## GPRS TELEPHONE SGH-X480

## ELECTRONICS

http://www.samsungmobile.com


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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 off your phone near the 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

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 (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, especially when the phone is in service.

## 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. 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 install or repair your phone.

For more detailed safety information, see "Health and safety information" on page 154.

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

## CAUTION

 BY AN INCORRECT TYPE.TO THE INSTRUCTIONS

## Unpacking

Your package contains the following items:


Battery


Travel Adapter


User's Manual

You can obtain the following accessories for your phone from your local Samsung dealer:

- Standard batteries
- Hand strap
- Simple handsfree car kit
- PC data link kit
- Travel charger/adapter
- Straight headset

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

## Your phone

## Phone layout

The following illustrations show the main elements of your phone:


## Key(s) Description

$\vdots \vdots$
Performs the functions indicated by the screen text above them, on the bottom (soft keys) line of the display.

In Menu mode, scroll through the menu options and Phonebook.
When entering text, move the cursor depending on which side you push.

In Idle mode, allows you to access your favorite menu options directly. For further details about shortcuts, see page page 146.

In Idle mode, launches the WAP (Wireless Application Protocol) browser. In Menu mode, selects the highlighted menu options or confirms your input.

Makes or answers a call.
In Idle mode, recalls the last number dialled or received when held down.

Deletes characters from the display. In Menu mode, returns you to the previous menu level.

Ends a call. Also switches the phone on and off when held down.
In Menu mode, cancels your input and returns the phone to Idle mode.

## $\operatorname{Key}(\mathrm{s}) \quad$ Description (continued)

In Idle mode, accesses your voice mai when held down. special characters.

Enters special characters.
Performs various functions.
(on the left side of the phone)
Adjusts the ringer volume when the
phone is ringing and the earpiece volume during a call.
In Idle mode, with the phone open, adjusts the keypad tone volume. With the phone closed, turns the external display on when held down.

In Menu mode, scrolls through menu options and Phonebook.

## Display

## Display layout

The display has 3 areas:

|  | - Icons |
| :---: | :---: |
|  | Text and graphics area |
| Menu Phonebook | Soft key function indicators |

## Area Description

First line

Middle

Last line

Displays various icons. See page 14.

Displays messages, instructions, and any information that you enter, such as the number you are dialling.
Shows the current functions assigned to the two soft keys.

## Icons

## Icon Description

Fulll Shows the received signal strength．The greater the number of bars，the stronger the signal．

6 Appears when a call is in progress．
1 Appears when you are out of your service area．When it displays，you cannot make or receive a call．

G．Appears when you are connected to the GPRS network．

B）Appears when you are out of your home area and have logged onto a different network；for example，when travelling in other countries．
$\Rightarrow$ Appears when the Call Diverting feature is activated．For details，see page 60.

3 Appears when a new text message has been received．
（⿴囗⿰㇇⿰亅⿱丿丶丶⿱⿰㇒一乂心 A Appears when a new voice mail message has been received．
．．．．．Appears when a new multimedia message has been received．

A Appears when you set an alarm to ring at a specified time．For details，see page 114.

## Icon Description（continued）

Appears when Silent mode is active or you set the phone to vibrate for incoming calls． For further details，see page 28 and page 70 respectively．
（x Appears when Mute mode is active．For details，see page 41.

IIII Shows the level of your battery．The more bars you see，the more power you have remaining．

## Getting started

## Backlight

The backlight illuminates the display and the keypad. When you press any key or open the phone, the backlight comes on. It goes off when no keys are pressed within a given period of time, depending on the setting in the Back light menu (Menu 9.1.3). See page 139 for further details.

## Service light

The service light is on the front of the phone. It flashes when services are available on the phone.

To activate or deactivate the service light, use the Service light menu (Menu 9.1.5). See page 140 for further details.


## 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 so on.

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

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

1. If necessary, switch the phone off by holding down the $\sigma$ key until the power-off image displays.
2. Remove the battery. To do so:
(1) Slide the battery lock towards the top of the phone and hold it in that position.
(2) Lift the battery away, as shown.

3. Slide the SIM card into the SIM card socket, as shown, so that the card locks into position.

Make sure the metal contacts of the card face into the phone.


Note: When you need to remove the SIM card, slide it upwards, as shown, and take it out of the socket.

4. Replace the battery so that the tabs on the end align with the slots at the bottom of the phone.

5. Press the battery down until it clicks into place. Make sure that the battery is properly installed before switching the power on.


## Charging the battery

Your phone is powered by a rechargeable Li-ion battery. A travel adapter comes with your phone for charging the battery. Use only approved batteries and chargers. Ask your local Samsung dealer for further details.

The travel adapter allows you to use the phone while the battery is charging, but this causes the phone to charge more slowly.

Note: You must fully charge the battery before using your phone for the first time. A discharged battery recharges fully in approximately 200 minutes.

1. With the battery in position on the phone, plug the connector of the travel adapter into the jack at the bottom of the phone.

2. Plug the adapter into a standard AC wall outlet.
3. When charging is finished, unplug the adapter from the power outlet and disconnect it from the phone by pressing the buttons on both sides of the connector and pulling the connector out.


Note: You must unplug the adapter before removing the battery from the phone during charging; otherwise, the phone could be damaged.

## Low battery indicator

When the battery is weak and only a few minutes of talk time remain, a warning tone sounds and a message repeats at regular intervals on the display. In this case, your phone turns off the backlight to conserve the remaining battery power.

The battery sensor informs you in the following ways:

- An empty battery icon flashes
- You hear a warning tone.

When the battery becomes too weak for the phone operate, it switches off automatically.

## Switching the phone on or off

1. Open the phone
2. Press and hold the key until the phone switches on.
3. If the phone asks you to enter a password, enter a password and press the OK soft key or the $\boldsymbol{i}$ key. The password is preset to " 00000000 " at the factory. For further details, see page 150.
4. If the phone asks for a PIN, enter the PIN and press the OK soft key or the $\boldsymbol{i}$ key. For further details, see page 150.

The phone searches for your network and, after finding it, the idle screen appears on the display. Now, you can make or receive calls.
Note: To change the language, use the
Language menu (Menu 9.4). For further details, see page 141.
5. When you wish to switch the phone off, press and hold the key until the power-off image displays.

## Call functions

## Making a call

When the idle screen displays, enter the area code and phone number, then press the $\gamma$ key.

Note: When you activate the Auto redial option in the Extra settings menu (Menu 9.6), the phone will automatically redial up to 10 times when the person does not answer the call or is already on the phone. See page 145 for further details.

## Making an international call

1. Press and hold the $\mathbf{0}$ key.

The + character appears.
2. Enter the country code, area code, and phone number and press the $\downarrow$ key.

## Correcting the number

| To clear | Press the |
| :--- | :--- |
| the last digit <br> displayed | C key. |
| any other digit in <br> the number | Left or Right key until the <br> cursor is immediately to the <br> right of the digit to be cleared. <br> Press the C key. |
| the whole display | C key and hold it for more <br> than one second. |

## Ending a call

When you want to end your call, briefly press the $\sigma$ key or close the phone.

## Redialling the last number

The phone stores the numbers of the calls you've dialled, received, or missed, if the call recipient or caller is identified. See "Call records" on page 55 for further details.

To recall any of these numbers:

1. If you have typed characters on the display, press the $\sigma$ key to return to Idle mode.
2. Press the $\$ key to display a list of the most recent numbers used, in the order you dialled or received them.
3. Use the Up and Down keys to scroll through the numbers until the number you want highlights.
4. | To | Press the |
| :--- | :--- |
| dial the number | रey. |
| edit the number | Options soft key or the <br> $\boldsymbol{i}$ key and select Edit. <br> Change the number, <br> referring to "Correcting <br> the number" on page 22. |
| delete the number | Options soft key or the <br> $\boldsymbol{i}$ key and select Delete. |
| delete all of the <br> numbers on the <br> Call log list | Options soft key or the <br> $\boldsymbol{i}$ key and select Delete <br> all. For details, see <br> page 57. |

## Making a call from Phonebook

You can store phone numbers that you use regularly in the SIM card or in the phone's memory, which are collectively called Phonebook.
Once you have stored numbers in Phonebook, you can dial a number by pressing a few keys or assign your most frequently-used numbers to number keys using the Speed Dial feature.

For further details about the Phonebook feature, see page 126 .

## Adjusting the volume

During a call, if you want to adjust the earpiece volume, use the Volume keys on the left side of the phone.

Press the $\boldsymbol{\Delta}$ key to increase the volume level and the $\boldsymbol{\nabla}$ key to decrease the level.


In Idle mode, you can also adjust the keypad tone volume using these keys.

## Answering a call

When somebody calls you, the phone rings and displays the incoming call image.

The caller's phone number or name, if stored in Phonebook, displays.

1. If necessary, open the phone. Press the $\boldsymbol{\gamma}$ key or the Accept soft key to answer the incoming call.

When the Anykey answer option in the Extra settings menu (Menu 9.6) is activated, you can press any key to answer a call except for the $\sqrt{\sigma}$ key and the Reject soft key. See page 145.

When the Active folder option in the Extra settings menu (Menu 9.6) is activated, you can answer the call simply by opening the phone. See page 145.

Note: To reject the call, press and hold one of the Volume keys before opening the phone, or press the Reject soft key or the $\widetilde{\sigma}$ key.
2. End the call by closing the phone or pressing the $\sigma$ key.
Note: You can answer a call while using Phonebook or menu features. After ending the call, the display returns to the function screen you were using.

## Viewing missed calls

When you are unable to answer a call for any reason, you can find out who called you so that you can call the person back.

The number of calls you've missed displays on the idle screen immediately after a call is missed.
To view a missed call immediately:

1. If the phone is closed, open the phone.
2. Press the View soft key or the $\boldsymbol{i}$ key.

The number for the most recent missed call displays, if available.

| 3. To | Press the |
| :--- | :--- |
| scroll through the <br> missed calls | Up or Down key. |
| call the number <br> displayed | key. |
| edit or delete a missed <br> call number | Select soft key or the $\boldsymbol{i}$ <br> key. See below. |

## Editing a missed call number

Note: When the number for the missed call is not available, the Edit option does not display.

1. Press the Options soft key or the $\boldsymbol{i}$ key.
2. Press the Up or Down key to highlight the Edit option.
3. Press the Select soft key or the $\boldsymbol{i}$ key.
4. Change the number.
5. | To | Press the |
| :--- | :--- |
| call the number | 凤 key. |
| store the number | Save soft key or the $\boldsymbol{i}$ <br> key and enter a name and <br> location. For further <br> details, see page 128. |

## Deleting a missed call

1. Press the Options soft key or the $\boldsymbol{i}$ key.
2. If necessary, press the Up or Down key to highlight the Delete option.
3. Press the Select soft key or the $\boldsymbol{i}$ key.

You can press the $\sigma$ key at any time to exit the Missed Call feature.

Note: You can access the Missed Call feature at any time by selecting the Missed calls menu (Menu 2.1). For further details, see page 55.

## Quickly switching to Silent mode

Silent mode is convenient when you wish to stop the phone from making noise, in a theatre for example.

In Idle mode, press and hold the \# key until the "Silent mode" message and the Vibration icon ( $\mid x$ ) display.

In Silent mode, instead of sounds, your phone will vibrate, flash its light, or do nothing, depending on the function and the situation.
To exit and reactivate the previous sound settings, press and hold the \# key again until "Exit silent mode" appears. The Vibration icon ( $1 \mathbf{x}$ ) no longer displays.

## Notes:

- When you turn off the phone, Silent mode is automatically deactivated.
- Activating Silent mode will not turn off the camera shutter sound.


## Selecting functions and options

Your phone offers a set of functions that allow you to customise it. These functions are arranged in menus and sub-menus, accessed using the two soft keys, $\vdots$ and $\AA$. Each menu and sub-menu allows you to view and alter the settings of a particular function.

## Using the soft keys

The roles of the soft keys vary depending on the function you are currently using; the labels on the bottom line of the display just above each key indicate their current role.

Example:


Press the left soft key to access Menu mode.

Press the right soft key to access the Phonebook feature.

In each main menu, one of the most popular submenus is assigned to the left soft key for example, if you select the Sound settings menu, Ringtone is assigned to the left soft key. This allows you to quickly access the most popular menus.

## Selecting options

To view the various functions and options available and to select the one you want:

1. Press the appropriate soft key.

| To | Press the |
| :---: | :---: |
| select the: <br> - function displayed <br> - option highlighted | Select soft key or the i key. |
| view the next function or highlight the next option on a list | Down key. |
| move back to the previous function or option on a list | Up key. |
| move back up one level in the menu structure | C key or the $\mathbf{S}$ soft key. |
| exit the menu structure without changing the settings | $\sigma$ key. |

In some functions, you may be asked for a password or PIN. Enter the code and press the OK soft key or the $\boldsymbol{i}$ key.

Note: When you access a list of options, your phone highlights the currently active option. If, however, there are only two options, such as On/Off or Enable/Disable, your phone highlights the option that is not currently active, so that you can select it directly.

## Changing the font size

You can change the font size of the menu
After accessing a main menu screen, press one of the Volume keys one or more times until the font changes to the size you want.

## Entering text

When using your phone, you will often need to enter text, such as when storing a name in Phonebook, creating your personal greeting or scheduling events on your calendar. You can enter alphanumeric characters by using your phone's keypad.
Your phone has the following text input modes:

- T9 mode

This mode allows you to enter words with only one keystroke per letter. Each key on the keypad has more than one letter; for example, pressing the $\mathbf{5}$ key can enter J, K, or L. However, T9 mode automatically compares the series of keystrokes you make with an internal linguistic dictionary to determine the most likely word, thus requiring far fewer keystrokes than the traditional Alphabet mode.

- Alphabet mode

This mode allows you to enter letters by pressing the key labelled with the letter you want. Press the key once, twice, three, or four times until it displays.

- Number mode

This mode allows you to enter numbers.

- Symbol mode

This mode allows you to enter various symbols and punctuation marks.

## Changing the text input mode

When you are in a field that allows characters to be entered, you will notice the text input mode indicator on the display.

Example: Writing a text message


| To select | Press the right soft key <br> until |
| :--- | :--- |
| T9 mode | T9 displays. See page 34. |
| Alphabet mode | A displays. See page 35. |
| Number mode | 1 displays. See page 37. |
| Symbol mode | the symbol list displays. <br> See page 37. |

Note: Additional text input mode may be available, depending on your country. To use a text input mode for your specific country, press and hold the * key in Alphabet mode.

## Using T9 mode

T9 is a predictive text input mode that allows you to key in any character using single keystrokes. This text input mode is based on a built-in dictionary.

To enter a word in T9 mode:

1. When you are in T9 mode, start entering a word by pressing the keys $\mathbf{2}$ to $\mathbf{9}$. Press each key only once for each letter.

Example: To enter "Hello" in T9 mode, press the 4, 3, 5, 5, and $\mathbf{6}$ keys.

The word that you are typing appears on the display. It may change with each key that you press.
2. Enter the whole word before editing or deleting the keystrokes.
3. When the word displays correctly, go to step 4.

If the word doesn't display correctly, press the $\mathbf{0}$ key or the Up or Down key repeatedly to display alternative word choices for the keys that you have pressed.

Example: Both "Of" and "Me" use the 6 and $\mathbf{3}$ keys. The phone displays the most commonly used choice first.
4. Insert a space by pressing the \# key and start entering the next word.

