

DUAL BAND GPRS Series SGH-C225 Portable Digital Telephone User Manual

**Please read this manual before operating your phone,
and keep it for future reference.**



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Important Safety Precautions

Read these guidelines before using your wireless phone. Failure to comply with them may be dangerous or illegal. For more detailed safety information, see “Health and Safety Information” on page 119.

Road Safety at All Times

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

Switching Off When Refueling

Do not use the phone at a service station or near fuels or chemicals.

Switching Off in Aircraft

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

Switching Off in Hospitals

Switch off your phone near medical equipment. Follow any regulations or rules in force.

Interference

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

Special Regulations

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

Radio Frequency Exposure

The design of this phone complies with FCC (of the U.S. government) requirements relating to radio frequency (RF) exposure. To maintain compliance with these requirements, use only Samsung-supplied or approved accessories. Use of non-approved accessories may violate the requirements.

Sensible Use

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

Accessories and Batteries

Use only Samsung-approved accessories and batteries.

Qualified service

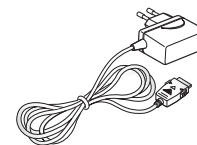
Only qualified service personnel may install or repair your phone.

Unpacking

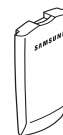
Your package contains the following items.



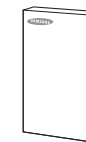
Handset



Travel Adapter



Battery



User's manual



Ear Microphone

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

- Battery charger
- Earphone
- Simple hands-free kit
- Car holder
- Standard battery
- Cigarette lighter adapter

Your Phone

Phone Layout

The following illustrations show the main elements of your phone.



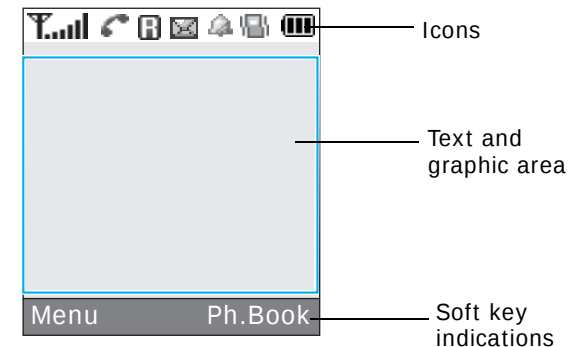
Key	Description
	In the Menu Mode, scroll through the menu options and phonebook memory. In idle mode, allow you to access your favorite menu options directly (for more information on shortcuts, see page 89).
	In the menu facility, return to the previous menu level and select the current menu respectively. When entering text, move the cursor left and right respectively. In idle mode, allow you to access your favorite menu options directly (for more information on shortcuts, see page 89).
 (soft keys)	Perform the functions indicated by the text above them (on the bottom line of the display).
	In idle mode, launches the WAP Browser directly.
	Deletes characters from the display. In the menu facility, returns to the previous menu level.

Key	Description (Continued)
	Makes or answers a call. When held down in idle mode, recalls the last numbers dialed or received. In the menu facility, selects a menu function or stores information that you have entered (such as a name) in the phone or SIM memory.
	Ends a call. Also switches the phone on and off when held down. In the menu facility, returns to the idle mode and cancels your input.
	When held down in idle mode, accesses your voice mail.
	Enter numbers, letters and some special characters. The key with the * key is used to change from upper to lower case when entering text. The key with the # key is used to enter a space, or to turn on the silent/vibration function.
	
	(on the side of the phone) During a call, adjust the earpiece volume. In idle mode, adjust the key volume. In the menu facility, scroll through the menu options and phone book memory.

Display

Display Layout

The display is comprised of three areas.



Area	Description
First line	Displays various icons (see page 14).
Middle lines	Display messages, instructions and any information that you enter (number to be dialed, for example).
Last line	Shows the functions currently assigned to the two soft keys.

Icons

Icon	Description
	Shows the received signal strength. The greater the number of bars, the better the signal strength.
	Appears when a call is in progress.
	Appears when you are connected to the GPRS network.
	Appears when the Silent mode is active or you set the Alert Type menu option ("Alert type" on page 78), so that the phone vibrates when you receive a call; for further details, see page 78.
	Appears when a new text message has been received.
	Appears when a new voice mail message has been received.
	Appears when you are entering text to indicate the current text input mode.
	Appears when you set the alarm.
	Shows the level of your battery. The more bars you see, the more power you have left.
	Appears when the Mute mode is active.

Backlight

The display is illuminated by a backlight. When you press any key, the backlight illuminates. It turns off if no key is pressed within a given period of time, depending on the **Back Light** menu option.

To specify the length of time for which the backlight is active, set the **Back Light** menu option (**Menu 5.1.5**); see page 83 for further details.

Main Screen Display

Your phone has a main screen display. It indicates that you have an incoming call or a message, and notifies you at the specified time when you set an alarm.

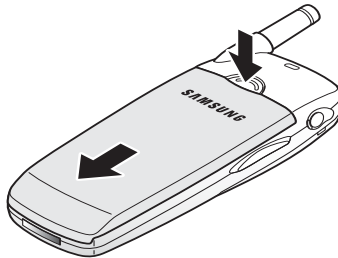
Getting Started

Installing the SIM Card

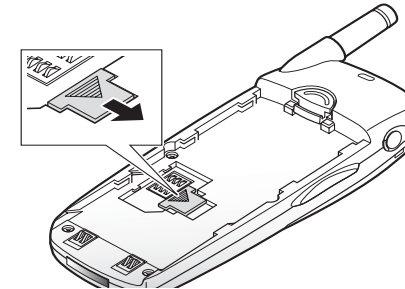
When you subscribe to a cellular network, you are provided with a plug-in SIM card loaded with your subscription details, such as your PIN, any optional services available and so on.

Note: 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.

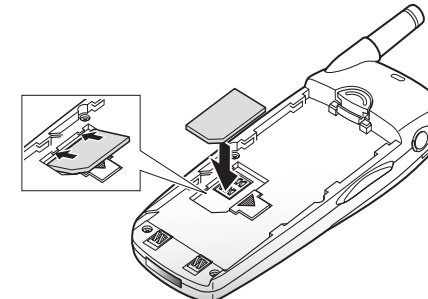
1. If necessary, switch off the phone by holding down the  key until the power-off image is displayed.
2. Remove the battery. To do so:
 - Press down the catch above the battery and hold it in this position.
 - Slide the battery and lift it away, as shown.



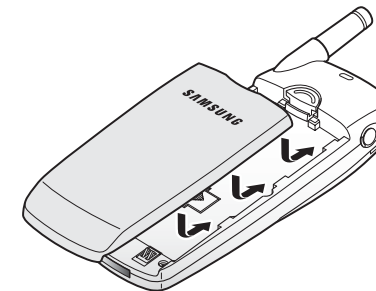
3. Slide the SIM card into the SIM card holder so that the holder locks the card in position. Make sure that the cut corner is top right and the gold contacts of the card face into the phone.



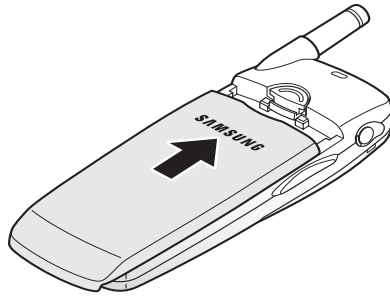
Note: When you need to remove the SIM card, slide it, as shown, and take it out of the holder.



4. Place the battery back, taking care to match the tabs on the battery with the grooves on the phone.



5. Slide the battery towards the top of the phone until it clicks into place. Make sure that the battery is properly installed before switching on the power.



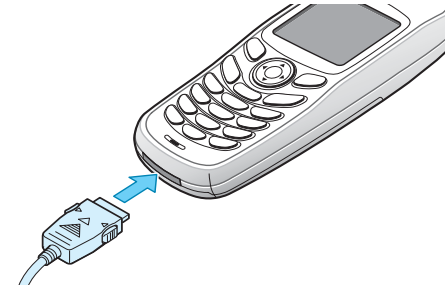
Charging a Battery

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

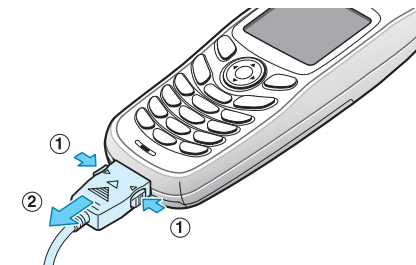
The phone can be used while the battery is charging, but this will cause the phone to charge more slowly.

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

1. With the battery in position on the phone, connect the lead from the travel adapter to the bottom of the phone.

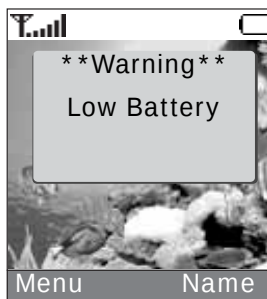


2. Connect the adapter to a standard AC wall outlet.
3. When charging is finished, disconnect the adapter from the power outlet and from the phone by pressing the grey tabs on both sides of the connector and pulling the connector out.



Low Battery Indicator

When the battery is weak and only a few minutes of talk time remain, you will hear a warning tone and a message will be repeated at regular intervals on the display:



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

Switching the Phone On / Off

1. Hold down the  key until the phone switches on.

2. If the phone asks for a password, key in the password and press the **OK** soft key. The phone password is factory set to 00000000. For further details, see page 109.
3. If the phone asks for a PIN, key in the PIN and press the **OK** soft key. For further details, see page 110. The phone searches for your network and when it finds it, the idle screen appears with the Service Provider's name, date and time. Now, you can make or receive a call.

Note: The display language is factory set to English. To change the language, use the **Language** menu option (**Menu 5.4**); for further details, refer to page 84. If you locked the keypad, you must unlock it before switching the phone off by pressing the Unlock soft key and the  key.

4. When you wish to switch the phone off, hold down the  key until the power-off image is displayed.

Note: If you locked the keypad, you must unlock it before switching the phone off by pressing the **Unlock** soft key and the  key.

Locking or Unlocking the keypad

You can lock the keypad to avoid pressing keys by mistake.

In Idle Mode, press and hold the  key until the LOCK icon and "Keypad Locked" appear on the display.

You can answer incoming calls using any keys, even if you lock the keypad. When you receive a call in the key lock mode, the keypad is automatically unlocked. After the call, the key lock mode is canceled.

You can dial emergency calls even if you lock the keypad. When the confirming message appears, select **Yes** by pressing

the left soft key or the Green phone key. When you end the call, your phone returns to the key lock mode after the period of time specified in the **Phone Lock** menu option.

To exit the key lock mode, press the **UnLock** soft key and then press the  key again. "Keypad Unlocked" appears and the Lock icon no longer displays.

Call Functions

Making a Call

When the idle screen is displayed, key in the area code and phone number, and press the  key.

Note: If you have checked the **Auto Redial** option in the **Extra Settings** menu (**Menu 5.6.1**), the number is redialed automatically up to ten times when the person does not answer the call or is already on the phone; see page 88 for further details.

Making a International Call

1. Press and hold down the **0** key.
The **+** character appears.
2. Key in the country code, area code and phone number and press the  key.

Correcting the Number

To clear...	Then...
The last digit displayed	Press the  key.
Any other digit in the number	Press the  or  key until the cursor is immediately to the right of the digit to be cleared. Press the  key. You can also insert a missing digit simply by pressing the appropriate key.
The whole display	Hold down the  key for more than one second.

Ending a Call

When you have finished your call, briefly press the  key.

Redialing the Last Number

The phone stores the numbers you dialed, received or missed. To recall any of these numbers, proceed as follows.

1. If you have typed any characters on the display, clear the display by holding down the  key for more than one second.
2. Press the  key to display a list of the last numbers in the order in which the calls were made.
3. Use the  and  keys to scroll through the numbers until the required number is highlighted.

4. To...

Dial the number highlighted

Edit the number highlighted

Then...

Press the  key.

Press the **Options** soft key select **Edit** option and change the number as required.

Making a Call from the Phonebook

You can store frequently-dialed phone numbers with a name in the SIM card or the phone memory, using the phonebook. You then simply select the required name to recall the associated number. For further details on the Phonebook features, refer to page 31.

