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

Printed in Korea
Code No.:GH68-XXXXXA
English. 04/2004. Rev 1.0

World Wide Web
http://www.samsungmobile.com

SAMSUNG

GPRS TELEPHONE
SGH-D428

Draft version
(2004. 05.10)

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Important safety precautions

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

Road safety at all times

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

Switching off when refuelling

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

Switching off in an aircraft

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

Switching off in hospitals

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

Interference

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

Special regulations

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

Sensible use

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

Emergency call

Ensure the phone is switched on and in service. Key in the emergency number for your present location, then press the key. You must deactivate any unnecessary features before you can make an emergency call. Give all the necessary information as accurately as possible. Do not end the call until given permission to do so.

Water resistance

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

Accessories and batteries

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

Qualified service

Only qualified service personnel may repair your phone.

For more detailed safety information, see “Health and Safety Information” on page 183.

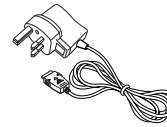
CAUTION

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

Unpacking

Your package contains the following items:

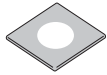
Handset



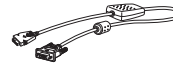
Travel charger

Batteries

Battery charger



PC link CD



PC link cable

Straight headset

Hand strap

User's manuals

Stylus pen

Note: The illustrations above may look different from your phone and accessories

Your phone

Phone layout

The following illustrations show the main elements of your phone:

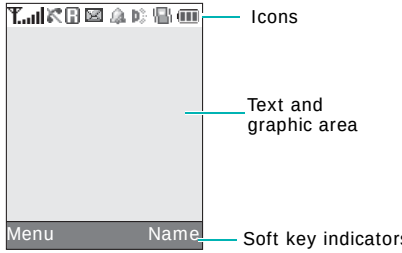
Key(s)	**Description**
	In Menu mode, scrolls through the menu options and Phonebook. While entering text, moves the cursor up and down respectively. In Idle mode, the Up key allows you to access the **Sound settings** menu and the Down key to access the **Camera** menu.
	When entering text, moves the cursor to the left and right respectively. In Idle mode, the Left key allows you to access the **Messages** menu and the Right key to access **Voice memo** menu directly.
(soft keys)	Performs the functions indicated by the text above them, on the bottom line of the display.
	In Idle mode, allows you to quickly access the Wireless Web or Samsung Fun Club. In Menu mode, selects the highlighted main menu or menu option.
	Makes or answers a call. In Idle mode, recalls the last number you dialled or received when held down.

Key(s)	**Description** (continued)
	Deletes characters from the display. In Menu mode, returns to the previous menu level.
	Ends a call. Also switches the phone on and off when held down. In Menu mode, cancels your input and returns to Idle mode.
	In Idle mode, accesses your voice mail when held down.
	Enters numbers, letters, and some special characters.
	Enters special characters. Performs various functions.
	(on the left side of the phone) During a call, adjusts the earpiece volume. In Idle mode with the phone open, adjusts the keypad tone volume. With the phone closed and the external display on, turns on or off the flashlight when held down. In Menu mode, scrolls through the menu options and Phonebook.

Display

Display layout

The display has three areas:



Area	Description
First line	Displays various icons. See page 14.
Middle lines	Displays messages, instructions, and any information that you enter, such as the number you are dialling.
Last line	Shows the current functions assigned to the two soft keys.

Icons

Icon	Description
	Shows the received signal strength. The greater the number of bars, the stronger the signal.
	Appears when you set an alarm to ring at a specified time.
	Appears when the IrDA port is active. For details, see page 163.
	Appears when you are out of your home area and have logged onto a different network; for example, when travelling in other countries.
	Appears when a new text message has been received.
	Appears when a new voice mail message has been received.
	Appears when a new multimedia message has been received.
	Appears when a call is in progress.
	Appears when you are out of your service area. When it displays, you cannot make or receive a call.
	Appears when you are connected to the GPRS network.

Icon	Description (continued)
	Appears when Silent mode is active or when you set the **Alert type** menu (Menu 4.3) to **Vibrate**. For further details, see page 37 and page 98 respectively.
	Appears when Mute mode is active.
	Shows the level of your battery. The more bars you see, the more power you have remaining.

Tool icons panel

The tool icons below the display performs the following functions when tapped:

Icon	Description
	Returns to Idle mode.
	Allows you to search for a number from Phonebook.
	Opens a new sketch memo screen.
	Enters the **Dictionary** menu.
	Allows you to quickly access your Inbox or Outbox of text messages.

Backlight

The backlight illuminates the display and the keypad. When you press any key or open the phone, the backlight turns on and remains on for a given period of time, depending on your setting in the **Back light** menu. When no keys are pressed, the display turns off after one minute to conserve your battery power.

To specify the length of time the backlight is active, set the **Back light** menu. See page 168 for further details.

Service light

The keys on the top of the phone works as a service light to blink when service is available on the phone.

You can activate or deactivate the use of the service light in the **Service light** menu. See page 168 for further details.

Camera

The camera on the top left of your phone allows you to take a photo or record a video while on the move.

For further details about the Camera feature, see page 156.

Getting started

Installing the SIM card

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

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

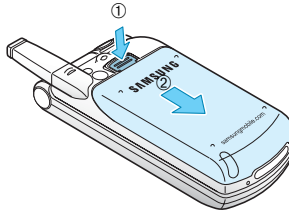
Keep all SIM cards out of the reach of small children.

1. If necessary, switch off the phone by holding down the key until the power-off image displays.

2. Remove the battery.

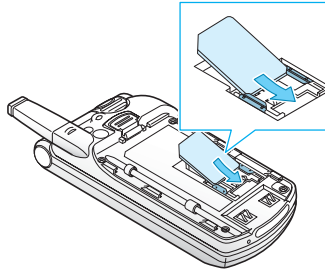
   ① Press down the battery lock above the battery.