To add a new word into the T9 dictionary:

1. After pressing the keys corresponding to the word you want to add, press the $\mathbf{0}$ key or the Down key to display the alternative words.
2. When you press the $\mathbf{0}$ key or the Down key at the last alternative word, the display shows Add on the bottom line. Press the Add soft key.
3. If necessary, clear the word using the $\mathbf{C}$ key and enter the word you want to add using Alphabet mode. See page 35.
4. Press the OK soft key or the ikey.

The word is added to the T9 dictionary and becomes the first word for the associated keypress series.

Note: This feature may not be available for some languages.

- To enter periods, hyphens, or apostrophes, press the $\mathbf{1}$ key. T9 mode applies grammar rules to ensure that correct punctuation is used.
- To shift case in T9 mode, use the * key. There are 3 cases; Capital lock ( $\mathbf{A B}$ ), Lower case ( $\mathbf{a b}$ ), and Initial capital ( $\mathbf{A b}$ ).
- You can move the cursor by using the Left and Right keys. To delete letters, press the C key. Press and hold the $\mathbf{C}$ key to clear the display.


## Using Alphabet mode

## Use the $\mathbf{1}$ to $\mathbf{0}$ keys to enter your text.

1. Press the keys labelled with the letter you want:

- Once for the first letter
- Twice for the second letter
- And so on

2. Select the other letters in the same way.

Note: The cursor moves to the right when you press a different key. When entering the same letter twice or a different letter on the same key, just wait for a few seconds for the cursor to move to the right automatically, and then select the next letter.

Refer to the table below for further details about available characters:

| Key | Characters in the order displayed |  |
| :---: | :---: | :---: |
|  | Upper case | Lower case |
| 1 | . , - ? ! @ : |  |
| 2 | A B C 2 Ä Å ¢ Ç Г | a b c 2 à ä å $æ \Gamma$ |
| 3 | D EF 3 É $\triangle$ ¢ | d e f 3 è é $\Phi$ |
| 4 | G H I $4 \Theta \Psi$ | gh i 4 ì $\Psi$ |
| 5 | JKL5 | j k \| $5 \Lambda$ |
| 6 | M N O 6 Ñ $\varnothing$ Ö | m n o 6 ñ ø ò ö |
| 7 | P Q R S $7 \Pi \Sigma \Xi$ | pqrs 7 ß $\Sigma \Xi$ |
| 8 | T U V 8 Ü ü | $\mathrm{t} u$ v 8 ù ü |
| 9 | W X Y Z $9 \Omega$ | wxyz $9 \Omega$ |
| 0 | Space $+=<>€ £ \$ \%$ \& ${ }^{\text {¢ }}$ ¢ 0 |  |

Note: The characters available in Alphabet mode may be different, depending on the selected language.

- To insert a space, press the \# key.
- To shift case in Alphabet mode, use the * key. There are three cases; Capital lock ( $\mathbf{A B}$ ), Lower case ( $\mathbf{a b}$ ), and Initial capital ( $\mathbf{A b}$ ).
- You can move the cursor by using the Left and Right keys. To delete letters, press the $\mathbf{C}$ key. Press and hold the $\mathbf{C}$ key to clear the display.

Note: To enter or exit an additional input mode for your specific country, press and hold the * key.

## Using Number mode

Number mode enables you to enter numbers into a text message. Press the keys corresponding to the digits you want to enter.

## Using Symbol mode

Symbol mode enables you to insert symbols into a text message.

| To | Press the |
| :--- | :--- |
| select a symbol | corresponding numeric <br> key. |
| display more symbols | Up or Down key. |
| insert the symbol(s) <br> into your message | OK soft key or the $\boldsymbol{i}$ key. |
| clear the symbol(s) | C key. When the input <br> field is empty, this key <br> exits Symbol mode. |

## Options during a call

Your phone provides a number of control functions that you can use during a call.

## Putting a call on hold

You can place the current call on hold whenever you want. You can make another call while you have a call in progress if your network supports this service.

To place a call on hold, simply press the Hold soft key. You can reactivate the call whenever you want, by pressing the Unhold soft key.
To make a call while you have a call in progress:

1. Enter the phone number that you wish to dial or look it up in Phonebook.

For details about searching for a number in Phonebook, see page 126.
2. Press the key to dial the second call.

The first call is automatically put on hold.
Or,

1. Put the current call on hold by pressing the Hold soft key.
2. Make the second call in the normal way

When you have an active call and a call on hold, you may switch between the two calls, changing the one on hold to active and placing the other on hold.

To switch between the two calls, simply press the Swap soft key.
The current call is placed on hold and the call on hold is reactivated so that you can continue conversing with that person.

When you want to finish, end each call normally by pressing the key.

## Using the menu functions

You can access the main menu functions during a call.

1. Press the Options soft key or the $\boldsymbol{i}$ key.
2. Press the $\mathbf{O K}$ soft key or the $\boldsymbol{i}$ key when the Menu option highlights.
3. Press the Navigation keys to scroll through the menu list.

Note: You cannot use some menus during a call. They are deactivated on this list.

For further details about available menu functions, see the list on page 48.

## Switching the microphone off (Mute)

You can temporarily switch your phone's microphone off so that the other person on the phone cannot hear you.

Example: You wish to say something to a person in the room, but do not want the person on the phone to hear you.

To switch the microphone off temporarily:

1. Press the Options soft key or the key
2. Press the Down key to highlight the Mute option.
3. Press the OK soft key or the $\mathbf{i}$ key.

The other person can no longer hear you.
To switch the microphone back on:

1. Press the Options soft key or the $i$ key.
2. If necessary, press the Down key to highlight the Unmute option.
3. Press the OK soft key or the $\mathbf{i}$ key.

The other person can hear you again.

## Muting or sending key tones

These options allow you to turn the key tones off or on. If the Mute keys option is selected, your phone does not transmit the DTMF (Dual Tone MultiFrequency) tones of the keys, which allows you to press keys without hearing annoying key tones during a call.

Note: To communicate with answering machines or computerised telephone systems, the Send keys option must be selected.

## Sending a sequence of DTMF tones

You can send the DTMF tones as a group after entering the entire number you need to send

This option is helpful for entering a password or an account number when you call an automated system, like a banking service.
To send the DTMF tones:

1. While connected to the teleservice system, press the Options soft key or the $\boldsymbol{i}$ key.
2. Press the Down key to highlight the Send DTMF option.
3. Press the OK soft key or the $\boldsymbol{i}$ key.
4. Enter the number you want to send and press the OK soft key or the $\boldsymbol{i}$ key.

The tones are sent

## Searching for a number in Phonebook

You can search for a number in Phonebook during a call.

1. Press the Options soft key or the $i$ key.
2. Press the Down key to highlight the Phonebook option
3. Press the $\mathbf{O K}$ soft key or the $\boldsymbol{i}$ key.

The Phonebook entries are listed.
4. Enter the name that you wish to find.

If you enter the first few letters of the name, the Phonebook entries are listed, starting with the first entry matching your input.
5. To view the highlighted entry, press the View soft key or the i key.

For further details about the Phonebook feature, see page 126 .

## Call waiting

You can answer an incoming call while you have a call in progress, if your network supports this service and you have set the Call waiting menu (Menu 3.3) to Activate; see page 64. You are notified of an incoming call by a call waiting tone

To answer a call while you have a call in progress

1. Press the $\lambda$ key to answer the incoming call. The first call is automatically put on hold.
2. To switch between the two calls, press the Swap soft key.
3. To end the call on hold, press the Options soft key or the $i$ key and select the End held call option.

To end the current call, press the (0) key

## Making a multi-party call

A multi-party call is a network service that allows up to 6 people to take part simultaneously in a multi-party or conference call. For further details about subscribing to this service, contact your service provider

## Setting up a multi-party call

1. Call the first participant in the normal way.
2. Call the second participant in the normal way. The first call is automatically put on hold.
3. To join the first participant to the multi-party call, press the Options soft key or the $\boldsymbol{i}$ key and select the Join option. Press the OK soft key or the $\boldsymbol{i}$ key.
4. To add a new person to the multi-party call, call the new person in the normal way and press the Options soft key or the $\boldsymbol{i}$ key. Select the Join option and press the OK soft key or the $\boldsymbol{i}$ key.

You can add incoming callers by answering the call, pressing the Options soft key or the $\boldsymbol{i}$ key, and selecting the Join option. Repeat as required.

## Having a private conversation with one participant

1. Press the Options soft key or the $\boldsymbol{i}$ key and select the Select one option. Press the OK soft key or the $\mathbf{i}$ key.
The list of call participants appears.
2. Highlight a person from the list by pressing the Up or Down key and press the $\$ key.
3. When the Private option highlights, press the OK soft key or the $\boldsymbol{i}$ key.

Now you can talk privately to that person. The other participants can still converse with each other.
4. To return to the multi-party call, press the

Options soft key or the $\boldsymbol{i}$ key and select the Join option. Press the OK soft key or the $\boldsymbol{i}$ key.

All the multi-party call participants can now hear each other.

## Dropping one participant

1. Press the Options soft key or the $\boldsymbol{i}$ key and select the Select one option. Press the OK soft key or the $\mathbf{i}$ key.
The list of call participants appears.
2. Highlight a person from the list by pressing the Up or Down key and press the $\gamma$ key.
3. Press the Down key to select the Remove option and press the OK soft key or the $\boldsymbol{i}$ key.

The call with that participant ends, but you can continue to talk to the others.
4. When you want to end the multi-party call, close the phone or press the key.

## Using the menus

The phone offers a range of functions that allow you to tailor it to your needs. These functions are arranged in menus and sub-menus.
The menus and sub-menus can be accessed by scrolling using the Navigation keys or by using the shortcuts.

## Accessing a menu function by scrolling

1. In Idle mode, press the Menu soft key to access Menu mode.
2. Scroll using the Navigation keys to reach a main menu, Phone settings for example. Press the $i$ key to enter the menu.
3. If the menu contains sub-menus, Language for example, you can access them by scrolling using the Up or Down key and pressing the Select soft key or the $\mathbf{i}$ key.

If the menu that you have selected contains further options, repeat this step.

| 4. To | Press the |
| :--- | :--- |
| scroll through the <br> menus | Up or Down key, or use <br> the Volume keys. |
| confirm the chosen <br> setting | Select soft key or the $\boldsymbol{i}$ <br> key. |
| return to the previous <br> menu level | C key or the $\mathbf{S}$ soft key. |
| exit the menu without <br> changing the settings | $\boldsymbol{\sigma}$ key. |

## Using shortcuts

The menu items, such as menus, sub-menus and options, are numbered and can be accessed quickly by using their shortcut numbers. For the main menus, you can access any one of them by pressing the number keys ( $\mathbf{1}$ to $\mathbf{9}$ ) corresponding to their location on the screen.

Press the Menu soft key and enter the number of the menu you want.
Note: The numbers assigned to each menu are indicated on the list on page 48 . They may not match the menu number on the phone, depending on the services supported by your SIM card.

Example: Accessing the Language menu.

1. Press the Menu soft key.
2. Press the $\mathbf{9}$ key for Phone settings.
3. Press the $\mathbf{4}$ key for Language.

The languages available display.

## List of menu functions

The following list shows the menu structure and indicates the number assigned to each option and the page where you can find a description of each feature.

Note: If you use a SIM AT card that provides additional services, the SIM AT menu displays when you press the Menu soft key to enter Menu mode. For further details, see your SIM card instructions.

## 1. SIM AT

2. Call records (see page 55)
2.1 Missed calls
2.2 Received calls
2.3 Dialled calls
2.4 Delete all
2.5 Call time
2.5.1 Last call time
2.5.2 Total sent
2.5.3 Total received
2.5.4 Reset timers
2.6 Call costs
2.6.1 Last call cost
2.6.2 Total cost
2.6.3 Max cost
2.6.4 Reset counters
2.6.5 Set max cost
2.6.6 Price/unit
3. Network services (see page 60)
3.1 Call diverting
3.1.1 Divert always
3.1.2 Busy
3.1.3 No reply
3.1.4 Unreachable
3.1.5 Cancel all
3.2 Call barring
3.2.1 All outgoing
3.2.2 International
3.2.3 International except to home
3.2.4 All incoming
3.2.5 Incoming while abroad
3.2.6 Cancel all
3.2.7 Change barring password
3.3 Call waiting
3.4 Network selection
3.4.1 Automatic
3.4.2 Manual
3.5 Caller ID
3.5.1 Default
3.5.2 Hide number
3.5.3 Send number
3.6 Closed user group
3.6.1 Index list
3.6.2 Outside access
3.6.3 Default group
3.6.4 Deactivate
3.7 Band selection
4. Sound settings (see page 69)
4.1 Ring tone
4.2 Ring volume
4.3 Alert type
4.4 Keypad tone
4.5 Message tone
4.5.1 SMS tone
4.5.2 SMS-CB tone
4.5.3 MMS tone 4.5.4 Repetition
4.6 Folder tone
4.7 Power on/off
4.8 Alert on call
4.9 Extra tones
5. Messages (see page 74)
5.1 Text messages
5.1.1 Create
5.1.2 Inbox
5.1.3 Outbox
5.1.4 Templates
5.1.5 Emoticon Template
5.1.6 Settings
5.2 Multimedia messages
5.2.1 Create
5.2.2 Inbox
5.2.3 Outbox
5.2.4 Draft
5.2.5 Templates
5.2.6 Settings
5.2.7 MMS profile
5.3 Push messages
5.3.1 Inbox
5.3.2 Receive
5.3.3 Delete all
5.4 Delete all
5.4.1 Text messages
5.4.2 Multimedia messages
6. Messages (continued)
5.5 Voice mail
5.5.1 Connect to voice server 5.5.2 Voice server number
5.6 Broadcast messages
5.6.1 Read
5.6.2 Receive
5.6.3 Channel list
5.6.4 Language
5.7 Memory status
5.7.1 Text messages
5.7.2 Multimedia messages
7. Funbox (see page 99)
6.1 WAP browser
6.1.1 Home
6.1.2 Bookmarks
6.1.3 http://
6.1.4 WAP profiles
6.1.5 Clear cache
6.2 Games
6.3 Sounds
6.4 Images
6.5 Delete all
6.6 Memory status
6.6.1 Games
6.6.2 Sounds \& images
6.7 Melody composer
6.7.1 Compose melody
6.7.2 Memory status
8. Organiser (see page 114)
7.1 Alarm
7.1.1 Once
7.1.2 Daily
7.1.3 Morning call
7.1.4 Remove alarm
7.1.5 Autopower
7.2 Calendar
7.3 Time \& date
7.3.1 Set time
7.3.2 Set date
7.3.3 World time
7.3.4 Time format
7.4 Calculator
7.5 To do list
7.6 Record voice
7.6.1 Record voice
7.6.2 Voice list
7.6.3 Delete all
7.6.4 Memory status
7.7 Currency exchange
9. Phonebook (see page 126)
8.1 Search
8.2 Add entry
8.3 Group search
8.4 Group edit
8.5 Speed dial list
8.6 Delete all
8.7 Memory status
8.8 SDN
10. Phone settings (see page 138)
9.1 Display settings
9.1.1 Wallpaper
9.1.2 Menu style
9.1.3 Back light
9.1.4 Contrast
9.1.5 Service light
9.1.6 Graphic logo
9.2 Greeting message
9.3 Own number
9.4 Language
9.5 Security
9.5.1 PIN check
9.5.2 Change PIN
9.5.3 Phone lock
9.5.4 Change password
9.5.5 Privacy
9.5.6 SIM lock
9.5.7 FDN mode
9.5.8 Change PIN2 *
9.6 Extra settings
9.7 Short cut
9.8 Reset settings

## SIM AT

If you use a SIM AT card that provides additional services, the SIM AT menu displays. For further details, see your SIM card instructions.