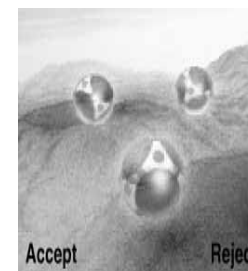
Adjusting the Volume

During a call, if you want to adjust the earpiece volume, use the  keys on the left side of the phone. Press the  key to increase and the  key to decrease the volume.

In idle mode, you can adjust the key volume using the  and  keys.

Answering a Call

When somebody calls you, the phone rings and the following screen appears on each display.



If the caller can be identified, the caller's phone number or name, if stored in your phonebook, is displayed.

1. Press the  key or the **Accept** soft key to answer the incoming call.
2. If the **Anykey Answer** option in the **Extra Settings** menu (**Menu 5.6.2**) is checked, you can press any key to answer a call except for the  key and the **Reject** soft key (see page 88).
3. End the call by pressing the  key.

Note: You can answer a call while using the phonebook or menu features.

Viewing Missed Calls

If you are unable to answer a call for any reason, you can find out who was calling you, provided that this service is available. This option provides the ability to call the person back, if necessary. The number of missed calls is displayed on the idle screen immediately after a call was missed.

To view the missed call immediately

1. Press the **View** soft key.
2. The number corresponding to the most recent missed call is displayed, if available.

To....

Scroll through the missed calls

Call the number displayed

Edit or delete a missed call number

Then press the...

▲ or ▼ key.

 key.

Select soft key (see the next page).

Editing a Missed Call Number

Note: If the number corresponding to the missed call is not available, the Edit Number option is not displayed.

1. Press the **Options** soft key.
2. Press the ▲ or ▼ key to highlight the **Edit** option.
3. Press the **Select** soft key.
4. Change the number as required. Press the **Save** soft key. If no change is required press the **Exit** soft key.

To...

Call the number

Store the number

Then press the...

 key.

Save soft key and enter the name and location required (for further details, refer to page 31).

Deleting a Missed Call

1. Press the **Options** soft key.
2. If necessary, press the ▲ or ▼ key to highlight the Delete option.
3. Press the **Select** soft key to go to the **Options** menu.

You can press the  [Ⓢ] 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 option (**Menu 3.1**); for further details, see page 74.

Switching Quickly to the Silent Mode

The Silent Mode is convenient when discretion is required and you wish to stop the phone from making any noise, in a theater for example.

In idle mode, to switch your phone quickly to the silent mode, simply press and hold down the  key until the “Silent Mode” message and vibration icon  are displayed.

In the silent mode, your phone changes the sound settings as follows.

Option	New Setting
Alert Type (Menu 4.3)	Vibration
Keypad Tone (Menu 4.4)	Off
SMS Tone (Menu 4.5)	Vibration
Power On/Off (Menu 4.6)	Off
Extra Tones (Menu 4.7.1)	Off

To exit the silent mode and reactivate the previous Sound Settings, press and hold the  key again until “Exit Silent Mode” appears. The vibration icon () is no longer displayed.

Selecting Functions and Options

Your phone offers a set of functions that allow you to customize your phone. These functions are arranged in menus and sub-menus, accessed via the two soft keys marked  and . Each menu and sub-menu allows you to view and alter the settings of a particular function.

The roles of the soft keys vary according to the current context; the label on the bottom line of the display just above each key indicates its current role.

To view the various functions/options available and select the one required, proceed as follows.

1. Press the appropriate soft key.

To...	Then press the...
Select the: • Function displayed - or • Option highlighted	Select soft key or the ► key.
View the next function or highlight the next option in a list	▼ key or  key on the left side of the phone.
Move back to the previous function or option in a list	▲ key or  key on the left side of the phone.
Move back up one level in the structure	◀ key,  soft key or  key.
Exit the structure without changing the settings	 key.

In some functions, you may be asked for a password or PIN. Enter the required code and press the **OK** soft key.

Example: Setting the Display Language

1. When the idle screen is displayed, press the **Menu** soft key to access the menus.
2. Scroll through the menus until you reach the **Phone Settings** menu, by pressing the ▲ or ▼ key.
3. To select the **Phone Settings** menu, press the **Select** soft key or the  key.

Note: If the menu name is too long for the display, will scroll when highlighted.

4. Scroll through the sub-menus until you reach the **Language** sub-menu, by pressing the ▲ or ▼ key.
5. To view the languages available, press the **Select** soft key or the  key. The current setting is highlighted.
6. Scroll through the list of languages until the appropriate one is highlighted, by pressing the ▲ or ▼ key.
7. Press the **Select** soft key or the  key to confirm your selection.
8. Press the  or ◀ key twice to exit the menu structure.

Phonebook

You can store phone numbers and their corresponding names in the memory of your SIM card. In addition, you can store up to 1000 numbers in the phone memory. The SIM card and phone memories, although physically separate, are used as if they were a single entity, called the phonebook.

Storing a Number with a Name

There are two ways to store a number:

- Using the **Save** soft key in idle mode
- Using the **New Entry** option in the Phonebook menu

Storing a Number in Idle 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 the phonebook.

1. Key in the number to be stored.

Note: If you make a mistake while entering a number, correct it using the  key. For further details, refer to page 23.

2. When you are sure that it is correct, press the **Save** soft key.
3. Select an entry type to identify the category of number to be stored. Four categories are available:
 - Mobile Number
 - Work Number
 - Home Number
4. To select the category, press the ◀ or ▶ key, followed by the **Select** soft key.
5. Enter a name and press the **OK** soft key.

The maximum length of a name depends on your SIM card. For information on how to enter characters, see page 40.

The phone now displays the first free location in the last memory used to save a number and name. If that memory is full, the first free location in the other memory is displayed.

Note: If you change phones, any numbers stored in your SIM card memory will automatically be available with the new phone, whereas any numbers stored in the phone memory must be restored.

6. Press the right soft key, labeled To Card or To Phone to toggle between the phone and card memories.
7. If you do not want to save the number and name in the suggested location, press the  key to clear the location number and enter your preferred location by pressing the number keys.
8. Press the **OK** soft key to store the name and number.
9. After storing, the phone displays the phonebook entry or name just created.

To...	Then press the...
Use the entry options	Options soft key.
Return to the idle screen	  key.

Storing a Number Using the Phonebook Menu

1. When the idle screen is displayed, press the **Ph.Book** soft key.
2. Scroll to New Entry by pressing the **2** or  key and press the **Select** soft key.

3. Select an Entry Type to identify the category of the number to be stored. The following four options are provided:

- Mobile Number
- Work Number
- Home Number
- E-mail Address

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. Continue the procedure from Step 4 on page 31 to store the number.

Using Phonebook Entry Options

While accessing any phonebook entry, press the **Options** soft key to access the options for the entry.

To...	Then press the...
Select the highlighted option	Select soft key or the  key.
Highlight a different option	 or  key until the required option is highlighted.

The following options are available.

- **Paste:** allows you to paste the selected number into the normal dialing mode. Use this option to dial a number similar to one in the phonebook, a different extension in the same office, for example. Use the  key to change the number as required; refer to page 23 for further details. When you are ready to dial, press the  key.
- **Edit:** allows you to edit **One Entry** or **All Entry**. Select the name and number and press the **Select** soft key.
- **Delete:** allows you to erase the selected name and number from the phonebook. You are asked to confirm that

you wish to erase the name and number by pressing the **Yes** soft key.

- **Copy:** allows you to copy the selected number to another location. Use this option to store a number similar to one already in memory; once copied, edit the number and store it in the phonebook.
- **Caller Group:** allows you to assign the entry to a caller group so that the phone alerts you in a particular way when the corresponding person calls you. Select one of the ten groups available. To remove an entry from a group, select the No Group option. For more information on how to change caller group properties, see page 36.
- **Add Entry:** allows you to add a new number in a different category (mobile, office, home or E-mail) to the currently selected name. A phonebook entry or name can contain up to four numbers, one in each category.

Searching for and Dialing a Number in the Phonebook

After storing numbers in the 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 is displayed, press the **Ph.Book** soft key. When Search is highlighted, press the **Select** soft key. You are asked to enter a name.
2. Enter the start of the name that you wish to find.

3. The phonebook entries are listed, starting with the first entry matching your input. This entry is also highlighted.

To...	Then press the...
View the highlighted entry	View soft key.
Select a different entry	▲ or ▼ key until the required entry is highlighted.
Look for a name starting with a different letter	To clear previously entered text, press the  Key labeled with the required letter.

4. Once you have found the required entry, press the  key to dial the number, or press the **Options** soft key to access the phonebook entry options; for further details, see page 33.

Searching for a Number by Caller Group

1. When the idle screen is displayed, select the **Ph.Book** soft key to scroll to Group Search by pressing the ▲ or ▼ key and press the **Select** soft key. You are asked to enter a group name.
2. Enter the start of the group name that you wish to find.

3. The caller groups are listed, starting with the first group matching your input. The group is also highlighted.
4. Scroll to the required group by pressing the ▲ or ▼ key and press the **View** soft key.
5. The phonebook entries in the selected caller group are listed.

To...	Then press the...
View the highlighted entry	View soft key.
Select a different entry	▲ or ▼ key until the required entry is highlighted.

6. Once you have found the required entry, press the ↶ key to dial the number, or press the **Options** soft key to access the phonebook entry options; for further details, see page 33.

Editing a Caller Group

1. When the idle screen is displayed, select the **Ph.Book** soft key to scroll to Group Edit by pressing the 4 or ▼ key and press the **Select** soft key.
2. Enter the start of the required group name or scroll through the group list by pressing the ▲ or ▼ key.
3. When the required group is highlighted, press the **Options** soft key.
4. Select each option and change the settings, as required. The following options are available.
 - **Call ring tone:** allows you to select the ring tone to be used when you receive a voice call from a person in the group.

- **SMS tone:** allows you to select the ring tone to be used when you receive a text message from a person in the group.
- **Graphic:** allows you to select the graphic icon to be displayed when you receive a voice call from a person in the group.
- **Group Name:** allows you to assign a name to the group; for further details on how to enter characters, see page 40.

5. When you have finished, press the  or  key.

Speed-Dialing

Once you have stored phone numbers in the SIM card, you can set up to eight speed-dial entries and then dial them easily whenever you want, simply by pressing the associated number key.

Setting Up Speed-Dial Entries

1. When the idle screen is displayed, select the **Ph.Book** soft key to scroll to **Speed Dial** by pressing the 5 or ▼ key and press the **Select** soft key.
 2. Select the key to which you wish to assign the speed-dialing feature (keys 2 to 9) and press the **OK** soft key.
- Note:** If you have already assigned a number to the key, the **Options** soft key replaces the **OK** soft key. Go to Step 6.
3. Select the required phonebook entry from the list and press the **View** soft key.

4. Select the required number if the entry has more than one number, by pressing the ▲ or ▼ key and press the **Select** soft key.
5. Once you have assigned a number to the selected key, four options are available:
 - **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.
6. When you have finished, press the  or  key.

Speed-Dialing from the Phonebook

To speed-dial the numbers assigned to keys **2** to **9**, press and hold down the appropriate key.

Note: Memory location 1 is reserved for your Voice Mail server number and cannot be changed.

Deleting All Phonebook Entries

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

1. When the idle screen displays, press the **Ph.Book** soft key.
2. Scroll to **Delete All** by pressing the Up or Down key and press the **Select** soft key.
3. To place a check mark on the memory you want to empty, **ALL**, **SIM** or **Phone**, press the **Mark** soft key.

You can remove the check mark by pressing the **Unmark** soft key.

4. When you are 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.

Note: The password is preset to "00000000" at the factory.

6. When the confirming message appears, press the **Yes** soft key.
7. When you finish deleting, press the  or the  key.

Checking Memory Status

You can check how many names and numbers are stored in the phonebook (card and phone memories) or how many free locations remain.

1. When the idle screen is displayed, select the **Ph.Book** soft key to scroll to Memory Status option pressing the **7** or ▼ key and press the **Select** soft key.
2. When the idle screen is displayed, select the
3. Press the ▲ or ▼ keys to view the number of existing and remaining entries in the card and phone memories.