   ② Slide away the battery, as shown.

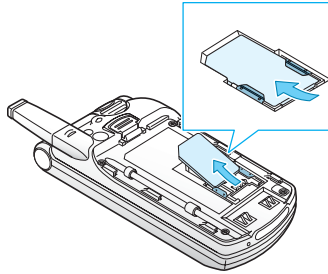


3. Slide the SIM card into the SIM card socket, as shown, so that it locks the card into position.

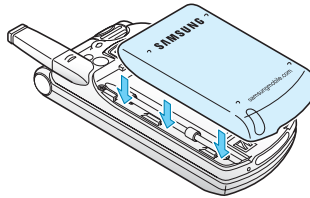
   Make sure the gold coloured contacts of the card face into the phone.



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



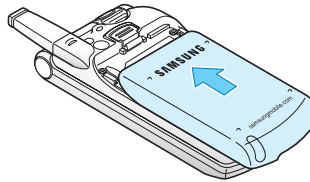
4. Place the battery so that the grooves on it align with the tabs on the phone.



Note: Before installing the battery, make sure that the stylus pen is removed from the phone.

5. Slide the battery toward the top of the phone until it clicks into place.

   Make sure that the battery is properly installed before switching the power on.



Charging the battery

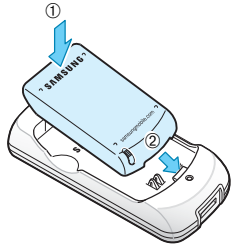
Your phone is powered by a rechargeable Li-ion battery. A battery charger and a travel adapter comes with your phone for charging the battery. Use only approved batteries and chargers. Ask your local Samsung dealer for further details.

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

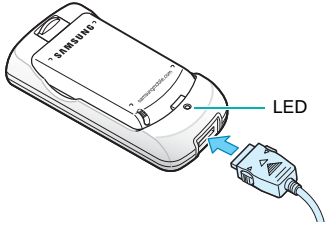
Using the Battery Charger

You can charge the battery alone by using the battery charger.

1. Insert the battery into the charger, ensuring that the terminals on the battery are in contact with those on the charger. Press the battery until it clicks into place.



2. Plug the connector of the travel adapter into the jack at the bottom of the charger. The LED on the charger turns red.

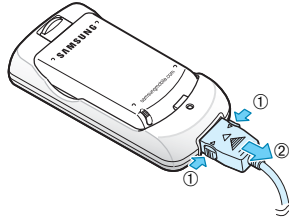


3. Plug the adapter into a standard AC wall outlet.

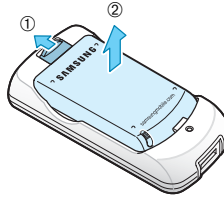
   The LED indicates the charging progress with the following colours:

   - Red: the battery is being charged.
   - Green: the battery is completely charged.
   - Yellow: the battery is not correctly plugged in or is operating at a too high or too low temperature.

4. When charging is finished, unplug the adapter from both the power outlet and the charger.



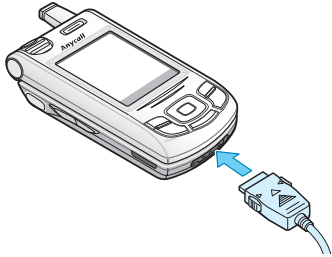
5. Remove the battery from the charger.



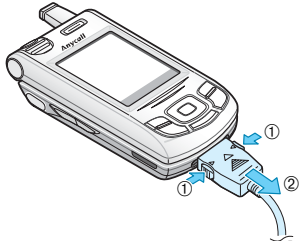
Using the travel adapter

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

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



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



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

Low battery indicator

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

When the battery level becomes too low, the phone automatically turns off.

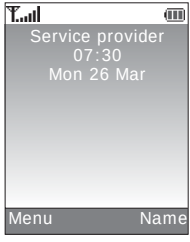
Switching on or off the phone

1. Press and hold the key until the phone switches on.

2. If the phone asks you to enter a password, enter the password and press the **OK** soft key. The phone password is preset to “00000000” at the factory. For further details, see page 179.

3. If the phone asks for a PIN, enter the PIN and press the **OK** soft key. For further details, see page 180.

The phone searches for your network and, after finding it, the idle screen appears on the display, as illustrated below. Now, you can make or receive a call.



Note: The display language is preset to English at the factory. To change the language, use the **Language** menu. For further details, see page 170.

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

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

Using the keypad lock feature

You can open the phone to use the number keypad and close the phone to make it compact.

When you close the phone, the display turns off and the phone automatically locks the keypad to keep it from being pressed accidentally.

When you press and hold down the key or one of the Volume keys on the left side, the display turns on and shows “Keypad locked.” To unlock the keypad, press and hold the **Unlock** soft key. The keypad is activated and you can use the phone’s functions.

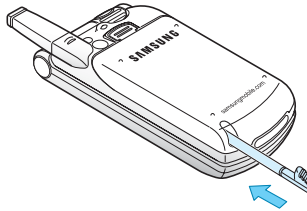
Using the stylus pen

Your phone’s display is a touch screen which allows you to select an item displayed by tapping on it or to write text as you would on paper. A stylus pen is supplied with your phone to let you tap and write on the touch screen.

1. Expand the stylus pen by pulling the handle.

2. Use the stylus pen, holding it as you would a pen or pencil.

3. When you don't use the stylus pen, store in the phone by slide it into the storage slot on the bottom of the phone.



Selecting functions and options

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

Using the soft keys

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

Example:

Press the left soft key to access Menu mode.