Shown only if it is supported by your SIM card.

## Call records

In this menu, you can view the:

- calls you have missed, received, or dialled.
- length of your calls.
- cost of your calls, if the SIM card supports it.


## Notes:

- You can access phone numbers in the three types of call records by pressing the $\boldsymbol{\gamma}$ key in Idle mode.
- The number of call records the phone can store may be different, depending on your SIM card.


## Missed calls

(Menu 2.1)
This menu lets you view the numbers of the calls you have received, but did not answer.

The number or name, if available, displays together with the time and date the call was received.

To dial the number, press the $\backslash$ key.
By pressing the Options soft key or the $\boldsymbol{i}$ key, you can access the following options:

Edit: allows you to edit the number, if available, and dial it or save it in Phonebook.

Delete: deletes the call from the list.

## Received calls

 (Menu 2.2)This menu lets you view the numbers of the calls you have received.

The number or name, if available, displays together with the time and date the call was received.

To dial the number, press the $\backslash$ key.
By pressing the Options soft key or the $\boldsymbol{i}$ key, you can access the following options:

Edit: allows you to edit the number, if available, and dial it or save it in Phonebook.

Delete: deletes the call from the list.

## Dialled calls (Menu 2.3)

This menu lets you view the numbers you dialled.
The number or name, if available, displays together with the time and date the call was made

To dial the number, press the $\backslash$ key.
By pressing the Options soft key or the $\mathbf{i}$ key, you can access the following options:

Edit: allows you to edit the number, if available, and dial it or save it in Phonebook.

Delete: deletes the call from the list.

## Delete all (Мепи 2.4)

This menu allows you to delete all of the records in each call record. You can also delete all of your call records at one time.

| 1. To | Press the |
| :--- | :--- |
| select a call record <br> to clear | Up or Down key. To <br> delete all of your call <br> records, select All calls. |
| place or remove a <br> check mark | i key. |

2. Press the Delete soft key to delete the marked records.
3. When a confirmation message displays, press the Yes soft key or the $\boldsymbol{i}$ key to confirm.
4. When the phone asks for confirmation again, press the Yes soft key or the $\boldsymbol{i}$ key.

## Call time (Menu 2.5)

This menu lets you view the timers for calls you made and received.

Note: The actual time invoiced by your service provider may vary, depending on network features, rounding-off for billing purposes, and other factors.

The following timers are available:
Last call time: length of the last call.
Total sent: total length of all calls you have made since the timer was last reset.

Total received: total length of all calls you have received since the timer was last reset.

Reset timers: allows you to reset the call timers. You must first enter the phone password and then press the $\mathbf{O K}$ soft key or the $\mathbf{i}$ key.

Note: The password is preset to " 00000000 " at the factory. To change this password, see page 150.

Call costs (Menu 2.6)
This network feature lets you view the cost of calls. This menu may not be available depending on your SIM card.

The following options are available:
Last call cost: shows the cost of the last call you made.

Total cost: shows the total cost of all calls you have made since the cost counter was last reset. If the total cost exceeds the maximum cost set in the Set max cost option, you can no longer make any calls until you reset the counter.

Max cost: shows the maximum cost set in the Set max cost option.
Reset counters: allows you to reset the cost counter. You must first enter your PIN2 (see page 152) and then press the OK soft key or the $\boldsymbol{i}$ key.

Set max cost: allows you to enter the maximum cost that you authorise for your calls. You must first enter your PIN2 (see page 152) and then press the OK soft key or the $\boldsymbol{i}$ key.

Price/unit: allows you to set the cost of one unit; this price per unit is applied when calculating the cost of your calls. You must first enter your PIN2 (see page 152) and then press the OK soft key or the $\boldsymbol{i}$ key.

## Network services

These menu functions are network services. Please contact your service provider to check their availability and subscribe to them, if you wish.

## Call diverting (Мепи 3.1)

This network service enables incoming calls to be rerouted to a number that you specify.
Example: You may wish to divert your business calls to a colleague while you are on holiday.

To set your call diverting options:

1. Select a call diverting option by pressing the Up or Down key, and then press the Select soft key or the $\boldsymbol{i}$ key.

The following options are available:

- Divert always: all calls are diverted.
- Busy: calls are diverted when you are already on another call.
- No reply: calls are diverted when you do not answer the phone.
- Unreachable: calls are diverted when you are not in an area covered by your service provider or when your phone is switched off
- Cancel all: all call diverting options are cancelled.

2. Select the type of calls, voice or data, by pressing the Up or Down key, and then press the Select soft key or the ikey.

The current status displays. If the option has already been set, the number to which the calls are diverted displays.

| 3. To | Press the |
| :--- | :--- |
| activate call <br> diverting | Activate soft key or the <br> $\boldsymbol{i}$ key. Go to step 4. |
| change the number <br> to be called | Options soft key or the <br> $\boldsymbol{i}$ key and then select <br> Change. Go to step 4. |
| deactivate call <br> diverting | Options soft key or the <br> $\boldsymbol{i}$ key and then select <br> Remove. |

4. Enter the number to which the calls are to be diverted and press the OK soft key or the ikey.

To enter an international code, press the $\mathbf{0}$ key until the + sign displays.
5. If you selected No reply in step 1 , select the length of time the network waits before diverting a call and press the Select soft key or the $\boldsymbol{i}$ key.

The phone sends your settings to the network and the network's acknowledgement displays.

## Call barring (Menu 3.2)

The call barring network service allows you to restrict your calls.

To set your call barring options:

1. Select a call barring option by pressing the Up or Down key, and then press the Select soft key or the $\boldsymbol{i}$ key.
The following options are available:

- All outgoing: calls cannot be made.
- International: international calls cannot be made.
- International except to home: 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.
- All incoming: calls cannot be received.
- Incoming while abroad: calls cannot be received when you are using your phone outside of your home service area.
- Cancel all: all call barring settings are deactivated; calls can be made and received normally.
- Change barring password: you can set and change the call barring password obtained from your service provider.

2. Select the type of calls, voice or data, by pressing the Up or Down key, and then press the Select soft key or the $\boldsymbol{i}$ key.
3. Press the Activate soft key or the $\boldsymbol{i}$ key to confirm your settings.
4. Enter your call barring password supplied by your service provider.
The phone sends your settings to the network and the network's acknowledgement displays.

To deactivate specific call barring settings:

1. Select the call barring option to be deactivated.
2. Select the type of calls to which this option applies.
3. Press the Deactivate soft key or the $\boldsymbol{i}$ key.
4. Enter your call barring password supplied by your service provider.

The phone sends your settings to the network and the network's acknowledgement displays.

## Call waiting (Menu 3.3)

This network service informs you when someone is trying to reach you during another call.

You can specify individual call waiting options for voice calls and/or data calls:

To set your call waiting options:

1. Select the type of calls, voice, or data, to which you want to apply the call waiting option by pressing the Up or Down key, and then press the Select soft key or the $\boldsymbol{i}$ key.

The screen informs you whether call waiting is activated or deactivated.
2. You can activate or deactivate the Call Waiting feature as necessary by using the Activate or Deactivate soft key respectively.

To return to the previous screen, press the Exit soft key.

You can also deactivate all call waiting settings by selecting the Cancel all option.

## Network selection (Menu 3.4)

The Network Selection feature enables you to automatically or manually select the network used when roaming outside of your home area.

Note: You can select a network other than your home network only if there is a valid roaming agreement between the two.

To automatically or manually select the network to be used when roaming:

1. Press the Up or Down key until the appropriate option highlights and then press the OK soft key or the $i$ key.

If you select Automatic, you are connected to the first available network when roaming.

If you select Manual, go to step 2.
2. Press the Up or Down key until the network you want highlights and then press the OK soft key or the $\boldsymbol{i}$ key.

The phone will scan for that network and you will be connected.

## Caller ID

 (Menu 3.5)You can prevent your phone number from being displayed on the phone of the person being called.

Note: Some networks do not allow the user to change this setting.

The following options are available:
Default: the default setting provided by the network is used.

Hide number: your number does not display on the other person's phone.

Send number: your number is sent each time you make a call.

## Closed user group (Menu 3.6)

This network service allows incoming and outgoing calls to be restricted to a selected user group. You can create up to 10 user groups.

For details about how to create and use a closed user group, contact your service provider.

Example: A company lends SIM cards to its employees and wants to restrict outgoing calls to members of the same team.

If you select the Closed user group menu, you can enter the CUG function. You can access the following options:

Index list: lets you list, add, or delete CUG index numbers.

If there is no CUG index stored, you are prompted to add a new index when you select this option. Once you have added a CUG index, the list of current CUG indexes appears.
Add a new CUG index as advised by your service provider, or delete a group.

| To | Press the |
| :--- | :--- |
| scroll through <br> existing CUG <br> indexes | Up or Down key. |
| add a new CUG <br> index | Options soft key or the $\boldsymbol{i}$ <br> key, select the Add option <br> and enter the index. |
| delete a CUG <br> index | Options soft key or the $\boldsymbol{i}$ key <br> and select the Delete option. |
| activate a CUG <br> index | Options soft key or the $\boldsymbol{i}$ key <br> and select the Activate <br> option. |

Outside access: lets you enable or disable calls to numbers other than those in the Closed user group. This feature depends on the nature of your CUG subscription. Please check with your service provider.

Default group: you may set a default CUG with your service provider. If you have done so, you can enable the Default group option on your phone. When making a call, you are given the option of using your default CUG, instead of selecting one from the list.

Deactivate: deactivates the CUG function. This menu appears only when the default group is enabled or a CUG index is selected.

## Band selection (Menu 3.7)

For the phone to make and receive phone calls, it must register with an available network. Your phone can handle any of the following types of networks:

- Combined GSM 900/1800
- GSM 1900

The country where you purchased your phone determines the default band that it uses. When you travel abroad, you must remember to change to an appropriate band.

1. Press the Up or Down key until the appropriate option highlights and select the OK soft key or i key.
2. When the display confirms the network band you selected, select the Yes soft key.

To cancel the selection, select the No soft key.
When you select a new band, your phone displays a confirmation message and then automatically searches for all of available networks. Your phone registers with a preferred network within the band.

## Sound settings

You can use the Sound Settings feature to customise various settings, such as the:

- ring melody, volume, and type.
- sounds made when you press a key, receive a message, open/close the phone or switch your phone on or off.
- alert tone made every minute during a call, when you make an error, or when your call is connected to the system

Note: When the phone is in Silent mode (see page 28), you cannot change the sound settings.

## Ring tone (Menu 4.1)

This menu allows you to select a ring melody.
You can select between many different melodies. If you have downloaded sounds from the Internet or the optional Easystudio programme, you can use them in this menu.

## Ring volume (Menu 4.2)

This menu allows you to adjust the ring volume to one of 5 levels.

Use the Up and Down keys or the Volume keys on the left side of the phone to increase or decrease the volume.

## Alert type (Menu 4.3)

This menu allows you to specify how you are to be informed of incoming calls.

The following options are available:
Light only: the service light flashes; the phone neither rings nor vibrates.

Melody: the phone rings using the selected ring tone.

Vibration: the phone vibrates but does not ring.
Vibra+melody: the phone first vibrates three times and then starts ringing.

## Keypad tone (Мепи 4.4)

This menu allows you to select a tone which sounds when you press a key.

To turn off the sound, select Off.

## Message tone (Мепи 4.5)

This menu allows you to select how the phone informs you that a new message has been received.

## SMS tone (Menu 4.5.1)

The following options are available for alerting you to new SMS messages:

Off: the phone does not use an SMS tone.

Light only: the service light flashes.
Vibration: the phone vibrates.
Single beep: the phone beeps once.
SMS tone x: the phone uses one of several SMS tones.

## SMS-CB tone (Menu 4.5.2)

The following options are available for alerting you to new cell broadcast (CB) messages:

Off: the phone does not use a CB tone.
Light only: the service light flashes.
Vibration: the phone vibrates.
Single beep: the phone beeps once.
SMS-CB tone $\mathbf{x}$ : the phone uses one of several CB tones.

MMS tone (Menu 4.5.3)
The following options are available for alerting you to new MMS messages:

Off: the phone does not use an MMS tone.
Light only: the service light flashes.
Vibration: the phone vibrates.
Single beep: the phone beeps once.
MMS tone $\mathbf{x}$ : the phone uses one of several MMS tones.

Repetition (Menu 4.5.4)

This menu allows you to specify how often the phone informs you of a new message. The following options are available:

Once: the phone alerts you to a new message just once at the time of receipt.
Periodic: the phone alerts you to a new message every 2 minutes until you open the message.

## Folder tone (Menu 4.6)

This menu allows you to select the tone that the phone sounds when you open or close the phone.
To turn off the sound, select Off.

## Power on/off (Menu 4.7)

This menu allows you to select the melody that the phone sounds when it is switched on or off.

To turn off the sound, select Off.

## Alert on call (Menu 4.8)

This menu allows you to select whether or not the phone informs you when you receive a new message or when the time for an alarm comes during a call.
The following options are available:
Off: the phone doesn't alert you to incoming messages or alarms. It only displays the corresponding notification.

On: the phone alerts you with a beep and displays the corresponding notification

Extra tones (Menu 4.9)
You can customise additional tones for the phone.

| To turn a given <br> tone | Press the |
| :--- | :--- |
| on | Mark soft key or the $\boldsymbol{i}$ key. <br> A check mark displays in front <br> of the option. |
| off | Unmark soft key or the $\boldsymbol{i}$ key. <br> The check mark no longer <br> displays. |

The following options are available:
Error tone: sets whether or not the phone informs you when you make a mistake.

Minute minder: sets whether or not the phone beeps every minute during an outgoing call to keep you informed of the length of your call.

Connect tone: sets whether or not the phone beeps when your call is connected to the system.

## Messages

Using the Messages menu, you can use various message features, such as:

- text messages
- multimedia messages
- push messages
- voice mail
- broadcast messages


## Text messages (Menu 5.1)

Short Message Service (SMS) allows you to send and receive short text messages to and from other GSM mobile phones. In addition, your phone supports the Enhanced Messaging Service (EMS), which enables you to include simple pictures, melodies, and animated images in your messages. To use this feature, you must subscribe to your service provider's message service.

When the Text Message icon ( appears, you have received new text messages. If the memory is full, an error message displays and you cannot receive any new messages. Use the Delete option in each message box to delete the obsolete ones.

## Create (Menu 5.1.1)

In this menu, you can write and send text messages.

## Creating a simple text message

1. Create your message.

You can create a message using standard Alphabet characters or special Uni-code characters, depending on the setting in the
Character support menu; see page 83.

## Notes:

- For further details about entering characters, see page 32.
- You can enter up to 918 standard Alphabet characters in your message. When you enter text using Uni-code characters, the maximum number of characters which can be in a message is reduced to approximately half in length.

