

SAMSUNG

DUAL BAND GSM TELEPHONE SGH-N600

OWNER'S MANUAL

SAMSUNG

ELECTRONICS



The information contained in this manual is believed to be correct at the time of printing, however Samsung reserves the right to change or modify any of the specifications without notice.

Some of the contents in this manual may differ from your phone, depending on the software installed, your SIM card or your service provider.

Contents

Safety Precautions	7
Unpacking	9
Your Phone	10
Phone Layout	10
Display	12
Service Light	14
Getting Started	15
Installing the SIM Card and the Battery . . .	15
Charging a Battery	18
Switching the Phone On/Off	20
Locking the Keypad	21
Call Functions	22
Making a Call	22
Adjusting the Volume	24
Answering or Rejecting a Call	25
Viewing Missed Calls	26
In-Call Options	28
Entering Text	35
Changing the Text Input Mode	36
Using the T9 Mode	36
Using the ABC Mode	38
Using the Number Mode	40
Using the Symbolic Mode	40

Contents (continued)

Phonebook	41
Storing a Phone Number with a Name	41
Phonebook Options	42
Speed-Dialling by SIM Memory Location ..	45
Searching for and Dialling a Number in the Phonebook	46
Dialling a Number using the Service Directory or Information Numbers	47
Selecting Functions and Options	48
Using the Menus	50
Accessing Menu Functions by Scrolling ...	50
Accessing Menu Functions by Using Shortcuts	51
Menu Structure	52
Call Records	55
Missed Calls (Menu 1-1)	55
Received Calls (Menu 1-2)	55
Dialled Calls (Menu 1-3)	56
Call Time (Menu 1-4)	56
Call Cost (Menu 1-5)	57
Messages	58
Voice Mail (Menu 2-1)	58
Read Messages (Menu 2-2)	59
Write Messages (Menu 2-3)	61
Preset Message List (Menu 2-4)	62
Setup (Menu 2-5)	62
Broadcast (Menu 2-6)	63
Picture Messages (Menu 2-7)	64

Voice Functions	66
Voice Dial (Menu 3-1)	66
Voice Command (Menu 3-2)	69
Voice Memo (Menu 3-3)	70
Tones	72
Ring Tone (Menu 4-1)	72
Melody Composer (Menu 4-2)	73
Ring Volume (Menu 4-3)	75
Alert Type (Menu 4-4)	75
Keypad Tone (Menu 4-5)	76
Message Tone (Menu 4-6)	76
Error Tone (Menu 4-7)	77
Minute Minder (Menu 4-8)	77
Connect Tone (Menu 4-9)	78
Settings	79
Phone Settings (Menu 5-1)	79
Network Services (Menu 5-2)	84
Security Settings (Menu 5-3)	93
LCD/LED Settings (Menu 5-4)	96
Browser Settings (Menu 5-5)	98
Organiser	99
Scheduler (Menu 6-1)	99
Alarm (Menu 6-2)	101
Calculator (Menu 6-3)	103
World Time (Menu 6-4)	105
Clock (Menu 6-5)	106

Contents (continued)

Games	107
Squares (Menu 7-1)	108
Fortress (Menu 7-2)	109
Ice Cave (Menu 7-3)	110
WWW Services	111
Home (Menu 8-1)	111
Bookmark (Menu 8-2)	112
Goto (Menu 8-3)	113
Navigating with the WAP Browser	113
Entering Text, Numbers, or Symbols	115
Network Connection Information	116
Additional Services	117
ALS (Alternate Line Service)	117
Solving Problems	119
Reference Information	122
Access Codes	122
Using the Batteries	125
Safety Information	127
Glossary	131
Index	135
Quick Reference Card	139

Safety Precautions

Read these simple guidelines. Failure to comply with them may be dangerous or illegal.

For more detailed safety information, see "Safety Information" on page 127.

Road safety comes first

Do not use a hand-held phone while driving; park the vehicle first. Remember that in some countries, it is illegal to use a hand-held phone while driving.

Switch off when refuelling

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

Switch off in aircraft

Mobile phones can cause interference. Using them on aircraft is both illegal and dangerous.

Respect special regulations

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

Interference

All mobile phones may be subject to radio interference, which may affect their performance.


Qualified service

Only qualified service personnel must repair cellular equipment. Use only approved accessories and batteries.

Use sensibly

Avoid unnecessary contact with the antenna when the phone is switched on.

Emergency calls

Ensure that the phone is switched on and in service. Enter the emergency number (112 or another official emergency number) and press the  key. Give your location. Do not end the call until given permission to do so.

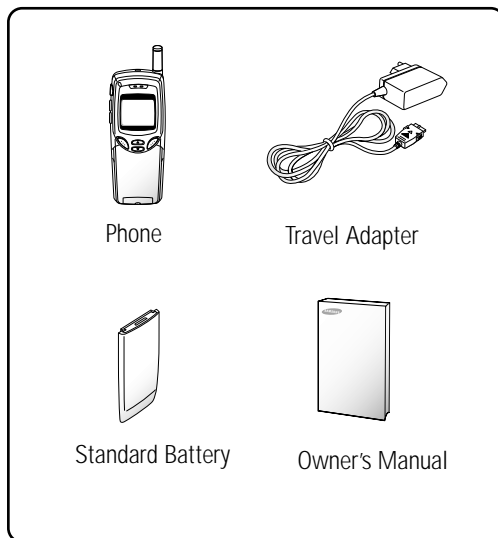
End the call by closing the flip cover or pressing .

IMPORTANT! Use only SAMSUNG-approved accessories. The use of any other power accessory will invalidate any approval or warranty applying to the phone, and may be dangerous.

When you disconnect the power cord of any accessory, grasp and pull the connector, not the cord.

Unpacking

Your package contains the following items.



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

- Cigarette lighter adapter
- Simple hands-free car kit
- Standard battery
- Battery Charger
- Hand Strap
- Data kit
- Wearable Ear-microphone
- Ear-microphone*

* : Depending on the country, this accessory may be supplied in the standard package.

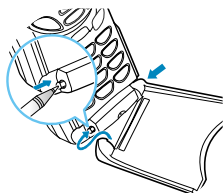
Your Phone

Phone Layout

The following illustration shows the main elements of your phone.



Flip cover



If the flip cover is detached from the phone either accidentally or on purpose, it can be easily clipped back on to the phone.



Soft keys

Perform the functions indicated by the text above them (in the bottom line of the display).



In the menu facility, scroll through the menu options and phonebook memory.



allows you to access the Ring Tone menu, allows you to access the call list in idle mode.



Deletes characters from the display.

In idle mode, allows you to access the WAP Browser quickly.



Makes or answers a call.

In idle mode, access the call list.

In the menu facility, selects a menu function or stores information that you have entered (such as a name) in the phonebook.



Ends a call. Also switches the phone on and off when pressed and held.

In the menu facility, returns to the idle mode and cancels your input.



Enter numbers, letters and some special characters.



When held down in idle mode, locks the keypad manually.



When held down, toggles the Silent mode on and off. (This feature is not available when the phone is connected to a optional car kit.)

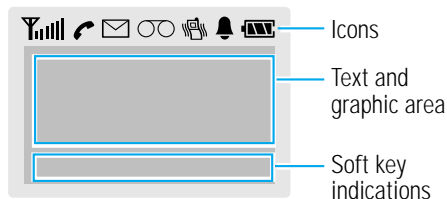


During a call, adjust the earpiece volume. In idle mode, adjust the key tone volume. When you get a call, press and hold it to silence the ring tone immediately.

Display








Display Layout

The display comprises three areas.



Area	Description
First line	Displays various icons (see opposite).
Middle lines	Display messages, instructions and any information that you enter (number to be dialled, for example).
Last line	<p>With the flip cover open, shows the functions currently assigned to the two soft keys.</p> <p>With the flip cover closed, shows various types of information, such as missed calls, call diverting options, advice of charge information or the keypad lock icon (🔒). This information varies, depending on your SIM card, service provider or current context.</p>

Icons

- 
Signal strength: shows the received signal strength. The greater the number of bars, the better the signal strength.
- 
Service: appears when a call is in progress.
- 
New Message: appears when a new text message has been received.
- 
New Voice Mail: appears when a new voice mail message has been received.
- 
Vibrator on/Silent mode on: appears when the Vibrate mode or Silent mode is active.
- 
Alarm on: appears when you set an alarm.
- 
Battery strength: shows the level of your battery. The more bars you see, the more power you have left.

Backlight

The display and keypad are illuminated by a backlight. When you open the flip cover or press any key, the backlight comes on.

To specify the length of time for which the backlight is active, set the **Backlight** menu option (5-1-5); see page 81 for further details.

Service Light

There are several cases in which the service light flashes.


- When in service.
To activate or deactivate the service light, set the Service Light menu option (5-1-6); see page 82.
To select the colour of the service light, set the Service Colour menu option (5-4-4); see page 97.
- When an SMS message is received (the light is yellow, only if the Message Tone is set Light only.).
- When the alarms ring.
- When you receive a call.
To change the colour, set the phonebook Colour option; see page 45.

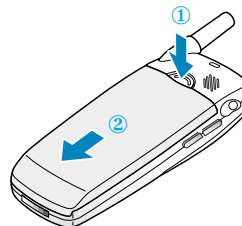
Getting Started

Installing the SIM Card and the Battery

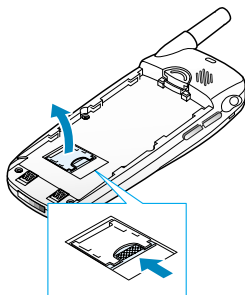
When you subscribe to a cellular network, you are provided with a SIM card loaded with your subscription details (PIN, optional services available and so on).

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

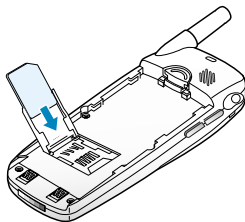
1. If necessary, switch off the phone by holding down  until the closing animation is displayed.
2. Remove the battery. To do so:
 - ① Press and hold down the catch above the battery on the back of the phone
 - ② Slide the battery away, as shown



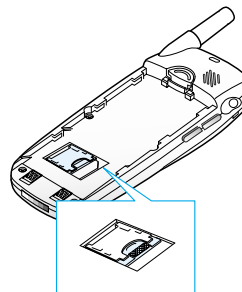
3. Slide the ivory-coloured lock on the SIM card holder left to unlock the holder. Lift the holder up.



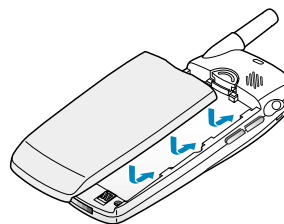
4. Insert the SIM card, ensuring that the cut corner faces top left and the gold contacts of the card face into the phone.



5. Close the SIM card holder and slide the ivory-coloured lock right.



6. Place the battery back on the phone. Slide the battery up towards the catch until it locks into place. Make sure that the battery is properly installed before switching on the power.