Entering Text

When using your phone, you will often need to enter text. For example, when storing a name in the phonebook, creating your personal greeting or scheduling events in your calendar. You can enter alphanumeric characters by using your phone's keypad.

You are provided with 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 – when you press the **5** key once, J, K or L may be displayed. The T9 mode automatically compares your keystrokes with an internal linguistic dictionary to determine the correct word, thus requiring far fewer keystrokes than the traditional upper/lower-case character modes.
- **Upper/lower-case character modes:** These modes allow you to enter letters by pressing the key labeled with the required letter once, twice, three or four times until the letter is displayed.
- **Number mode:** This mode allows you to enter numbers.
- **Symbol mode:** This mode allows you to enter symbols, such as 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 in the display.

To select the...	Then press the  soft key until...
T9 mode	 displays. See page 41.

To select the...	Then press the  soft key until...
Alphabet mode	abc displays. See page 42.
Symbol mode	The symbol list displays. See page 43.
Number mode	1 is displayed. See page 43.

Using the T9 Mode

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

1. When you are in the T9 predictive text input mode, start entering a word by pressing keys **2** to **9**. Press each key only once for one letter.

Example: to enter HELLO in the T9 mode, press **4**, **3**, **5**, **5** and **6**.

The word that you are typing appears in the display. It may change with each key that you press.

2. Enter the whole word before editing or deleting the keystrokes.
3. If the word is correct, start entering the next word.
4. Otherwise, press the **0**, **▲** or **▼** key repeatedly to display alternate word choices for the keys that you have pressed.

Example: both OF and ME have the sequence **6** and **3**. The phone displays the most commonly used choice first.

5. Complete each word with a space by pressing the **#** key.
 - To type words not found in the T9 mode, change the text input mode to the upper/lower-case character input mode.
 - To enter full stops, hyphens or apostrophes, press the **1** key. The T9 mode applies grammar rules to ensure that the correct punctuation is used.

- To change the case in the T9 mode, use the * key.
- You can move the cursor by using the ◀ and ▶ keys. To delete letters, press the  key. Press and hold down the  key to clear the display.

Using the Upper/Lower-Case Character Mode

Use the **1** to **0** keys to enter your text.

1. Press the key labeled with the required letter:

- 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 right automatically, and then select the next letter.

Refer to the table below for more information about the characters available.

Key	Characters in the Order Displayed	
	Upper Case	Lower Case
1	Space . 1 ! ? & i ÿ §	. % @ _ £ \$ ¥ ¤ §
2	A B C 2 Ä Å Æ Ç Γ	a b c 2 à ä å æ Γ
3	D E F 3 É Δ Φ	d e f 3 è é Φ
4	G H I 4 Θ Ψ	g h i 4 ì Ψ
5	J K L 5 Λ	j k l 5 Λ
6	M N O 6 Ñ Ø Ö ö	m n o 6 ñ ø ò ö
7	P Q R S 7 Π Σ Ξ	p q r s 7 β Σ Ξ
8	T U V 8 Ü ü	t u v 8 ù ü
9	W X Y Z 9 Ω	w x y z 9 Ω
0	0 * # , ; ‘ “ =	/ : - + () < >

- To insert a space, press the # key.
- You can move the cursor by using the ◀ and ▶ keys. To delete letters, press the  key. Press and hold down the  key to clear the display.

Using the Symbol Mode

The symbol mode enables you to insert symbols in a text message.

Use the navigation keys to scroll to the desired symbol and then press **OK** soft key to insert the highlighted symbol into your message.

Using the Number Mode

The Number mode enables you to enter numbers in a text message (a telephone number for example). Press the keys

corresponding to the required digits before manually switching back to the appropriate text input mode.

In-Call Options

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 this service is supported by the network. Of these two calls, one is active and the other is on hold and you can switch between the calls.

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, proceed as follows.

1. Key in the phone number that you wish to dial or look it up in the phonebook.
2. Press the  key to dial the second call.
3. The first call is automatically put on hold.

Or alternatively, proceed as follows.

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

To swap 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 the other party.

When you have finished, end each call normally by pressing the  [Ⓢ] key.

Switching the Microphone Off (Mute)

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

Example: You wish to say something to another person in the room but do not want the other party to hear you.

To switch the microphone off temporarily, proceed as follows.

1. Press the **Options** soft key.
2. If necessary, press the ▼ key to highlight the **Mute** option.
3. Press the **OK** soft key.

The other party can no longer hear you.

To switch the microphone back on, proceed as follows.

1. Press the **Options** soft key.
2. If necessary, press the ▼ key to highlight the **Unmute** option.
3. Press the **OK** soft key.

The other party can hear you again.

Muting / Sending DTMF

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 key tones. It allows you to press keys without hearing annoying key tones during a call.

Note: To communicate with answering machines or computerized telephony systems, the **Send keys** option must be selected.

Searching for a Number in the Phonebook

You can search for a number in the phonebook during a call.

1. Press the **Options** soft key.
2. Press the ▼ key to highlight the **Phonebook** option.
3. Press the **OK** soft key.

The phonebook entries are listed.

4. Enter the name that you wish to find.

If you enter the start of the name, the phonebook entries are listed, starting with the first entry matching your input. The entry is also highlighted.

5. To view the highlighted entry, press the **Options** soft key.

For a more detailed description of the Phonebook feature, refer to page 31.

Answering a Second Call

You can answer an incoming call while you have a call in progress, if this service is supported by the network and you have set the **Call Waiting** menu option (**Menu 7.2**) to **Activate** (see page 101). You will be notified of an incoming call by a call waiting tone.

To answer a call while you have a call in progress, proceed as follows.

1. Press the  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.

To end a held call, press the **Options** soft key and select the **End Held Call** option.

3. To end the current call, press the  key.

Making a Multiparty Call

A multiparty call is a network service that allows up to six people to take part simultaneously in a multiparty or conference call. For more information, contact your service provider.

Setting up the Multiparty 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 multiparty call, press the **Options** soft key and select the **Join** option.
4. To add a new person to the multiparty call, call the person in the normal way, then press the **Options** soft key and select the **Join** option.

You can add incoming callers by answering the call and pressing **Options**, followed by **Join**. Repeat as required.

Having a Private Conversation With One Participant

1. Press the **Options** soft key and choose the **Select one** option.
The list of call participants appears.
2. Highlight the required person, by pressing the ▲ or ▼ key, followed by the **Select** soft key or the ↶ key.
3. Select the **Private** option.
Now you can talk privately with that person. The other participants can continue to converse with each other.
4. To return to the multiparty call, press the **Options** soft key and select **Join**.

All the multiparty call participants can now hear each other.

Dropping One Participant

1. Press the **Options** soft key and choose the **Select one** option.
The list of call participants appears.
2. Highlight the required person, by pressing the ▲ or ▼ key, followed by the **Select** soft key or the ↶ key.
3. Select **Remove**.
The call is ended with that participant, but you can continue to talk with the other participants.
4. End the multiparty call by closing the phone or pressing the ☎[®] key.

Using the Menus

The phone offers a range of functions that allow you to tailor the phone to your needs. These functions are arranged in menus and sub-menus.

The menus and sub-menus can be accessed by scrolling with the navigation keys or by using the shortcuts.

Accessing Menu Functions by Scrolling

1. In idle mode, press the **Menu** soft key to access the menu facility.
2. Scroll with the ▲ or ▼ key to reach the required main menu, **Phone Settings** for example. Press the **Select** soft key or the ► key to enter the menu.
3. If the menu contains any sub-menus, **Language** for example, you can access them by scrolling with the ▲ or ▼ key and pressing the **Select** soft key.

If the menu that you have selected contains further options, repeat the same procedure.

To...

Scroll through the menus

Confirm the chosen setting

Return to the previous menu level

Exit the menu without changing the settings

Then press the...

▲ or ▼ key or use the Volume keys on the left side of the phone.

Select soft key or the ► key.

↶ soft key.

Ⓜ/C key.

Accessing Menu Functions by Using Shortcuts

The menu items (menu, sub-menus and options) are numbered and can be accessed quickly by using their shortcut numbers. The shortcut number is shown in the bottom right next to the ↶ soft key on the display. Simply press the **Menu** soft key and key in the required number.

Example: Accessing the **Language** option.

1. Press the **Menu** soft key.
2. Press **5** for **Phone Settings**.
3. Press **4** for **Language**.

The languages available are displayed directly.

Note: The numbers assigned to each menu option are indicated in the list on page 52. They may not match the menu number on the phone. It depends on the services supported by the SIM card.

List of Menu Functions

The following illustration shows the menu structure available and indicates the:

- Number assigned to each option
- Page on which you can find a description of each feature

Note: If you use a SIM AT card that provides additional services, the **SIM AT** menu (x) is displayed first when you press the **Menu** soft key to enter the menu facility. For further details, refer to your SIM card documentation.

1. Text messages (see page 58)

- 1.1 Inbox
- 1.2 Outbox
- 1.3 Create
- 1.4 Templates
- 1.5 Settings
 - 1.5.1 Setting 1*
 - 1.5.2 Common setting*
- 1.6 Delete all
- 1.7 Memory status
 - 1.7.1 SIM memory
 - 1.7.2 PHONE memory
 - 1.7.3 CB memory
- 1.8 Voice mail
 - 1.8.1 Call voice mail
 - 1.8.2 Voice server number
- 1.9 Broadcast (If supported)
 - 1.9.1 Read
 - 1.9.2 Receive
 - 1.9.3 Channel List
 - 1.9.4 Language

* Shown only if supported by your SIM card.

2. Picture messages (see page 66)

- 2.1 Inbox
- 2.2 Outbox
- 2.3 Draft
- 2.4 Create
- 2.5 Templates
- 2.6 Delete all
- 2.7 Memory status

3. Call records (see page 74)

- 3.1 Missed calls
- 3.2 Incoming calls
- 3.3 Outgoing calls
- 3.4 Delete all
- 3.5 Call time
 - 3.5.1 Last call
 - 3.5.2 Total outgoing
 - 3.5.3 Total incoming
 - 3.5.4 Reset timers
- 3.6 Call cost
 - 3.6.1 Last call cost
 - 3.6.2 Total cost
 - 3.6.3 Max cost
 - 3.6.4 Reset counters
 - 3.6.5 Set max cost
 - 3.6.6 Price/Unit

4. Sound settings (see page 77)

- 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
- 4.6 Power On/Off
 - 4.6.1 Off
 - 4.6.2 Classical
 - 4.6.3 Cheerful
- 4.7 Extra tones
 - 4.7.1 Error tone
 - 4.7.2 Minute minder
 - 4.7.3 Connect tone

5. Phone settings (see page 81)

- 5.1 Display settings
 - 5.1.1 Wallpaper
 - 5.1.1.1 Wallpaper list
 - 5.1.1.2 Text color
 - 5.1.2 Menu style
 - 5.1.2.1 Bar style
 - 5.1.2.2 Page style
 - 5.1.3 Auto key lock
 - 5.1.3.1 Off
 - 5.1.3.2 15 seconds
 - 5.1.3.3 30 seconds
 - 5.1.3.4 1 minute
 - 5.1.3.5 2 minutes
 - 5.1.4 Contrast
 - 5.1.5 Back light
 - 5.1.5.1 Off
 - 5.1.5.2 15 Seconds
 - 5.1.5.3 30 Seconds

- 5.1.5.4 1 Minute
- 5.1.5.5 3 Minutes
- 5.1.5.6 10 Minutes

5.1.6 Graphic logo

- 5.2 Greeting message
- 5.3 Own number
- 5.4 Language
- 5.5 Security
 - 5.5.1 PIN check
 - 5.5.2 Change PIN
 - 5.5.3 Phone lock
 - 5.5.4 Change password
 - 5.5.5 FDN mode*
 - 5.5.6 Change PIN2*
- 5.6 Extra settings
 - 5.6.1 Auto redial
 - 5.6.2 Anykey answer
- 5.7 Short cut
 - 5.7.1 Key up
 - 5.7.2 Key down
 - 5.7.3 Key right
 - 5.7.4 Key left
- 5.8 Reset settings