2. When you finish entering the message, press the Options soft key or the $\boldsymbol{i}$ key. The following options are available:

- Send only: allows you to send the message. The message is deleted after sending.
- Save and send: allows you to save a copy of the message and then send the message. You can read the message in your Outbox.
- Save only: allows you to save the message so that it can be sent later. You can read the message in your Outbox.
- For further details about Text formatting, Add content, Add templates, Add
Emoticon, Add from phonebook, Add from
bookmarks, and Language options, see
page 76.

3. Select Send only or Save and send, and press the Select soft key or the iney.
If you want to just save the message, select Save only. After saving the message, the
phone returns to the Text messages menu screen.
4. If you select a save option, select the memory location by pressing the Up and Down keys and press the OK soft key or the $\mathbf{i}$ key.
5. Enter a destination number and press the OK soft key or the $i$ key.

The message is sent.
Note: If the phone fails to send the message, it will ask you if you want to retry. Press the OK soft key or the $i$ key to confirm. Otherwise, press the Exit soft key to return to the Create screen.

## Creating a text message using options

1. Create a message.
2. Press the Options soft key or the $i$ key.
3. Select one of the following options by using the Up and Down keys and pressing the Select soft key or the $i$ key:

- Text formatting: allows you to format the style of the text.

For the Size attribute, Small, Normal and Large, and sizes are available.

For the Bold, Italic, Underline, and Strikethrough attributes, select On or Off.

These attributes can be combined.

- Add content: allows you to add a sound, melody, picture, or animated image to the message. Select the category of the object to be added. In each category, you can select
from the various factory-set items or items received from other sources, such as the Internet or other phones.

Note: When you add media items to a message, the number of characters you are allowed to enter decrease.

- Add templates: allows you to apply one of the preset message templates to the text. Select one of 5 items stored in the Templates menu (Menu 5.1.4). For further details, see page 80 .
- Add Emoticon: allows you to add the preset emoticons to the text. For further details, see page 81.
- Add from phonebook: allows you to add a Phonebook entry to your message. Select one from the list.
- Add from bookmarks: allows you to add a Web page's address stored in your Bookmarks list. Select one from the list.
- Language: allows you to change the language to be used in T9 input mode. Select the language you want to use.

4. Complete the message, and send or save it by following the procedure from step 2 on page 75

## Create a long text message

When you write a text message, the phone automatically splits it into several messages if your message exceeds the maximum number of characters allowed for sending. The number of split messages to be sent is shown each time your message is split. Depending on your service
provider, the maximum number of characters may vary.

## Inbox (Menu 5.1.2)

This message box is used to store messages that you have received.

When you enter this menu, the list of messages in the box displays with the senders' phone numbers or names, if available in your Phonebook.

1. Select a message from the list and press the View soft key or the $\boldsymbol{i}$ key to read the message contents.
2. Press the Up or Down key to scroll through the contents.
3. Press the * or \# key to scroll to the previous or next message.
While reading a message, you can access the following options by pressing the Options soft key or the $\mathbf{i}$ key:

Delete: allows you to delete the message.
Send: allows you to forward the message. For further details about how to send a message, see page 74.

Text reply: allows you to send a reply to the sender by sending a text message.
Call back: allows you to call the sender.
Save address: allows you to extract the sender's number and URL, e-mail addresses or phone numbers from the message text.

Move to phone: allows you to move the message from the SIM card to the phone's memory. This option is only available when you select a message stored in the SIM card.

Move to SIM: allows you to move the message from the phone's memory to the SIM card. This option is only available when you select a message stored in the phone's memory.
Select content: allows you to save media objects, such as sounds or images, from the message into your phone. You can use the objects when writing a message. For details, see page 76 .

## Outbox (Menu 5.1.3)

This message box is used to store messages that you have sent or will send.

When you enter this menu, the list of messages in the box displays with the recipients' phone numbers or names, if available in your Phonebook.

1. Select a message from the list and press the View soft key or the $\boldsymbol{i}$ key to read the message contents.
2. Press the Up or Down key to scroll through the contents.
3. Press the * or \# key to scroll to the previous or next message.

While reading a message, you can access the following options by pressing the Options soft key or the $\boldsymbol{i}$ key:

Delete: allows you to delete the message.

Send: allows you to send/resend the message. For further details, see page 74 .

Save address: allows you to extract the destination number and URL, e-mail addresses or phone numbers from the message text.
Move to phone: allows you to move the message from the SIM card to the phone's memory. This option is only available when you select a message stored in the SIM card.
Move to SIM: allows you to move the message from the phone memory to the SIM card. This option is only available when you select a message stored in the phone's memory.
Select content: allows you to save media objects, such as sounds or images, from the message into your phone. You can use the objects when writing a message. For details, see page 74 .

Templates (Menu 5.1.4)
Using this menu, you can preset a maximum of 5 messages that you use most frequently.

Select an empty location or the message template you want and press the Options soft key or the ii key.
The following options are available:
Edit: allows you to write a new message template or edit an existing message template.

Note: For further details about how to enter characters, see page 32.

Send: allows you to retrieve the message template. Once you have completed the message, you can
send, save and send, or simply save it. For further details about how to send a message, see page 74.

Delete: allows you to delete the message template. You are asked to confirm the deletion by pressing the Yes soft key or the $\boldsymbol{i}$ key.

## Emoticon Template (Menu 5.1.5)

Using this menu, you can express your thoughts or feelings easily with emoticons.

Insert an emoticon template into a message or edit your own emoticon.

The following options are available:
Add: allows you to add an emoticon you want.
Edit: allows you to edit an existing emoticon template.

Send: allows you to insert the emoticon into a message.
Delete: allows you to delete the emoticon you have added.

## Settings (Menu 5.1.6)

In this menu, you can set up default message information. A setting group is a collection of settings required to send messages. The number of setting groups available depends on the capacity of your SIM card.

## Notes:

- The setting options available in this menu may vary, depending on your service provider.
- The last setting you accessed is automatically activated for sending subsequent messages.

Setting $\mathbf{x}$ (where $\mathbf{x}$ is the setting group number): each group has its own sub-menu.

Setting name: allows you to give a name to the setting group currently being defined.

Service center: allows you to store or change the number of your message centre, which is required when sending messages. You must obtain this number from your service provider.

Default destination: allows you to store a default destination number. The number automatically displays on the Destination screen when you create a message.

Default type: allows you to set the default message type to Text, Fax, Email, or Paging. The network can convert the messages into the selected format.

Validity period: allows you to set the length of time your text messages are stored in the message centre while attempts are made to deliver them.

## Common setting: The following options are

 available:Reply path: allows the recipient of your message to send you a reply through your message centre, if your network supports this service.

Delivery reports: allows you to activate or deactivate the report function. When this function is activated, the network informs you whether or not your message has been delivered.

Bearer selection: allows you to select either GSM or GPRS preferred, depending on your network.

Character support: allows you to select a character encoding type, either GSM-alphabet, Uni-code, or Automatic.

If you select Automatic, the phone automatically changes the encoding type from GSM-alphabet to Uni-code when you enter a Uni-code character.

When you select Uni-code, the maximum number of characters which can be in a message is reduced to approximately half in length. If your recipient's phone does not support Uni-code characters, he/ she may not be able to read your message correctly. For details about Uni-code characters, see page 188.

Note: If your phone doesn't have the Character support menu, the phone provides the Automatic character encoding by default.

## Multimedia messages (Menu 5.2)

Multimedia Message Service (MMS) is a service providing delivery of personal multimedia messages from phone to phone or from phone to e-mail. In addition to the familiar text content, multimedia messages can contain images, video clips, audio clips, and combinations of these things. Images could include downloads and photos you have taken, while audio clips could be downloaded or recorded sounds, or voice memos. Using MMS, your phone can send and receive these multimedia messages.

This function is available only if it is supported by your service provider. Only phones that offer multimedia messaging features can receive and display multimedia messages.

Note: When you buy media content from the Internet, this content is delivered to you in MMS messages. You can retrieve the messages from the server and then save the items in your phone's memory. You cannot forward these messages to other people or add the saved items to an MMS message.

## Create (Menu 5.2.1)

This menu allows you to create a new multimedia message and send it to one or multiple destinations.

## Creating and sending a multimedia message

1. Enter the subject of your message and press the Next soft key or the i key.
For further details about entering characters, see page 32.
2. When Add here highlights, press the Options soft key or the $\boldsymbol{i}$ key and add the message contents using one of the following options:

- Add text: allows you to enter the message text and press the OK soft key or the $\boldsymbol{i}$ key.
- Add picture: allows you to add a picture downloaded from the wireless web. You can add some downloaded images if they are in the correct format and your service provider supports them.
- Add sound: allows you to add a sound. You can record a new voice memo or select one of voice memos stored in your phone and downloaded sounds. For further detail about recording voice memos, see page 123. You
can add some downloaded sounds if they are in the correct format and your service provider supports them.
- Send: allows you to send the message. Use this option when you finish creating the message.
- Save: saves the message in the Draft (Menu 5.2.4) or Templates (Menu 5.2.5) box for later use.
- Settings: allows you to change the message settings. For further details about each setting option, see page 93. After changing the settings, you need to press the $\mathbf{C}$ key or the $\boldsymbol{G}$ soft key to go to back to the options screen.
- Add destination: allows you to enter destination addresses. See steps 6 to 11 on page 86.
- Preview: shows the message you created.

Note: You can add text, an image and a sound once for each page.
3. Repeat step 2 until you have finished creating your message.
4. If you want to change the added items, press the Up or Down key to highlight one and press the Options soft key or the $\boldsymbol{i}$ key to display the Options list.

Note: Available options are different, depending on whether the item you select on the message screen is text, an image, a sound, or the Page field.

The following options are available:

- Add page: allows you to add up to 5 pages After adding pages, you can move to each page using the Left or Right key on the message screen. The display shows you the current page number and memory space used for the page.
- Delete: deletes the item from your message.
- Duration: allows you to set when and how long text, an image, a sound, or a page displays on the message presentation screen. If the duration you set is shorter then the content duration (for example, the length of the sound clip) for a particular page, the content duration is automatically decreased.
- Send: allows you to send the message.
- Save: saves the message in the Draft (Menu 5.2.4) or Templates (Menu 5.2.5) box for later use.
- Settings: allows you to change the message settings. For further details about each setting option, see page 93.
- Add destination: allows you to enter destination addresses. See steps 6 to 11 on page 86.
- Preview: shows the message you created.

5. When you have finished creating the message, select Send from the options and press the Select soft key or the $\boldsymbol{i}$ key.
6. Select a destination type (To, Cc, or Bcc) and press the Select soft key or the $\boldsymbol{i}$ key.
7. Choose one of the following options and press the Select soft key or the $\boldsymbol{i}$ key:

- Phone number: allows you to enter the phone number you want.
- E-mail: allows you to enter the e-mail address of the recipient.
- Phonebook: allows you to retrieve a number from your Phonebook.

8. Enter a number or an e-mail address, or select a number from Phonebook.
9. When the correct number or address displays, press the OK soft key or the $\mathbf{i}$ key.
10. To add a destination, press the Select soft key or the $\boldsymbol{i}$ key when Add destination highlights. Repeat from step 7.

If you want to edit the destinations, select one and press the Options soft key or the $\boldsymbol{i}$ key. You can change or delete it.
11. To enter additional numbers or addresses to the other destination types, press the $\mathbf{C}$ key or the $\boldsymbol{6}$ soft key and repeat steps 6 through 10 .
You can enter up to 10 destinations each for To, Cc, and Bcc.
12. When you have finished entering the destinations, select Send message and press the Select soft key or the $\boldsymbol{i}$ key.

Your phone sends the message.

Inbox (Menu 5.2.2)
Viewing a message when you receive it

When a new multimedia message comes in, the display shows the MMS Message icon (...$)_{\text {) and a }}$ text notification along with the sender's number.

1. Press the View soft key or the $\boldsymbol{i}$ key to view brief information about the message, such as the sender's number, the message size and the subject.
If you want to view the message later in the Inbox, press the $\mathbf{C}$ key or the $\boldsymbol{\sigma}$ soft key.
2. Press the Up or Down key to scroll through the message information.
You can access the following options by pressing the Options soft key or the ikey:

- Retrieve: retrieves the message from the MMS server.
- Delete: deletes the message.
- More properties: shows you detailed information about the message.

3. Select the Retrieve option to read the message. Your phone retrieves the message contents from the server and displays it.
4. Press the Up or Down key to scroll through the message.
5. When you have finished, press the key.

## Viewing a message from the Inbox

When you access the Inbox menu (Menu 5.2.2), the list of multimedia messages you have received displays along with the message subjects. The icons on the left tell you the status of the messages.

- MMS notifications that have been opened.
- B : MMS notifications that have not been opened.
- : You have set an enquiry to the MMS server requesting the message be sent to your phone.
- .nil: The MMS server is processing your request.
- x : The MMS server is unable to send the message to your phone.
- $\forall$ : Messages that have been opened.
- $\boxtimes$ : Messages that have not been opened.

1. Select a message on the list and press the View soft key or the $\boldsymbol{i}$ key.

The message displays and scrolls to the next page, if it has one, after a specified time.
2. Press the $\mathbf{O K}$ soft key or the $\boldsymbol{i}$ key to go to the message view screen.

Or, the display automatically switches to the screen after a specified time.
3. Press the Up or Down key to scroll through the message.

If the message has more than one page, you can scroll through the pages by using the Left and Right keys.
4. Press the $*$ or \# key to scroll to the previous or the next message.

While viewing a message, you can access the Messages options by pressing the Options soft key or the $\boldsymbol{i}$ key.

If you are viewing a new message, the options are the same as when you view a message at the time of you receive it. See page 88.

When you are reviewing a message retrieved from the MMS server, the following options are available:

Delete: deletes the message.
Reply: allows you to send a reply to the sender by sending a text or multimedia message.

Callback: allows you to call the sender.
Save address: allows you to extract the sender's number or e-mail address and URL, e-mail addresses or phone numbers from the message text.

Forward: allows you to forward the message to another person. When the message contains media contents you have bought on the Internet,
forwarding is not available.
Save picture: allows you to save an image from the message into your phone. Pictures are stored in the Images folder (Menu 6.4).
Save sound: allows you to save a sound from the message into the Sounds folder (Menu 6.3).
Properties: shows you information about the message, such as the message status, subject, sender's e-mail address or phone number, message size, priority, and the time and date the message was received.

Outbox (Menu 5.2.3)
When you access this menu, the list of the multimedia messages you have sent or saved
displays. The icons on the left tell you the status of the messages.

- M: Messages currently being sent
- . Messages sent
- 気 : Messages your phone couldn't send
- Messages to be sent
- 菛: Messages deferred

1. Select a message on the list and press the View soft key or the $\boldsymbol{i}$ key.

The message displays and scrolls to the next page, if it has one, after a specified time.
2. Press the $\mathbf{O K}$ soft key or the $\boldsymbol{i}$ key to go to the message view screen.

Or, the display automatically switches to the screen after a specified time.
3. Press the Up or Down key to scroll through the message.
If the message has more than one page, you can scroll through the pages by using the Left and Right keys.
4. Press the * or \# key to scroll to the previous or the next message.
While viewing a message, you can access the following options by pressing the Options soft key or the $\boldsymbol{i}$ key:

Delete: deletes the message.
Save address: allows you to extract the destination numbers or e-mail addresses and URL, e-mail addresses, or phone numbers from the message text.