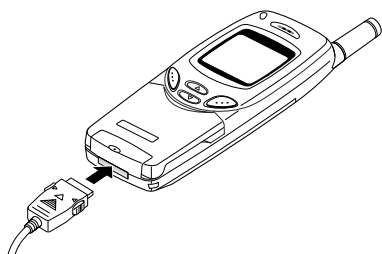
Charging a Battery

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.

Note: You must fully charge the battery before using your phone for the first time. A discharged battery is fully recharged in approximately 140 minutes.

1. With the battery in position on the phone connect the lead from the travel adapter to the bottom of the phone. Check that the arrow on the lead connector is facing towards the front of the phone.

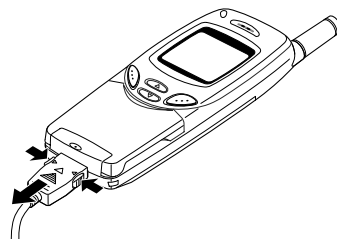


2. Connect the adapter to a standard AC wall outlet.

When the battery is charging, the battery icon in the top right-hand corner of the display fills repeatedly.

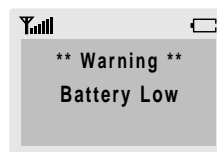
Note: Do not remove the battery from the phone while the travel adapter is connected to the phone.

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:



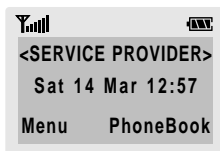
When the battery becomes too weak for the phone to operate, the phone switches off automatically.

Switching the Phone On/Off


1. Open the flip cover.
2. Hold down  for more than one second to switch the phone on.

Note: If “Insert SIM Card” appears on the display, please check that the SIM card is correctly inserted. The phone requires a 3 V SIM card. Please contact your service provider if you experience any problems.


3. If the phone asks for a password, key in the password and press the **OK** soft key. The phone password is factory set to 0000. For further details, see page 122.
4. If the phone asks for a PIN, key in the PIN and press the **OK** soft key. For further details, see page 123.
The phone searches for your network and when it finds it, the idle screen, illustrated below, is displayed.



Note: The display language is determined by the SIM card inserted. To change the language, use the **Language** menu option (5-1-3); for further details, refer to page 80.

5. When you wish to switch the phone off, hold down  for more than two seconds.

Locking the Keypad


If the keypad lock icon() is displayed, you cannot use the keypad.

To activate the keypad, hold down the left soft key. You can access the Menu and Phonebook features without opening the flip cover.

The keypad is automatically locked if no key is pressed within a few seconds or you open and close the flip cover.



Call Functions

Making a Call






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

Note: If you have set the **Auto Redial** option (5-1-7) to **ON** (see page 82) and the person called does not answer or the line is busy, the number is redialled automatically up to ten times.


Making International Calls

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

Correcting the Number

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

Ending a Call






When you have finished your call, briefly press .

Making a Call from the Phonebook

You can store the names and phone numbers of the people you call regularly in the SIM card memory and phone memory called the phonebook. You then simply select the required name to recall the associated number. For further details on the Phonebook feature, refer to page 41.

Redialling the Last Number

The phone stores call records. To use any of these numbers, proceed as follows.

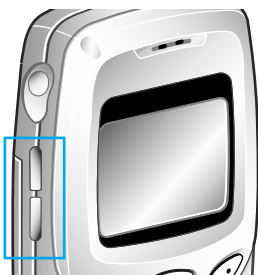
1. If there are any characters on the display, press the  key to return to the idle mode.
2. Press the  key to access the list of the last call record including missed, received and dialled calls.
3. Use the  and  keys to scroll through the numbers until the required number is displayed.
4. Press the  key to dial the number displayed.

Using the Voice Dialling Feature

When the Voice Dialling function is used, by saying a name, the number that has been associated to that name is dialled automatically. For further details on the Voice Dialling feature, refer to page 66.

Adjusting the Volume

During a call, if you wish to adjust the earpiece volume, use the up or down key on the left side of the phone.



When your keypad is unlocked or your phone is not in silent mode, you can adjust the key tone volume using the same keys in idle mode.


When you get a call, press and hold the volume key to silence the ring tone immediately.

Answering or Rejecting a Call

When somebody calls you, the phone rings and the phone icon in the middle of the screen flashes. If the caller can be identified, the caller's phone number (or name if stored in your phonebook) is displayed.

Answering a Call

There are three ways to answer an incoming call.

- Press the **Accept** soft key.
- Open the flip cover.
- When the **Any-Key Answer** menu option is set to **ON**, press any key (except  the **Reject** soft key or the volume key)

Rejecting a Call

- Close the flip cover or press  or the **Reject** soft

key.

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 and you can then call the person back, if necessary.

The number of missed calls is displayed on the idle screen immediately after the call was missed.





To view the missed call immediately, proceed as follows.


- | | |
|-----------------------------------|---------------------------------|
| 1. If the flip cover is... | Then... |
| Closed | Open the flip cover. |
| Open | Press the View soft key. |

The number corresponding to the most recent missed call is displayed, if available.



- | | |
|-------------------------------------|---|
| 2. To... | Then press the... |
| Scroll through the missed calls |  or  key. |
| Call the number displayed |  key. |
| Edit or delete a missed call number | Options soft key (see opposite). |


Editing a Missed Call Number

1. Press the **Options** soft key.
2. Press  or  to highlight the **Paste** option.
3. Press the **Select** soft key.
4. Change the number as required. Press  or  to move back through the number.
5. **To...** **Then press the...**

Call the number	 key.
Store the number	Save soft key and enter the name and location required (for further details, refer to page 41).

Deleting a Missed Call

1. Press the **Options** soft key.
2. Press  or  to highlight the **Delete** option.
3. Press the **Select** soft key.

You can press  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 (1-1); for further details, see page 55.

In-Call Options



Your phone provides a number of control functions that you can use during a call. To access these functions during a call, press the **Options** soft 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. Press  or  to highlight the **Mute** option.
3. Press the **OK** soft key.

Your correspondent can no longer hear you.



To switch the microphone back on, proceed as follows.

1. Press the **Options** soft key.
2. Press  or  to highlight the **Unmute** option.
3. Press the **OK** soft key.

Your correspondent can hear you again.

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  or  to highlight the **Phonebook** option.
3. Press the **OK** soft key.
4. Enter the start of the name that you wish to find and press the **Find** soft key.

Note: You can also scroll through the phonebook from the beginning, by pressing the **Find** soft key directly.

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

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


For a more detailed description of the Phonebook feature, refer to page 41.

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 swap between the calls.

To place a call on hold, press the **Options** soft key, and select the **Hold** option. You can reactivate the call whenever you want, by pressing the **Retrieve** 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  to dial the second call.
The first call is automatically put on hold.

Or alternatively, proceed as follows.

1. Put the current call on hold by pressing the **Options** soft key and selecting the **Hold** option.
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 .


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 (5-2-3) to **Activate** (see page 89). 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  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 .
You are automatically switched back to any held calls.

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  or , followed by .





3. Press the **Private** soft key.

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  or , followed by .
3. Press the **Remove** soft key. 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 flip cover or pressing .

Muting/Sending Key Tones

These options allow you to turn the key tones off or on. If the **Mute keys** option is selected, your phone does not transmit the key tones.

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

Using the SMS Service

If you receive an SMS (Short Message Service) message during a call, the message icon (✉) appears in the display.

After you have finished your call, you can read the message; refer to page 59 for further details.


Note: It is also possible to read SMS messages during a call using the options soft key and selecting '5 SMS service' and then '1 Read messages'.

Entering Text

Whether storing a name in the phonebook, creating your personal greeting or scheduling events in your calendar, you will need to enter text.

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  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 ABC mode.

ABC mode


This mode allows you to enter letters by pressing the key labelled with the required letter once, twice three or four times until the letter is displayed.

Number mode

This mode allows you to enter numbers.

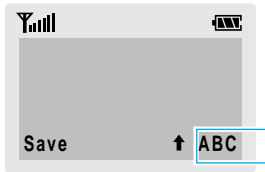
Symbolic mode

This mode allows you to enter special characters.

 is a registered trademark of Tegic Communications, Inc.

Changing the Text Input Mode

1. When you are in a field that allows characters to be entered, you will notice the text input mode indicator in the lower right corner of the display.



Text input mode

indicator:

ABC: ABC mode

NUM: Number mode

T9: T9 mode

SYM: Symbolic mode

2. Press the right soft key.
The modes available are displayed.
3. Scroll to the required mode, then press the Select soft key.

Using the T9 Mode

The T9 predictive text input mode allows you to enter words easily with a minimum of key presses. As you press each key, the phone selects a letter that makes up the word that it thinks you are typing, based on a built-in dictionary. As a new letter is added, the word changes based on the key that you have pressed.

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

Example: to enter HELLO in the T9 English mode, press **4 H**, **5 E**, **5 L**, **5 O** and **5 O**.

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 any keystrokes.
3. If the word is correct, start entering the next word.

Otherwise, press **0 +** repeatedly to display alternate word choices for the keys that you have pressed.

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


4. Complete each word with a space by pressing the **6 SP** key.

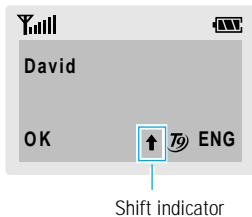
To type words not found in the T9 mode, change the text input mode to the ABC mode.


To delete letters, press **67 C**. Press and hold down **67 D** to erase entire words.

There are three shift options:

- Lower Case (no shift indicator)
- Initial Cap (↑ indicator)
- Caps Lock (↑ indicator)

Press  one or more times to display the appropriate shift indicator and continue typing normally.




Note: To exit the text input mode without saving your input, press . The phone returns to the previous menu level.

Using the ABC Mode

Use the  to  keys to enter your text.

1. Press the key labelled with the required letter:
 - Once for the first letter
 - Twice for the second letter
 - And so on


Note: To display a list of special characters, press . See the table on the next page for more information on the characters available.


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.

There are three shift options:

- Lower Case (no shift indicator)
- Initial Cap (↑ indicator)
- Caps Lock (↑ indicator)

Press the  key one or more times to display the appropriate shift indicator in the bottom line of the display and continue typing normally.

To insert a space, press the  key.

To delete letters, press . Press and hold down  to erase entire words.

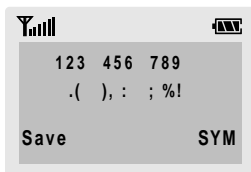
Key	Characters in the Order Displayed	
	Upper Case	Lower Case
1	: ; , ' 1 = " /	. , ? ! 1 - ' @ :
2	A B C 2 Å Æ Å Γ	a b c 2 à ä æ å Ç
3	D E F 3 É Δ	d e f 3 é è
4	G H I 4 Θ	g h i 4 ï
5	J K L 5 Λ	j k l 5
6	M N O 6 Ñ Ò Ø Æ	m n o 6 ñ ò ø
7	P Q R S 7 Π Σ	p q r s 7 ß
8	T U V 8 Ù Φ	t u v 8 ù ü
9	W X Y Z 9 Ψ Ω	w x y z 9
0	0 * < > % # £	0 + () & _ \$



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 entry mode.