Press the right soft key to access the Phonebook feature.

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

Using the touch screen

Using the stylus pen, you can tap items on the display of your phone to perform the following operations:

- Enter main menus
- Select menu options
- Perform soft key commands
- Scroll through lists
- Enter text on the onscreen keyboards
- Move the cursor in text input fields

Note: Tapping on main menus perform the same as you press the left soft key; it allows you to quickly access the most popular sub menus.

Selecting options

To you select an option, you can use both the keypad and the touch screen.

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

To	Choose one of the following options:
perform a soft key command	• Press the corresponding soft key. • Tap the soft key indicator.
scroll through a list	• Press the Up or Down key. • Tap the up or down arrow on the right of the list.
select an option or a function	• Press **Select** soft key or *i* key when the option or function is highlighted. • Tap **Select** when the option or function is highlighted. • Press the corresponding number key when the option or function is numbered. • Tap the option or function.
move back up one level in the structure	• Press the soft key. • Tap . • Press the **C** key.
exit the structure without changing the settings	• Press the key. • Close the phone.

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

Note: When you access a list of options, your phone highlights the currently selected 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.

Call functions

Making a call

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

Note: When you activate the **Auto redial** option in the **Extra settings** menu (Menu 9.7), the phone automatically redials up to ten times if the person does not answer the call or is already on the phone. See page 174 for further details.

Making an international call

1. Press and hold the **0** key.
   The **+** character appears.

2. Enter the country code, area code and phone number and press the key.

Correcting the number

To clear	Press the
the last digit displayed	**C** key.
any other digit in the number	Left or Right key until the cursor is immediately to the right of the digit to be cleared. Press the **C** key. You can also insert a missing digit simply by pressing the appropriate key.
the whole display	**C** key and hold it for more than one second.

Ending a call

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

Redialling the last number

The phone stores the numbers you've dialled, received, or missed if the caller or the call recipient is identified. See "Call records" on page 86 for further details.

To recall any of these numbers:

1. If you have typed characters on the display, press the key to return to Idle mode.
2. Press the key to display a list of the most recent numbers in the order you made or received them.
3. Scroll through the numbers until the number you want highlights.
4. Choose one of the following options:
   - To dial the number, press the key.
   - To edit the number, select **Options** and then select **Edit**. Change the number, referring to "Correcting the Number" on page 31.
   - To delete the number, select **Options** and then select **Delete**.
   - To delete all of the numbers on the Call log list, select **Options** and then select **Delete all**. For details, see page 88.

Making a call from Phonebook

You can store phone numbers that you use regularly in the SIM card or in the phone's memory, which are collectively called Phonebook.

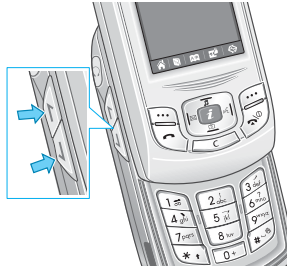
Once you have stored numbers in Phonebook, you can dial a number by pressing a few keys or assign your most frequently-used numbers to number keys using the Speed Dial feature.

For further details about the Phonebook feature, see page 38.

Adjusting the volume

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

Press the ↑ key to increase the volume level and the ↓ key to decrease the level.



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

Answering a call

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

When the caller can be identified, the caller's phone number or name, if stored in your Phonebook, displays.

1. If necessary, open the phone. Press the key or select **Accept** to answer the incoming call.

   When the **Anykey answer** option in the **Extra settings** menu (Menu 9.7) is activated, you can press any key to answer a call except for the key and the **Reject** soft key. See page 174.

   When the **Active slide** option in the **Extra settings** menu is activated, you can answer the call simply by opening the phone. See page 174.

   Note: To reject the call, press and hold the Volume keys before opening the phone, or select **Reject** or press the key.

2. End the call by closing the phone or pressing the key.

Note: You can answer a call while using Phonebook or menu features. After ending the call, the display returns to the function screen you were using.

Viewing missed calls

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

The number of calls you missed displays on the idle screen immediately after a call is missed.

To view the missed call immediately:

1. If the phone is closed, open the phone.
2. Select **View**.

   The number for the most recent missed call displays, if available.
3. Scroll through the missed calls if there is more than one.
4. Choose one of the following options:
   - To call the number displayed, press the key.
   - To edit or delete a missed call number, select the call. See below.

Editing a missed call number

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

1. Select **Options** or press the *i* key and then select the **Edit** option.
2. Change the number.

3. Choose one of the following options:
   - To call the number, press the key.
   - To store the number, select **Save** and enter the name and the location. For further details, see page 38.

Deleting a missed call

1. Select **Options** or press the *i* key.
2. Select **Delete**.

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

Note: You can access the Missed Call feature at any time by selecting the **Missed calls** menu (Menu 2.1). For further details, see page 86.

Quickly switching to silent mode

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

In Idle mode, press and hold the # key until the "Silent mode" message and the Vibration icon ( ) display. The phone also vibrates.

In Silent mode, your phone changes the sound settings as follows:

Option	New Setting
Alert type	Vibration
Keypad tone	Off
SMS/MMS tone	Light + vibration
SMS-CB tone	Light only
Slider tone	Off
Power off tone	Off
Extra tones	Off

To exit and reactivate the previous sound settings, press and hold the # key again until "Exit silent mode" appears. The Vibration icon ( ) no longer displays.

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

Phonebook

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

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

Storing a number with a name

There are two ways to store a number:

- Entering a number and then selecting **Save** in Idle mode
- Using the **New entry** option in the Phonebook menu

Storing a number in idle mode

1. Enter the number you want to store.

   Note: If you make a mistake while entering a number, correct it using the **C** key. For further details, see page 31.