6. Organizer (see page 90)

- 6.1 Alarm
- 6.2 Calendar
- 6.3 Time & date
- 6.4 Calculator
- 6.5 To do list
- 6.6 Voice memo
 - 6.6.1 Record
 - 6.6.2 Memo list
 - 6.6.3 Delete all
- 6.7 Currency exchange

7. Network services (see page 99)

- 7.1 Call forwarding
 - 7.1.1 Forward always
 - 7.1.2 Busy
 - 7.1.3 No reply
 - 7.1.4 Unreachable
 - 7.1.5 Cancel all
- 7.2 Call waiting
- 7.3 Network Selection
 - 7.3.1 Automatic
 - 7.3.2 Manual
- 7.4 Caller ID
 - 7.4.1 Default
 - 7.4.2 Hide number
 - 7.4.3 Send number

8. Funbox (see page 103)

- 8.1 t-zones
 - 8.1.1 Home
 - 8.1.2 Favorite
 - 8.1.3 http://
 - 8.1.4 Clear Cache
 - 8.1.5 Push Message
- 8.2 Games
 - 8.2.1 Game1
 - 8.2.2 Game2
 - 8.2.3 Game3
 - 8.2.4 Game4
- 8.3 Sounds
- 8.4 Images
- 8.5 Delete all
- 8.6 Memory status

9. AIM

- 9.1 Sign on
- 9.2. Offline convs.
- 9.3 Settings
 - 9.3.1 Auto-sign on
 - 9.3.2 Change password
 - 9.3.3 Set AIM sounds
 - 9.3.3.1 New IM
 - 9.3.3.2 System message
 - 9.3.3.3 Alert
- 9.4. Help
 - 9.4.1 Sign up
 - 9.4.2 Sign on
 - 9.4.3 Buddy list
 - 9.4.4 Sending IMs
 - 9.4.5 Receiving IMs
 - 9.4.6 Privacy
 - 9.4.7 Away message

Text Messages

The SMS (Short Message Service) function is a network service and may not be supported by your network. Messages can be sent by text, fax, Email and paging messaging systems, provided that these services are supported by your network. To send text messages by phone, you must obtain the number of the SMS centre from your service provider.

When the message icon () appears, you have received new text messages.

Two message boxes are available.

Inbox: used to store the messages that you have received.

Outbox: used to store the messages that you have already sent or will send.

If the message memory is full, an error message is displayed and you cannot receive any new messages.

Note: Use the **Delete** option in the **Inbox** menu (**Menu 1.1**) to delete obsolete messages.

Reading a Message

1. Select the required box and press the **Select** soft key.

The list of messages in the box is displayed with the sender or recipient's phone number or name, if it is available in your phonebook.

2. Select the required message and press the **View** soft key to view the message contents.
3. To scroll through the message, press the ▲ or ▼ key.

While reading a message, you can choose the following options by pressing the **Options** soft key.

Delete: allows you to delete obsolete messages.

Text Reply (inbox only): allows you to reply to the sender by sending a text message. You can also change the SMS center number, if required.

Call Back (inbox only): allows you to call the sender back.

Cut Number: allows you to extract a number from the message text, so that you can call the number or save it in the phonebook.

Send: allows you to send a message that you have received or saved. For further information on how to send a message, see page 59.

Edit Message: allows you to edit a message.

Select Objects: allows you to save the objects, such as sounds or images, from the message into your phone. You can then use the objects when writing a message; for details, see page 61.

Note: The options available vary, depending on the message status (new/old, not sent or sent for example).

Create

Via this menu, you can write and send a text message.

Note: You can enter up to 918 alphanumeric characters for your message. If you add objects to the message, the number of characters you can enter will be decreased.

Creating a Simple Text Message

1. Create your message as required.

Note: For more information about entering characters, refer to page 40.

2. When you have completed your message, press the **Options** soft key. The following options are available.

Send only: allows you to send the message. The message will be deleted after sending.

Save and send: allows you to save a copy of the message and then send the message to the required destination. You can read the message in your outbox using the **Read Messages** option.

Save only: allows you to save the message so that it can be sent later. You can read the message in your outbox using the **Read Messages** option.

Text formatting allows you to select the following options: Size, Underline, and Strike through.

Add content allows you to select the following objects: Sound, Melody, Picture, Animation.

Add templates provides the ability to select from a list of standard comments. You may edit these templates.

Add from phonebook allows you to search through your entries in your phonebook.

Add from bookmark allows you to select from bookmarks you've previously entered into your phone.

Language allows you to change the language in the text input mode.

For details about the options, see page 61.

3. Select **Send Only** or **Save and Send**, and press the **Select** soft key.

If you want just to save the message, select **Save Only**. After saving the message, the phone returns to the **Messages** menu.

4. Enter a destination number and press the **OK** soft key. The message is sent.

Creating a Message using the Options

1. Create your message as required.
2. Press the **Options** soft key.
3. Select one of the following options as required by using the **▲** and **▼** keys and pressing the **Select** soft key.

Text Formatting: allows you to format the style of the text. For the **Size** attribute, the **Normal**, **Large** and **Small** sizes are available. For the **Underline** and **Strike through** attributes, select **On** or **Off**. The attributes can be combined.

Add Objects: allows you to add the required sound, melody picture or animation to the message. Select the category of the object to be added: **Sound**, **Melody**, **Picture** and **Animation** are available. In each category, you can select the various factory-set items or choose an item received from other sources, such as the Internet or other phones.

Add Templates: allows you to apply one of the preset message templates to the text. Select one of the five messages predefined via the **Templates** menu option (**Menu 1.4**); for further details, see page 62.

Language: allows you to change the language to be used in the T9 input mode. Select the language to be used.

4. Complete the message, and send or save it by following the procedure from Step 2 on page 60.

Templates

Using this menu, you can preset up to nine messages that you use most frequently. Scroll through the template list using the ▲ and ▼ keys. When the required message template is highlighted, press the **Options** soft key.

Edit: allows you to write a new message or edit the selected message.

Note: For further information on how to enter characters, refer to page 40.

Send Message: allows you to recall the selected message. Once you have completed the message, you can send, save and send, or simply save it. For details on how to send a message, see page 59.

Delete: allows you to delete the selected message. You are asked to confirm the deletion by pressing the **Yes** soft key.

Settings

Via this menu, you can set up default SMS 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.

Setting x (where 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 SMS center required when sending messages. You must obtain this number from your service provider.

Default destination

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

Default validity: allows you to set the length of time for which your text messages will be stored at the message center while attempts are made to deliver them.

Common setting: four options are available.

Reply path: allows the recipient of your SMS message to send you a reply message via your message center, if the service is provided by the network.

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

Bearer selection: allows you to choose between **GSM** and **GPRS**.

Character Support

Delete all

This menu provides the option to delete messages saved on your SIM or Phone for both your Inbox and Outbox. In addition, it also provides the option to delete CB Messages and by selecting the All Messages, you are capable of deleting all at one time.

Memory status

This menu shows how many messages are currently stored in the SIM, phone and CB memories.

Voice mail

This menu provides you with a way of accessing your voice mailbox (if provided by your network).

The following options are available.

Call voice mail: before using this feature, you must enter the voice server number obtained from your service provider (see menu option **1.8.2**). You can then select this option and simply press the **OK** soft key to listen to your messages.

To quickly connect to the voice server, press and hold down the **1** key in idle mode.

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

To...	Then press the...
Enter the server number	Corresponding numeric keys.
Correct a digit	 key.
Move the cursor to the left/right without clearing the digit	◀ or ▶ key.

Note: Voice Mail is a network feature. Please contact your service provider for more information.

Broadcast

This network service allows you to receive text messages on various topics, such as the weather or traffic. Messages are displayed immediately they are received, provided that:

- The phone is in idle mode
- The **Receive** option is set to **Enable**
- The message channel is currently active in the channel list

The following options are available.

Read: lets you view the message. **Volatile** displays the messages from the network, but loses its contents as soon as the phone is switched off. Scroll through the message by using the ▲ and ▼ keys. While reading a message, press the **Save** soft key to store the message in the **Archive** box for later retrieval.

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: used to enable or disable channels in the list by marking or unmarking them respectively (a check mark is displayed in front of each channel selected).

Add channel: used to declare the ID and title for a new channel.

Delete: used to remove a channel from the list.

Edit: used to change the ID and title of an existing channel.

Language: allows you to select your preferred language to be used when displaying cell broadcast messages.

Please contact your service provider for more information.

Picture messages

Multimedia Message Service (MMS) is a messaging service very similar to Short Message Service (SMS). It provides automatic and immediate delivery of personal multimedia messages from phone to phone or from phone to e-mail. In addition to the familiar text content of text messages, multimedia messages can contain images, graphics, voice and audio clips. An MMS message is a multimedia presentation in a single entry. It is not a text file with attachments. Using the MMS feature, your phone can receive multimedia messages. You can also send picture messages, which are short messages that contain images, such as your photos or graphics you downloaded from the Internet. This function is available only if it is supported by your service provider. Only phones that offer picture message features can receive and display picture messages.

Inbox

Viewing a Message When You Receive it

When a new multimedia message comes in, the display shows the text notification along with the sender's number.

1. Press the **View** soft key to view the message.

The display shows 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 **Exit** soft key.

2. To scroll through the message information, press the Up or Down key.

While viewing the information, press the **Options** soft key to use the following options:

Retrieve: shows you the message contents.

Delete: deletes the message.

Properties: shows you detailed information about the message.

Viewing a Received Message in the Inbox

When you access the **Inbox** menu option (**Menu 2.1**), the list of multimedia messages you received displays with the senders' phone numbers, if they are available in your Phonebook, or subjects. The icons on the left tell you the status of the messages.



Messages you already read.



Messages you haven't read yet.

1. Select a message and press the **Select** soft key to view the message.
2. To scroll through the message, press the Up or Down key.
3. Press the **OK** soft key on the message presentation screen.

While viewing a message, you can choose the Message options by pressing the **Options** soft key.

If you are viewing a new message, the options are the same as when you view a message as soon as you receive it. See the previous section.

When you are reviewing a message, the following options are available:

Delete: deletes the message.

Reply: allows you to reply to the sender by sending a text or picture message.

Callback: allows you to call the sender back.

Cut Address: allows you to extract the destination number from the message, so that you can call the number or save it in your Phonebook.

Forward: allows you to forward the message to another person.

Save picture: allows you to save an image from the message into your phone. Images are stored in the **Pictures** folder in the **Fun Box** menu option.

Save sound: allows you to save a sound from the message into the **Sounds** folder in the **Fun box** menu option.

Properties: shows you information about the message, such as subject, sender's address, message size, status and priority.

Outbox

When you access this menu option, the list of the picture messages you sent or saved displays. The icons on the left tell you the status of the messages.

-  Messages currently being sent
-  Messages sent
-  Messages your phone couldn't send
-  Messages to be sent
-  Messages forwarded

1. Select a message and press the **Select** soft key to view the message contents.
2. To scroll through the message, press the Up or Down key.
3. Press the **OK** soft key on the message presentation screen.

While viewing a message, you can choose the following options by pressing the **Options** soft key:

Delete: deletes the message.

Save address: allows you to extract the destination number from the message, so that you can call the number save it in your Phonebook.

Send: allows you to resend the message.

Edit: allows you to change the message contents, sound, picture or text.

Properties: shows you information about the message, such as subject, recipient's address, message size, status and priority.

Draft

After creating a picture message, you can store it in this message box for later sending. For further details about viewing a message, see "Outbox" on page 68.

Create

This menu option allows you to create a new picture message and then send it to multiple destinations.

Creating and Sending a Picture Message

1. Enter the subject of your message and press the **OK** soft key.
2. When **Add here** highlights, press the **Options** soft key and add the message contents using one of the following options:
 - Add text:** Enter the message text and press the OK soft key.

Add picture: allows you to add a picture stored in the Pictures folder in the **Funbox** menu option. Choose a picture and press the Select soft key.

Add sound: allows you to add a sound. You can record a new voice memo or use a sound stored in the **Sounds** folder in the **Funbox** menu option.

