place your call without taking your attention off the road.
- When available, use a hands-free device. If possible, add an extra layer of convenience and safety to your wireless phone with one of the many hands-free accessories available today.
- Position your wireless phone within easy reach. Be able to access your wireless phone without removing your eyes from the road. If you get an incoming call at an inconvenient time, let your voice mail answer it for you.
- 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, ice and even heavy traffic can be hazardous.
- Do not take notes or look up phone numbers while driving. Jotting down a To Do list or flipping through your phonebook takes your attention away from your primary responsibility, driving safely.
- Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan calls when your car will be stationary. If you need to make a call while moving, dial only a few numbers, check the road and your mirrors, then continue.

- Do not engage in stressful or emotional conversations that may be distracting. Make the people to whom you are talking aware that you are driving and suspend conversations that have the potential to divert your attention from the road.
- Use your wireless phone to call for help. Dial the emergency number in the case of fire, traffic accident or medical emergencies. Remember, it is a free call on your wireless phone!
- Use your wireless phone to help others in emergencies. If you see a car accident, crime in progress or other serious emergency where lives are in danger, call the emergency number, as you would want others to do for you.
- 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 any other special non-emergency wireless number.

Operating Environment

Remember to follow any special regulations in force in any area and always switch your phone off whenever it is forbidden to use it, or when it may cause interference or danger.

When connecting the phone or any accessory to another device, read its user's guide for detailed safety instructions. Do not connect incompatible products.

As with other mobile radio transmitting equipment, users are advised that for the satisfactory operation of the equipment and for the safety of personnel, it is recommended that the equipment should only be used in the normal operating position (held to your ear with the antenna pointing over your shoulder).

Electronic Devices

Most modern electronic equipment is shielded from radio frequency (RF) signals. However, certain electronic equipment may not be shielded against the RF signals from your wireless phone. Consult the manufacturer to discuss alternatives.

Pacemakers

Pacemaker manufacturers recommend that a minimum distance of 15 cm (6 inches) be maintained between a wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research and recommendations of Wireless Technology Research.

Persons with pacemakers:

- should always keep the phone more than 15 cm (6 inches) from their pacemaker when the phone is switched on.
- should not carry the phone in a breast pocket.
- should use the ear opposite the pacemaker to minimize potential interference.

If you have any reason to suspect that interference is taking place, switch your phone off immediately.

Hearing Aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may wish to consult your hearing aid manufacturer to discuss alternatives.

Other Medical Devices

If you use any other personal medical devices, consult the manufacturer of your device to determine if it is adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information. Switch your phone off 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.

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle. You should also consult the manufacturer of any equipment that has been added to your vehicle. You should also consult the manufacturer of any equipment that has been added to your vehicle.

Posted Facilities

Switch your phone off in any facility where posted notices require you to do so.

Potentially Explosive Environments

Switch your phone off when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Users are advised to switch the phone off while at a refueling point (service station). Users are reminded of the need to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants or where blasting operations are in progress.

Areas with a potentially explosive atmosphere are often but not always clearly marked. They include the areas below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), areas where the air contains chemicals or particles, such as grain, dust or metal powders, and any other area where you would normally be advised to turn off your vehicle engine.

Emergency Calls

This phone, like any wireless phone, operates using radio signals, wireless and landline networks as well as user-programmed functions, which cannot guarantee connection in all conditions. Therefore, you should never rely solely on any wireless phone for essential communications (medical emergencies, for example).

Remember, to make or receive any calls the phone must be switched on and in a service area with adequate signal strength. Emergency calls may not be possible on all wireless phone networks or when certain network services and/or phone features are in use. Check with local service providers.

To make an emergency call:

1. If the phone is not on, switch it on.
2. Key in the emergency number for your present location (for example, 911 or other official emergency number). Emergency numbers vary by location.
3. Press the <Send> key.