Send: allows you to send/resend the message.
Edit: allows you to change the message contents, sound, picture, or text.
Properties: shows you properties about the message, such as the message status, subject, sender and recipients' e-mail addresses or phone numbers, message size, priority, and the time and date the message was sent.

## Draft (Menu 5.2.4)

After creating a multimedia message, you can store it in this message box for later sending.

For further details about viewing a message, see "Outbox" on page 90.

## Templates (Menu 5.2.5)

This menu stores messages you saved as templates so that you can use them to make new messages.

1. Scroll through the template list using the Up or Down key.
2. When the message template you want highlights, press the View soft key or the $\boldsymbol{i}$ key.
3. Press the $\mathbf{O K}$ soft key or the $\boldsymbol{i}$ key to access the following options, or the display automatically shows the options after a specified time:

- Edit: allows you to change the template and then send a message. For further details about how to send a message, see page 84 .
- Delete: allows you to delete the message template. You are asked to confirm the
deletion by pressing the Yes soft key or the $\boldsymbol{i}$ key.

4. Press the key to return to Idle mode.

## Settings (Menu 5.2.6)

You can change the default settings for sending or receiving multimedia messages.
The following options are available:
Delivery report: when this option is enabled, the network informs you whether or not your message has been delivered.

Read reply: when this option is enabled, your phone sends a request for a reply along with your message to the recipient.

Auto download: you can set whether or not your phone retrieves new incoming messages from the MMS server without notifications.

Off: you need to manually download new messages by using the Retrieve option.

On: the phone automatically retrieves new messages from the server. As soon as you receive a message you can use more options while you are reading. See page 90 for details about the options.

Off when roaming: the phone automatically downloads new messages unless you are roaming on another network or in another country.
Message acceptance: you can specify the category of messages you want to receive.

Hide ID: when this option is enabled, your phone number does not display on the recipient's phone.

Validity period: you can select the length of time your messages are stored at the message centre after they are sent.

Delivery time: you can set a time delay before the phone sends your messages.
Priority: you can select the priority level of your messages.

Report allowed: when this option is enabled, the sender of an incoming message receives a delivery report from the network.

Page duration: you can set how long one page of an outgoing message displays on the message presentation screen. After a specified time, the display automatically scrolls to the next page.

## MMS profile (Menu 5.2.7)

In this menu, you can configure various network settings that are required when you send or receive multimedia messages.

## Notes:

- The last profile you accessed is automatically activated for sending subsequent messages.
- If you change the MMS settings without first checking with your service provider, the MMS feature may not work properly.

The following options are available for each profile:
Profile name: enter a name that you wish to assign to the MMS server.
Connection URL: enter the address of your MMS server.

Security: select a data transmission mode. Choose Secure to protect your data against unauthorised access; otherwise, select Non-secure.

IP address: enter the gateway address required to connect to the MMS server.

User name: enter the user ID required to connect to the MMS server.

Password: enter the password required to connect to the MMS server.

APN: enter the access point name used for the address of the MMS server.

For further details, contact your service provider.

## Push messages (Menu 5.3)

In this menu, you can receive and access web messages from the server.

The following options are available:
Inbox: allows you to read the messages received from the web server.

Receive: allows you to set whether or not your phone receives web messages. Select Always to receive web messages or Never to reject web messages.
Delete all: allows you to delete all of the web messages.

## Delete all (Menu 5.4)

This menu allows you to delete all of the messages in each message box separately. You can also delete all of your messages at one time.

1. Select a message type and press the Select soft key or the $\mathbf{i}$ key.
2. | To | Press the |
| :--- | :--- |
| select a message <br> box to clear | Up or Down key. To <br> delete all of your <br> messages, select All <br> messages. |
| place or remove a <br> check mark | i key. |
3. Press the Delete soft key to delete the marked messages.
4. When a confirmation message displays, press the Yes soft key or the $\boldsymbol{i}$ key to confirm.
5. When the phone asks for confirmation again, press the Yes soft key or the $\boldsymbol{i}$ key.

## Voice mail (Menu 5.5)

This menu allows you to access your voice mailbox, if your network supports this service.
The following options are available:
Connect to voice server: before using the Voice Mail feature, you must enter the voice server number obtained from your service provider. You
can then select this option and press the $\mathbf{O K}$ soft key or the $\boldsymbol{i}$ key to listen to your messages.

You can quickly connect to the voice server by pressing and holding the $\mathbf{1}$ key in Idle mode.

Voice server number: allows you to change the voice mail server number, if necessary.

Note: Voice mail is a network feature. Please contact your service provider for further details.

## Broadcast messages (Menu 5.6)

This network service allows you to receive text messages on various topics, such as the weather or traffic. Cell Broadcast (CB) messages display as soon as they are received, provided that:

- the phone is in Idle mode.
- the Receive option is set to Enable.
- the message channel is currently active on the channel list.

The following options are available:
Read: lets you view the received message.
The Volatile box displays messages from the network, but loses its contents as soon as the phone is switched off. Scroll through the message by using the Up and Down keys.

You can save a CB message in the Archive box for later retrieval. When a text notification appears, press the Options soft key or the $\boldsymbol{i}$ key and select Save.

Receive: allows you to enable or disable the reception of broadcast messages.

Channel list: allows you to indicate the channels from which you wish to receive broadcast messages. The following options are available:

Select: use to enable or disable channels on the list by marking or unmarking them, respectively. A check mark displays in front of each selected channel.

Add channel: use to enter the ID and title for a new channel.

Delete: use to remove a channel from the list.
Edit: use to change the ID and title of an existing channel.

Language: allows you to select your preferred language in which to display cell broadcast messages.

Please contact your service provider for further details.

## Memory status (Menu 5.7)

You can check the amount of the memory being used and the memory remaining for messages.

Text messages: shows the number of messages currently stored and the total number of messages you can store in the SIM, Phone, and CB memory.

Multimedia messages: shows the total space, including the free and used space, and how much space is currently occupied by each message box. You can also view the number of messages currently stored and the total number of messages you can store. Press the Up or Down key to scroll through the screen.

The Funbox menu contains several fun options.

## WAP browser (Menu 6.1)

Your phone is equipped with a WAP (Wireless Application Protocol) browser to allow you to access and navigate the Wireless Web using your phone.

## Home (Menu 6.1.1)

Selecting this menu connects the phone to the network and loads the homepage of the Wireless Web service provider. You can also press the $i$ key in Idle mode to launch the browser.

The contents of the WAP Browser startup homepage depend on your Wireless Web service provider. To scroll through the screen, use the Up or Down key.

Note: To go to the startup homepage from any other screen in the WAP browser, use the Home option. For further details about the WAP Browser menus, see page 101.

## Exiting the WAP browser

To exit the browser at any time, simply press and hold the $\sqrt{\sigma}$ key.

## Navigating the WAP browser

| To | Press the |
| :--- | :--- |
| scroll through the <br> browser items | Up or Down key. |
| select a browser <br> item | i key, or press the Options <br> soft key and then select <br> Select. |
| return to the <br> previous page | C key, or press the Options <br> soft key and then select <br> Back. |
| return to the <br> startup homepage | Menu soft key and select <br> Home. For further details <br> about this option, see <br> page 101. |

## Entering text in the WAP browser

When you are prompted to enter text, the currently active text input mode is indicated on the screen.
To change the text input mode, press the $\boldsymbol{i}$ key one or more times.
The following modes are available:
Upper-case character mode (A): allows you to enter upper-case English characters.

Lower-case character mode (a): allows you to enter lower-case English characters.

Note: You can also enter special characters in Uppercase or Lower-case character mode. For details about available characters, see page 35.

T9 mode (T9): allows you to enter English characters by pressing one key per letter. In this mode, you can use only the $\mathbf{0}$ key to display alternative words. To change the case, press the * key.
Number mode (1): allows you to enter numbers.

## Selecting and using browser menu options

Various menu options are available when you are using the WAP browser to navigate the Wireless Web.

To access a menu option:

1. Press the Menu soft key.

A menu list displays.
2. Highlight a menu by pressing the Up or Down key.
3. Select an option by pressing the Select soft key or the $\boldsymbol{i}$ key.
4. If necessary, select a secondary option using the Up or Down keys, and press the Select soft key or the $\mathbf{i}$ key to confirm.

Note: The menus may vary, depending on your version of the WAP browser.

The following options are available:
Bookmarks: shows the bookmark list. You can bookmark the current Web page or access one of bookmarked pages.

Reload: reloads the current page.
Home: takes you back at any time to the homepage of the Wireless Web service provider.

Go to URL: allows you to manually enter the URL address of a Web page. After entering an address, press the OK soft key to go there directly.

Show URL: displays the URL address of the Web page to which you are currently connected. It also enables you to set the current site as the startup homepage.

Clear cache: deletes the information stored in the cache. The cache stores the most recently accessed Web pages.

Security info: shows security information when you access the Wireless Web with the secured WAP setting activated.

Inbox: allows you to read messages received from a web server.

Show images: shows the images on the current Web page in order. Press the Next soft key or the i key to view the next images.

## Bookmarks (Menu 6.1.2)

This menu allows you to store up to 16 URL addresses.

To store your favourite web site:

1. Select an empty location and press the Options soft key or the $i$ key.
2. Enter the address you want to store and press the Enter soft key or the $\boldsymbol{i}$ key.

For further details about how to enter characters, see page 32.
3. Enter a name for the item and press the Enter soft key or the $\boldsymbol{i}$ key.

After saving an item, you can access the following options when you press the Options soft key or the i key:

Go to URL: takes you to the corresponding Website.

Edit: allows you to change the address and the name of the item.

Delete: allows you to delete the item.

## http:// (Menu 6.1.3)

This menu allows you to manually enter the URL address of a Website that you wish to access.

For further details about how to enter characters, see page 32.

## WAP profiles (Menu 6.1.4)

This menu allows you to set up 5 proxy servers for the WAP browser. Contact your service provider for details about your WAP profile options.

For each server, the following options are available:
Profile name: enter a name that you wish to assign to the HTTP server.

Homepage URL: set the address of your startup homepage. When the default homepage displays, you can delete it using the $\mathbf{C}$ key and enter your own choice.

Security: select a data transmission mode. Choose Secure to protect your data against unauthorised access; otherwise, select Non-secure.

Bearer: select a bearer to be used for each type of network address accessed; GPRS or Data. The remaining options depend on the Bearer setting.

When the bearer is set to GPRS:
IP address: enter the WAP gateway address required to connect to the Internet.
User name: enter the User ID required to connect to the GPRS network.

Password: enter the password required to connect to the GPRS network.

APN: enter the access point name used for the address of the GPRS network gateway.

When the bearer is set to Data:
IP address: enter the WAP gateway address required to connect to the Internet.

Login name: enter the PPP server login ID.
Password: enter the PPP server password.
Dial-up number: enter the PPP server phone number.
Data call type: select a data call type; Analogue or ISDN.

Note: The WAP browser settings may vary, depending on the service provider. Contact your service provider for further details.

## Clear cache (Menu 6.1.5)

You can clear the information stored in the cache, the phone's temporary memory in which the most recently accessed Web pages are stored.

Press the Yes soft key or the $\boldsymbol{i}$ key to confirm the deletion. Otherwise, press the No soft key.

## Games (Menu 6.2)

You can download MIDlets (Java applications that run on mobile phones) from various sources using the WAP browser and store them in your phone.

When you access the Games menu, the list of the default games appears. Once you have downloaded games, they are added to the list.

Note: Java services may not be available, depending on your service provider.

## Launching a MIDlet

Note: The procedure explained below are for the default games. For downloaded games, the procedure may be different.

1. Scroll to the MIDlet you want on the Games list and press the $\boldsymbol{i}$ key.
2. On the startup screen of the MIDlet, scroll to an option using the Navigation keys or the $\mathbf{2}$ and $\mathbf{8}$ keys
The following options are available:

- START GAME: starts a new game.
- CONTINUE: allows you to continue the last game you played.
- HIGH SCORE: shows the high score table. This option may not be available for some games.
- HOW TO PLAY: shows how to play the game and the key functions for the game.
- OPTION: allows you to switch the game sound on or off.

3. Press the $\mathbf{5}$ key or the $\mathbf{i}$ key to confirm your selection.

| While you are playing a <br> game, to | Press the |
| :--- | :--- |
| adjust the sound volume | Volume keys. |
| stop the game and return <br> to the startup screen | C key. |
| exit the game | $\sigma$ key. |

## Viewing MIDlet information

1. Scroll to the MIDlet you want and press the Info soft key.

The display shows information about the MIDlet, such as the file size, application version, and its vendor.
2. To scroll to other MIDlet information, press the Left or Right key.
3. If you want to delete the MIDlet, press the Delete soft key and then press the Yes soft key or the ikey to confirm the deletion.

Note: When you select default games from the list, the Delete option is not available.
4. To exit and return to the Games list, press the $\mathbf{C}$ key or the $\boldsymbol{\zeta}$ soft key.

## Entering text

If you need to enter text while using a MIDlet, you can use the following input modes:

Upper-case character mode (A): allows you to enter upper-case English characters.

Lower-case character mode (a): allows you to enter lower-case English characters.
Number mode (1): allows you to enter numbers.
Symbol mode: allows you to enter symbols. After highlighting a symbol by pressing the Navigation keys, press the $\boldsymbol{i}$ key to insert it.

T9 mode (T9): allows you to enter English characters by pressing one key per letter. In this mode, you can change the case by pressing the $\mathbf{0}$ key.

To change the text input mode, press the * key until the appropriate indicator appears on the soft key area of the display.

## Changing the DNS settings

The DNS (Domain Name Server) is the server that assigns the Java server domain name to an IP address. The DNS setting is preset at the factory, but sometimes you may need to change it at your service provider's instructions.

1. Scroll to Setting on the Games list and press the Select soft key or the ikey.
2. Enter the primary address using the number keypad and press the OK soft key or the $\mathbf{i}$ key.
3. Enter the secondary address and press the OK soft key or the $\boldsymbol{i}$ key.

## Sounds (Menu 6.3)

In this menu, you can view the list of sounds downloaded from a web server or received in multimedia messages. You can set the downloaded sounds as the current ring tone or send them to other phones.
Scroll to the sound you want on the sound list and press the Play soft key or the $\mathbf{i}$ key.

By pressing the Options soft key or the $\boldsymbol{i}$ key, you can access the following options:
Rename: allows you to change the name of the sound.

Delete: allows you to delete the sound.
Set as ringtone: allows you to set the sound as your ring tone.

## Images (Menu 6.4)

In this menu, you can view the list of photos downloaded from a web server or received in messages. You can set the downloaded photos as the current background image or send them to other phones.

Once you have set a photo as your wallpaper, it is designated as My photo or My baby photo on the list.

Scroll to the image you want on the images list and press the View soft key or the $\boldsymbol{i}$ key.

By pressing the Options soft key or the key, you can access the following options:

Rename: allows you to change the name of the image.

Delete: allows you to delete the image.
Set as wallpaper: sets the image as your wallpaper for the idle screen. This option is only available when you select an image except for My baby photo on the image list.

Set as front wallpaper: sets the image as your wallpaper for the external display. This option is only available when you select My baby photo on the image list.