Using the Symbolic Mode

The Symbolic mode enables you to enter various symbols.



To scroll through the symbols available, press the  or  key. Press the number key corresponding to the required symbol. The phone then automatically switches back to the text entry mode used immediately prior to selecting the Symbolic mode.

Phonebook



You can store phone numbers and their corresponding names in the memory of your SIM card. In addition, you can store up to 500 numbers and names 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 Phone Number with a Name





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.

Notes:

- If you make a mistake while entering a number, correct it using the  soft key. For further details, refer to page 22.
- To insert a dialling pause for special phone services, such as banking by phone, hold down . 'P' is displayed to indicate the pause.

2. When you are sure that the number is correct, press the **Save** soft key.
3. Enter the corresponding name (the maximum length depends on your SIM card). For information on how to enter a name, see page 35.
4. When you are satisfied, press the **Save** soft key. 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.
5. Press the right soft key to toggle between the phone (**To Phone**) and card (**To Card**) memories.

6. If you do not want to save the number and name in the suggested location, press  to clear the location number and enter your preferred location by pressing the number keys.
7. Press **OK** to store the name and number.
You can access the phonebook options by pressing the **Options** soft key, or scroll through the memory with  or .
8. To exit, press the  key.

Phonebook Options

When storing or viewing a number in the phonebook, **Options** appears above the left soft key to allow you to access the phonebook options, described in the following paragraphs.

Accessing the Options

To access the various phonebook options, proceed as follows.

1. Press the **Options** soft key.



The first available option is highlighted.

2. **To...** **Then press the...**

Select the highlighted option

Select soft key.

Highlight a different option

 or  key one or more times until the required option is highlighted.

Voice Record

Note: This option only appears if no name has as yet been recorded.

This option allows you to add a voice tag to the number.

Follow the instructions given by your phone to record the required name.

Play Voice

Note: This option only appears when you have already recorded a name.

This option plays back the names that you have recorded.



Voice Delete

Note: This option only appears when you have already recorded a name.

This option allows you to delete a specific voice tag. You are asked to confirm the deletion by pressing the **OK** soft key.

Paste

Allows you to paste the phonebook number into the normal dialling 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  soft key to change the number as required (refer to page 22 for further details). When you are ready to dial, press .

Edit

Allows you to edit a number and name stored in the phonebook.

Erase

Allows you to erase a number and name stored in the phonebook.

You are asked to confirm that you wish to erase the name and number from the phonebook by pressing the **Yes** soft key.

Copy

Allows you to copy a phonebook 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 another location on the SIM card or in the phone memory.

Memory Status

This option allows you to check how many names and phone numbers are stored and how many locations are still free in the card memory and phone memory.

Alert

This option allows you to assign a specific ringing tone to a number and thus distinguish the caller by the ringing tone. Specific ringing tones can be assigned to up to five numbers.

Colour

This option allows you to assign a specific service light colour to a number and thus distinguish the caller by the service light colour. Three colours are available (red, violet and blue) and they can be assigned to up to five numbers. If no specific colour assigned, the service light flashes with the colour you set in the **Service Colour** option (5-4-4).

Speed-Dialling by SIM Memory Location

Once you have stored phone numbers in the SIM card, you can dial them easily whenever required.

To speed-dial a number, proceed as follows.

To speed-dial a number in locations...

Then...

2 to 9

Press and hold down the appropriate key.

10 and above

Press the appropriate keys, followed by the # key. When the display shows the name, phone number and location, press the **Dial** soft key.

Note: Memory location 1 is reserved for your Voice Mail server number.

Searching for and Dialling a Number in the Phonebook

1. When the idle screen is displayed, press the **PhoneBook** soft key.
2. If your SIM card provides Service Dialling Number (SDN) and Information Number services, press the **OK** soft key when **Find Entry** is highlighted. If not, go to step 3.

3. Enter the start of the name that you wish to find and press the **Find** soft key.

Note: You can also scroll through the phonebook from the beginning, by pressing the **Find** soft key directly.



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

4. **To...** **Then press the...**

View the highlighted entry


View soft key.

Select a different entry

 or  key one or more times until the required entry is highlighted.

Look for a name starting with a different letter

Key labelled with the required letter.

5. Once you have found the required entry, press  to dial the number.

Dialling a Number using the Service Directory or Information Numbers

Note: The **Service Dir.** and **Information Numbers** options may not be available, depending on your SIM card.

When the idle screen is displayed, press the **PhoneBook** soft key, then you can select one of the services.

Service Dir.: enables you to view the Service Directory and make calls from it.

Information Numbers: enables you to see the Information Numbers in a tree structure and make a call.

Selecting Functions and Options

Your phone offers a set of functions that allow you to customise your phone. These functions are arranged in menus and sub-menus, accessed via the two soft keys. 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.




Example:




Press the left soft key to access the menu feature.

Press the right soft key to access the Phonebook feature.

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

1. Press the appropriate soft key.
2. **To...** **Then press the...**
 - Select the:
 - Function displayed **or**
 - Option highlighted
 - View the next function or highlight the next option in a list  key.
 - Move back to the previous function or option in a list  key.
 - Move back up one level in the structure **Right soft 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 .





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

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 or by using the shortcuts.

Accessing Menu Functions by Scrolling

1. In idle mode, press the Menu soft key to access the menu facility. Scroll with the  or  keys to reach the required main menu, such as Tones. Press the Select soft key to enter the menu.
2. If the menu contains any sub-menus, Ring Tone for example, you can access them by scrolling with the  or  keys and pressing the Select soft key.

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





- | | |
|--|--|
| 3. To... | Then press the... |
| Scroll through the menus |  or  keys. |
| Confirm the chosen setting | Select soft key. |
| Return to the previous menu level |  soft key. |
| Exit the menu, without changing the settings |  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 number. The shortcut number is shown in the bottom line on the display.

1. In idle mode, press the Menu soft key to access the menu facility.
2. Key in the first digit of the shortcut number. Repeat this for each digit of the shortcut number.

Example: setting the Any-key Answer function

Press the Menu soft key, and key in , , , .

Menu to enter the menu, 5 for Settings, 1 for Phone Settings, 4 for Any-key Answer and 2 to set the Any-key Answer option to ON.

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

Menu Structure

Menus let you check or change your phone settings. The following outline shows the menu structure.

Note: You can only see menu 0, if your SIM card supports the SIM Application Toolkit. This is a network feature. Please contact your service provider for more information.

Main menu	level 1	level 2
1. Call Records	1. Missed Calls 2. Received Calls 3. Dialed Calls 4. Call Time	1. Last Call Time 2. Total Sent 3. Total Received 4. Reset Timers 1. Last Call Cost 2. Total Cost 3. Max Cost 4. Reset Counters 5. Set Max Cost 6. Price/Unit
2. Messages	1. Voice Mail 2. Read Messages 3. Write Messages 4. Preset Message List 5. Setup 6. Broadcast 7. Picture Messages	1. Connect to Voice Mail 2. Voice Server Number 1. Service Centre 2. Default Type 3. Default Validity 4. Reply Path 5. Delivery Report 1. Read 2. Receive 3. Channel List 4. Language

Main menu	level 1	level 2
3. Voice Functions	1. Voice Dial 2. Voice Command 3. Voice Memo	1. Record 2. Act 3. Delete One 4. Play All 5. Delete All 1. Record 2. Act 3. Play All 4. Delete All 1. Record 2. Replay 3. Delete One 4. Delete All
4. Tones	1. Ring Tone 2. Melody Composer 3. Ring Volume 4. Alert Type 5. Keypad Tone 6. Message Tone 7. Error Tone 8. Minute Minder 9. Connect Tone	
5. Settings	1. Phone Settings	1. Greeting Message 2. Own Number ¹ 3. Language 4. Any-key Answer 5. Backlight 6. Service Light 7. Auto Redial 8. Auto Answer 9. Caller ID 0. Active Flip *. Reset Settings #. Active Line ¹

¹ Shown only if supported by your SIM card.

Main menu	level 1	level 2
5. Settings	2. Network Services	1. Call Diverting ² 2. Call Barring ² 3. Call Waiting ² 4. Network Selection 5. Line Identification ² 6. Closed User Group
	3. Security Settings	1. PIN Check 2. Change PIN 3. Phone Lock 4. Change Password 5. SIM Lock 6. FDN Mode ¹ 7. Change PIN2 ¹
	4. LCD/LED Settings	1. Screen Mode 2. Select Image 3. LCD Contrast 4. Service Colour
	5. Browser Settings ²	1. Proxy Settings 2. Current Proxy
6. Organiser	1. Scheduler 2. Alarm	1. Daily Alarm 2. Once Alarm 3. Weekly Alarm 4. Alarm Tone
	3. Calculator 4. World Time 5. Clock	1. Set Time 2. Set Date 3. Format
7. Games	1. Squares 2. Fortress 3. Ice Cave	
8. WWW Services ²	1. Home 2. Bookmark 3. Goto	

¹ Shown only if supported by your SIM card.

² May not be shown or supported by your network service provider.

Call Records

Via this menu, you can view the phone calls:

- Missed
- Received
- Dialed

The number and name (if available) are displayed together with the date and time at which the call was made. You can also view call times and costs.

Missed Calls

Menu 1-1

This option lets you view the last 15 unanswered calls. You can also:

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

Received Calls

Menu 1-2

This option lets you view the last 15 phone calls received. You can also:

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

Dialled Calls

Menu 1-3

This option lets you view the last 15 numbers dialled. You can also:

- Edit the number and save it in the phonebook
- Redial the number
- Delete the number from the list

Call Time

Menu 1-4

This option lets you view the timers for calls made and received. The following timers are available.

Last Call Time: length of the last call.

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

Total Received: 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 122) 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

Menu 1-5

Note: The options for this menu may vary, depending on your SIM card.

This network feature lets you view the cost of calls. 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 will no longer be able to make any calls, except calls to the emergency services, until you reset the counter.

Max Cost: maximum cost set via the **Set Max Cost** option (see below).

Reset Counters: option used to reset the cost counter; you must first enter your PIN2 (see page 123) 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 123) 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 123) and then press the **OK** soft key.

Note: AOC (Advice Of Charge) information may be displayed in idle mode, depending on your SIM card or service provider.

Messages

Your phone receives voice mail notification messages, and the Short Message Service(SMS) messages. Voice mail and SMS are network services. Please contact your service provider for more information.

When the ☎ icon appears, you have received voice mail. When the ✉ icon appears, you have received a new text message. If the **Message Tone** menu option (4-6) is set to **Light only**, the service light flashes yellow. If the message memory is full, an error message is displayed, the ✉ icon flashes and you cannot receive any new messages. Use the **Delete** option in the **Read Messages** menu (2-2) to delete obsolete messages. Once there is space in the memory any undelivered SMS messages will be received (provided sufficient space is available).