Send: allows you to send the message. Use this option when you finish creating the message. This option is activated after you add a content to the message.

Save: saves the message in the Draft or Templates box for later use. This option is activated after you add a content to the message.

Settings: allows you to change the message settings. After changing, you need to press the  soft key or the  key to go to back to the options screen.

Add destination: allows you to enter destination addresses. See steps 7 to 10. After adding, you need to press the  soft key or the  key to go to back to the options screen.

Preview: shows your message as it will display on the recipient's phone.

Note: You can use the adding options only one time for one page.

3. When the added content displays, press the Down key to highlight **Add here**.
4. Repeat steps 2 and 3 until you finish creating your message.
5. If you want to change the added items, press the Up or Down key to highlight one and press the **Options** soft key. The following options are available:

Edit Text/Picture/Sound: allows you to change text or replace the image or sound with another one.

Add page: allows you to add more pages. You can move to each page using the Left or Right key when **Page** highlights on the message screen.

Delete: deletes the item from your message.

Duration: allows you to set how long one page displays. After a specified length of time, the display scrolls to the next page.

Send: allows you to send the message.

Save: saves the message in the **Draft** or **Templates** box for later use.

Settings: allows you to change the message settings.

Add destination: allows you to enter destination addresses. See steps 7 to 10.

Preview: shows your message as it will display on the recipient's phone.

Note: The options available are different depending on the item selected on the message screen.

6. When you finish creating the message, choose **Send** from the options and press the **Select** soft key.
7. Choose one of the following options and press the **Select** soft 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 to send the message as an e-mail.

Phone book: allows you to recall a number from your Phonebook.

8. Enter a number or an e-mail address, or select a number in Phonebook.

9. When the correct number or address displays, press the **OK** soft key.
10. To send the message to multiple destinations, select **Add destination** and press the **Select** soft key.
11. Repeat steps 7 to 10. You can enter up to 11 destinations.
If you want to edit the destinations, select one and press the **Select** soft key. You can change or delete it.
12. When you are finished entering the destinations, select **Send Message** and press the **Select** soft key. Your phone sends the message.

Templates

This menu option stores up to five messages you saved as templates. You can make a new message using the text of them.

Scroll through the template list using the Up and Down keys. When the message template you want highlights, press the **Select** soft key. The message text displays.

Press the **OK** soft key to use the following options:

Edit Message: allows you to send a message using the template. For further details about how to send a message, see page 79.

Delete: allows you to delete the message. You are asked to confirm the deletion by pressing the **Yes** soft key.

Delete all

This menu option allows you to delete all of the picture messages in each message box, Inbox, Outbox and Draft.

When a confirming message displays, press the **Yes** soft key to confirm.

Memory status

This menu option displays the pictures that you have maintained in the memory of your phone. Use the **Next** soft key to rotate through the pictures.

Call records

Via this menu, you can view the phone calls:

- Missed
- Received
- Dialed

Note: You can access all numbers in the three types of call records by pressing the  key in idle mode.

Missed calls

This option lets you view the last 20 unanswered calls.

The number and name, if available, are displayed, together with the date and time at which the call was received. By pressing the **Options** soft key, you can:

- Edit the number if available and dial it or save it in the phonebook
- Delete the call from the list

Incoming calls

This option lets you view the last 20 phone calls answered.

The number and name, if available, are displayed, together with the date and time at which the call was received. By pressing the **Options** soft key, you can:

- Edit the number if available and dial it or save it in the phonebook
- Delete the call from the list

Outgoing calls

This option lets you view the last 20 numbers dialed.

The number and name, if available, are displayed, together with the date and time at which the call was made. By pressing the **Options** soft key, you can:

- Delete the number
- Edit the number and save it in the phonebook

Delete all

This option lets you delete calls using the following options:

All calls: All calls will be deleted, both incoming and outgoing.

Missed calls: All missed calls will be deleted.

Incoming calls: All incoming calls will be deleted.

Outgoing calls: All outgoing calls will be deleted.

Call time

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

The following timers are available.

Last call: length of the last call.

Total outgoing: total length of all calls made since the timer was last reset.

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

Reset timers: option used to reset the call timers; you must first enter the phone password (see page 86) and then press the **OK** soft key.

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

Call cost

This feature lets you view the cost of calls.

Note: AOC(Advice Of Charge) information may display in Idle Mode, depending on your SIM card or service provider.

the following options are available:

Last call cost: cost of the last call made.

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

Max cost: maximum cost set via the **Set max cost** option.

Reset counters: option used to reset the cost counter; you must first enter your PIN2 (see page 87) and then press the **Ok** soft key.

Set max cost: option used to enter the maximum cost that you authorise for your calls; you must first enter your PIN2 (see page 87) and then press the **Ok** soft key.

Price / Unit: option used 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 87) and then press the **Ok** soft key.

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, make an error or receive a message

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

Ring tone

This option allows you to select the required ring melody.

You can choose between many different melodies. Each time you select a melody, it is played for a few seconds. If you have downloaded any sounds from the Internet or EasyGPRS program or received any ring tone messages, you can view the list in this menu.

Ring volume

This option allows you to adjust the ring volume to one of five levels.

Use the ▲ and ▼ keys or the Volume keys on the left side of the phone.

Alert type

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

The following options are available.

Melody: the phone rings using the ring melody selected via the **Ring tone** menu option.

Vibration: the phone vibrates but does not ring.

Vibra+Melody: the phone first vibrates three times and then starts ringing.

Keypad tone

This option allows you to select the tone that the keypad generates when you press a key.

The following options are available.

Off: the keys do not make any sound.

Cool: each key, when pressed, makes the same sound but is a different tone from the Beep option.

Piano: each key, when pressed, plays the piano melody.

Tone: each key, when pressed, makes a different sound.

Beep: each key, when pressed, makes the same sound.

Message tone

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

SMS tone

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

The following options are available.

SMS tone1~10: the phone uses an SMS tone. You are provided with ten SMS tones.

OFF: the phone does not use the SMS tone.

Light only: the service light at the top of the phone flashes.

Vibration: the phone vibrates.

Single beep: the phone beeps once.

SMS-CB tone

This option allows you to select how the phone informs you that a new cell broadcast (CB) message has been received.

The following options are available.

OFF: the phone does not use the CB tone.

Light only: the service light at the top of the phone flashes.

Vibration: the phone vibrates.

Single beep: the phone beeps once.

SMS-CB tone1~10: the phone uses a CB tone. You are provided with ten CB tones.

MMS tone

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

The following options are available.

MSG tone1~10: the phone uses an MMS tone. You are provided with ten MSG tones.

OFF: the phone does not use the MMS tone.

Light only: the service light at the top of the phone flashes.

Vibration: the phone vibrates.

Single beep: the phone beeps once.

Power On / Off

Use this option to choose the sound you prefer when turning your phone on or off. Three options are **Off**, **Classical**, and **Cheerful**.

Extra tones

You can customise various other tones used by the phone.

To turn a given tone...	Then press the...
On	Mark soft key. A check mark is displayed in front of the option.
Off	Unmark soft key again. The check mark is no longer displayed.

The following options are available.

Error tone: sets whether the phone informs you that you have made a mistake or not.

Minute minder: sets whether the phone must beep every minute during an outgoing call to keep you informed of the length of your call.

Connect tone: sets your phone to beep when the person you are calling answers the phone.

Phone settings

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

Display settings

You can change the background image and the color of the components in the display according to your preference.

Wallpaper

This option allows you to change the background image (wallpaper) to be displayed in idle mode.

To change the background image, proceed as follows.

1. Scroll through the list by pressing the ▲ or ▼ key.
You have various preset images available. You can also select the blank background and any images downloaded from the Internet or the EasyGPRS program.
2. Press the **Select** soft key when the required image is highlighted.
The selected image is displayed.
3. After viewing the image, press the **Select** soft key to display it on the idle screen.
4. To change the **Text color**, scroll through the list by pressing the ▲ or ▼ key. Select the color desired and press the **Select** soft key.

Menu style

This option allows you to select the menu display style. You can choose between **Bar style** and **Page style**.

Auto key lock

When the Auto Key Lock feature is enabled, the phone keypad is locked and you must press the **Unlock** soft key then press the  key. The phone displays Keypad active.

If you wish to keep your phone unlocked, you must go into the settings and change the option to **Off**.

The following options are available.

Off: the keypad is not locked.

15 Seconds: the keypad is locked after being idle for 15 seconds

30 Seconds: the keypad is locked after being idle for 30 seconds

1 Minute: the keypad is locked after being idle for 1 minute

2 Minutes: the keypad is locked after being idle for 2 minutes

Contrast

This option allows you to adjust the contrast of the display screens to make them lighter or darker.

To adjust the display contrast, proceed as follows.

1. Adjust the contrast by using the ▲ and ▼ keys or the Volume keys on the left side of the phone.
2. When you are satisfied, press the **OK** soft key to save the selection.

Back light

You can select whether or not the phone uses the backlight. A marginal increase in standby/talk time can be achieved by turning the backlight off.

The following options are available.

Off: the backlight is not used.

15 Seconds : the backlight comes on when you press a key or receive a call and switches off 15 seconds after the last key is pressed.

30 Seconds: the backlight comes on when you press a key or receive a call and switches off 30 seconds after the last key is pressed.

1 Minute: the backlight comes on when you press a key or receive a call and switches off 1 minute after the last key is pressed.

3 Minutes: the backlight comes on when you press a key or receive a call and switches off 3 minutes after the last key is pressed.

10 Minutes: the backlight comes on when you press a key or receive a call and switches off 10 minutes after the last key is pressed.

Graphic logo

This option allows you to display your operator's logo instead of its name.

On: The operator logo stored in your phone is displayed in idle mode; if no logo has been stored, the operator name is displayed.

Off: The operator name is displayed in idle mode.

Greeting message

This option allows you to set a greeting message to be displayed briefly when the phone is switched on. The current message is displayed.

To...	Then press the...
Clear the existing message	 key and hold it down until the message is cleared.
Enter a new message	Appropriate alphanumeric keys.
Change the text input mode	 soft key.

For further details on how to enter characters, refer to page 40.

Own number

This feature allows you to:

- Assign a name to each of your own phone numbers registered on your SIM card
- Edit the names and numbers

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

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

Language

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.

Security

The Security feature enables you to restrict the use of your phone to:

- The people of your choice
- The types of calls of your choice

Various codes and passwords are used to protect the features of your phone.

PIN check

When the PIN Check feature is enabled, you must enter your PIN each time you switch the phone on. 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.

To change your PIN, refer to the **Change PIN** menu option (**Menu 5.5.2**).

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

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

When the Phone Lock feature is enabled, the phone is locked and you must enter the 8-digit phone password each time the phone is switched on.

The password is factory set to “00000000”. To change the phone password, refer to the **Change password** menu option.

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 the phone on.

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

Change password

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 factory set to “00000000”. Once you have entered a new password, you are asked to confirm it by entering it again.

FDN mode

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 phone any number.

Enable: you can only call phone numbers stored in the phonebook. You must enter your PIN2.

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

To change your PIN2, refer to the **Change PIN2** menu option (**Menu 5.5.6**) below.

Change PIN2

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 option is not displayed.

Extra settings

You can turn the automatic redialing or answering features on or off.

To turn a feature...	Then press the...
On	ON soft key. A check mark is displayed in front of the option.
Off	OFF soft key. The check mark is no longer displayed.

The following options are available.

Auto redial: when this option is checked, the phone makes up to ten attempts to redial a phone number after an unsuccessful call.

Note: The interval between two call attempts varies.

Anykey answer: when this option is checked, you can answer an incoming call by pressing any key, except the **Reject** soft key. To reject the call, press the  [Ⓢ] key or the **Reject** soft key.

When this option is unchecked, you can only press the  key or **Accept** soft key.

Short cut

The navigation keys can be used as shortcut keys. When held down in idle mode, they allow you to access specific menu options directly.

To assign a shortcut to a key, proceed as follows.

1. Select the key to be used as a shortcut key by pressing the  or  key, followed by the **Select** soft key.

Key up ()

Key down ()

Key right ()

Key left ()

2. Select the menu option to be assigned to the key by pressing the  or  key.

Note: To deactivate a shortcut key, select the **None** option.