## Delete all (Мепи 6.5)

This menu allows you to delete all of the downloaded items in the Games, Sounds, and Images folders separately. You can delete all of the items at one time.

| 1. To | Press the |
| :--- | :--- |
| select a folder to <br> clear | Up or Down key. To <br> delete all of your items, <br> select All. |
| place or remove a <br> check mark | $\boldsymbol{i}$ key. |

2. Press the Delete soft key to delete the marked items.
3. When a confirmation message displays, press the Yes soft key or the $\boldsymbol{i}$ key to confirm.
4. When the phone asks for confirmation again, press the Yes soft key or the $\boldsymbol{i}$ key.

## Memory status (Menu 6.6)

You can check the amount of memory being used and the memory remaining for games or sounds and images.

The following options are available:
Games: the display shows the total, free, and used space and the number of games you have downloaded.

Sounds \& images: the display shows the total, free, and used space, including each space used for sounds and images.

## Melody composer (Menu 6.7)

Melody Composer is a great tool that allows you to compose your own melodies using a variety of musical components. You can set one of your own melodies as your call ringer.

## Compose melody (Menu 6.7.1)

When you access the Compose melody menu, a stave screen displays with a selection point at the first note position (Do).

## Creating a melody

You can compose a melody of up to 10 pages and you can insert 12 notes or rests onto a page.

1. Move the selection point up or down by pressing the Up or Down key.
2. When you have placed the selection point to your satisfaction, press the Input soft key.
3. Scroll to a note or rest, and press the Select soft key or press the corresponding number key to insert it.

The note or rest is inserted onto the stave and the selection point moves to the right on the same line.
4. Repeat steps 1 to 3 to add more notes and rests.

Note: You can also add a background melody, change the tempo, or adjust the volume by using composer options. See the following page.
5. When you have completed your melody, press the Options soft key to open the Option list
6. Select Save and press the Select soft key.
7. Enter a melody name and press the OK soft key. The melody is saved.

## Using composer options

While composing a melody, press the Menu soft key to access the following options:

New: opens a new composer screen.
Open: opens the list of the melodies you have made.
Play: plays back the current melody.
Save: saves the melody.

Save as: allows you to save the melody with a different name.

Instrument: allows you to change the musical instrument for the melody.

Background Melody: allows you to use a
background melody. You can choose one of a variety of music genres, including Dance, Jazz, Latin, Pop, or Reggae.

Add Note: allows you to add notes in different chords.

Tempo: allows you to change the tempo for the melody.

Volume: allows you to adjust the volume level of the main and background melodies separately.

## Editing a melody

While composing a melody or after opening a saved melody, you can edit it.

1. To change and entered note or rest, move the selection point by pressing the Left or Right key.

The color of the selected item changes to yellow to indicate that it is in Edit mode.
2. Change the position or type of the note or rest the same as you would when inserting it.

Press the * or \# key to move a note to the next higher or lower position.

You can access the following options by pressing the Options soft key in Edit mode.

- Range: allows you to select more than one note or rest by pressing the Left or Right key. The selected items are indicated in yellow.
- Copy: copies the selected note(s) and/or rest(s).
- Cut: cuts the selected note(s) and/or rest(s).
- Paste: pastes the selected note(s) and/or rest(s) to the end of the melody.
- Change: allows you to change the type of the currently selected note or rest.
- Delete: deletes the selected note(s) and/or rest(s).
- Play: plays back the current melody.

3. After editing, press the Right key until the selection point moves to an input position.
4. Press the Options soft key and select Save to save the changes to the melody, or Save as to save the melody with a different name.

## Memory status (Menu 6.7.2)

You can check the amount of memory being used and the memory remaining for sounds and images.

## Organiser

The Organiser feature enables you to:

- set an alarm so that the phone rings at a specific time, for example, to remind you of an appointment.
- view the calendar and organise your schedule.
- set the current time and date
- use the phone as a calculator for basic mathematical equations or currency exchange operations.
- define a list of things to do.
- record voice memos.


## Alarm (Menu 7.1)

This feature allows you to:

- set the alarm to ring at a specific time.
- set the phone to switch on automatically and ring the alarm even if the phone is switched off.
The following options are available:
Once: the alarm rings only once and is then deactivated.

Daily: 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. Choose the type of an alarm to be set and press the Select soft key or the ikey.
2. Enter the time for the alarm to sound.

Note: Your phone is preset to a 24 -hour format. To change the format, see page 120.

If you want to use the alarm options, press the
Options soft key. The following options are available:

- Remove alarm: deactivates the current alarm.
- Alarm sound set: allows you to select the alarm melody.

3. Press the $\boldsymbol{i}$ key.
4. If applicable, select AM or PM and press the Select soft key or the $\mathbf{i}$ key.
5. If you select Morning call in step 1 , select the repeat option, Monday to friday or Monday to saturday, and press the Select soft key or the i key.
To stop the alarm when it rings, open the phone, if necessary and press any key.

Remove alarm: deactivates all alarm settings.
Autopower: when this option is set to Enable, the alarm rings at the specified time, even if the phone is switched off.

If the menu option is set to Disable and the phone is switched off at the specified time, the alarm does not ring.

## Calendar (Menu 7.2)

With the Calendar feature, you can:

- consult the calendar and check your memos.
- write memos to keep track of your schedule.
- set an alarm to act as a reminder.


## Consulting the calendar

When you select the Calendar menu (Menu 7.2), the calendar displays with today's date highlighted.

The following options are available when you press the Options soft key:
Search all: displays all of the memos, starting with the oldest, regardless of the day. To scroll through the memos, press the Up or Down key.

Delete all: allows you to delete all of the memos. You are asked to confirm your action.

Go to date: allows you to go to a specific date.
Exit: exits the Calendar feature and returns to Idle mode.

## Writing a memo

You can make up to 100 memos for the calendar.
More than one memo can be made for one day.
To write or edit a memo on a specific date:

1. Select a date on the calendar by using the Navigation keys.

Note: To skip to the previous or next month, press the Volume keys on the left side of the phone.
2. Press the $\boldsymbol{i}$ key.

An empty memo screen displays allowing you to enter your memo.
3. Enter your memo and then press the OK soft key or the $\boldsymbol{i}$ key.
Note: For further details about how to enter characters, see page 32.

You are asked if you wish to set an alarm.
4. If you want an alarm to ring on the chosen day, press the $\mathbf{i}$ key.
Otherwise, press the Skip soft key. The memo is saved.
5. If you pressed the $\boldsymbol{i}$ key, enter the time for the alarm and press the $i$ key.
Note: Your phone is preset to a 24 -hour format. To change the format, see page 120.

You can also select the melody for the alarm by pressing the Melody soft key.
6. If applicable, select $\mathbf{A M}$ or $\mathbf{P M}$ and press the Select soft key or the ikey.

The colour of the date on the calendar changes to green to indicate that a memo exists for that date.

When the alarm time for a memo comes and the phone sounds the selected alarm melody, press the View soft key or the $\boldsymbol{i}$ key to view the memo. Alternatively, press either of the Exit soft key or the $\sqrt{\sigma}$ key to stop the alarm.

## Viewing a memo

When you select a day on which more than one memo exists, the latest memo for the day displays.

In that case, press the Up or Down key to scroll to the previous or next memo.

You can access the following options by pressing the Options soft key or the $\boldsymbol{i}$ key:

New: allows you to write a new memo.
Edit: allows you to change the memo text.
Alarm: allows you to set an alarm to ring at a specified time to remind you of the memo. If you have already set an alarm for that memo, you can change or delete the alarm.

Delete: allows you to delete the memo.
Copy to: allows you to copy the memo to another date.

Move to: allows you to change the date of the memo.

## Time \& date (Мепи 7.3)

This menu allows you to change the current time and date displayed. You can also find out what time it is in another part of the world.

The following options are available:
Set time: allows you to enter the current time. You can select the time format in the Time format menu (Menu 7.3.4).

Note: Before setting the time, you must specify your time zone in the World time menu (Menu 7.3.3).

Set date: allows you to enter the day, month, and year.

World time: allows you to find out what time it is in another part of the world, using the Left and Right keys.

The screen shows the:

- city name.
- current time and date.
- time difference between the selected city and your city if you have set your local time (see below for further details).

To select your time zone:

1. Select the city corresponding to your time zone by pressing the Left or Right key one or more times.

The local time and date display.
2. Press the Set soft key or the $\boldsymbol{i}$ key.

Time format: allows you to change the time format to $\mathbf{1 2}$ hours or $\mathbf{2 4}$ hours.

## Calculator (Menu 7.4)

With this feature, you can use the phone as a calculator. The calculator provides basic arithmetic functions; addition, subtraction, multiplication, and division.

1. Enter the first number using the numeric keys.

Note: To include a decimal point or a bracket, press the left soft key until the symbol you want displays.
2. Enter the operation for your calculation by pressing the Navigation keys, according to the illustration on the display.
3. Enter the second number.
4. To view the result, press the $\boldsymbol{i}$ key.
5. Repeat steps 1 to 4 as many times as required.

## To do list (Мепи 7.5)

This feature allows you to:

- enter a list of tasks to be done.
- assign a priority and a deadline to each task.
- sort the tasks by priority and status.


## Creating the To do list

1. Press the New soft key or the $\boldsymbol{i}$ key.
2. Enter the first task.

Note: For further details about how to enter characters, see page 32.
3. Press the $\mathbf{O K}$ soft key or the $\mathbf{i}$ key.
4. Select a priority status of high, normal, or low priority using the Up and Down keys and press the Select soft key or the ikey.
5. Enter your deadline and press the $\boldsymbol{i}$ key.

If you do not want to set a deadline, press the Skip soft key.

## Editing the To do list

When you select the To do list menu, the current contents display with the status mark, if the task has been done, and priority; 团 for High, $\qquad$ for Normal, and $\triangle$ for Low.
Note: You can change the status of a specific task by pressing the * key. The task is marked as completed as of the current time and date.

Scroll to a task from the list and press the $i$ key to view the details for the task. You can scroll through the tasks using the Up and Down keys, if necessary.

You can access the following options by pressing the Options soft key or the i key:

New: allows you to create a new task.
Mark: allows you to change the status of a task. Select the appropriate status, Done or Undo.

Edit: allows you to edit a task. You can change the text, priority, and/or deadline for the task.

Sort: allows you to sort the existing tasks by priority or status. Select the sort criterion, High, Low, Done, or Undo

Copy: allows you to copy a task.
Copy to calendar: allows you to copy a task to the calendar as a memo. You can also change the text and deadline for the task and/or set the alarm.

Delete: deletes a task.
Delete all: allows you to delete all tasks.
Exit: exits the To do list menu and returns to Idle mode.

## Record voice (Мепи 7.6)

You can record voice memos. After recording, you can send a memo to other people via Multimedia Message Service.

## Record Voice (Мепи 7.6.1)

This menu allows you to record a new memo. When you select this option, the display shows a $30-$ second timer.

1. To start recording, press the Record soft key or the $\boldsymbol{i}$ key.
2. Record a memo by speaking into the microphone.
3. When you press the Stop soft key or the ikey, or if the recording time expires, the following options display:

- Replay: plays back your memo.
- Re-record: discards the memo and enables you to record another one.
- Save: allows you to save the memo
- Quit: cancels your recording and exits the Record voice menu

4. To save the memo, select Save and press the OK soft key or the ikey.
5. Press the $\mathbf{C}$ key to clear the default name, if necessary, and enter a name for the memo.

For further details about how to enter characters, see page 32.
6. Press the OK soft key or the i key.

The memo is saved and then the display shows the memo information.
7. Press the Options soft key or the $\boldsymbol{i}$ key to access the following memo options:

- Send: allows you to send the memo to other people by using the MMS feature. Follow the procedure on page 84.
- Rename: allows you to change the memo's name.
- Delete: allows you to delete the memo.

8. To exit, press the $\mathbf{C}$ key or the key.

## Voice list (Menu 7.6.2)

This menu shows a list of saved voice memos Scroll to a memo and press the Options soft key or the $\boldsymbol{i}$ key to access the following options:

Play: plays the memo.
Send: allows you to send the memo to other people by using the MMS feature. See page 84 for further details about sending a message.
Rename: allows you to change the memo's name.
Properties: displays information about the memo, such as the name, the date when the memo was made, recording duration, and memory size.

Delete: allows you to delete the memo.

## Delete all (Menu 7.6.3)

In this menu, you can delete all of your voice memos.

When a confirmation message appears, press the Yes soft key or the $\boldsymbol{i}$ key. To cancel the deletion, press the No soft key. When the phone asks for confirmation again, press the Yes soft key or the $\boldsymbol{i}$ key one more time.

## Memory status (Menu 7.6.4)

You can check the amount of memory being used and the memory remaining for voice memos.
The display shows the total, free, and used memory, including the number of memos you recorded and the total number of memos you can record.

## Currency exchange (Menu 7.7)

Using this menu, you can figure out currency conversions.

1. Enter the current exchange rate of your source currency and press the OK soft key or the ii key.

You can insert a decimal point by pressing the \# key.
2. Enter the amount to convert and press the $\mathbf{O K}$ soft key or the $i$ key.

The amount you entered and its equivalent value display.
3. Press the $\mathbf{S}$ soft key or the $\mathbf{C}$ key to exit the currency converter

Phonebook

You can store phone numbers and their corresponding names in both your SIM card and your phone's memory. They are physically separate but are used as a single entity, called Phonebook.

Note: Depending on your particular SIM card, the maximum number of phone numbers the SIM card can store may differ.

## Search (Menu 8.1)

After storing numbers in Phonebook, you can search for them in two ways; by name and by caller group.

## Searching for a number by name

1. When the idle screen displays, press the Phonebook soft key.
2. Press the Select soft key or the $i$ key when Search highlights. You are asked to enter a name.
3. Enter the first few letters of the name that you want to find.

The Phonebook entries are listed, highlighting the entry that most closely matches your input.

| 4. | Press the |
| :--- | :--- |
| view the highlighted <br> entry | View soft key or the $i$ <br> key. |


| 4. | Press the |
| :--- | :--- |
| select a different <br> entry | Up or Down key until <br> the entry you want <br> highlights. |
| look for a name <br> starting with a <br> different letter | key labelled with the <br> letter you want. |

5. Once you have found the entry, press the $\gamma$ key to dial the number, or press the Options soft key or the $\boldsymbol{i}$ key to access the Phonebook entry options; for further details, see page 137.

## Dialling a number from Phonebook

Once you have stored phone numbers in Phonebook, you can dial them easily and quickly by using the location numbers that were assigned to them in Phonebook.

Note: If you cannot remember a location number, you must go into the Search option to search for the entry by name. For details, see page 126.

To dial a number from the SIM card:

1. In Idle mode, enter the location number for the phone number you want and press the \# key.

The list of the entries in the SIM card appears.
2. You can press the Up or Down key to find other numbers on the list.
3. Press the Dial soft key, the key, or the $\boldsymbol{i}$ key when you have selected the number you want.

To dial a number from the phone's memory:

1. In Idle mode, press and hold the $\mathbf{0}$ key. A + appears.
2. Enter the location number of the phone number you want and press the \# key.
The list of the entries in the phone's memory appears.
3. You can press the Up or Down key to find other numbers on the list.
4. Press the Dial soft key, the $\boldsymbol{k e y}$, or the $\boldsymbol{i}$ key when you have selected the number you want.