Other types of messaging is also available.

- **Picture Messages** : refer to the **Picture Messages** menu option (2-7); see page 64.
- **Ringtone Messages** : refer to the **Ring Tone** menu option (4-1); see page 72.
- **Operator Logo Messages** : press the **View** soft key to view it and **Save** soft key to use it in idle mode. If you don't want to use the logo, press the **Exit** or **Discard** soft key.

Voice Mail

Menu 2-1

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

Connect to Voice Mail

Before using this feature, you must enter the voice server number obtained from your service provider (see the following page). You can then select this option and simply press the **OK** soft key to listen to your messages.

Note: In idle mode, you can access your voice mail server directly by holding down the ☎ key.

Voice Server Number

You can change the voice mail server number.

To...	Then press the...
Enter the server number	Corresponding number keys.
Recall a number in the phonebook	PhoneBook soft key.
Correct a digit	← soft key.
Move the cursor to the left/right without clearing the digit	⏮ or ⏭ key.

Note: See page 41 for instructions on how to use the phonebook.

Read Messages



Menu 2-2

When the **Read Messages** menu is selected, the header of the first message is displayed. This contains:

- Message number
- Message status (new, old, not sent, sent)

To view this message, press the **View** soft key. The screen shows :

- Sender's phone number (if sent with the message)
- Date and time at which the message was received
- Message text

To scroll through the messages, press the  or  keys. You can choose the following options, by pressing the **Options** soft key.

Text Reply: allows you to reply by sending a text message. You can either:

- Send the message
- Save and send the message
- Save but not send the message

Call back: allows you to call the sender back.

Edit: allows you to edit a message.

Delete: allows you to delete obsolete messages.

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 not already sent.

Send again: allows you to resend a message that you have already sent.

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

Write Messages

Menu 2-3

Via this menu, you can write and edit text messages of up to 160 characters.

1. Key in a message. For details on how to enter text, refer to page 35.
2. After you complete the message, you can select the following options.

Send Only: allows you to send the message immediately. You can enter the required destination.



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 using the **Read Messages** option. When you read the message, 'Sent' is displayed to indicate the message state.

Save Only: allows you to save the message so that it can be sent later. When you read the message, 'Not sent' is displayed.

3. After selecting the required option, press the **Select** soft key.
The display prompts you to enter the destination number.
4. Enter the phone number and press the **OK** soft key. Or,
Press the **Phonebook** soft key to select the number from the phone book.

Preset Message List

Menu 2-4

Using this menu, you can preset up to five messages that you use most frequently. This menu shows the preset message list. Scroll through the list using the  or  keys. When the required message number appears, press the **Options** soft key.

The following options are available.

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

Send Message: allows you to recall the selected preset message. Once you have completed the message, you can send, save and send, or simply save it.

Delete: allows you to delete the selected preset message.

Setup

Menu 2-5

Via this menu, you can set up default SMS information.

Service Centre: allows you to store or change the number of your SMS centre required when sending text messages. You must obtain this number from your service provider.

Default Type: allows you to set the default message type (Text, Voice, Fax, X.400, Email, and ERMES). 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 SMS centre while attempts are made to deliver them to the recipient.

Possible values are one hour, 6 hours, 24 hours, one week and the maximum authorised by your service provider.

Reply Path: allows the recipient of your SMS message to send you a reply via your message centre, 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 or not your message has been delivered.

Broadcast

Menu 2-6



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

If the message is long, press the  and  keys one or more times.

The last five messages are also stored for later retrieval. Please contact your service provider for more information.

The following options are available.

Read: lets you view the first message. Scroll through the message using  or . At the end of the message, press the **Next** soft key to move to the next message.

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

Channel List: lists all available channels. The channels currently selected are indicated by an asterisk (*) beside the name. When you select one of them, you can edit, enable, disable or delete the channel.

The **Enter Channel** option allows you to add a new channel to the channel list. Enter the appropriate channel ID obtained from your service provider, and a title for the channel.

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

Picture Messages

Menu 2-7

The phone allows you to send and receive text messages that contain pictures. These messages are called 'Picture Messages', several of which are preset in the phone and can be replaced with new one received from other sources.

The following options are available.

Write Message: allows you to write text to send with the picture message.

Erase: deletes the picture message; **Empty** is

displayed instead of the title.

Send Message: allows you to enter the destination phone number; you must then press the **OK** soft key to send the picture message.

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

Receiving a Picture Message

To view a message immediately you receive it, press the **View** soft key. Press the right soft key to toggle between viewing the message and the image.

The following options are available.

Save: allows you to save the picture message to your picture message list.

Discard: allows you to discard the picture message without saving it.

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

Note: Each picture message is made up of several text messages; therefore, sending one picture message may cost more than one text message.

Picture messages are stored in the phone, you cannot view them if you use your SIM in another phone.

This function is available between phones supporting Nokia's* Smart Messaging services.

* Nokia is a registered trademark of Nokia Corporation.

Voice Functions

You can use the Voice feature to customize various settings, such as the:

- Voice Dial
- Voice Command
- Voice Memo

Voice Dial

Menu 3-1

The voice dialling feature allows you to make phone calls by saying a voice tag that has been added to a desired name and phone number. Any spoken word, for example a name, can be a voice tag.

Before using voice dialling, note that:

- Voice tags are not dependent on a language. They are dependent on the speaker's voice.
- The voice tags are sensitive to any background noise. Where possible, record voice tags or make calls in a quiet environment.
- When recording a voice tag or making a call, hold the phone in the normal position close to your ear.
- The maximum length for a voice tag recording is about 1.5 seconds, but very short names are not recorded
- You can store up to twenty voice tags in the phone's memory.

Voice Dial Record

Allows you to record name tags and allocate them to numbers for voice dialling.

Say the name you want to use for voice dialling after you hear a voice prompt. For best results, use names with at least two syllables, or use both a first and last name. The phone stores the name as a "first" sample, and then prompts you to say the name again.

Respond to the prompt by repeating the name. The phone stores the name as a second sample and then requests the phone number.

To store the number, press the OK soft key. Follow the instructions described on page 41 to complete storing the number into your internal phonebook.

Voice Dial Act

This option activates voice dialling.

You hear a voice prompt and Say Name is displayed. Say the voice tag clearly. If no match for the voice tag is found or recognized, the phone may ask you to try again. The phone automatically dials the number of a recognized voice tag.

Note: This option is only available once you have recorded voice tags.

Voice Dial Delete One



Allows you to delete an individual voice tag. The corresponding phone number remains in the phonebook but the voice tag is deleted.


If the name displayed is... Then press the...

To be deleted

OK soft key.

Not to be deleted

 or  key.
The next name is displayed.

To exit the **Voice Dial Delete One** option, press the  soft key.

Voice Dial Play All

Allows you to play back all recorded voice tags.

Voice Dial Delete All

Allows you to delete all voice tags. The corresponding phone numbers remain in the phonebook but the voice tags are all deleted. Press the **OK** soft key when the message 'Delete All confirm?' is displayed.

Otherwise, press the **Cancel** soft key to exit the function without deleting the voice tags.

Voice Command

Menu 3-2

This menu allows you to get quick access to the frequently used menus by saying your own voice command.

You can select the following functions:

Voice Command Record: The most frequently used menu functions are programmable with your own voice commands. The menus are preset to OFF at the factory, indicating that they are not recorded. When voice commands are recorded successfully, the menus are changed to ON in the display.

Voice Command Act: Use this menu to access the menu of the recorded voice commands.

Voice Command Play All: Plays all voice commands you have recorded.

Voice Command Delete All : Deletes all commands you have recorded.

Voice Memo

Menu 3-3

You can use the Voice Memo feature to :

- Record up to 3 voice memos
- Play the recorded voice memos
- Delete one or all voice memos

Voice Memo Record: Allows you to record a memo. The screen displays the:

- Memo location
- Date and time when the memo was recorded
- Recording time counter

The maximum recording time is about 35 seconds.

If you want to record for longer, press the **Continue** soft key. **Split** appears instead of **Continue**. You can continue recording and the rest of the memo is stored in the next memo location.

To stop recording, press the **Stop** soft key.

Note: If all memo locations are full, you must delete an old memo before recording a new one.

Voice Memo Replay: Allows you to play back all memos recorded, starting with the most recent memo. The screen displays the:

- Memo location
- Date and time when the memo was recorded.

To skip to the next memo, press the **Skip** soft key, to stop the playback, press the **Stop** soft key.



Voice Memo Delete One: Allows you to delete a specific memo. All memos recorded are played back, starting with the most recent one.

Voice Memo Delete All: Allows you to delete all memos. Press the **OK** soft key to confirm.

Tones

You can use the Tones menu to customise various sound settings, such as the:

- Ringing tone or melody, volume and type
- Sounds made when you press a key, make an error or receive a message

Note: The silent mode allows you to turn the various tones off when discretion is required. Press  and hold down  to toggle between activating and deactivating the silent mode.

Ring Tone

Menu 4-1

This option allows you to select the required ringing tone. There are 25 different tones available; 8 pre-defined ring tones, 12 changeable tones*, 2 using the Melody Composer and 3 by SMS.

When you receive a ringing tone message, proceed as follows.

1. To listen to the tone, press the **Play** soft key.
2. To save the ring tone, press the **Save** soft key.
3. Select the ringing tone location you wish to save it and press the **OK** soft key.
4. To use this tone as the current ringing tone, press the **Yes** soft key. Otherwise press the **No** soft key.

If your SIM card supports the ALS feature, this option also allows you to select a different ringing tone for each line, and thus distinguish incoming calls.

Melody Composer

Menu 4-2

This option allows you to compose your own melody to be used as the ringing tone.

- Three octaves are available.
- A maximum of 50 notes can be entered.
- You can adjust the length of the notes and add rests, as required.

Composing a Melody

You can compose three melodies.

1. When you access the menu, the names of any melodies created are displayed. Otherwise, **(Empty)** appears. Select the melody that you wish to create or edit.
2. Press the **Select** soft key and compose your melody using the following keys.

To...

Enter C, the first note in the musical scale

Enter D

Enter E

Enter F

Enter G

Enter A

Enter B

Move a note up or down one octave

Then press the...

 key.

 key.

 key.

 key.

 key.

 key.


 key.

 key.

To...

Enter a rest




Then press the...

 key (press the key until the rest is of the required length).

Delete notes

 key.


Move a note a semitone up or down

 or  key (for example, the note A changes to A#, B, C, C#, and so on in the scale each time you press the  key).

Add # to a note or not

 key.

Change the length of a note

 key (the length will be changed each time you press the key).

Listen to your melody

Listen soft key.

Cancel your changes

 key.

- When you are satisfied with your melody, press the **Yes** soft key.