3. Press the **Select** soft key to save the selection.

Reset settings

You can easily reset your phone to its default configuration. To do so, proceed as follows.

1. Select the **Reset settings** menu option.
2. Enter the 8-digit phone password and press the **OK** soft key.

Note: The password is preset to “00000000”. To change this password, refer to page 86.

Organizer

The Organizer feature enables you to:

- View the calendar and organize your schedule
- Define a list of things to do
- Set the current date and time
- Set the alarm so that the phone rings at a specific time (to remind you of an appointment for example)
- Use the phone as a calculator for basic mathematical equations or currency exchange operations

Alarm

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 (**Autopower** menu option set to **Enable**)

The following options are available.

Once Alarm: the alarm rings only once and is then deactivated.

Daily Alarm: the alarm rings every day at the same time.

Morning Call: the alarm rings to wake you up in the morning.

To set the alarm, proceed as follows.

1. Choose the type of alarm to be set.
2. Enter the required time and day of the week, if applicable.
3. Press the **OK** soft key.
4. If you select **Morning Call** in Step 1, select the repeat option: **Monday to Friday** or **Monday to Saturday**.

Remove Alarm: deactivates all alarm settings.

Autopower: if this option is set to **Enable**, the alarm will ring at the specified time, even when 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 will not ring.

To stop the alarm when it rings, press the **Exit** soft key.

When setting or viewing an alarm, the following options are available when you press the **Options** soft key.

Remove Alarm: deactivates the current alarm.

Alarm Sound Set: allows you to select the alarm melody this option can be found in each of the Alarm options.

Calendar

With the Calendar feature, you can:

- Consult the calendar
- Write memos to keep track of your schedule and trigger an alarm if necessary

Consulting the Calendar

When you select the **Calendar** menu option, the calendar is displayed. The following options are available when you press the **Options** soft key.

Search all: displays all memos set, regardless of the day and starting with the oldest. To scroll through the memos, press the **▲** or **▼** key.

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

Go to date: allows you to jump to a specific date.

Exit: exits the Calendar feature and returns to the idle mode.

Writing a Memo

To write or edit a memo on a specific date, proceed as follows.

1. Select the required date in the calendar, using the navigation keys.

Note: To skip to the previous or next month, press the  keys on the left side of the phone.

2. Press the **Select** soft key.

An empty memo screen is displayed to allow you to enter your memo.

3. Enter your memo and then press the **OK** soft key.

Note: For further details on how to enter characters, refer to page 40.

You are asked if you wish to set the alarm.

4. If you want the alarm to ring on the chosen day, press the **Yes** soft key.

Otherwise, press the **No** soft key.

5. If you pressed the **Yes** soft key, set the time for the alarm and press the **OK** soft key.

The color of the date is changed to green to indicate that a memo exists.

Editing a Memo

1. To edit a memo, select the **Calendar** menu option.

Select the date your memo is set to occur by using the right and left arrow keys. Press the **Select** soft key.

2. Press the **Options** soft key.

3. Select the **Edit** menu option and edit the memo appropriately.

Note: For further details about how to enter characters, refer to page 40.

Once you have finished editing the memo, press the **OK** soft key. The following options are then available when you press the **Options** soft key.

Alarm: allows you to set the alarm to ring on the chosen day.

Delete: allows you to delete the memo.

Copy to: allows you to copy the memo to another date and/or time.

Move to: allows you to change the date and/or time of the memo.

Time & date

This option allows you to change the current time and date displayed. You can also check the current time for Greenwich Mean Time (GMT) and 21 major cities around the world.

The following options are available.

Set Time: allows you to enter the current time. You can choose the time format via the **Time Format** menu option (**Menu 6.3.4**).

Note: Before setting the time, you must specify your time zone, via the **World Time** menu option (**Menu 6.3.3**).

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

World Time: allows you to check the current time for Greenwich Mean Time (GMT) and 21 major cities around the world, using the ◀ and ▶ keys.

The screen shows the:

- City name
- Current date and time
- Time difference between the selected city and your city if you have set the local time (see below for further details) or GMT (by default)

To select the time zone in which you are located, proceed as follows.

1. Select the city corresponding to your time zone by pressing the ◀ and ▶ key one or more times.

The local date and time are displayed.

2. Press the **Set** soft key.

Time Format: allows you to change the time format to **24 Hours** or **12 Hours**.

Calculator

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

Using the Calculator

1. Enter the first number using the numeric keys.
2. Press the right soft key until the required arithmetic symbol appears: + (add), - (subtract), x (multiply), / (divide).
3. Enter the second number.
4. Repeat Steps 1 to 3 as many times as required.

Note:

- To erase any mistakes and clear the display, press the  key.
- To include a decimal point or a bracket, press the left soft key until the required symbol is displayed.

5. To calculate the result, press the  key.

To do list

This feature allows you to:

- Draw up a list of tasks to be done
- Assign a priority and deadline to each task
- Sort the tasks by priority and status mark

Creating the To Do List

1. Press the **New** soft key.
2. Enter the first task.

Note: You can enter up to 40 characters. For further details on how to enter characters, see page 40.

3. Press the **OK** soft key.
4. Select high, normal or low priority using the ▲ or ▼ key and press the **Select** soft key.
5. Enter your deadline.

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

6. Press the **OK** soft key.

Editing the To Do List

If tasks are already defined in the To Do List when you select the **To Do List** menu option (**Menu 6.5**), the current contents are displayed with the status mark and priority (three stars for high, two for normal and one for low).

The following options are available.

To...	Then...
View the details for a specific task	Highlight the task. Press the View soft key.
Change the status of a specific task	Highlight the task. Press the  key to mark the task as completed as of the current date and time. <u>or</u> Highlight the task. Press the Options soft key. Select the Mark option. Select the appropriate status (Done or Undo).
Create a new task	Press the Options soft key. Select the New option. Enter the text, priority and deadline for the task.
Edit an existing task	Highlight the task. Press the Options soft key. Select the Edit option. Change the text, priority and deadline for the task.
Sort the existing tasks by priority or status	Press the Options soft key. Select the Sort option. Select the sort criterion (High , Low , Done or Undo).
Copy a task	Highlight the task. Press the Options soft key. Select the Copy option. Change the text, priority and deadline for the task as required.

To...	Then...
Copy a task to the calendar	Highlight the task. Press the Options soft key. Select the Copy to calendar option. Change the text and deadline for the task and set the alarm as required.
Delete a task	Highlight the task. Press the Options soft key. Select the Delete option.
Delete all tasks	Press the Options soft key. Select the Delete all option. Confirm the deletion by pressing OK .
Exit the To Do list	Press the Options soft key. Select the Exit option.

Voice memo

Voice Memo allows you to record voice messages for your convenience. The following options are available.

To...	Then...
Record	Press the left soft key to BEGIN recording. Once you have completed the recording, press the left soft key again to STOP the recording. You can then 1. Replay 2. Re-record 3. Save 4. Quit

To...	Then...
Memo list	To review the memo list select the left soft key and use the ▲ or ▼ key to scroll through the list of memos. Press the Options soft key.
Delete all	Press the Select soft key. This will delete all the voice memos you have stored.

Currency exchange

Using this menu option, you can make currency conversions.

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

You can insert a decimal point by pressing the  key.

2. Enter the amount for which you wish to conduct the currency conversion and press the **OK** soft key.

The exchange rate amount you entered and equivalent value are displayed.

3. Press the **Exit** soft key to exit the currency convertor.

Network services

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

Call forwarding

This network service enables incoming calls to be rerouted to the number that you specify.

Example: You may wish to forward your business calls to a colleague while you are on holiday.

Call forwarding can be set up in the following ways.

Forward always: all calls (**Voice and Data**) are forwarded to the designated number. To activate press the **Activate** soft key. To exit press the **Exit** soft key.

Busy: calls are forwarded if you are already making another call.

No reply: calls are forwarded if you do not answer the phone.

Unreachable: calls are forwarded if you are not in an area covered by your service provider.

Cancel all: all call forwarding options are cancelled.

You can specify individual forwarding options for each of the following call types:

- Voice calls only
- Data calls only

Example: You can forward voice calls to your colleague if you are already using the phone.

To set your call forwarding options, proceed as follows.

1. Select the type of call forwarding required by pressing the ▲ or ▼ key until the appropriate option is highlighted, and then press **Select**.
2. Select the type of calls to be forwarded by pressing the ▲ or ▼ key until the appropriate option is highlighted and then press **Select**.

The current status is displayed. If the option has already been set, the number to which the calls are forwarded is displayed.

To...	Then...
Activate call forwarding	Press the Activate soft key. Go to Step 4.
Change the call number	Press the Change soft key. Go to Step 4.
Deactivate call forwarding	Press the Remove soft key.

3. Enter the number to which the calls are to be forwarded and press **OK**.
To enter the international code, press the **0** key until the + sign is displayed.

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

You can deactivate all call forwarding settings by selecting the **Cancel All** option.

Call waiting

This network service enables you to be informed when someone is trying to reach you during another call.

You can specify individual call waiting options for each of the following call types:

- Voice calls only
- Data calls only

To set your call waiting options, proceed as follows.

1. Select the type of calls to which the call waiting option is to be applied by pressing the ▲ or ▼ key until the appropriate option is highlighted and then press the **Select** soft 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

The Network Selection feature enables you to indicate whether the network used when roaming (outside your home area) is selected automatically or manually.

Note: You can select a network other than your home network only if it has a valid roaming agreement with your home network.

To indicate whether the network is to be selected automatically or manually when roaming, proceed as follows.

1. When **Network selection** is displayed, press the **Select** soft key.
2. Press the ▲ or ▼ key until the appropriate option is highlighted and then press the **OK** soft key.

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

If you select **Manual**, the phone scans for the available networks. Go to Step 3.

3. Press the ▲ or ▼ key until the preferred network is highlighted and then press the **OK** soft key.

You are connected to that network.

Caller ID

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 is not displayed on the other person's phone.

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

Funbox

The **Funbox** menu contains several fun options.

t-zones

Your phone is equipped with a WAP Browser to allow you to access and navigate the Wireless Web via your phone. Using this menu, you can use the WAP browser.

Home

Selecting this option connects the phone to the network and loads the homepage of the Wireless Web service provider. You can also press the  in Idle Mode.

Favorite

Selecting the Favorite option allows you to store the URL addresses of your favorite Web sites. You can access this menu directly by pressing and holding the # key while using the WAP browser. To store a URL address:

1. Select an empty location and press the **Options** soft key.
2. Enter the address and press the **Enter** soft key.
3. Enter a name for the favorite item and press the **Enter** soft key.

After saving your favorite items, you can use the following options by pressing the **Options** soft key:

Goto URL: quickly accesses you to the site

Edit: allows you to edit the address

Delete: deletes the address.

http: / /

Selecting this option provides a starting point for you to enter the web address you wish to reach.

Clear cache

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

Press the **Yes** soft key to confirm the deletion. Otherwise, press the **No** soft key.

Push message

In this menu option, 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

Delete all: allows you to delete all of the web messages.

Games

You can enjoy three games with your phone.

Scroll to the required game, using the ▲ and ▼ keys and press the **Select** soft key. For further details on the game, refer to the on-screen help.

Sounds

In this menu, you can view the list of sounds downloaded from the server. You can set the downloaded sounds as the current ring tone, but cannot send the sounds to other phones.

When the memory is full, a warning message is displayed and the phone rejects additional sounds until you erase obsolete ones.

Images

In this menu, you can view the list of pictures downloaded from the server. You can set the downloaded pictures as the current background image, but cannot send them to other phones.

When the memory is full, a warning message is displayed and the phone rejects additional pictures until you erase obsolete ones.

Delete all

This option allows you to delete all games, sounds, and images you have stored on your phone. To select one of these options, press the left soft key to **Mark** your choice. Then press the right soft key to Delete them.

Memory status

This option displays the memory used for games, sounds, and images. Press the Select soft key to view the following options:

Games: each time you press the **Next** soft key, the display shows the total, free and used space, and the number of objects you downloaded.