2. When you are sure that it is correct, select **Save**.

3. Select an icon to identify the category of the number to be stored. Three categories are available:
   - : Mobile phone number
   - : Office number
   - : Home number

4. Select a memory location, either **SIM** or **Phone**.

   Note: When you change phones, any numbers stored in your SIM card are automatically available with the new phone, whereas any numbers stored in the phone's memory must be reentered.

5. Enter a name and select **OK**.

   For further details about how to enter characters, see page 50.

6. When the phone confirms the name you've entered, select **OK**.

7. If you do not want to save the number and name in the suggested location, press the **C** key to clear the location number and enter another location by pressing the number keys.

8. Select **OK** to store the name and number.

   After storing, the phone displays the Phonebook entry or name you just created.

9. Choose one of the following options:

   - To dial the number, press the key.
   - To use the entry options, select **Options** or press the *i* key. For further details, see page 41.
   - To return to the idle screen, press the key.

Storing a number using the Phonebook menu

1. When the idle screen displays, select **Name**.
2. Select **New entry**.
3. Select an icon to identify the category of the number to be stored.

   Note: The E-mail icon ( ) is available in this step. It allows you to save an e-mail address instead of a phone number.

4. Select a memory location, either **SIM** or **Phone**.

   Note: When you are saving an e-mail address, SIM is not available.

5. Enter a name and select **OK**.

   For further details about how to enter characters, see page 50.

6. When the phone confirms the name you entered, select **OK**.
7. Enter the number or address you want to store and select **Save**.
8. Continue the procedure from step 7 on page 39 to store the number.

Using Phonebook entry options

While accessing any Phonebook entry, select **Options** or press the *i* key to access the options for the entry.

The following options are available:

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

Use the **C** key to change the number as required; see page 31 for further details. When you are ready to dial, press the key.

Edit: allows you to edit the name and number.

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

Select **All entry** to change only the name of the entry.

Erase: allows you to erase the name and number from Phonebook. You are asked to confirm that you wish to delete the name and number by selecting **Yes**.

Copy: allows you to copy the number to another location. You can select the memory and the location number.

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

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

For further details about how to change caller group properties, see page 46.

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

Send via IrDA: allows you to send one or all numbers in the entry to another phone via the infrared port. For details, see page 166.

Dialling a number from Phonebook

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

Dialling a number from the SIM card

1. In Idle mode, enter the location number of the number you want to dial and press the # key.

   The list of the entries in the SIM card appears.

2. If necessary, scroll through the list.

3. When the number displays, select **Dial** or press the ☎ or *i* key.

Dialling a number from the phone's memory

1. In Idle mode, press and hold the **0** key. A **+** appears.

2. Enter the location number of the number you want and press the # key.

   The list of the entries in the phone's memory appears.

3. If necessary, scroll through the list.

4. When the number displays, select **Dial** or press the ☎ or *i* key.

Speed dialling

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

Setting up speed-dial entries

1. When the idle screen displays, select **Name**.

2. Select **Speed dial**.

3. Select the key to which you wish to assign the speed-dialling number, from the **2** to **9** keys.

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

   If you have already assigned a number to the key, the **Options** soft key replaces the **Select** soft key. Go to step 6.

4. Enter the first few letters of the name that you want to find and select **OK**.

5. Select a Phonebook entry from the list.
6. Select a number, if the entry has more than one.
7. Once you have assigned a number to the key, you can use the following options by selecting **Options** or pressing the *i* key:
   - **Change**: allows you to assign a different number to the key.
   - **Delete**: allows you to clear the setting so that no number is assigned to the key.
   - **Delete all**: allows you to clear the settings for all keys so that no numbers are assigned to any of the keys.
   - **Number**: allows you to view the number assigned to the key. You can dial the number by pressing the key.
8. When you are finished, select or press the key.

Speed-dialling from Phonebook

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

Searching for and dialling a number in Phonebook

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

Searching for a number by name

1. When the idle screen displays, select **Name** and then select **Search**. Alternatively, tap from any screen.

   You are asked to enter a name.

2. Enter the first few letters of the name that you want to find and select **OK**.

   The Phonebook entries are listed, starting with the first entry matching your input.

3. Select the entry you want.

4. Select one of the following options:

   - To dial the number, press the key.
   - To use the entry options, select **Options** or press the *i* key. For further details, see page 41.
   - To return to the idle screen, press the key.

Searching for a number by caller group

1. When the idle screen displays, select **Name**.

2. Select **Group search**. You are asked to enter a group name.

3. Enter the first few letters of the group name that you want to find and select **OK**.

   The caller groups are listed, starting with the first group matching your input.

4. Select a group from the list.

   The Phonebook entries in the caller group are listed.

5. Select the entry you want.

6. Select one of the following options:

   - To dial the number, press the key.
   - To use the entry options, select **Options** or press the *i* key. For further details, see page 41.
   - To return to the idle screen, press the key.

Editing a caller group

1. When the idle screen displays, select **Name**.

2. Choose **Group edit**.

3. Choose the group that you want to find.

4. Select each option and change the settings, as required. The following options are available:

   - **Call ringtone**: allows you to set a ring tone to be used when you receive a call from a person in the group.

- **SMS tone**: allows you to set a ring tone to be used when you receive a message from a person in the group.
- **Graphic**: allows you to set a graphic icon to be displayed when you receive a call from a person in the group.
- **Group name**: allows you to assign a name to the group. For further details about how to enter characters, see page 50.

5. When you are finished, select or press the key.

Deleting all of the Phonebook entries

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

1. When the idle screen displays, select **Name**.
2. Select **Delete all**.
3. Select the memory you want to empty, **All**, **SIM**, or **Phone**, in order to place a check mark.