If certain features are in use (call barring, for example), you may first need to deactivate those features before you can make an emergency call. Consult this document and your local cellular service provider.

When making an emergency call, remember to give all the necessary information as accurately as possible. Remember that your phone may be the only means of communication at the scene of an accident; do not cut off the call until given permission to do so.

Other Important Safety Information

- Only qualified personnel should service the phone or install the phone in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty applicable to the device.
- Check regularly that all wireless phone 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 phone, its parts or accessories.

- For vehicles equipped with an air bag, remember that an air bag inflates with great force. Do not place objects, including both installed or portable wireless equipment in the area over the air bag or in the air bag deployment area. If wireless equipment is improperly installed and the air bag inflates, serious injury could result.
- Switch your phone off before boarding an aircraft. The use of wireless phones in aircraft is illegal and may be dangerous to the aircraft's operation.
- Failure to observe these instructions may lead to the suspension or denial of telephone services to the offender, or legal action, or both.

Care and Maintenance

Your phone is a product of superior design and craftsmanship and should be treated with care. The suggestions below will help you fulfill any warranty obligations and allow you to enjoy this product for many years

- Keep the phone and all its parts and accessories out of the reach of small children's.
- Keep the phone dry. Precipitation, humidity and liquids contain minerals that will corrode electronic circuits.
- Do not use the phone with a wet hand. Doing so may cause an electric shock to you or damage to the phone.
- Do not use or store the phone in dusty, dirty areas, as its moving parts may be damaged.
- Do not store the phone in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.

- Do not store the phone in cold areas. When the phone warms up to its normal operating temperature, moisture can form inside the phone, which may damage the phone's electronic circuit boards.
- Do not drop, knock or shake the phone. Rough handling can break internal circuit boards.
- Do not use harsh chemicals, cleaning solvents or strong detergents to clean the phone. Wipe it with a soft cloth slightly dampened in a mild soap-and-water solution.
- Do not paint the phone. Paint can clog the device's moving parts and prevent proper operation.
- Do not put the phone in or on heating devices, such as a microwave oven, a stove or a radiator. The phone may explode when overheated.
- Use only the supplied or an approved replacement antenna. Unauthorized antennas or modified accessories may damage the phone and violate regulations governing radio devices.
- If the phone, battery, charger or any accessory is not working properly, take it to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

Acknowledging Special Precautions and the FCC and Industry Canada Notice

Cautions

Modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Compliance Information

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received.

Including interference that may cause undesired operation.

Information to User

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

Appendix A: CERTIFICATION INFORMATION (SAR)

THIS MODEL PHONE MEETS THE GOVERNMENT'S REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on safety standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate (SAR). The SAR limit set by the FCC is 1.6 W/kg. SAR Tests are conducted using standard operating positions accepted by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

Before a new model phone is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in

positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model.

The highest SAR values of this model phone as reported to FCC are Head: 0.218W/kg, Body-worn: 0.188W/kg in GSM 1900.

To maintain compliance with FCC RF exposure requirements, use only belt-clips, holsters or similar accessories that maintain a 1.5 cm. separation distance between the user's body and the back of the phone, including the antenna. The use of belt-clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not

comply with FCC RF exposure requirements, and should be avoided. The FCC has granted an Equipment Authorization for this model phone will all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant Section of <http://www.fcc.gov/oet/fccid> after searching on FCC ID A3LSGHD710.

In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kilogram (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

Appendix B: Guide to Safe and Responsible Wireless Phone Use

Cellular Telecommunications & Internet Association

“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 seat belts and requiring other passengers to do the same.

But with wireless phone use, driving safely means a little more. This brochure is a call to wireless phone users everywhere to make safety their first priority when behind the wheel of a car. Wireless telecommunications is keeping us in touch, simplifying our lives, protecting us in emergencies and providing opportunities to help others in need. When it comes to the use of wireless phones, safety is your most important call.