Sounds and Images: each time you press the **Next** soft key, the display shows the total and free space, including the memory for objects in the **Sounds** and **Images** menus and the memory for voice memos.

Solving Problems

Before contacting the after-sales service, perform the following simple checks. They 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 supplied with the SIM card.
- The option requiring that the PIN be entered each time the phone is switched on was enabled. You must enter your PIN and then disable this option if so required.

Enter PUK

- The PIN code was entered wrongly three times in succession and the phone is now blocked. Enter the PUK supplied by your network operator.

“No service,” “Network failure” or “Not done” is displayed

- The network connection was 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 dialed

- Have you pressed the  key?
- Are you accessing the right cellular network?
- You may have set an outgoing call blocking 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 blocking 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 in the display**

- The battery is insufficiently charged. Replace the battery and recharge it.

The audio quality of the call is poor

- Check the signal strength indicator in the display (); the number of bars indicates the signal strength from strong () to weak ().
- Try moving the phone slightly or moving closer to a window if you are in a building.

No number is dialed when you recall a phonebook entry

- Check that the numbers have been stored correctly, by using the Phonebook Search feature.
- Re-store the number, if necessary.

If the above guidelines do not enable you to solve the problem, take a note of:

- The model and serial numbers of your phone
- Your warranty details
- A clear description of the problem

Then contact your local dealer or Samsung after-sales service.

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 unauthorized use.

When requested for any of the codes explained below, key in the appropriate code (displayed as asterisks) and press the **OK** soft key. If you make a mistake, press the  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 **Security** menu options (**Menu 5.5**). See page 85 for further details.

Important! Avoid using access codes resembling emergency numbers, such as 911, so that you do not dial an emergency number accidentally.

Phone Password

The Phone Lock feature uses the phone password to protect your phone against unauthorized use. The phone password is supplied with the phone and is factory set to 00000000.

To...	Refer to...
Activate/deactivate the Phone Lock feature	Page 86 (Menu 5.5.3).
Change the phone password	Page 86 (Menu 5.5.4).

PIN

The **P**ersonal **I**dentification **N**umber or PIN (4 to 8 digits) protects your SIM card against unauthorized 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...	Refer to...
Activate/deactivate the PIN Check feature	Page 85 (Menu 5.5.1).
Change the PIN	Page 85 (Menu 5.5.2).

PUK

The 8-digit PUK (**P**ersonal **U**nblocking **K**ey) 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, proceed as follows.

1. Key in the PUK and press the **OK** soft key.
2. Enter a new PIN of your choice and press the **OK** soft key.
3. When the **Confirm New PIN** message is displayed, key in the same code again and press the **OK** soft 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, refer to page 87 (**Menu 5.5.7**).

PUK2

The 8-digit PUK2 (**P**ersonal **U**nblocking **K**ey **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, proceed as follows.

1. Key in the PUK2 and press the **OK** soft key.
2. Enter a new PIN2 of your choice and press the **OK** soft key.
3. When the **Confirm PIN2** message is displayed, key in the same code again and press the **OK** soft 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.

WAP Browser

Your phone comes equipped with a WAP (Wireless Application Protocol) browser, making it possible for you to access the Wireless Web.

About the WAP Browser

The WAP Browser allows you to:

- Access up-to-the minute information via your phone
- View specially designed text versions of popular Internet sites including Yahoo!, CNN Mobile and the Weather Channel

Browsing the Wireless Web using your phone is unlike using your computer, in that site providers have:

- Selected only the critical aspects of their site for wireless phone users
- Removed most graphics

Each time you start the WAP Browser, the phone connects to the Wireless Web and the service indicator icon appears on the display to inform you that you are:

- Are connected to the Wireless Web
- Will be billed accordingly (rates vary according to your service option)

The WAP Browser ends the network connection after a certain period of inactivity and automatically reconnects as necessary. For this reason, you may find that you are billed for several network connections within a single session. This is normal and is designed to minimize your bill.

Accessing the WAP Browser

To enter the **t-zones** menu to access the WAP browser:

1. When the idle Screen is displayed, press the **Menu** soft key to enter the menu mode.
2. Press the **▲** or **▼** until the Funbox menu option is displayed, and then press the **Select** soft key. You can also press the **8** key directly.
3. Press the **▲** or **▼** key one or more times to highlight **t-zones**, then press the **Select** soft key. You can also press the **1** key directly.
4. Press the **▲** or **▼** key one or more times to highlight the required option and then press the **Select** soft key.

Option	Description
Home	Connects the phone to the network and loads the homepage of the Wireless Web service provider.
http://	This option allows you to manually enter the URL address of the Web site that you wish to access. You can access this menu directly by pressing and holding down the key in the WAP Browser.
Favorite	Allows you to store the URL addresses of your favorite Web sites. You can access this menu directly by pressing and holding the  key while using the WAP Browser. To store a URL address, select an empty location and enter the address. Three submenus are available. Select Go to URL to access the site quickly, Edit to edit the selected address and Delete to delete the selected address.

Option	Description
Clear Cache	Clears the information stored in the cache (the phone's temporary memory used to store the most recently accessed Web pages).
Push Message	In this menu option, 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. Delete All: allows you to delete all of the web messages.

Starting the WAP Browser

To start the WAP Browser when the idle screen is displayed press the  key or press the Menu soft key, followed by the **8**, **1** and **1** keys.

A connection is established with your service provider and the corresponding homepage is displayed.

The content of the WAP Browser startup homepage depends on your Wireless Web service provider. To scroll through the screen, use the **▲** and **▼** keys.

Note: To access the startup homepage from any other screen in the WAP Browser, use the Home option. For more information on the WAP Browser menus, refer to...

Exiting the WAP Browser

To exit the browser at any time, simply press the  [Ⓢ] key or press and hold down the  key.

Using the WAP Browser

Using the Soft Keys

A bar containing browser commands is located at the bottom of the WAP Browser display. The soft keys below the bar are used to execute these commands. The two keys are called soft keys because their functions changes depending on the WAP Browser application in use.

Navigating the Wap Browser

To...	Then....
Scroll through and select browser items	Press the ▲ and ▼ key until the ► symbol points to the required item, and then press the OK soft key to confirm the selection.
Select a numbered item	Press the corresponding numeric key.
Return to the previous page	Press the Back soft key or the  key.
Return to the startup homepage	Select the Home menu option; for more information on this option, refer to page 117.

Entering Text, Numbers or Symbols

When you are prompted to enter text, the current text entry mode is indicated on the screen. The following modes are available.

Mode	Description
A/a	Allows you to enter letters in the alphabet. Press the corresponding key until the required letter is displayed
1	Allows you to enter numbers.

Note: To enter symbols, press the **1** key repeatedly until the required symbol is displayed.

To...	Then....
Change modes	Press the  key one or more times.
Enter a space	Press the  .
Edit text	Set the cursor to the right of the character to be corrected Press the  key as required. Enter the correct character(s).

Using and Selecting WAP Menu Options

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

To access a menu option, proceed as follows:

1. Press and hold down the  key. A menu is displayed.
2. Highlight the required menu option by pressing the **▲** and **▼** keys.
3. Select the option by pressing the **Select** soft key.
4. If necessary, select the secondary option using the **▲** and **▼** keys, and press the **Select** soft key to confirm.

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

Reload

This option reloads the current page.

Home

This option takes you back at any time to the homepage of the Wireless Web service provider.

Go to URL

This option allows you to enter manually the URL address of the required Web page.

After entering an address, press the **OK** soft key to go there directly.

Show URL

This feature displays the URL address of the site to which you are currently connected. It also enables you to declare the current site as the startup homepage.

To...	Press the...
Declare the current page as your startup homepage	Option soft key, select the Save to Home option and press Select .
Set a bookmark for the current page	Option soft key, select the Save to Bookmark option and press Select .
Cancel your setting	Back soft key.

Health and Safety Information

Usage guidelines: All about performance and safety

Getting the Most Out of Your Reception

The quality of each call you make or receive depends on the signal strength in your area. Your phone informs you of the current signal strength by displaying a number of bars next to the signal strength icon. The more bars displayed, the stronger the signal.

If you're inside a building, being near a window may give you better reception.

Understanding the Power Save Feature

If your phone is unable to find a signal after 15 minutes of searching, a Power Save feature is automatically activated. If your phone is active, it periodically rechecks service availability or you can check it yourself by pressing any key. Anytime the Power Save feature is activated, a message displays on the screen. When a signal is found, your phone returns to standby mode.

Understanding How Your Phone Operates

Your phone is basically a radio transmitter and receiver. When it's turned on, it receives and transmits radio frequency (RF) signals. When you use your phone, the system handling your call controls the power level. This power can range from 0.006 watts to 0.2 watts in digital mode.

Knowing Radio Frequency Safety

The design of your phone complies with updated NCRP standards described below.

In 1991-92, the Institute of Electrical and Electronics Engineers (IEEE) and the American National Standards Institute (ANSI) joined in updating ANSI's 1982 standard for safety levels with respect to human exposure to RF signals. More than 120 scientists, engineers and physicians from universities, government health agencies and industries developed this updated standard after reviewing the available body of research. In 1993, the Federal Communications Commission (FCC) adopted this updated standard in a regulation. In August 1996, the FCC adopted hybrid standard consisting of the existing ANSI/IEEE standard and the guidelines published by the National Council of Radiation Protection and Measurements (NCRP).

Maintaining Your Phone's Peak Performance

Note: For the best care of your phone, only authorized personnel should service your phone and accessories. Faulty service may void the warranty.

There are several simple guidelines to operating your phone properly and maintaining safe, satisfactory service.

- Hold the phone with the antenna raised, fully-extended and over your shoulder.
- Try not to hold, bend or twist the phone's antenna.
- Don't use the phone if the antenna is damaged.
- Speak directly into the phone's receiver.

Maintaining Safe Use of and Access to Your Phone

FAILURE TO FOLLOW THE INSTRUCTIONS OUTLINED MAY LEAD TO SERIOUS PERSONAL INJURY AND POSSIBLE PROPERTY DAMAGE

IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS.

DANGER - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS.

FOR CONNECTION TO A SUPPLY NOT IN THE U.S.A., USE AN ATTACHMENT PLUG ADAPTOR OF THE PROPER CONFIGURATION FOR THE POWER OUTLET.

Using Your Phone While Driving

Talking on your phone while driving is illegal in some states. Even where it's not, it can divert your attention from driving. Remember that safety always comes first.

When using your phone in the car:

- Get to know your phone and its features, such as speed dial and redial.
- When available, use a hands-free device.
- Position your phone within easy reach.
- Let the person you are speaking to know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions.
- Do not take notes or look up phone numbers while driving.
- Dial sensibly and assess the traffic; if possible, place calls when you stationary or before pulling into traffic.
- Do not engage in stressful or emotional conversations that may divert your attention from the road.
- Dial **9,1,1** to report serious emergencies. It's free from your wireless phone.
- Use your phone to help others in emergencies.
- Call special non-emergency wireless number when necessary.

Following Safety Guidelines

Note: Always turn off the phone in health care facilities and request permission before using the phone near medical equipment.

To operate your phone safely and efficiently, always follow any special regulations in a given area. Turn your phone off in areas where use is forbidden or when it may cause interference or danger.

Using Your Phone Near Other Electronic Devices

Most modern electronic equipment is shielded from radio frequency (RF) signals. However, RF signals from wireless phones may affect inadequately shielded electronic equipment.

RF signals may affect improperly installed or inadequately shielded electronic operating systems and/or entertainment systems in motor vehicles. Check with the manufacturer or their representative to determine if these systems are adequately shielded from external RF signals. Also check with the manufacturer regarding any equipment that has been added to your vehicle.

Consult the manufacturer of any personal medical devices, such as pacemakers and hearing aids, to determine if they are adequately shielded from external RF signals.

Turning Off Your Phone Before Flying

Turn off your phone before boarding any aircraft. To prevent possible interference with aircraft systems, the U.S. Federal Aviation Administration (FAA) regulations require you to have permission from a crew member to use your phone while the plane is on the ground. To prevent any risk of interference, FCC regulations prohibit using your phone while the plane is in the air.