   You can remove the check mark by selecting the option again.
4. When you are finished marking, select **Delete** to delete the entries in the selected memory.
5. Enter the phone password and select **OK**.

Note: The password is preset to “00000000” at the factory. To change it, see page 172.

6. When the confirmation message appears, select **Yes**.

   To cancel the deletion, select **No**.

7. When the display asks for your confirmation, select **Yes**.

8. When you are finished, select or press the key.

Checking the memory status

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

1. When the idle screen displays, select **Name**.

2. Choose **Memory status**.

3. Choose the memory location.

   A pop-up box shows to view the number of the entries you stored and the total number of the entries you can store in the SIM card and the phone's memory.

4. When you are finished, select or press the key.

Using the service dialling numbers

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

1. When the idle screen displays, select **Name**.
2. Select **SDN**.
3. Select the number you want.
4. To dial the number displayed, select **Dial** or press the ☎ or *i* key.

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

Entering text

The phone allows you to enter characters for messages and names in Chinese and English by using the keypad and the touch screen. To enter Chinese text, the phone provides several widely used pronunciation based (Pinyin) and character shape based (Stroke) input methods to meet the preferences of different users, allowing for greater convenience and ease of use.

You can also enter any combination of Chinese characters, alphabets, numbers, and special symbols including punctuation marks.

The following text input modes are available on your phone:

- Pen stroke mode
- Pinyin mode
- Chinese Simplified Stroke mode
- Quick English mode
- English mode
- Chinese Traditional Stroke mode
- Number mode
- Symbolic mode
- My Words mode
- Help mode

Directions for using each of the text input modes appear later in this section.

Note: The available text input modes may be different, depending on your language setting. Refer to the following table:

Language	Available modes
English	Pen Stroke, Quick English, English, Number, Symbolic, My Words
Chinese T	Pen Stroke, Quick English, English, CHN T Stroke, Number, Symbolic, My Words
Chinese S	Pen Stroke, Pinyin, CHN S Stroke, Quick English, English, Number, Symbolic, My Words

Changing the text input mode

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

Example: Entering a name for a Phonebook entry

Text input mode indicator

To change to another text input mode:

1. Select the current mode indicator on the right soft key field.

2. Select the mode you want to use.

   Note: If you want to exit the menu without changing to a new mode, select .

   The selected text input mode indicator appears at the bottom of the display.

Input mode	Indicator
Pen Stroke mode	(see page 53)
Chinese Pinyin mode	拼 (see page 57)
Chinese Simplified Stroke mode	笔 (see page 60)
Quick English mode	T9 (see page 63)
English mode	A (see page 65)
Chinese Traditional Stroke mode	筆 (see page 60)
Number mode	1 (see page 67)
Symbolic mode	No Indicator (see page 67)
My Words mode	No Indicator (see page 68)
Help mode	No Indicator (see page 70)

Using Pen Stroke mode

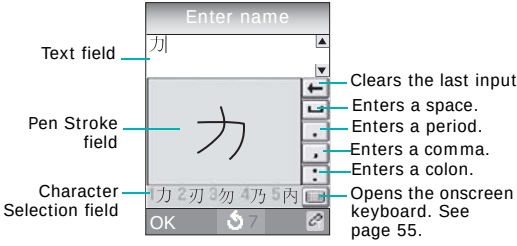
Pen Stroke mode allows you to write letters you want to enter on the touch screen using the stylus pen as you would on the paper or choose from the displayed choices corresponding to your pen stroke. You can enter Chinese and English letters, symbols, and numbers without having to change the text input mode.

In this mode, you can also open the alphabetic, numeric, and symbolic onscreen keyboard and enter text simply by tapping the characters on the keyboard.

Typing characters in Pen Stroke mode

1. Write the character you want on the Pen Stroke field.

   Note: You need to follow the correct sequence of strokes. For the sequences of English alphabet, numbers, and symbols, see page 54.



   The first choice is automatically inserted into the Text field.

2. If the phone doesn't recognise your stroke, you can select a character from the Character Selection field.

   The first character is replaced with the selected one.

   Note: If the character you want doesn't display in the Character Selection field, you need to clear the entered character and then start over the writing.

3. Continue writing the next characters.

Sequences of pen strokes

When you write English alphabet, numbers, and symbols, refer to the following tables to enter strokes in the correct order.

English

Aa	A	A	a	a		**Nn**	N	N	n		
Bb	B	B	b			**Oo**	O	O	O	O	
Cc	C	c				**Pp**	P	p	p	P	
Dd	D	d	d			**Qq**	Q	Q	q	q	q
Ee	E	E	e			**Rr**	R	R	r		
Ff	F	F	F	f	f	**Ss**	S	S			
Gg	G	g	g			**Tt**	T	t	t	t	
Hh	H	h	h			**Uu**	U	u			
Ii	I	i	i	i		**Vv**	V	v			
Jj	J	J	j	j		**Ww**	W	w			
Kk	K	K	K	k		**Xx**	X	X	x	x	x x
Ll	L	l				**Yy**	Y	y	y		
Mm	M	M	m			**Zz**	Z	Z	z	z	

Numbers

0	0	5	5
1	1	6	6
2	2	7	7
3	3	8	8
4	4	9	9

Symbols

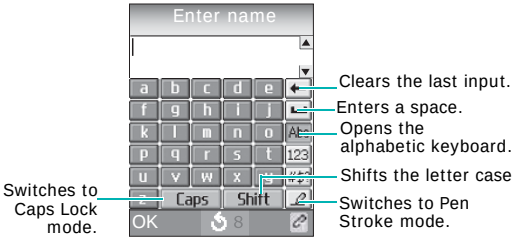
~	~	/	/	)	)
!	!	\	\	<	<
?	?	+	+	>	>
#	#	-	-	:	:
$	$	=	=	;	;
%	%	{	{	‘	`
^	^	}	}	,	,
&	&	[	[	’	´
*	*	]	]	”	¨
@	@	(	(	.	.