Wireless Phone “Safety Tips”

Below are safety tips to follow while driving and using a wireless phone which should be easy to remember:

1. Get to know your wireless phone and its features such as speed dial and redial. Carefully read your instruction manual and learn to take advantage of valuable features most phones offer, including automatic redial and memory. Also, work to memorize the phone keypad so you can use the speed dial function without taking your attention off the road.
2. When available, use a hands free device. A number of hands free wireless phone accessories are readily available today. Whether you choose an installed mounted device for your wireless phone or a speaker phone accessory, take advantage of these devices if available to you.
3. Position your wireless phone within easy reach. Make sure you place your wireless phone within easy reach and where you can grab it without removing your eyes from the road. If you get an incoming call at an inconvenient time, if possible, let your voice mail answer it for you.

4. Suspend conversations during hazardous driving conditions or situations. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow and ice can be hazardous, but so is heavy traffic. As a driver, your first responsibility is to pay attention to the road.
5. Do not take notes or look up phone numbers while driving. If you are reading an address book or business card, or writing a "to do" list while driving a car, you are not watching where you are going. It's common sense. Don't get caught in a dangerous situation because you are reading or writing and not paying attention to the road or nearby vehicles.
6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan your calls before you begin your trip or attempt to coincide your calls with times you may be stopped at a stop sign, red light or otherwise stationary. But if you need to dial while driving, follow this simple tip-dial only a few numbers, check the road and your mirrors, then continue.
7. Do not engage in stressful or emotional conversations that may be distracting. Stressful or emotional conversations and driving do not mix-they are distracting and even dangerous when you are behind the wheel of a car. Make people you are talking with aware you are driving and if necessary, suspend conversations which have the potential to divert your attention from the road.
8. Use your wireless phone to call for help. Your wireless phone is one of the greatest tools you can own to protect yourself and your family in dangerous situations-with your phone at your side, help is only three numbers away. Dial 9-1-1 or other local emergency number in the case of fire, traffic accident, road hazard or medical emergency. Remember, it is a free call on your wireless phone!
9. Use your wireless phone to help others in emergencies. Your wireless phone provides you a perfect opportunity to be a "Good Samaritan" in your community. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.
10. Call roadside assistance or a special wireless non emergency assistance number when necessary. Certain situations you encounter while driving may require attention, but are not urgent enough to merit a call for emergency services. But you still can use your wireless phone to lend a hand. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured or a vehicle you know to be stolen, call roadside assistance or other special non-emergency wireless number.

Careless, distracted individuals and people driving irresponsibly represent a hazard to everyone on the road. Since 1984, the Cellular Telecommunications Industry Association and the wireless industry have conducted educational outreach to inform wireless phone users of their responsibilities as safe drivers and good citizens. As we approach a new century, more and more of us will take advantage of the benefits of wireless telephones. And, as we take to the roads, we all have a responsibility to drive safely.

"The wireless industry reminds you to use your phone safely when driving."

Cellular Telecommunications & Internet Association For more information, please call 1-888-901-SAFE.

For updates: <http://www.wow-com.com/consumer/issues/driving/articles.cfm?ID=85>

Appendix C: Consumer Update on Wireless Phones

U.S. Food and Drug Administration

1. 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 radio frequency 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 well within the FCC's compliance limits.

2. 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 radio frequency 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.

3. What is FDA's role concerning the safety of wireless phones?

Under the law, FDA does not review the safety of radiation emitting consumer products such as wireless phones before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless phones are shown to emit radio frequency energy (RF) at a level that is hazardous to the user. In such a case, FDA could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace or recall the phones so that the hazard no longer exists.