- Enter a title for the melody.

Note: For further details on how to enter characters, refer to page 35.



You are asked if the melody is to become the ringing tone.

- To use the melody as the ringing tone, press the **Yes** soft key.
The melody is saved and is played each time your phone rings.

Deleting a Melody

- Select the melody that you wish to delete.
- Press and hold  for a few seconds. All notes are erased.
- Press the **Listen** soft key. You are asked to confirm that you wish to delete the melody by pressing the **Yes** soft key.

Ring Volume*Menu 4-3*

This option allows you to adjust the ringing volume. Use the  or  keys. The greater the number of bars, the greater the volume level.

Alert Type*Menu 4-4*

This option allows you to indicate how you are to be informed of any incoming calls. The following options are available.

Light only: only the backlight is switched on; the phone neither rings nor vibrates.

Melody: the phone rings using the ringing tone selected via menu option 4-1.

Vibration: the phone vibrates but does not ring.

Vibra+Melody: the phone both rings and vibrates.

Keypad Tone

Menu 4-5

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.

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

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

Message Tone

Menu 4-6

This option allows you to select how the phone informs you that a new message has been received. The following options are available.

SMS Tone1 ~ SMS Tone5: the phone uses an SMS tone.

Single Beep: the phone beeps once.

Light Only: the service light on the top of the phone flashes yellow.

Vibration: the phone vibrates but does not ring.

Error Tone

Menu 4-7

This option allows you to select how the phone informs you that you have made a mistake. The following options are available.

OFF: the phone does not beep.

ON: the phone beeps to indicate an invalid entry.

Minute Minder

Menu 4-8

This option allows you to specify whether the phone must beep every minute during an outgoing call to keep you informed of the length of your call. The following options are available.

OFF: the phone does not beep.

ON: the phone beeps every minute.

Connect Tone

Menu 4-9

This option allows you to specify whether the phone should beep when the phone connects to the network. The following options are available.

OFF: the phone does not beep.

ON: the phone beeps when your call is accepted.

Settings

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

Phone Settings

Menu 5-1


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.

For more information on how to enter characters, refer to page 35.

To go back to the previous menu level without saving your input, press .

Own Number

Note: The contents of this menu may vary, depending on the SIM card.

You can enter your own name and number using this menu. If you have subscribed to the Alternate Line Service, you can select a line with  or .

The following options are available:

Edit: allows you to edit the name and number.


Erase: allows you to erase the name and number.


Language


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

You can also set the default text input mode. For details on the text input modes available, refer to page 35.

Any-key Answer

Depending on the setting of the **Any-key Answer** option, you can answer an incoming call by pressing any key, except , the **Reject** soft key or the volume keys.

To reject the call, press  or the **Reject** soft key. The following options are available.

ON: you can press any key, except , the **Reject** soft key or the volume keys.

OFF: you can only press  or the **Accept** soft key.

Backlight

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.

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

Long: the backlight comes on when you press a key or receive a call and switches off 20 seconds after the last key is pressed.

OFF: the backlight is not used.

Service Light

This option allows you to select whether or not the service light on the top of the phone is used. The following options are available.

ON: the service light flashes when the phone is ready for use.

OFF: the service light is not used.

Auto Redial

With the Auto Redial function, the phone makes up to ten attempts to redial a phone number after an unsuccessful call.

Note: The interval between two call attempts varies.

The following options are available.

ON: the number is redialled automatically.

OFF: the number is not redialled.

Auto Answer

With the Auto Answer function, the phone automatically answers calls after 3, 5 or 10 seconds. You can also turn this feature off.

Note: This feature only operates when the phone is connected to a car kit (optional).

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.

Active Flip

The voice dial or voice command mode can be activated automatically whenever the flip cover is opened.

The following options are available.

OFF: the voice dial or voice command mode must be activated manually via the phonebook; for further information, refer to page 35.

Voice Dial: the voice dial mode is activated when you open the flip cover.

Voice Command: the voice command mode is activated when you open the flip cover.

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 4-digit phone password.

Note: The password is preset to 0000. To change this password, refer to page 95.

Active Line

Some SIM cards may be used with two subscriber numbers (network service). This function is available only if your SIM card supports it.

This menu allows you to select the line to be used when making calls. However, calls can be answered on both lines, regardless of the line selected. When you select a line, the line number appears as an indicator after the operator/service provider's names.

When you select the **Manual** option, you can choose a line whenever you access the call barring, diverting and waiting features; the active line is not displayed.

Network Services

Menu 5-2

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

Call Diverting

Note: Some call divert options may not be shown if they are not supported by your network operator.

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

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

Call diverting can be set up in the following ways.

Divert Always: all calls are diverted.

Busy: calls are diverted if you are already on the phone.

No Reply: calls are diverted if you do not answer the phone.

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

Unavailable: calls are diverted if you are busy, do not answer or cannot be reached.

Cancel All: all call diverting options are cancelled.

Note: These options may be different, depending on the SIM card.






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

- Voice calls only
- Fax calls only (not available when line 2 is in use)
- Data calls only (not available when line 2 is in use)

Example: You can:

- Systematically divert fax calls to your office fax machine
- Divert voice calls to your colleague if you are already using the phone

To set your call diverting options, proceed as follows.

1. Select the type of call diverting required by pressing  or  until the appropriate option is highlighted, and then press the **Select** soft key.
2. Select the type of calls to be diverted by pressing  or  until the appropriate option is highlighted and then press the **Select** soft key.
3. Press the **Activate** soft key to confirm your settings.
4. Enter the number to which the calls are to be diverted.
To enter the international code, press and hold **0** until the + sign is displayed. You can also select a number in the phonebook or the voice server number, by pressing the **Options** soft key, followed by **PhoneBook** or **Voice Server Number**.
5. When you are satisfied, press  or **OK** soft key.
The phone sends your setting to the network and the network's acknowledgement is displayed.

To deactivate specific call diverting settings, proceed as follows.

1. Select the call diverting option to be deactivated.
2. Select the type of call to which this option applies.

3. Press the **Remove** soft key.

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

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

Note: When all calls are diverted, one of the indicators below is displayed on the last line of the display, with the flip cover closed, if supported by your SIM card.

Divert Line 1: all calls from line 1 are diverted.

Divert Line 2: all calls from line 2 are diverted.

Divert All: all calls from lines 1 and 2 are diverted.

Call Barring

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

Call barring can be set up in the following ways.

All outgoing: calls cannot be made.

International: international calls cannot be made.





International except to home: when abroad, calls can be made only to numbers within the current country and to your home country, that is the country where your home network provider is located.

All Incoming: calls cannot be received.

Incoming while abroad: calls cannot be received when you are using your phone outside your home service area.

Cancel All: all call barring settings are deactivated; calls can be made and received normally.

To set your call barring options, proceed as follows.

1. Select the type of call barring required by pressing  or  until the appropriate option is highlighted and then press the **Select** soft key.
2. Select the type of calls to be barred by pressing the  or  key until the appropriate option is highlighted and then press the **Select** soft key.
3. Press the **Activate** soft key to confirm your settings.
4. Enter your call barring password supplied by your service provider.

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

To deactivate specific call barring settings, proceed as follows.

1. Select the call barring option to be deactivated.
2. Select the type of call to which this option applies.
3. Press the **Remove** soft key.
4. Enter your call barring password supplied by your service provider.

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

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



Change Barring Password: you can set and change the call barring password obtained from your service provider using this option. You must enter the current password before you can specify a new one.

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

Call Waiting

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

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  or  until the appropriate option is highlighted and then press **Select**.
2. Press the **Activate** soft key to confirm your settings.

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

To deactivate specific call waiting settings, proceed as follows.

1. Select the type of call to which the option applies.
2. Press the **Deactivate** soft key.

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



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 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 Select** is displayed, press the **Select** soft key.
2. Press  or  until the appropriate option is highlighted and 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  or  until the preferred network is highlighted and press the **OK** soft key.

You are connected to that network when roaming.

Line Identification

This option allows you to view the following line identification settings.

CLIP (Calling Line Identification Presentation) / **COLP** (Connected Line Identification Presentation)

If these network functions are active, the caller's number is displayed during a call. If the phone number matches one stored in the phonebook, the caller's name is also displayed.

CLIR (Calling Line Identification Restriction) / **COLR** (Connected Line Identification Restriction)

If these network functions are active, your phone number is not displayed on the called person's phone.

Closed User Group (CUG)

This network service allows incoming and outgoing calls to be restricted to a selected user group. You may be a member of up to 10 user groups. For details on how to create, activate and use a closed user group, contact your service provider.

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

Activating a Closed User Group

If you select the **Closed User Group** menu, you are asked if you wish to activate the CUG function. Press the **Yes** soft key. You can now access the following options.

Deactivate: deactivates the CUG function.

Index List: lets you list, add or delete CUG index numbers. The list of current CUG indexes appears. Add a new CUG index (as advised by your service provider) or delete a selected group.

To...

Scroll through the existing CUG indexes



Add a new CUG index

Delete a CUG index

Then press the...

 or  key.

Options soft key, select **Add** and enter the index.

 or  key to select the index to be deleted, press the **Options** soft key and select **Delete**.

Outside Access: enables you to allow or prohibit calls to numbers other than those nominated for the Closed User Group. This feature depends on the nature of your CUG subscription. Please check with your service provider.

Default Group: you may communicate a default CUG to your service provider. If you have done so, you can enable the **Default Group** option on your phone. When making a call, you will be given the option of using your default CUG, instead of selecting one from the list.

Security Settings

Menu 5-3

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. They are described in the following sections (also see page 122).

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.

The following options are available.

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

Disable: the phone connects directly to the network when you switch it 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 phone password each time the phone is switched on.

The password is factory set to 0000. To change the phone password, refer to the **Change Password** menu option (5-3-4).

Once the correct password has been entered, you can use the phone until you switch it off.

The following options are available.

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

Disable: you are not asked 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 0000. Once you have entered a new password of up to 4 digits, you are asked to confirm it by entering it again.

SIM Lock

When the SIM Lock feature is enabled, your phone only works with the current SIM.

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

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

FDN Mode

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.

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

Disable: you can call any number.

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

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.

LCD/LED Settings

Menu 5-4

The **LCD/LED Settings** menu enables you to set the style of the LCD display.

Screen Mode

You can select the screen image to be displayed in idle mode.

Normal Mode: the LCD displays <Service Provider> and the current time and date.



Image Display: The LCD displays the image selected via the **Select Image** option. To display the normal mode for a while, press any key.

Clock: The LCD displays an analogue clock. To display the normal mode for a while, press any key.

Select Image



This option allows you to select the image to be displayed when you set the **Screen Mode** option to **Image Display**. You can select one of images.

LCD Contrast

This option allows you to adjust the contrast of the LCD screen. Press  to increase or  to decrease the contrast.

Service Colour

There are six colours available for the service light: normal (green), yellow, orange, violet, blue and sky blue.