Using the onscreen keyboard

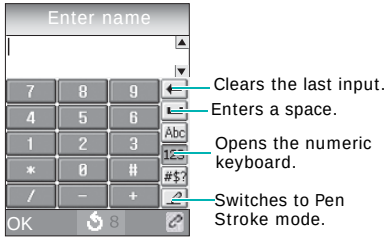
Tapping ⌨ in Pen Stroke mode opens the onscreen keyboard. You can select either the alphabetic, numeric, or symbolic keyboard.

To enter characters using the onscreen keyboard, just tap the one you want on the keyboard.

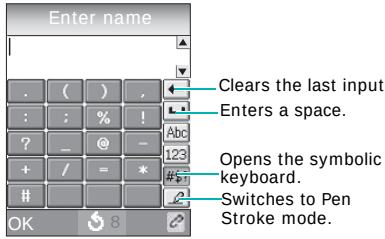
- Tap **Abc** to open the alphabetic keyboard.



- Tap **123** to open the numeric keyboard.



- Tap **#$?** to open the symbolic keyboard.



Using Chinese Pinyin mode

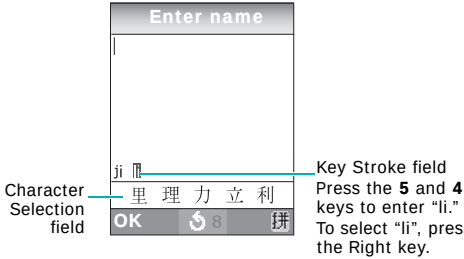
Pinyin is a system to write pronunciation of Chinese words using the Latin alphabets. With the Pinyin input method, you can enter Chinese characters by keying in the Pinyin string from the phone's keypad and the phone automatically presents the matching words.

This mode allows you to enter Pinyin characters with only one key press per letter.

Typing characters in Pinyin mode

1. Press the keys corresponding to the phonetic spelling, referring to the alphabets printed on the keys. Notice that the choices in the Character Selection field change. All of the phonetic spellings corresponding to the keys you press display.

   Example: Typing "力" in Pinyin mode



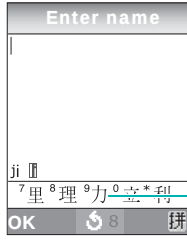
2. Select the Pinyin you want.

3. If you cannot find the character on the display, scroll through choices in the Character Selection field by pressing the Down key. To move back, press the Up key.

When the character you are typing appears in the Character Selection field, you may select it, without completing the Pinyin spelling for the character.

4. When the character displays, press the **1** key to activate the Character Selection field. A number (**7** to ✱) is added to the beginning of a corresponding character.

5. With the Character Selection field being activated, tap the character or press the **7** key to the ✱ key to select the corresponding character.



Press the **9** key to select "力" or just tap it.

Notes:
- If you enter the first character of the name you assigned to a My Words item (see page 68), the display shows you the character along with the Pinyins for your keypress. To use the item, press the Right key to highlight the character and then press the key.
- If you enter the first three characters of a My Words item (see page 68), the remaining characters automatically display. To use the My Words item, press the Right key to move the cursor. If you don't want to use it, enter the next character you want.

Inserting a space

To insert a space between characters, press the # key when the cursor blinks in the Text Area.

Scrolling

To move the cursor through your text, press the Navigation keys or just tap the position where you want to place the cursor.

Clearing strokes and characters

Press the **C** key one or more times to remove key stokes to the left. When the Key Stroke field is empty, pressing the **C** key removes characters from the Text Area.

Rapid character entry

Rapid character entry is easy in any mode, using the Character Selection field. As you enter characters, your phone predicts the next character you might want and presents choices in the Character Selection field. When the character you want appears, you may select it as described in steps 4 and 5 in “Typing characters in Pinyin mode” on page 57.

For example, when you want to type the word “zhong guo (中國),” enter the first character using the following keystrokes; **9**, **4**, **6**, **6**, **1**, and **7**. You don’t need to complete the Pinyin spelling to include “guo (國).” With no extra typing, the character displays conveniently in the Character Selection field for you to choose.

Using Chinese Stroke modes

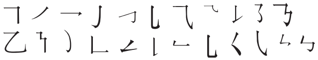
Your phone provides Chinese Simplified Stroke mode and Chinese Traditional Stroke mode. These modes allow you to enter individual Chinese strokes, in written order, from top to bottom and from left to right.

The two modes work similarly, but the characters that appear on the display may differ.

Even though there are many different strokes used to create Chinese characters, the strokes are classified into 5 basic categories; heng, shu, pie, dian and zhe. The basic strokes are printed on the **1** to **5** keys on the keypad.

To enter a stroke, press the key printed with the stroke that most closely represents the exact stroke you want.

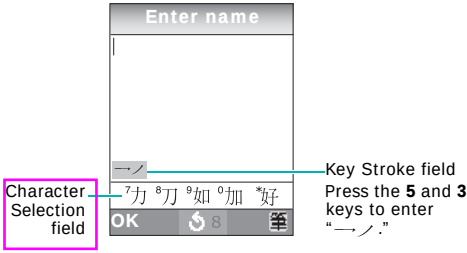
The table shows the stroke/key relationship:

Categories	Keys	Strokes Represented in Each Category
一	1	
丨	2 abc	
丿	3 def	
丶	4 ghi	
乛	5 jkl	

Typing stokes and characters in Stroke Mode

1. To type a character, press the keys corresponding to its component strokes. Press the keys on the phone in order that you would write the strokes, using one press per stroke.