Turning Off Your Phone in Dangerous Areas

To avoid interfering with blasting operations, turn off your phone when in a blasting area or in other areas with signs indicating that two-way radios should be turned off. Construction crews often use remote-control RF devices to set off explosives.

Note: Never transport or store flammable gas, liquid or explosives in the compartment of your vehicle that contains your phone or accessories.

Turn off your phone when you're in any area that has a potentially explosive atmosphere. Although it's rare, your phone or its accessories could generate sparks. Sparks could cause an explosion or a fire resulting in bodily injury or even death. These areas are often, but not always, clearly marked. They include:

- Fueling areas such as gas stations.
- Below deck on boats.
- Fuel or chemical transfer or storage facilities.
- Areas where the air contains chemicals or particles such as grain, dust or metal powders.
- Any other area where you would normally be advised to turn off your vehicle's engine.

Restricting Children's Access to your Phone

Your phone is not a toy. Children should not be allowed to play with it because they could hurt themselves and others, damage the phone or make calls that increase your phone bill.

Caring for the Battery

The guidelines listed below help you get the most out of your battery's performance.

- Use only Samsung-approved batteries and desktop chargers. These chargers are designed to maximize battery life. Using other batteries or chargers voids your warranty and may cause damage.
- In order to avoid damage, charge the battery only in temperatures that range from 32° F to 104° F (0° C to 40° C).
- Don't use the battery charger in direct sunlight or in high humidity areas, such as the bathroom.
- Never dispose of the battery by incineration.
- Keep the metal contacts on top of the battery clean.
- Don't attempt to disassemble or short-circuit the battery.
- The battery may need recharging if it has not been used for a long period of time.
- It's best to replace the battery when it no longer provides acceptable performance. It can be recharged hundreds of times before it needs replacing.

Don't store the battery in high temperature areas for long periods of time. It's best to follow these storage rules:

Less than one month

32° F to 104° F (0° C to 40° C)

Disposal of Lithium Ion (Li-Ion) Batteries

For safe disposal options of your Li-Ion batteries, contact your nearest Samsung-authorized service center.

- For safety, do not handle a damaged or leaking Li-Ion battery.
- Be sure to dispose of your battery properly. In some areas, the disposal of batteries in household or business trash may be prohibited.

Acknowledging Special Precautions and FCC

FCC Notice

The phone may cause TV or radio interference if used in close proximity to receiving equipment. The FCC can require you to stop using the phone if such interference cannot be eliminated.

Vehicles using liquefied petroleum gas (such as propane or butane) must comply with the National Fire Protection Standard (NFPA-58). For a copy of this standard, contact the National Fire Protection Association, One Batterymarch Park, Quincy, MA 02269, Attn: Publication Sales Division.

Cautions

Any changes or modifications to your phone not expressly approved in this document could void your warranty for this equipment, and void your authority to operate this equipment. Only use approved batteries, antennas and chargers. The use of any unauthorized accessories may be dangerous and void the phone warranty if said accessories cause damage or a defect to the phone.

Although your phone is quite sturdy, it is a complex piece of equipment and can be broken. Avoid dropping, hitting, bending or sitting on it.

Body-Worn 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 about RF exposure, please visit the FCC website at www.fcc.gov.

SAR Values

- Head: 1.16 (W/kg)
- Body-worn: 0.404 (W/kg)
- Distance: 1.5 (cm)

FDA Consumer Update

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 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.

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 it 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 a 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 Committee
- Occupational Safety and Health Administration

The National Institutes of Health participates in some interagency working group activities, as well.

FDA shares regulatory responsibilities about 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 wireless exposures that people get from these base stations are typically thousands of times lower than those they get from wireless phones. Base stations are thus not the subject of the safety questions discussed in this document.

What kinds of phones are the subject of this update?

The term “wireless phones” refers here to hand-held wireless phones with built-in antennas, often called “cell,” “mobile,” or “PCS”. 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 phone wiring in a house, typically operate at far lower per levels, and thus produce RF exposures far below the FCC safety limits.

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 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 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, glaucoma, 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 phones RF exposures. However, none of the studies can answer questions about long-term exposures, since average period of phone use in these studies was around three years.

What research is needed to decide whether RF exposure from wireless phones poses a health threat?

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 ten 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.

What is FDA doing to find out more about the possible health effects of wireless phone RF?

FDA is working with the U.S. 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.

How can I find out how much radio frequency energy exposure I can get by using my wireless phone?

All phones sold in the United States must comply with Federal Communications Commission (FCC) guidelines that limit radio frequency energy (RF) exposures. FCC established these guidelines in consultation with FDA and other federal health and safety agencies. The FCC limit for exposure from wireless telephones is set at a Specific Absorption Rate (SAR) of 1.6 watts per kilogram (1.6 W/kg). The FCC limit is consistent with the safety standards developed by the Institute of Electrical and Electronic Engineering (IEEE) and the National Council on Radiation Protection and Measurement. The exposure limit takes into consideration the body's ability to remove heat from the tissue that absorb energy from the wireless phone and is set well below levels known to have effects.

Manufacturers of wireless phones must report the RF exposure level for each model of phone to the FCC. The FCC website (<http://www.fcc.gov/oet/rfsafety>) gives directions for locating the FCC identification number on your phone so you can find your phone's RF exposure level in the online listing.

What has FDA done to measure the radio frequency energy coming from wireless phones?

The Institute of Electrical and Electronic Engineers (IEEE) is developing a technical standard for measuring the radio frequency energy (RF) exposure from wireless phones and other wireless hand sets with the participation and leadership of FDA scientists and engineers. The standard, "Recommended Practice for Determining the Spatial-Peak Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques," sets forth the first consistent test methodology for measuring the rate at which RF is deposited in the heads of wireless phone users. The test method uses a tissue-simulating model of the human head.

Standardized SAR test methodology is expected to greatly improve the consistency of measurements made at different laboratories on the same phone. SAR is the measurement of the amount of energy absorbed in tissue, either by the whole body or a small part of the body. It is measured in watts/kg (or milliwatts/g) of matter. This measurement is used to determine whether a wireless phone complies with safety guidelines.

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 RF exposure from these products, you can use measures like those described above to reduce your RF exposure from wireless phone use.

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.

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.

Where can I find additional information?

- For additional information, please refer to the following resources:
- FDA web page on wireless phones
(<http://www.fda.gov/cdrh/phones/index.html>)
- Federal Communications Commission (FCC) RF Safety Program
(<http://www.fda.gov/oet/rfsafety>)
- International Commission on Non-Ionizing Radiation Protection
(<http://www.icnirp.de>)
- World Health Organization (WHO) International EMF Project
(<http://www.who.int/emf>)
- National Radiological Protection Board (UK)
(<http://www.nrpb.org.uk>)

CTIA Safety Information

Exposure to radio frequency signals

Your wireless hand held portable telephone is a low power radio transmitter and receiver. When it is ON, it receives and also sends out radio frequency (RF) signals.

In August, 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for hand-held wireless phones. Those guidelines are consistent with the safety standards previously set by both U.S. and international standard bodies:

- ANSI C95.1 (1992)
- NCRP Report 86 (1986)
- ICNIRP (1996)

Those standards were based on comprehensive and periodic evaluations of the relevant scientific literature. For example, over 120 scientists, engineers, and physicians from universities, government health agencies, and industry reviewed the available body of research to develop the ANSI Standard (C95.1).

The design of your phone complies with the FCC guidelines (and those standards).

Antenna care

Use only the specified or approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the phone and may violate FCC regulations.

Phone operation

NORMAL POSITION: Hold the phone as you would any other telephone with the antenna pointed up and over your shoulder.

Tips on efficient operation:

For your phone to operate most efficiently:

- Extend your antenna fully.
- Do not touch the antenna unnecessarily when the phone is in use. Contact with the antenna affects call quality and may cause the phone to operate at a higher power level than otherwise needed.

Driving

Check the laws and regulations on the use of wireless telephones in the areas where you drive. Always obey them.

Also, if using your phone while driving, please:

- Give full attention to driving--driving safety is your first responsibility.
- Use hands-free operation, if available.
- Pull off the road and park before making or answering a call if driving conditions so require.

Electronic devices

Most modern electronic equipment is shielded from RF signals. However, certain electronic equipment may not be shielded against RF signals from your wireless phone.

Pacemakers

The Health Industry Manufacturers Association recommends that a minimum separation of six (6") inches be maintained between a hand-held wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research.

Persons with pacemakers:

- Should ALWAYS keep the phone more than six inches from their pacemaker when the pacemaker is turned on;
- Should not carry the phone in a breast pocket;
- Should use the ear opposite the pacemaker to minimize the potential for interference.
- If you have any reason to suspect that interference is taking place, turn your phone OFF immediately.

Hearing aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may want to consult your service provider (or call the customer service line to discuss alternatives.) Optional for each phone manufacturer.

Other medical devices

If you use any other personal medical device, consult the manufacturer of your device to determine if they are adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information.

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

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle. You should also consult the manufacturer of any equipment that has been added to your vehicle.

Posted facilities

Turn your phone OFF in any facility where posted notices so require.

Aircraft

FCC regulations prohibit using your phone while in the air. Switch OFF your phone before boarding an aircraft.

Blasting areas

To avoid interfering with blasting operations, turn your phone OFF when in a “blasting area” or in areas posted: “Turn off two-way radio”. Obey all signs and instructions.

Potentially explosive atmospheres

Turn your phone OFF when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Areas with a potentially explosive atmosphere are often but not always clearly marked. They include fueling areas such as gasoline stations; below deck on boats; fuel or 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.

For vehicles equipped with an airbag

An airbag inflates with great force. DO NOT place objects, including both installed or portable wireless equipment, in the area over the air bag deployment area. If in-vehicle wireless equipment is improperly installed and the air bag inflates, serious injury could result.

Owner's Record

The model number, regulatory number and serial number are located on a nameplate inside the battery compartment. Record the serial number in the space provided below. This will be helpful if you need to contact us about your phone in the future.

Model: SGH-C225

Serial No.:

User Guide Proprietary Notice

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Holster	90 Days
Other Phone Accessories	1 Year

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[080802]

Glossary

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

Call Forwarding

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

Ability to inform users that they have an incoming call when engaged on another call.

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.

Line Identification Services (Caller ID)

Services allowing subscribers to view or block the telephone numbers of callers.

Multiparty 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 unauthorized 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 Dialing 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  and  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

Dual Band

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

Voice Mail

Computerized 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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Access the Menu Functions	① Press the Menu soft key. ② Scroll with the UP and DOWN arrow keys through the list of the menus until you reach the required menu. ③ Press the Select soft key. ④ Scroll with the UP and DOWN arrow keys through the list of the options until the required one is selected. ⑤ Press the Select soft key.
• Each of the two soft keys ( and ) perform the function indicated by the text above it (bottom line in the display).	

Dual Band SGH-C225 GPRS Telephone Quick Reference Card	
Switch On/Off	Press and hold the  ^① key.
Make a Call	① Key in the number. ② Press the  key.
End a Call	Briefly press the  ^① key.
View Missed Calls Immediately After Missing Them	① Open the phone and press the View soft key. ② Scroll with the UP and DOWN arrow keys through the missed calls. ③ To return the call, press the  key.

Answer a Call	Open the phone or Press the  key.
Adjust the Volume	Press the UP or DOWN arrow key on the left side of the phone.
Choose the Alert Type	① Select the Alert Type menu option (4.3). ② Select an option: • Light only • Melody • Vibration • Vibra+Melody ③ Press the Select soft key.
	Store Numbers in the Phonebook
	① Key in the number. ② Press the Save soft key. ③ Select an icon for label. ④ Press the Select soft key. ⑤ Enter the name. ⑥ Press the OK soft key. ⑦ If necessary, change the location. ⑧ Press the OK soft key. ⑨ Press the  key to return to idle mode.
	Search for a Number in the Phonebook
	① Press the Ph.Book soft key. ② Select the Search option. ③ Enter the start of the name. ④ To scroll through the names, press the UP and DOWN arrow keys. ⑤ Press the View soft key. ⑥ To scroll through the numbers, press the UP and DOWN arrow keys. ⑦ Press the  key to dial.