You can scroll through these colours, by pressing the  or  key. Press the **Select** soft key to select the required colour.

Browser Settings

Menu 5-5

Note: This menu may not be shown, depending on your network service provider.

You can set up several proxies, using the **Proxy Settings** menu (5-5-1), and you can designate one as the current proxy, using the **Current Proxy** menu option (5-5-2). The following parameters must be set for each proxy; they may vary depending on your service provider. Contact your service provider for further details.

Proxy Name: name of the proxy server.

WDP Address: IP address required to connect to the Internet.

Port Number: number of the port to be used to connect the gateway.

Home URL: URL of your home Web site.

Access Point

- NAS Phone Number: PPP server phone number.
- Login Name: PPP server login ID (may be optional).
- Password: PPP server password (may be optional).
- Network Type: V.32 Transparent, V.32 Non-Transparent, V.110 Transparent or V.110 Non-Transparent.

Organiser

The Organiser feature enables you to:

- Write your schedule
- Use a calculator
- 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)
- Find out what time it is in various cities around the world

Scheduler

Menu 6-1

The Scheduler helps you to keep track of reminders, calls that you need to make, meetings and birthdays. The phone alarm rings when the date set for a birthday, reminder or call is reached.







When you access the Scheduler menu, the following options are available.


Go to date: allows you to enter a particular date and schedule an event on that date.

View All: shows the events scheduled.

Delete All: deletes all scheduled events.



To schedule a new event, proceed as follows.

1. When the calendar is displayed, use the  and  keys to select the month, the  and  keys to select the week and the  and  keys to select the day. You can also use the **Go to date** menu option to specify the date.

Note: To exit the Calendar screen, press .
The phone returns to the previous menu level.

2. Press the OK soft key.
3. Select a schedule type. Four types are available.
Reminder: requires a description and the time.
Call: requires a phone number and the time.
Meeting: requires a description and the time.
Birthday: requires a name and the time.
4. Enter the appropriate information, referring to page 35 for further details on how to enter text if necessary.
5. If you wish to set the alarm to ring on the scheduled date and time, select **Yes**. Otherwise, select **No**.
6. If you selected **Yes**, set the time for the alarm and press **OK**.

A date that has a schedule already associated is displayed in bold. If you select such a date, you will see the contents.

Note: If you have scheduled more than one event on a given day, you can scroll to the required event by pressing  or .

The following options are available.

Add: allows you to add new contents.

Delete: deletes the scheduled event.

Move: moves the scheduled event to a new date.

Copy: copies the scheduled event to a new date.

Delete Day: deletes all events scheduled on that date.

Alarm

Menu 6-2

This option allows you to set the alarm to ring at a specific time. You can set one or more alarms.
The following alarms are available.



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


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

Weekly Alarm: the alarm rings every week on the same day and at the same time.

The **Alarm Tone** option allows you to select a specific tone for the alarm.

To set the alarm, proceed as follows.

1. Select an alarm type by pressing the Select soft key.
The Set Alarm option allows you to set the alarm time or days of the week.
2. If you choose **Weekly Alarm**, select the required day of the week and press .
The * symbol appears to indicate that the day is selected.
To remove it, press .
You can set more than one day.
3. Press the **OK** soft key.
4. Enter the required time, then press the **OK** soft key.
Alarm Activated is displayed.

The alarm icon () appears in the top line of the display. The service light flashes in white when the alarm rings. To stop the alarm when it rings, open the flip cover, press the Exit soft key or press any key with the flip cover open.


To deactivate the alarm, select **Remove Alarm**.


Calculator

Menu 6-3

You can use the phone as a 9-digit calculator. The calculator provides the basic arithmetic functions: addition, subtraction, multiplication, division, percentages.



























To use the calculator, proceed as follows.


1. Enter the first number using the number keys.
2. Press the Operator soft key until you find the appropriate arithmetic symbol: + (add), - (subtract), x (multiply), / (divide).
3. Enter the second number.
4. Repeat Steps 2 and 3 if necessary.
5. To calculate the result to two decimal places, press the Equal soft key or the  key.

To erase any mistakes or clear the display, press the  key.

To enter a decimal point, press the  key.



Examples:

Expression	Key Sequence	Result
$12 \times 3 + 5 =$	12x3+5  (or )	41
$34 + 57 =$	34+57  (or )	91
$45 + 57 =$	45  (or )	102
$48 - 23 =$	48-23  (or )	25
$14 - 23 =$	14  (or )	-9
$68 \times 25 =$	68x25  (or )	1700
$68 \times 40 =$	40  (or )	2720
$35/14 =$	35/14  (or )	2.5
$98/14 =$	98  (or )	7
10% of 200	200x10 	20
10=? % of 100	10/100 	10
10% premium of 200	200+10 	220
10% discount of 200	200-10 	180
square of 4	4x  (or )	16
reciprocal of 8	8/  (or )	0.12

Note: When you have finished with the calculator, press  to return to the previous menu level.

World Time



Menu 6-4

You can use your phone to check the current time in 21 major cities around the world. Scroll through the cities using the  or  key.

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  or  keys one or more times.

The local date and time are displayed.

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

3. **To...**

Update the current date/time with this new setting

Indicate that the time zone is currently using the daylight saving time

Indicate that the time zone is no longer using the daylight saving time

Then press the...

Set Local soft key.

Set DST soft key.
A check mark is shown next to the time difference.

Remove DST soft key (only available when a check mark is shown next to the time difference).

Clock

Menu 6-5

Set Time

This option allows you to change the time displayed, using the 24-hour system.

Note: Before setting the time, you must specify your time zone, via the **World Time** menu option (6-4).

Set Date

This option allows you to change the date displayed. Enter the day, month and year, using the format specified in the option below.

Format

This option allows you to select the date format:

- DD/MM/YYYY (day, month, year)
- MM/DD/YYYY (month, day, year)

Games

Using this menu you can also enjoy games on the phone.

Scroll to the desired game and press the Select soft key.

The following options are available.




New Game: allows you to start a new game.

High Score: show you the high score list.

Key Info.: shows you the key usage.

Continue: allows you to enjoy the paused status. It enables only when the game was paused before.

While you are playing a game,

To...	Then press the...
adjust the game volume	volume keys
toggle the backlight on and off	
pause the game	
pause and exit the game	

If, on finishing you are ranked within the top 5 highest scores, you will be allowed to enter a name of up to 10 characters.

Here are the list of available characters or function.

1: . @ - _ / : ~ 1

2: A B C 2

3: D E F 3

4: G H I 4

5: J K L 5

6: M N O 6

7: P Q R S 7

8: T U V 8

9: W X Y Z 9

0: 0

: to clear a previous character

left/right soft key: to move the cursor left
or right

: to move the cursor to the next position

Squares

Menu 7-1

Object

The goal of the game is to remove the required number of blocks by joining the falling pieces together. A block is a collection of 3 or more pieces that have been correctly joined together. When this is achieved the block is automatically removed from the screen and any remaining pieces will move across the screen were possible. Each piece can be moved and rotated as it falls. There are three kinds of special pieces: 'H' breaks all pieces in a horizontal line, 'V' breaks all pieces in a vertical line, and 'S' breaks all pieces around it.

Each level is completed when you have removed the specified number of blocks shown as 'Remain' in the top right of the display.

To... Then press the...

scroll up or down menu  or 

level up/ down left soft key /right soft key

start a game 

Key Commands

2: move up

8: move down

4: move left

5: rotate

Fortress

Menu 7-2

Object

The goal of the game is to defend the earth against UFOs. You can check the appearance of UFOs in the radar at the bottom of the screen. Each level is completed if you manage to defend the city without running out of time or energy. You can monitor your energy and remaining time in the left and right parts of the radar.

When you start a new game, you see a map of the earth. The 'V' marks mean you have already defended that city. Press any key to start the game.

Key Commands

2: move up the cannon
 8: move down the cannon
 4: move left the cannon
 6: move right the cannon
 5: shoot

Ice Cave


Menu 7-3

Object

The goal of the game is to move eggs into the hole in ice cave safely within the given period of time.

The penguin can push the egg, push pieces of ice that are blinking and jump. The egg will break if it falls from higher than 4 steps.

You can see the 'T'=time, 'L'=life, and 'S'=stage information on the right side of the display.

When you start the game and the initial animation finishes, you can adjust the stage using the left or right soft key. Press the  key to start the stage.

Key Commands

2: scroll up the screen
 8: scroll down the screen
 4: move left
 6: move right
 5: jump
 #: retry

WWW Services




You can use your phone as a Web Browser.

You can obtain up-to-date news, weather, sport, and other information as well as use e-mail and other Internet services.


Please contact your service provider to open your Internet account. To use the Web Browser, you must indicate your phone number via the Own Number menu option (5-1-2).

Home

Menu 8-1

To launch the browser from the idle mode, press the  key on the right side of the display, or press the **Menu** soft key, followed by the  and  keys.

Once connected, the homepage is displayed. The content depends on the service provider.





To exit the browser at any time, press the  key. The idle screen is displayed.

Bookmark

Menu 8-2

You can store the addresses of up to five Internet sites for easy access using the Bookmark feature.

To access the Bookmark feature, proceed as follows.

1. In idle mode, press the Menu soft key.
2. Press  for WWW Services.
3. Press  for Bookmark.
4. Highlight the required bookmark using the  or  key and press the Select soft key.
5. Press the Options soft key.

Three options are available.

Edit: allows you to create or edit a local bookmark.

1. Enter the required title (up to 14 characters).
2. Press the OK soft key.
3. Enter the URL address (up to 128 characters).
4. Press the OK soft key.

Go: allows you to open the selected page.



Delete: allows you to delete the selected bookmark.

Goto

Menu 8-3

You can open any WWW page by entering its URL address.

To enter the URL address directly, proceed as follows.





1. In idle mode, press the Menu soft key.
2. Press  for WWW Services.
3. Press  for Goto.
4. Enter the URL address and press the Go soft key.

Navigating with the WAP Browser

You can surf the Internet using either the phone keys or the WAP Browser menu.

Using the Phone Keys






When surfing the Internet, the phone keys function differently from the phone mode.

To...	Then press the...
Scroll each line of the content area	 or  key.
Return to the previous page	 key (except on the homepage).
Return to the startup homepage	 key and hold it down anywhere.

Using the WAP Browser Menu

There are various menu options available when surfing the Wireless Web.

To access the WAP Browser menu, proceed as follows.

1. Press .
A list of menu options appears.
2. Highlight the required option using the  or  key.
3. Press the OK soft key to select the option.
4. If necessary, select the secondary option by pressing the  or  key, followed by OK.

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

The following options are available.

Reload: reloads the current page.

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

Bookmarks: allows you to load a bookmarked Web page directly.

Mark Site: adds the current page to your bookmark list.

About Phone.com: shows the version of the WAP Browser.

Advanced...: gives you access to the following advanced features. Some features may not be supported by your network operator.

Show URL: shows the URL of the current page.