   Example: Typing “ 力 ” in Chinese Traditional Stroke mode



2. The phone displays your strokes in the Key Stroke field and offers character choices in the Character Selection field. As you enter strokes, notice that the choices in the Character Selection field change. To scroll through the choices, press the Down key. To move back, press the Up key.

3. When the character you are typing appears in the Character Selection field, you may select it without finishing the stroke sequence for the character. Characters displayed in the Character Selection field correspond to the keys **7** to ✱ on the keypad.

To select a character and add it to your text, press the corresponding key (**7** to ✱). You can also tap the character.

Notes:
- If you are uncertain of the order of one or more strokes, press the **6** key in place of each questionable stroke. Continue entering strokes until the character displays in the Character Selection field or until you finish the character.
- If you enter the first three characters of a My Words item (see page 68), the remaining characters automatically displays. To use the word you added, press the Right key to move the cursor. If you don't want to use it, enter the next character you want.

Inserting a space

To insert a space between characters, press the # key when the cursor blinks in the Text Area.

Scrolling

To move the cursor through your text, press the Navigation keys or just tap the position where you want to place the cursor.

Clearing strokes and characters

Press the **C** key one or more times to remove strokes to the left. When the Key Stroke field is empty, pressing the **C** key removes characters from the Text Area.

Rapid character entry

Rapid character entry is easy in any mode, using the Character Selection field.

As you enter characters, your phone predicts the next character you might want and presents choices in the Character Selection field. When the character you want appears, you may select it as described in step 3 on page 61.

In most cases, the character you want appears in the Character Selection field before you enter all of the strokes to build it.

For example, try typing the twelve stroke character pair "中國" using the following keystrokes; **2**, **8**, and **7**. Even though "中國" is a twelve stroke character pair, your phone enables you to type it in only three key presses!

Using Quick English mode

This mode allows you to enter English words with only one key press per letter. Each key on a keypad has more than one letter; for example, when you press the 5 key once, J, K, or L displays. Quick English mode automatically compares your key presses to an internal linguistic database to determine the correct word.

The mode requires far fewer keystrokes than the traditional multi-tap method, English mode.

Note: In Quick English mode, the touch screen is not available.

To enter a word in Quick English mode:

1. Press keys on the phone just once per a letter you want. For example, to enter “HELLO,” press the **4**, **3**, **5**, **5** and **6** keys.

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

2. Type to the end of the word before editing or deleting any keystrokes.

3. If the word is correct, insert a space by pressing the # key and start entering the next word.

   Otherwise, press the **0** key, the Up or Down key repeatedly to display alternative word choices for the keys that you pressed.

   Example: Both “Of” and “Me” use the **6** and **3** keys. The phone displays the most commonly used choice first.

To type words not found in Quick English mode, change Text input mode to English mode.

Smart punctuation

To enter periods, hyphens, or apostrophes, press the **1** key. Quick English mode applies grammar rules to ensure that the correct punctuation is used.

Changing the case

To change the case of the letters, use the * key. There are three cases; Capital Lock(AB), Lower case(ab) and Initial Capital(Ab).

Scrolling

To move the cursor through your text, press the Navigation keys.

Clearing letters and words

To delete letters, press the **C** key. Press and hold the **C** key to clear the display.

Using English mode

When typing in English mode, you can tap the alphabets on the onscreen keyboard, or press the key labelled with the character you want:

- Once for the first character
- Twice for the second character
- and so on.

This method is called Multi-tap typing.

For example, you need to press the **2** key three times to display the character “C” and the **5** key two times to display the character “K.”

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

Refer to the table below for more information about the characters available by pressing the number keys:

Key	Characters in the order displayed	
	Upper case	Lower case
1	Space . 1 ! ? &	. % @ _ $ ¥
2	A B C 2	a b c 2
3	D E F 3	d e f 3
4	G H I 4	g h i 4
5	J K L 5	j k l 5
6	M N O 6	m n o 6
7	P Q R S 7	p q r s 7
8	T U V 8	t u v 8
9	W X Y Z 9	w x y z 9
0	0 * # , ; ' " =	/ : - + ( ) < >

Inserting a space

You can insert a space between words by pressing the # key.

Changing the case

To change the case of the letters, use the * key. There are three cases; Capital Lock(AB), Lower case(ab) and Initial Capital(Ab).

Scrolling

To move the cursor through your text, press the Navigation keys or just tap the position where you want to place the cursor.

Clearing letters and words

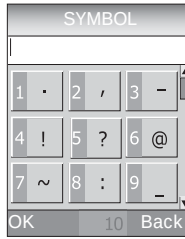
To delete letters, press the **C** key. Press and hold the **C** key to clear the display

Using Number mode

Number mode enables you to enter numbers in your text, such as a telephone number. Tap the number on the onscreen keyboard or press the keys corresponding to the digits you want to enter.

Using Symbol mode

Symbol mode enables you to insert symbols into your text.



- To select a symbol, press the corresponding number key or just tap the symbol.
- To display more symbols. press the Up or Down key or tap the up or down arrow.
- To insert the symbol(s) into your text, select **OK** or press the *i* key.

- To clear the symbol(s) you entered, press the **C** key.
- To cancel your input and exit Symbolic mode, select **Back**.

Using My Words mode

This mode allows you to preset Chinese words or phrases so that you can quickly and easily insert them into your text while you are creating a message.

Adding a word or phrase onto the My Words list

1. Select **Add Word**.
2. Enter a word or phrase using the available modes and select **OK**.

   For further details about each mode, see pages from 57 to 65.