Although the existing scientific data do not justify FDA regulatory actions, FDA has urged the wireless phone industry to take a number of steps, including the following:

- Support needed research into possible biological effects of RF of the type emitted by wireless phones;
- Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and
- Cooperate in providing users of wireless phones with the best possible information on possible effects of wireless phone use on human health

FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of RF safety to ensure coordinated efforts at the federal level. The following agencies belong to this working group:

- National Institute for Occupational Safety and Health
- Environmental Protection Agency Federal Communications Commission

- Occupational Safety and Health Administration
- National Telecommunications and Information Administration
- The National Institutes of Health participates in some interagency working group activities, as well.

FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply with FCC safety guidelines that limit RF exposure. FCC relies on FDA and other health agencies for safety questions about wireless phones.

FCC also regulates the base stations that the wireless phone networks rely upon. While these base stations operate at higher power than do the wireless phones themselves, the RF exposures that people get from these base stations are typically thousands of times lower than those they can get from wireless phones. Base stations are thus not the primary subject of the safety questions discussed in this document.

4. 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 radio frequency 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.

5. What steps can I take to reduce my exposure to radio frequency 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 radio frequency 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.

6. 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 radio frequency 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.

7. Do hands-free kits for wireless phones reduce risks from exposure to RF emissions?

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that hands-free kits reduce risks. Hands-free kits can be used with wireless phones for convenience and comfort. These systems reduce the absorption of RF energy in the head because the phone, which is the source of the RF emissions, will not be placed against the head. On the other hand, if the phone is mounted against the waist or other part of the body during use, then that part of the body will absorb more RF energy. Wireless phones marketed in the U.S. are required to meet safety requirements regardless of whether they are used against the head or against the body. Either configuration should result in compliance with the safety limit.

8. Do wireless phone accessories that claim to shield the head from RF radiation work?

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that accessories that claim to shield the head from those emissions reduce risks. Some products that claim to shield the user from RF absorption use special phone cases, while others involve nothing more than a metallic accessory attached to the phone. Studies have shown that these products generally do not work as advertised. Unlike "hand-free" kits, these so-called "shields" may interfere with proper operation of the phone. The phone may be forced to boost its power to compensate, leading to an increase in RF absorption. In February 2002, the Federal Trade Commission (FTC) charged two companies that sold devices that claimed to protect wireless phone users from radiation with making false and unsubstantiated claims. According to FTC, these defendants lacked a reasonable basis to substantiate their claim.

9. What about wireless phone interference with medical equipment?

Radio frequency 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 compatible 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.

10. 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 radio frequency energy (RF) exposures characteristic of wireless phones have yielded conflicting results that often cannot be repeated in other laboratories. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. However, many of the studies that showed increased tumor development used animals that had been genetically engineered or treated with cancer causing chemicals so as to be pre-disposed to develop cancer in the absence of RF exposure. Other studies exposed the animals to RF for up to 22 hours per day. These conditions are not similar to the conditions under which people use wireless phones, so we don't know with certainty what the results of such studies mean for human health.

Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, glioma, meningioma, or acoustic neuroma, tumors of the brain or salivary gland, leukemia, or other cancers. None of the studies demonstrated the existence of any harmful health effects from wireless phone RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of phone use in these studies was around three years.

11. 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.

12. Which other federal agencies have responsibilities related to potential RF health effects?

Additional information on the safety of RF exposures from various sources can be obtained from the following organizations.

FCC RF Safety Program:
<http://www.fcc.gov/oet/rfsafety/>

Environmental Protection Agency (EPA):
<http://www.epa.gov/radiation/>

Occupational Safety and Health Administration's (OSHA):
<http://www.osha-slc.gov/SLTC/radiofrequencyradiation/index.html>

National Institute for Occupational Safety and Health (NIOSH):
<http://www.cdc.gov/niosh/emfpg.html>

World Health Organization (WHO):
<http://www.who.int/peh-emf/>

International Commission on Non-Ionizing Radiation Protection:
<http://www.icnirp.de>

National Radiation Protection Board (UK):
<http://www.nrpb.org.uk>

Updated 4/3/2002: US Food and Drug Administration <http://www.fda.gov/cellphones>

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