HomePage: moves to the homepage.

Offline Services: allows you to copy and save Web pages so that you can view them, even if the network is down.


Outbox: stores outgoing requests from the browser so that they can be processed at a later date.

Restart Up.Browser: clears the cache memory and displays the homepage.

Encryption: allows you to check and generate the security key required to contact a server.




Entering Text, Numbers, or Symbols

When you are prompted to enter text, the current text entry mode appears above the right soft key: abc/Abc/ABC, NUM or SYM 1 ~ 4. To change modes, press the right soft key until the required mode is displayed.


abc/Abc/ABC: allows you to enter lower-case and upper-case letters. You can switch between lower- and upper-case letters by pressing the  key.

SYM1 ~ 4: allows you to enter various symbols and punctuation marks. To view more symbols, press the More soft key.

NUM: allows you to enter numbers.

If you wish to edit text, move the cursor to the required position, using the  or  keys and clear the wrong letter by pressing the  key. Then enter the correct letter.

Network Connection Information

To check the network connection time, press and hold down the  key. You can see the connection time on the last line of the content area. The linger time is one or more minutes (depending on your service provider). Consequently, if you do not use the browser for one or more minutes, the network is disconnected automatically. In this case, you can see that the connection time is stopped at that point. The connection time is reset whenever you exit the browser.

Additional Services

ALS (Alternate Line Service)

Note: Please contact your service provider to check the availability of this feature and how to subscribe to it.

The ALS feature enables two lines to be associated with one SIM card. Consequently, you can make and receive calls on either line as required. If you subscribe to this network service, a few additional menu options enable you to set up this feature.

1. Selecting a Line

With the Active Line menu option (5-1-#), you can set a line to be used automatically when you make a call or you can select the line manually for each call. For further details, refer to page 84.

2. Editing the Line Name

You can edit the name of each line via the Own Number menu option (5-1-2).

When you edit the name of a line, the name is displayed, whenever necessary, instead of "Line 1" or "Line 2". For further details, refer to page 80.

3. Setting the Ring Type

To distinguish between incoming calls on the two lines, you can select a different ring tone for each line with the Ring Tone menu option (4-1). See page 72 for further details.

4. Setting Call Diverting Options

You can set up call diverting options for each line, via the Call Diverting menu option (5-2-1). This service enables you to divert calls received on a given line to the number specified. See page 85 for further details.

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 appear

Insert SIM Card

- Check that the SIM card is correctly installed.
- This phone requires a 3 V SIM card. Please contact your service provider if you experience any problems.

Phone Locked

- 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 has been 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” is displayed

- The network connection was lost. You may be in a weak reception area (in a tunnel or surrounded by buildings). Move and try again.
- You are trying to access an option for which you have not taken out a subscription with your service provider. Contact the service provider for further details.


You have entered a number but it was not dialled

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

Your correspondent cannot reach you

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




Your correspondent cannot hear you speaking

- Have you switched off the microphone ( appears)?
- Are you holding the phone close enough to your mouth? The microphone is located in the bottom centre of the phone.

The phone starts beeping and “ Warning ** Battery Low” flashes in the display**

- The battery is insufficiently charged. Replace the battery with a charged one and recharge it or connect the battery charger.

The audio quality of the call is poor

- Check the signal strength indicator in the display (); the number of bars after it 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 dialled when you recall a phonebook entry

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

Reference Information

Access Codes

There are several access codes that are used by your phone and its SIM card. These codes help you protect the phone against unauthorised use.

The access codes (except for the PUK and PUK2 codes) can be changed using the **Security Settings** menu options (**5-3**). See page 93 for further details.

Phone Password

The phone password can be set to avoid unauthorised use of the phone. The password generally supplied with the phone is 0000. You are advised to change it before you start using your phone.

Keep the new password secret and in a safe place, separate from the phone.

PIN

The PIN (Personal Identification Number) protects your SIM card against unauthorised use. The PIN is usually supplied with the SIM card. When the PIN Check feature is enabled (menu option **5-3-1**), the PIN is needed each time the phone is switched on.

If you key in an incorrect PIN three times in succession, key in the PUK and press the **OK** soft key. Key in a new PIN and press the **OK** soft key. Key in the new PIN again and press the **OK** soft key.

PIN2

The PIN2, supplied with some SIM cards, is required to access specific functions, such as call cost counters. These functions are only available if supported by your SIM card.

If you key in an incorrect PIN2 three times in succession, key in the PUK2 and press the **OK** soft key. Key in a new PIN2 and press the **OK** soft key. Key in the new PIN2 again and press the **OK** soft key.

PUK

The PUK (Personal Unblocking Key) is required to change a blocked PIN. The PUK may be supplied with the SIM card. If not, contact your local service provider.

If you key in an incorrect PUK ten times in succession, the SIM card cannot be used anymore. Contact your service provider for a new card.

You cannot change the PUK. If you lose it, contact your service provider.

PUK2

The PUK2, supplied with some SIM cards, is required to change a blocked PIN2.

If you key in an incorrect PUK2 ten times in succession, you cannot use the functions requiring the PIN2. Contact your service provider for a new card.

You cannot change the PUK2. If you lose it, contact your service provider.

Barring Password

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

Using the Batteries

Your phone is powered by a rechargeable Li-ion standard battery.

Precautions When Using Batteries

- Never use any charger or battery that is damaged in any way.
- Use the battery only for its intended purpose.
- If you use the phone near the network's base station, it uses less power; talk and standby times are greatly affected by the signal strength on the cellular network and the parameters set by the network operator.
- Battery charging times depend on the remaining battery charge and the type of battery and charger used. The battery can be charged and discharged hundreds of times, but it will gradually wear out. When the operation time (talk time and standby time) is noticeably shorter than normal, it is time to buy a new battery.
- If left unused, a fully charged battery will discharge itself over time.

- Use only Samsung-approved batteries and recharge your battery only with Samsung-approved chargers. When a charger is not in use, disconnect it from the power source. Do not leave the battery connected to a charger for more than a week, since overcharging may shorten its life.
- Extreme temperatures will affect the charging capacity of your battery: it may require cooling or warming first.
- Do not leave the battery in hot or cold places, such as in a car in summer or winter conditions, as you will reduce the capacity and life-time of the battery. Always try to keep the battery at room temperature. A phone with a hot or cold battery may temporarily not work, even when the battery is fully charged. Li-ion batteries are particularly affected by temperatures below 0 °C (32 °F).
- Do not short-circuit the battery. Accidental short circuiting can occur when a metallic object (coin, clip or pen) causes a direct connection between the + and – terminals of the battery (metal strips on the back of the battery), for example when you carry a spare battery in a pocket or bag. Short-circuiting the terminals may damage the battery or the object causing the short-circuit.
- Dispose of used batteries in accordance with local regulations. Always recycle. Do not dispose of batteries in a fire.

Safety Information

Road Safety

- Remember, road safety always comes first!
- Do not use a hand-held phone while driving a vehicle. Always park the vehicle before having a conversation.
- Make sure that the phone is stored safely and will not fall or be broken in the event of a collision or emergency stop.
- The use of an alert device to operate a vehicle's lights or horn on public roads is not permitted.
- Only qualified personnel should install or service the phone in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty applicable to the unit.
- Electronic fuel injection, anti-skid braking, electronic cruise control or any other electronic systems may malfunction due to the lack of protection from radio signals. Check regularly that all cellular phone equipment in your vehicle is mounted and operating correctly.

Operating Environment

- Remember to follow any special regulations in force in any area and always switch off your phone whenever it is forbidden to use it, or when it may cause interference or danger (in a hospital for example).
- Operation of any radio transmitting equipment, including cellular phones, may interfere with inadequately protected medical devices. Consult a doctor or the manufacturer of the medical device if you have any questions. Other electronic equipment may also be subject to interference.
- As with other mobile radio transmitting equipment, you are advised that for satisfactory operations and personal safety, the equipment should only be used in the normal operating position.
- The effect of the GSM transmit/duty cycle on hearing aids and pacemakers is being investigated, and there is a potential hazard associated with use close to such personal medical electronic devices.
- Always switch off the phone when at a refuelling point (service station). You are reminded of the need to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants or where blasting operations are in progress.
- Do not store or carry flammable liquids, gases or explosive materials in the same compartment as the phone, its parts or accessories.

- Switch off your cellular phone when in aircraft. The use of cellular phones in aircraft is illegal and may be dangerous to the operation of the aircraft or disrupt the cellular network. Failure to observe these instructions may lead to the suspension or denial of cellular telephone services to the offender, legal action or both.

Care and Maintenance

Your phone is a product of superior design and craftsmanship and should be treated with care. The suggestions below will help you fulfil the warranty obligations and enjoy this product for many years.

- Keep the phone and all its parts and accessories out of the reach of small children.
- Keep the phone dry. Precipitation, humidity and liquids containing minerals will corrode the electronic circuits.
- Do not use or store the phone in dusty, dirty areas as its components may be damaged.
- Do not store the phone in hot areas. High temperatures can shorten the life of electronic devices, damage batteries and warp or melt certain plastics.
- Do not store the phone in cold areas. When the phone warms up to its normal temperature, moisture can form inside the phone, which may damage the electronic circuits.

- Do not attempt to open the phone. Non-expert handling of the phone may damage it.
- Do not drop or knock the phone. Rough handling may damage the internal circuits.
- Do not use harsh chemicals, cleaning solvents or strong detergents to clean the phone. Wipe it with a soft cloth slightly dampened in mild, soapy water.
- If the phone or any of its accessories are not working properly, take them to your nearest qualified service centre. The personnel there will assist you, and if necessary, arrange for the phone to be repaired.

Emergency Calls

Important! This phone, like any cellular phone, uses radio signals, cellular and landline networks, as well as user-programmed functions that cannot guarantee connection in all conditions. Therefore, you should never rely solely on any cellular phone for essential communications (medical emergencies for example).

Remember, to make or receive any calls, the phone must be switched on and in a service area with adequate cellular signal strength.

Emergency calls may not be possible on all cellular phone networks or when certain network services and/or phone features are in use. Check with local cellular service providers.



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.

Active Filp

Ability to use the voice dial or voice command feature simply by opening the flip cover.

ALS (Alternate Line Service)

Capability of associating two alternate lines with one SIM card. You can make and receive calls on either line as required.

Call Barring

Ability to restrict outgoing and incoming calls.

Call Diverting

Ability to reroute calls to another number.

Call Holding

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

Call Waiting

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

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.

Line Identification Services

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

PUK (PIN Unlocking 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).

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 (up to 160 characters long) can be displayed, received, edited or sent.