## Add entry (Menu 8.2)

There are two ways to store a number:

- Using the Add entry option in the Phonebook menu
- Using the Save soft key or the iney in Idle mode


## Storing a number using the Phonebook menu

1. When the idle screen displays, press the Phonebook soft key.
2. Scroll to Add entry by pressing the Up or Down key and press the Select soft key or the $\mathbf{i}$ key.
3. Select an icon to identify the category of the number to be stored by pressing the Left or Right key, and press the Select soft key or the i key.

Note: The E-mail icon (@) is available in this step. It allows you to save an e-mail address instead of a phone number.
4. Select a memory location, either SIM or Phone, by pressing the Up or Down key and press the Select soft key or the $\mathbf{i}$ key.

Note: When you are saving an e-mail address, SIM is not available.
5. Enter a name and press the OK soft key or the i key.

For further details about how to enter characters, see page 32.
6. Enter the number or address you want to store and press the Save soft key or the $\boldsymbol{i}$ key.
7. Continue the procedure from step 6 on page 130 to store the number

## Storing a number in Ide mode

As soon as you start to enter a number, Save appears above the left soft key to allow you to store the number in Phonebook.

1. Enter the number you want to store.

Note: If you make a mistake while entering a number, correct it using the C key. For further details, see page 22.
2. When you are sure that it is correct, press the Save soft key or the $\boldsymbol{i}$ key.
3. Select an icon to identify the category in which the number is to be stored. 3 categories are available:
-
: Mobile phone number

- 4 四

Office number

- 钅: Home number

To select the category, press the Left or Right key and press the Select soft key or the $\boldsymbol{i}$ key.
4. Select a memory location, either SIM or Phone, by pressing the Up or Down key and press the Select soft key or the ikey.

Note: When you change phones, any numbers stored in your SIM card memory are automatically available with the new phone, whereas any numbers stored in the phone's memory will need to be reentered.
5. Enter a name and press the $\mathbf{O K}$ soft key or the i key.
For further details about how to enter characters, see page 32.
6. If you do not want to save the number and name in the suggested location, press the $\mathbf{C}$ key to clear the location number and enter another location by pressing the numeric keys.
7. Press the $\mathbf{O K}$ soft key or the $\boldsymbol{i}$ key to store the name and number.

After storing, the phone displays the Phonebook number or name you just stored.

| 8. To | Press the |
| :--- | :--- |
| use the entry options | Options soft key or <br> the $\boldsymbol{i}$ key. For further <br> details, see page 137. |


| 8. | Press the |
| :--- | :--- |
| return to the idle <br> screen | $\sigma$ key. |

## Using Phonebook entry options

While accessing any Phonebook entry, press the Options soft key or the $\boldsymbol{i}$ key to access the options for the entry.

The following options are available:
Edit: allows you to edit the name and/or number.

Select One entry to change the name and/or phone number for the selected entry. If you change the name, the number is saved separately with the new name.

Select All entry to change only the name of the entry.
Copy: allows you to copy the number to another location.

Paste: allows you to paste the number into the normal dialling mode. Use this option to dial a number similar to one in Phonebook, such as a different extension in the same office.

Use the $\mathbf{C}$ key to change the number as required; see page 22 for further details. When you are ready to dial, press the key.

Delete: allows you to delete the selected number from Phonebook. You are asked to confirm that you wish to delete the name and number by pressing the Yes soft key.

Caller group: allows you to organise your
Phonebook entries in caller groups so that the phone alerts you in a specific way when a person from one of your groups calls you. Select one of the 10 groups available.

To remove an entry from a group, select the No group option.

For further details about how to change caller group properties, see page 137.

Add entry: allows you to add a new number to the currently selected name.

## Group search (Menu 8.3)

1. When the idle screen displays, press the Phonebook soft key.
2. Scroll to Group search by pressing the Up or Down key and press the Select soft key or the $\boldsymbol{i}$ key. You are asked to enter a group name.
3. Enter the first few letters of the group name that you want to find.

The caller groups are listed, starting with the group that most closely matches your input.
4. If necessary, scroll to a group by pressing the Up or Down key and press the View soft key or the $\boldsymbol{i}$ key.

The Phonebook entries in the caller group are listed.

| To | Press the |
| :--- | :--- |
| view the highlighted <br> entry | View soft key or the $\mathbf{i}$ <br> key. |
| select a different <br> entry | Up or Down key until <br> the entry you want <br> highlights. |

Once you have found the entry, press the $\$ key to dial the number, or press the Options soft key or the $\boldsymbol{i}$ key to access the Phonebook entry options; for further details, see page 137.

## Group edit (Мепи 8.4)

1. When the idle screen displays, press the Phonebook soft key.
2. Scroll to Group edit by pressing the Up or Down key and press the Select soft key or the $\boldsymbol{i}$ key.
3. Scroll through the group list by pressing the Up or Down key.
4. When the group you want highlights, press the Options soft key or the ikey.
5. Select each option and change the settings, as you want. The following options are available:

- Call ringtone: allows you to set a ring tone to be used when you receive a voice call from a member of that group.
- SMS tone: allows you to set a ring tone to be used when you receive a message from a member of that group.
- Graphic: allows you to set a graphic icon to be displayed when you receive a voice call from a member of that group.
- Group name: allows you to assign a name to the group. For further details about how to enter characters, see page 32.

6. When you have finished, press the $\mathbf{C}$ key or the $\sigma$ key.

## Speed dial list (Menu 8.5)

You can assign up to 8 phone numbers from Phonebook that you use most frequently to the number keys ( $\mathbf{2}$ to $\mathbf{9}$ ), and then dial them easily whenever you want, simply by pressing and holding the associated number key.

## Setting up speed dial entries

1. When the idle screen displays, press the Phonebook soft key.
2. Scroll to Speed dial list by pressing the Up or Down key and press the Select soft key or the $\boldsymbol{i}$ key.
3. Select the key to which you wish to assign the speed-dialling number, from the $\mathbf{2}$ to 9 keys, and press the OK soft key or the $\boldsymbol{i}$ key.
Note: Memory location 1 is reserved for your Voice Mail server number.

If you have already assigned a number to the key, the Options soft key replaces the OK soft key. Go to step 6.
4. Select a Phonebook entry from the list and press the View soft key or the $\boldsymbol{i}$ key.
5. Select a number, if the entry has more than one, by pressing the Up or Down key and press the Select soft key or the $\mathbf{i}$ key.
6. Once you have assigned a number to the key, you can access the following options by pressing the Options soft key or the $\boldsymbol{i}$ key:

- Change: allows you to assign a different number to the key.
- Delete: allows you to clear the setting so that no number is assigned to the key.
- Delete all: allows you to clear the settings for all keys so that no numbers are assigned to any of the keys.
- Number: allows you to view the number assigned to the key. You can dial the number by pressing the $\boldsymbol{\sim}$ key.

7. When you are finished, press the $\boldsymbol{S}$ soft key or the $\sigma$ key.

## Speed dialling

To speed-dial the numbers assigned to the $\mathbf{2}$ to 9 keys, press and hold the appropriate key.

## Deleting all (Мепи 8.6)

You can delete all of the entries in the selected memory or both memories.

1. When the idle screen displays, press the Phonebook soft key.
2. Scroll to Delete all by pressing the Up or Down key and press the Select soft key or the $\boldsymbol{i}$ key.
3. To place a check mark by the memory you want to empty, All, SIM, or Phone, press the $\boldsymbol{i}$ key. You can remove the check mark by pressing the i key again.
4. When you have finished marking, press the Delete soft key to delete the entries in the selected memory.
5. Enter the phone password and press the OK soft key or the $\boldsymbol{i}$ key.

Note: The password is preset to " 00000000 " at the factory. To change this password, see page 150.
6. When a confirmation message appears, press the Yes soft key or the $\boldsymbol{i}$ key.

To cancel the deletion, press the No soft key.
7. When the phone asks for confirmation again, press the Yes soft key or the $\boldsymbol{i}$ key.

When you have finished, press the soft key or the $\sigma$ key.

## Memory status (Menu 8.7)

You can check how many names and numbers are stored in Phonebook, in both the SIM card and phone's memory. You can also see the capacity of both memories.

1. When the idle screen displays, press the Phonebook soft key.
2. Select the Memory status option by pressing the Up or Down key and press the Select soft key or the $\boldsymbol{i}$ key
3. Press the Up or Down key to view the number of entries you stored and total number of the entries you can store in the SIM card and phone's memory.
4. When you have finished, press the $\boldsymbol{S}$ soft key or the key.

## SDN (Menu 8.8)

You can view the list of Service Dialling Numbers (SDN) assigned by your service provider. These numbers include emergency numbers, directory enquiries and voice mail numbers.

1. When the idle screen displays, press the Phonebook soft key.
2. Select the SDN option by pressing the Up or Down key and press the Select soft key or the $i$ key.
3. Scroll through the numbers by using the Up or Down key.
4. Press the Dial soft key or the $\boldsymbol{i}$ key to dial the number displayed.

Note: This menu is available only when your SIM card supports Service Dialling Numbers.

Phone settings
Many different features of your phone can be customised to suit your preferences. All of these features are accessed in the Phone settings menu.

## Display settings (Menu 9.1)

In this menu, you can change various settings for the display or the backlight.

## Wallpaper (Menu 9.1.1)

This menu allows you to change the background image or change the settings for the display in Idle mode.

The following options are available:
Wallpaper list: you can select a background image to be displayed on the idle screen.
To change the background image:

1. Scroll through the list by pressing the Up or Down key.

You have various preset images available. You can also select a blank background or any images downloaded from the Internet and the optional Easystudio programme, or received in messages.
2. Press the Select soft key or the $\boldsymbol{i}$ key when the image you want highlights.
3. When the image displays, press the Select soft key or the $\boldsymbol{i}$ key to display it on the idle screen.

Text display: you can specify whether or not the phone displays the current time and date.

Text color: you can select the colour of the text to be displayed on the idle screen. This option is available only when the Text display option is enabled.

Menu style (Menu 9.1.2)
This menu allows you to select the menu display style. You can choose either Grid style, Bar style, or Page style.

## Back light (Menu 9.1.3)

In this menu, you can select the length of time the display and keypad backlight stays with the display in Dimming mode.
The following options are available:
Back light On: allows you to select the length of time the backlight stays on. The backlight turns on when you press a key, open the phone, or receive a call or message, and remains on for the specified length of time.

Back light Dim: allows you to select the length of time the display remains in Dimming mode. After the length of time specified in the Back light On option, the backlight turns off. Then the display dims and finally turns off after the specified length of time.

## Contrast (Menu 9.1.4)

This option allows you to see the LCD screen better in different lighting conditions. Scroll through the contrast settings by pressing the Up or Down key to make the screen darker or brighter.

## Service light (Menu 9.1.5)

This menu allows you to select whether or not the service light is used. It also allows you to select a color in which it flashes.

To use the service light, select one of the 7 colour settings. When the phone is ready for use, the service light flashes in the chosen colour.

If you do not wish to use the service light, select Off.

## Graphic logo (Menu 9.1.6)

This menu allows you to display your service provider's logo instead of its name.

Off: the service provider's name displays in Idle mode.

On: the service provider's logo stored in your phone displays in Idle mode; if no logo has been stored, the service provider's name displays.

## Greeting message (Мепи 9.2)

This menu allows you to set a greeting to be displayed briefly when the phone is switched on.

For further details about how to enter characters, see page 32 .

## Own number (Мепи 9.3)

This function is a memory aid, which you can use to check your own phone numbers if you need to do so.

## You can:

- assign a name to each of your own phone numbers registered on your SIM card.
- edit the names and numbers.

Any changes made here do not in any way affect the actual subscriber numbers on your SIM card.

## Language (Menu 9.4)

You can select a display language. When the language option is set to Automatic, the language is automatically selected according to the language of the SIM card used.

Note: Depending on your country, service provider, or the software version of the phone, the
Automatic option may not display.

## Security (Menu 9.5)

The Security feature enables you to restrict the use of your phone by others and to restrict the types of calls.
Various codes and passwords are used to protect features of your phone. They are described in the following sections. Also see pages 150-153

PIN check (Menu 9.5.1)
When the PIN Check feature is enabled, you must enter your PIN each time you switch on the phone. Consequently, any person who does not have your PIN cannot use your phone without your approval.

Note: Before disabling the PIN Check feature, you must enter your PIN.

The following options are available:
Disable: the phone connects directly to the network when you switch it on.

Enable: you must enter the PIN each time the phone is switched on.

## Change PIN (Мепи 9.5.2)

This feature allows you to change your current PIN to a new one, provided that the PIN Check feature is enabled. You must enter the current PIN before you can specify a new one.
Once you have entered a new PIN, you are asked to confirm it by entering it again.

## Phone lock (Menu 9.5.3)

When the Phone Lock feature is enabled, the phone is locked and you must enter a 4 - to 8 -digit phone password each time the phone is switched on.
The password is preset to " 00000000 " at the
factory. To change the phone password, see the
Change password menu (Menu 9.5.4)
Once the correct password has been entered, you can use the phone until you switch it off.

The following options are available:
Disable: you are not asked to enter the phone password when you switch on the phone.

Enable: you are required to enter the phone password when you switch on the phone.

## Change password (Menu 9.5.4)

The Change Password feature allows you to change your current phone password to a new one. You must enter the current password before you can specify a new one.

The password is preset to "00000000" at the factory. Once you have entered a new password, you are asked to confirm it by entering it again.

Privacy (Menu 9.5.5)
Using this menu, you can lock your media contents, such as multimedia messages, photos, videos, voice memos, images, and sounds. Once you have locked the contents, you must enter the phone password to access the associated menus.

| To | Press the |
| :--- | :--- |
| select an item to <br> lock | Up or Down key. To lock <br> all of the contents, select <br> All. |
| place or remove a <br> check mark | $\boldsymbol{i}$ key. |
| lock the marked <br> items | OK soft key. |

When the phone asks for the phone password, enter the password and press the OK soft key or the $\mathbf{i}$ key.

Note: The password is preset to " 00000000 " at the factory. To change this password, see page 143.

## SIM lock (Menu 9.5.6)

When the SIM Lock feature is enabled, your phone only works with the current SIM. You must enter the SIM lock code to use a different SIM card.

Once you have entered the lock code, you are asked to confirm it by entering it again.

To unlock the SIM, you must enter the SIM lock code.

FDN mode (Menu 9.5.7)
The FDN (Fixed Dial Number) mode, if supported by your SIM card, allows you to restrict your outgoing calls to a limited set of phone numbers.

The following options are available:
Disable: you can call any numbers.
Enable: you can only call phone numbers stored in Phonebook. You must enter your PIN2.

Note: Not all SIM cards have a PIN2. If your SIM card does not, this menu does not display.

## Change PIN2 (Menu 9.5.8)

The Change PIN2 feature allows you to change your current PIN2 to a new one. You must enter the current PIN2 before you can specify a new one.

Once you have entered a new PIN2, you are asked to confirm it by entering it again.

Note: Not all SIM cards have a PIN2. If your SIM card does not, this menu does not display.

Extra settings (Menu 9.6)
You can turn on or off the automatic redialling or answering features.

| To turn a feature | Press the |
| :--- | :--- |
| on | Mark soft key or the $\boldsymbol{i}$ key. <br> A check mark displays in <br> front of the option. |
| off | Unmark soft key or the $\boldsymbol{i}$ <br> key. The check mark no <br> longer displays. |

The following options are available:
Auto redial: when this option is checked, the phone makes up to 10 attempts to redial a phone number after an unsuccessful call.