Soft Keys

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

Voice Mail

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

Index

A

ABC text mode • 38
Access codes • 122
Accessories • 9
Active Flip (5-1-0) • 83
Active Line (5-1-#) • 84
Alarm (6-2) • 101
Alert Type (4-4) • 45; 75
ALS • 117
Answering
 a call • 25
 a second call • 31
Any-key Answer (5-1-4) • 81
Auto Answer (5-1-8) • 82
Auto Redial (5-1-7) • 82

B

Backlight • 14; 81
Barring
 calls (5-2-2) • 87
 password • 89; 124
Batteries
 charging • 18
 installing • 15
 low battery indicator • 19
 precautions • 125
Broadcast (2-6) • 63
Browser
 settings (5-5) • 98
 using (8) • 111

C

Calculator (6-3) • 103
Caller ID (5-1-9) • 83
Calls
 answering • 25
 a second call • 31
 barring (5-2-2) • 87
 cost (1-5) • 57
 dialled (1-3) • 56
 diverting (5-2-1) • 85
 emergency • 8; 130
 ending • 23
 holding • 30; 89
 international • 22
 making • 22
 missed (1-1) • 26; 55
 multiparty • 32
 received (1-2) • 55

Calls (continued)

records (1) • 55
redialling • 23
 automatically • 82
rejecting • 25
searching for a number in
 the phonebook • 46
time (1-4) • 56
via the phonebook • 41
waiting (5-2-3) • 89

Card

installing SIM • 15

Care • 129

Changing

call barring
 password • 89
password (5-3-4) • 95
PIN (5-3-2) • 94
PIN2 (5-3-7) • 96
text modes • 36

Characters

changing modes • 36
entering • 35

Charging batteries • 18

Clock (6-5) • 106
type • 97

Closed User Group (5-2-6) • 92

Colour

service light • 14; 97

Composer

Melody (4-2) • 73

Conference calls • 32

Connect

to Voice Mail (2-1-1) • 59
Tone (4-9) • 78

Contrast (5-4-3) • 97

Copying phonebook numbers • 44

Cost of calls • 57

CUG (5-2-6) • 92

D

Date

format (6-5-3) • 106
setting (6-5-2) • 106

Deleting

missed calls • 27
phonebook numbers • 44






- schedules • 101
- Dialled Calls (1-3) • 56
- Dialling • 22
- Display • 12
 - contrast • 97
 - icons • 13
 - language • 80
- Diverting calls (5-2-1) • 85
- E
- Earpiece volume • 24
- Editing
 - messages • 61
 - missed calls • 27
 - phonebook numbers • 44
 - schedules • 101
- Emergency calls • 8; 130
- Erasing
 - missed calls • 27
 - phonebook numbers • 44
 - schedules • 101
- Error Tone (4-7) • 77
- F
- Fixed Dial Number (FDN)
 - mode (5-3-6) • 95
- Functions
 - selecting • 48
- G
- Games (7) • 107
- Greeting Message
 - (5-1-1) • 79
- Groups
 - user • 92
- H
- Holding calls • 30; 89
- I
- Icons • 13
- Identifying a caller • 83
- Image
 - screen • 96
- K
- Key tones
 - muting • 34
 - selecting • 76
 - sending • 34
 - volume • 24
- Keypad locking • 83
- Keys • 10; 11
- L
- Language (5-1-3) • 80
- Last number redialling • 23
 - automatic • 82
- LCD
 - layout • 12
 - settings (5-4) • 96
- LED indicator • 14
- Length of calls • 56
- Letters
 - changing modes • 36
 - entering • 35
- Line
 - active • 84
 - identification (5-2-5) • 91
- Locking
 - keypad • 21; 83
 - phone (5-3-3) • 94
 - SIM card (5-3-5) • 95
- Low battery indicator • 19
- M
- Maintenance • 129
- Melody Composer (4-2) • 73
- Memory status • 45
- Menus • 50-54
- Messages
 - broadcast (2-6) • 63
 - greeting (5-1-1) • 79
 - operator logo • 58
 - picture (2-7) • 64
 - preset (2-4) • 62
 - reading (2-2) • 59
 - ringtone • 73
 - setup (2-5) • 62
 - tone (4-6) • 76
 - voice mail (2-1) • 58
 - writing (2-3) • 61
- Microphone mute • 28
- Minute Minder (4-8) • 77
- Missed calls (1-1) • 26; 55
- Multiparty calls • 32
- Mute
 - key tones • 34
 - microphone • 28





- N
- Names
 - entering • 35
 - searching/dialling • 46
 - storing in the
 - phonebook • 41
- Network Selection
 - (5-2-4) • 90
- Network Services (5-2) • 84
- Numbers
 - copying phonebook • 44
 - correcting • 22
 - editing
 - missed call • 27
 - phonebook • 44
 - entering • 40
 - erasing phonebook • 44
 - fixed dial • 95
 - mode • 40
 - own • 80
 - redialling • 23
 - automatically • 82
 - searching/dialling • 46
 - storing • 41
- O
- Operator logo • 58
- Options
 - selecting • 48
- Organiser (6) • 99
- Own Number (5-1-2) • 80
- P
- Password
 - barring • 124
 - changing • 89
 - phone • 122
 - changing (5-3-4) • 95
- Pasting numbers • 44
- Phone
 - Lock (5-3-3) • 94
 - password • 95; 122
 - settings (5-1) • 79
- Phonebook • 41
 - alert tone • 45
 - colours • 45
 - copying numbers • 44
 - dialling • 46
 - editing numbers • 44
 - erasing numbers • 44
 - making calls • 23; 46
 - memory status • 45
- options • 43
- pasting numbers • 44
- ring tones • 45
- searching/dialling • 46
- storing numbers/
 - names • 41
- Picture Messages (2-7) • 64
- PIN • 123
 - changing (5-3-2) • 94
 - checking (5-3-1) • 94
- PIN2 • 123
 - changing (5-3-7) • 96
- Preset Message
 - List (2-4) • 62
- Problem solving • 119
- PUK • 124
- PUK2 • 124
- R
- Read Messages (2-2) • 59
- Received calls (1-2) • 55
- Records
 - call (1) • 55
- Redialling
 - automatically • 82
 - last number • 23
- Rejecting calls • 25
- Reset Settings (5-1-*) • 84
- Ring
 - tone (4-1) • 72
 - type • 75
 - volume (4-3) • 75
- ringing tone messages • 76
- Roaming • 90
- S
- Safety
 - batteries • 125
 - information • 127
 - precautions • 7
- Scheduler (6-1) • 99
 - preset (2-4) • 62
- SDN • 47
- Searching for names/
 - numbers • 46
- Security (5-3) • 93
- Selecting functions/
 - options • 48
- Sending
 - key tones • 34
 - messages • 61

Service
 colours • 97
 dialling numbers (SDN) • 47
 light (5-1-6) • 14; 82
 Settings
 alarm • 101
 browser • 98
 date • 106
 language • 80
 LCD • 96
 network • 84
 phone • 79
 reset • 84
 security • 93
 service colour • 97
 time • 106
 Setup (2-5) • 62
 Silent mode • 11
 SIM card
 installing • 15
 locking (5-3-5) • 95
 precautions • 15
 SMS
 see Messages
 Soft keys • 48
 Solving problems • 119
 Speed dialling • 45
 Switching on/off
 microphone • 28
 phone • 20
 Symbolic mode • 40
 T
 Text
 changing modes • 36
 entering • 35
 Time
 call (1-4) • 56
 format • 106
 setting (6-5-1) • 106
 world (6-4) • 105
 Tone
 connect (4-9) • 78
 error (4-7) • 77
 keypad (4-5) • 76
 melody • 73
 message (4-6) • 76
 ring (4-1) • 72
 Travel adapter • 18
 T9 mode • 36



U
 User groups • 92
 V
 Vibration • 75
 Voice Command (3-2) • 69
 Voice Dial (3-1) • 66
 activating • 67
 deleting numbers • 68
 playing recorded names/numbers • 60
 recording • 67
 earpiece • 24
 Voice Functions (3) • 66
 Voice Memo (3-3) • 70
 deleting • 70
 recording • 70
 replaying • 70
 Voice Server Number (2-1-2) • 59
 Volume adjustment
 earpiece • 24
 game • 107
 keypad • 24
 ring (4-3) • 75
 W
 Waiting
 calls • 30; 89
 WAP Browser • 111
 World Time (6-4) • 105
 Write Messages (2-3) • 61
 WWW Services (8) • 111

SGH-N600 GSM Telephone Quick Reference Card







Switch On/Off	Press and hold down 
Make a Call	① Key in the number. ② Press 
Adjust the Earpiece Volume	Press  or  during a call.
End a Call	Close the flip cover or briefly press 
Answer a Call	Open the flip cover or press the Accept soft key.

- ① Press the **Menu** soft key.
- ② Scroll with  or  through the list of menus until you reach the required menu.
- ③ Press the **Select** soft key.
- ④ Scroll with  or  through the list of options until the required option is selected.
- ⑤ Press the **OK** soft key to confirm.

Access the Menu Function

• Each of the two soft keys ( ) performs the function indicated by the text above it (bottom line in the display).



Speed-Dial with SIM Locations	• 2 to 9	Press and hold down the appropriate number key.
• 10 and above	① Press the appropriate keys. ② Press the  key. ③ Press the Dial soft key	
Connect to the Voice Mail Server	Press and hold down  .	
Set the Silent Mode On/Off	Press and hold down  .	
Store Numbers in the Phonebook	① Type in the number. ② Press the Save soft key. ③ Enter the name. ④ Press the Save soft key. ⑤ If necessary, change the location. ⑥ Press the OK soft key.	
Search for a Number in the Phonebook	① Press the PhoneBook soft key. ② Enter the start of the name. ③ Press the Find soft key. ④ To scroll through the names, press  or  .⑤ To make a call, press  .	

Declaration of Conformity (R&TTE)

For the following product :

DUAL BAND GSM TELEPHONE

(Product name)

SGH-N600

(Model Number)

Manufactured at :

- Samsung Electronics 94-1 Imsu-Dong, Gumli City, Kyung Buk, Korea, 730-350

- Samsung Electronics Iberia, S.A. Pol. Ind. Riera de Caldes, Via Augusta, n-10

08184 Palau de Plegamans, Barcelona, Espana

(factory name, address)

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

The conformity assessment procedure referred to in Article 10 and detailed in Annex^[IV] of Directive 1999/5/EC has been followed with the involvement of the following Notified Body(ies):

BABT, Claremont House, 34 Molesey Road, Walton-on-Thames, KT12 4RQ, UK
Identification mark: 168

The technical documentation kept at :

Samsung Electronics Euro QA Lab.

which will be made available upon request.
(Manufacturer)

Samsung Electronics Co., Ltd.
Suwon P.O.Box 105
Kyungki-Do, Korea 440-600
2001.11.07

(place and date of issue)



JUNGKWAN CHOI / S. Manager

(name and signature of authorized person)

(Representative in the EU)

Samsung Electronics Euro QA Lab.
Blackbushe Business Park, Saxony Way,
Yateley, Hampshire, GU46 6GG, UK
2001.11.06

(place and date of issue)



In-Seop Lee / Manager

(name and signature of authorized person)