Note: The interval between attempts varies.
Active folder: when this option is checked, you can simply open the phone to answer a call.
When it is unchecked, you must open the phone and press a key to answer a call, depending on the setting of the Anykey answer option.

Anykey answer: when this option is checked, you can answer an incoming call by pressing any key, except for the $\sigma$ key or the Reject soft key. To reject the call, press the $\sqrt{\sigma}$ key or the Reject soft key.

When this option is unchecked, you must press the خey, Accept soft key or the $\boldsymbol{i}$ key to answer a call.

## Short cut (Menu 9.7)

The Up and Down keys can be used as shortcut keys. In Idle mode, they allow you to access specific menus directly.

To assign a shortcut to a key:

1. Select the key to be used as a shortcut key by pressing the Up or Down key, and press the Select soft key or the $\mathbf{i}$ key.
2. Select the menu to be assigned to the key by pressing the Up or Down key.

Note: To deactivate a shortcut key, select the None option.
3. Press the Select soft key or the $\boldsymbol{i}$ key to save the selection.

## Reset settings (Menu 9.8)

You can easily reset your phone to its default settings.

To reset your phone, enter the 4- to 8-digit phone password and press the OK soft key or the $\boldsymbol{i}$ key.

Note: The password is preset to "00000000." To change this password, see page 143.

## Solving problems

If you are experiencing problems with your phone, perform the following simple checks, before contacting a service professional. This may save you the time and expense of an unnecessary service call.

## When you switch your phone on, the

 following messages may appear:
## Insert SIM card

- Check that the SIM card is correctly installed.


## Phone locked enter password

- The automatic locking function has been enabled. You must enter the phone's password before you can use the phone.


## Enter PIN

- 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. Every time the phone is switched on, the PIN has to be entered. To disable this feature, use the PIN check menu (Menu 9.5.1).


## Enter PUK

- The PIN code was entered incorrectly three times in succession and the phone is now blocked.
Enter the PUK supplied by your service provider.


## "No service," "Network failure" or "Not done" 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.


## You have entered a number but it was not dialled

- Have you pressed the $\$ key?
- Are you accessing the right cellular network?
- You may have set an outgoing call barring option


## Your correspondent cannot reach you

- Is your phone switched on (the key pressed for more than one second)?
- Are you accessing the right cellular network?
- You may have set an incoming call barring option


## Your correspondent cannot hear you 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 phone starts beeping and "**Warning** Low Battery" flashes on the display

- Your battery is insufficiently charged. Recharge the battery.


## The audio quality of the call is poor

- Check the signal strength indicator on the display (Tull); the number of bars indicates the signal strength from strong ( $\mathbb{T}_{\text {ullll }}$ ) to weak ( $\mathbb{T}_{1}$ ).
- Try moving the phone slightly or moving closer to a window if you are in a building.


## No number is dialled when you recall a Phonebook entry

- Check that the number has been stored correctly, by using the Phonebook search feature.
- Re-store the number, if necessary.


## 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 aftersales service

## Access codes

There are several access codes that are used by your phone and its SIM card. These codes help you protect the phone against unauthorised use.
When requested for any of the codes explained below, enter the appropriate code (displayed as asterisks) and press the OK soft key or the $\boldsymbol{i}$ key. If you make a mistake, press the $\mathbf{C}$ key one or more times until the incorrect digit is cleared and then continue entering the correct code.

The access codes, except for the PUK and PUK2 codes, can be changed using the Security menu (Menu 9.5). See page 141 for further details.

Important! Avoid using access codes resembling emergency numbers, such as 112 , so that you do not accidentally dial an emergency number.

## Phone password

The Phone Lock feature uses the phone password to protect your phone against unauthorised use. The phone password is supplied with the phone and is preset to " 00000000 " at the factory

| To | See |
| :--- | :--- |
| activate/deactivate the <br> Phone Lock feature | page 142 (Menu 9.5.3). |
| change the phone <br> password | page 143 (Menu 9.5.4). |

## PIN

The Personal Identification Number or PIN (4 to digits) protects your SIM card against unauthorised use. It is usually supplied with the SIM card.

If you enter an incorrect PIN three times in succession, the code is disabled and cannot be used until you re-enable it by entering the PUK (see below).

| To | See |
| :--- | :--- |
| activate/deactivate the <br> PIN Check feature | page 141 (Menu 9.5.1). |
| change the PIN | page 142 (Menu 9.5.2). |

## PUK

The 8-digit PUK (PIN Unblocking Key) is required to change a disabled PIN. The PUK may be supplied with the SIM card. If not, or you have lost it, contact your service provider.

To re-enable your PIN:

1. Enter the PUK and press the OK soft key or the i key.
2. Enter a new PIN of your choice and press the OK soft key or the $\boldsymbol{i}$ key.
3. When the Confirm new PIN message displays, enter the same code again and press the OK soft key or the $\boldsymbol{i}$ key.
If you enter an incorrect PUK ten times in succession, the SIM card becomes invalid. Contact your service provider for a new card.

## PIN2

The PIN2 (4 to 8 digits), supplied with some SIM cards, is required to access specific functions, such as setting the maximum cost of a call. These functions are available if supported by your SIM card.

If you enter an incorrect PIN2 three times in succession, the code is disabled and you cannot access the functions until you re-enable it by entering the PUK2.

To change the PIN2, see page 144 (Menu 9.5.8).

## PUK2

The 8-digit PUK2 (PIN Unblocking Key 2), supplied with some SIM cards, is required to change a disabled PIN2. If you lose the code, contact your service provider.

To re-enable your PIN2

1. Enter the PUK2 and press the OK soft key or the i key.
2. Enter a new PIN2 of your choice and press the OK soft key or the $\boldsymbol{i}$ key.
3. When the Confirm PIN2 message displays, enter the same code again and press the OK soft key or the $\mathbf{i}$ key.

If you enter an incorrect PUK2 ten times in succession, you will not be able to access the functions requiring the PIN2. Contact your service provider for a new card.

## Barring password

A 4-digit barring password is required when you use the Call Barring function. You can obtain the password from your service provider when you subscribe to this function.

You can change this password in the Call barring menu (Menu 3.2). See page 62 for further details.

## 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 set by the FCC is $1.6 \mathrm{~W} / \mathrm{kg}^{*}$.
*In the U.S. and Canada, the SAR limit for mobile phones used by the public is 1.6 watts $/ \mathrm{kg}(\mathrm{W} / \mathrm{kg})$ 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 imit 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.

FCC certification information for this model phone is attached separation paper

## For Body Operation

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.

For more Information concerning exposure to radio frequency signals, see the following websites:

Federal Communications Commission (FCC)
http://www.fcc.gov/rfsafety
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 and the type of battery and 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 Samsungapproved 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 $0{ }^{\circ} \mathrm{y} \mathrm{C}\left(32{ }^{\circ} \mathrm{y} \mathrm{F}\right)$.
- Do not short-circuit the battery. Accidental shortcircuiting 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 of used batteries in accordance with local regulations. Always recycle. Do not dispose of 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.

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. Do not engage in stressful or emotional conversations that may be distracting. Make the people with whom you are talking aware that you are driving and suspend conversations that have the potential to divert your attention from the road.
8. 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!
9. 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
10.Call roadside assistance or a special nonemergency wireless assistance number when necessary. 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 nonemergency wireless number.

## Operating Environment

Remember to follow 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.
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 off your phone 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 off your phone in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

## 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.

Posted Facilities
Switch off your phone in any facility where posted notices require you to do so.

## Potentially Explosive Atmospheres

Switch off your phone 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 off the phone 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 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, proceed as follows.

1. If the phone is not on, switch it on.
2. Key in the emergency number for your present location (for example, 112 or any other official emergency number). Emergency numbers vary by location.
3. Press the 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 end 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 off your phone before boarding an aircraft. The use of wireless phones in aircraft may be dangerous to the operation of the aircraft, and is illegal.
- 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.
- 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. Unauthorised 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 residentia 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 $1.6 \mathrm{~W} / \mathrm{kg}$. 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 governmentadopted 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 for this model phone as reported to the FCC are Head: $0.747 \mathrm{~W} / \mathrm{Kg}$, Bodyworn: $0.368 \mathrm{~W} / \mathrm{Kg}$.

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 A3LSGHX480.

## 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 tipdial 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 9-11 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 nonemergency 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. Handsfree 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, gioma, 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

## Glossary

To help you understand the main technical terms and abbreviations used in this booklet, and to take full advantage of the features of your mobile phone, here are a few definitions:

## Active folder

Ability to answer a call simply by opening the phone.

## Call barring

Ability to restrict outgoing and incoming calls.

## Call diverting

Ability to reroute calls to another number.

## Call holding

Ability to put one call on standby while answering or making another call; you can then switch between the two calls, as required

## Call waiting

Informs you that you have an incoming call when you are engaged on another call.

Caller line identification services (Caller ID)
Services allowing subscribers to view or block the telephone numbers of callers.

## EMS (Enhanced Message Service)

An adaptation of the Short Message Service (SMS) that allows you to send and receive ring tones and the service provider's logo, as well as combinations of simple media to and from EMS-compliant handsets. Because EMS is based on SMS, it can use SMS centres the same way that SMS does. EMS works on all Global System for Mobile communications (GSM) networks. EMS senders can use text, melodies, photos, sounds, and animations to enhance the expressive power of messages that are limited by the display constraints of mobile devices.

## GPRS (General Packet Radio Service)

New non-voice value-added service that allows information to be sent and received across a mobile telephone network. GPRS provides continuous connection to the Internet for mobile phone and computer users. It is based on the Global System for Mobile Communication (GSM) circuit-switched cellular phone connections and the Short Message Service (SMS).

## GSM (Global System for Mobile Communication)

International standard for cellular communication, guaranteeing compatibility between the various network operators. GSM covers most European countries and many other parts of the world.

## Java

Programming language generating applications that can run on all hardware platforms, whether small, medium or large, without modification. It has been promoted for and geared heavily to the Web, both for public Web sites and Intranets. When a Java program runs from a Web page, it is called a Java applet. When it is run on a mobile phone or pager, it is called a MIDlet.

## MMS (Multimedia Message Service)

A message service for the mobile environment, standardized by the WAP Forum and the 3rd Generation Partnership Program (3GPP). For phone users, MMS is similar to Short Message Service (SMS)-it provides automatic, immediate delivery of user-created content from phone to phone. The message addressing used is primarily phone numbers, thus the traffic goes from phone to phone. MMS also provides support for e-mail addressing, so that messages can be sent by email. In addition to the text content of SMS, MMS messages can contain still images, voice or audio clips, and also video clips and presentation information.

## Multi-party calling

Ability to establish a conference call involving up to five additional parties.

## Phone password

Security code used to unlock the phone when you have selected the option to lock it automatically each time it switches on.

## PIN (Personal Identification Number)

Security code that protects the phone against unauthorised use. The PIN is supplied by the service provider with the SIM card. It may be a four to eight-digit number and can be changed, as required.

## PUK (PIN Unblocking Key)

Security code used to unlock the phone when an incorrect PIN has been entered three times in succession. The eight-digit number is supplied by the service provider with the SIM card.

## Roaming

Use of your phone when you are outside your home area (when travelling for example).

## SDN (Service Dialling Numbers)

Telephone numbers supplied by your network provider and giving access to special services, such as voice mail, directory inquiries, customer support and emergency services.

## SIM (Subscriber Identification Module)

Card containing a chip with all the information required to operate the phone (network and memory information, as well as the subscriber's personal data). The SIM card fits into a small slot on the back of the phone and is protected by the battery.

## SMS (Short Message Service)

Network service sending and receiving messages to and from another subscriber without having to speak to the correspondent. The message created or received can be displayed, received, edited or sent.

## Soft keys

Two keys marked $\vdots$ and $\because$ on the phone, the purpose of which:

- varies according to the function that you are currently using.
- is indicated on the bottom line of the display just above the corresponding key.


## Tri Band

Ability to handle any of the following types of network; GSM 900, GSM 1800, combined GSM 900/ 1800 and GSM 1900 MHz bands, for greater call success and wider roaming.

Your phone automatically searches for the last network used. If, for any reason, this network is unavailable, your phone will attempt to register with a different network.

## Uni-code encoding

A character coding system designed to support the worldwide interchange, processing, and display of the written text of the diverse languages and technical disciplines of the world. Uni-code encoding provides data transmission to any other platforms without corruption, especially when you use specia Alphabet that are used for languages other than English. Please refer to the following table for the major characters requiring Uni-code encoding:

| À | Á | Â | Ã | á | â |  | ã |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| È | Ê | Ë | ê | ë |  |  |  |  |
| İ | Í | Î | Ï | 1 | î |  | i |  |
| Ò | Ó | Ô | O | Ó | $\varnothing$ |  | $\bigcirc$ | Q ő |
| Ù | Ú | Û | Ú | ù | ú |  | ú | Ý ${ }^{\text {v }}$ |
| ${ }^{\text {® }}$ | $\neg$ | « | » | (c) | - |  | ¢ |  |
|  | $\div$ | б | ç | P | $\times$ |  |  |  |

To change the character encoding type in your phone, use the Character support menu. Keep in mind that the maximum number of characters which can be in a message will be reduced to approximately half in length if you enter text using Uni-code characters.

## Voice mail

Computerised answering service that automatically answers your calls when you are not available, plays a greeting (optionally in your own voice) and records a message.

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$$
\begin{aligned}
& \text { message • } 90 \\
& \text { box • } 99
\end{aligned}
$$

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## Declaration of Conformity (R\&TTE)

## For the following product:

GSM900/GSM1800/GSM1900 Triband Digital Portable Cellular Telephone
(Product description)
SGH-X480S
(Model name)

## Manufactured at:

- Samsung Electronics Co., Ltd, 94-1, Imsoo-Dong, Gumi City, Kyung-Buk, Korea, 730-350
(factory name, address ${ }^{*}$ )
o which this declaration relates, is in conformity with the following standards and/ or other normative documents.

| Safety | : EN 60950-1:2001 |
| :--- | :--- |
| EMC | : EN 301 489-01 v1.4.1 (2002-08) |
|  | EN 301 489-07 v1.2.1 (2002-08) |
| SAR | : EN 50360:2001 |
| Network | EN 50360:2001 |
|  | : EN 301 419 v4.1.1 (2000-04) |
|  | EN 301 511 v7.0.1 (2000-12) |

We hereby declare the [all essential radio test suites have been carried out and that] the above named product is in conformity to all the essential requirements of Directive 1999/5/EC.

The conformity assessment procedure referred to in Article $\mathbf{1 0}$ and detailed in Annex[IV] of Directive 1999/5/EC has been followed with the involvement of the following Notified Body(ies):

> CETECOM ICT Services GmbH
> Untertuerkheimer strasse 6-1
> 66117 Saarbruecken Germany

The technical documentation kept at:
Samsung Electronics Euro QA Lab.

## which will be made available upon request.

(Representative in the $E U$ )
Samsung Electronics Euro QA Lab.
Blackbushe Business Park, Saxony Way,
Blackbushe Business Park, Saxony W
Yateley, Hampshire, GU46 6GG, UK
2004. 06. 29
(place and date of issue)


* It is not the address of Samsung Service Centre. For the address or the phone number of

Samsung Service Centre, see the warranty card or contact the retailer where you
purchased your phone.