3. Enter a name to assign to the word you added. If necessary, press the **C** key to clear the characters.
4. Select **OK**.

   The word or phrase is added to the My Words list. The item is saved separately, depending on the mode you select.

Using My Words items

1. Choose the current input mode indicator on the right soft key field when you are creating text.
2. Select **My Words** from the list.
3. Press the right soft key or tap the mode indicator on the right soft key field to select the input mode.

   The display shows the list of My Words items created in the selected mode.
4. Select the word you want from the list.

   Alternatively, enter a few letters of the name of the My Words item you want to find. The first item matching your input highlights. You can then select an item.
5. Choose **Select**. The word is inserted in your text.

Using My Words options

Select a word or phrase from the My Words list and select **Options**.

The following options are available:

Edit Phrase: allows you to change the word or phrase and then the name assigned to the item.

Create Phrase: allows you to add a new word or phrase.

Delete Phrase: allows you to delete the item. When a confirmation message appears, select **Yes**.

Select Phrase: allows you to insert the word or phrase to your text.

Using Help mode

On-screen help is available by selecting **Help** from the input mode menu. Use the Up and Down keys or tap the up and down arrows to scroll through the Help information.

Options during a call

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

Putting a call on hold

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

To place a call on hold, simply select **Hold**. You can reactivate the call whenever you want by selecting **Unhold**.

To make a call while you have a call in progress:

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

   For details about searching for a number in Phonebook, see page 45.

2. Press the key to dial the second call.

   The first call is automatically put on hold.

Alternatively,

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

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

To switch between the two calls, select **Swap**.

The current call is placed on hold and the call on hold is reactivated so that you can continue conversing with the other person.

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

Using the menu functions

During a call, you can access the main menu functions.

1. Select **Options** or press the *i* key and then select **Menu**.
2. If necessary, scroll through the menu list.

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

3. Select the menu you want to use.
4. If the selected menu has sub-options, repeat steps 2 and 3.

For further details about the menu functions available, see the list on page 80.

Switching the microphone off (Mute)

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

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

To switch the microphone off temporarily:

1. Select **Options** or press the *i* key.
2. Select **Mute**.

   The other person on the phone can no longer hear you.

To switch the microphone back on:

1. Select **Options** or press the *i* key.
2. Select **Unmute**.

   The other person on the phone can hear you again.

Muting and sending DTMF tones

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

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

Sending a sequence of DTMF tones

You can send the DTMF tones after entering the entire number you need to send.

This option is helpful for entering a password or an account number when you call an automated system, like a banking service.

To send the DTMF tones:

1. When you are connected to the teleservice system, select **Options** or press the *i* key.
2. Select **Send DTMF**.
3. Enter the number you want to send and select **OK**.

   The tones are sent.

Searching for a number in Phonebook

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

1. Select **Options** or press the *i* key.
2. Select **Phonebook**.

   The Phonebook entries are listed.
3. Enter the name that you wish to find and select **OK**.

   If you enter the first few letters of the name, the Phonebook entries are listed, starting with the first entry matching your input.
4. Select the entry you want to view.

For further details about the Phonebook feature, see page 38.

Call waiting

You can answer an incoming call while you have a call in progress, if your network supports this service and you have set the **Call waiting** menu (Menu 3.3) to **Activate**; see page 93. You are notified of an incoming call by a call waiting tone.

To answer a call while you have a call in progress:

1. Press the key to answer the incoming call. The first call is automatically put on hold.
2. To switch between the two calls, select **Swap**.

3. To end the call on hold, select **Options** or press the *i* key and then select **End held call**.

   To end the current call, press the key.

Making a multi-party call

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

Setting up the multi-party call

1. Call the first participant in the normal way.

2. Call the second participant in the normal way. The first call is automatically put on hold.

3. To join the first participant to the multi-party call, select **Options** or press the *i* key and then select **Join**.

4. To add a new person to the multi-party call, call the person in the normal way and select **Options** or press the *i* key and then select **Join**.

You can add incoming callers by answering the call, by selecting **Options** or press the *i* key and the selecting the **Join** option. Repeat as required.

Having a private conversation with one participant

1. Select **Options** or press the *i* key and then select **Select one**.

   The list of call participants appears.

2. Select a person from the list and press the key.

3. Select **Private**.

   Now you can talk privately to that person. The other participants can still converse with each other.

4. To return to the multi-party call, select **Options** and then select **Join**.

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

Dropping one participant

1. Select **Options** or press the *i* key and then select **Select one**.

   The list of call participants appears.

2. Select a person from the list and press the key.

3. Select **Remove**.

   The call ends with that participant, but you can continue to talk to the others.

4. When you want to end the multi-party call, close the phone or press the key.

Using the menus

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

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

Accessing a menu function by scrolling

You can scroll and select a menu function by tapping items on the touch screen or pressing the Navigation keys and the associate soft keys.

1. In Idle mode, Select **Menu** to access Menu mode.

2. Scroll using the Navigation keys to reach a main menu, **Phone settings** for example. Select it to enter the menu.

   Note: When you select a main menu, the left soft key allows you to quickly access its most popular submenus.

3. If the menu contains submenus, **Language** for example, select it.

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

4. You can select a menu function as follows:

   - To scroll through the menus, tap the up or down arrow, press the Up or Down key, or press the Volume keys.

- To confirm the chosen setting, tap the setting or press the **Select** soft key or the *i* key.
- To return to the previous menu level, tap or press the soft key or **C** key.
- To exit the menu without changing the settings, press the key.

Using shortcuts

Menu items, such as menus, sub-menus, and options, can be accessed quickly by using their shortcut numbers. For the main menus, you can access any one of them by pressing the number keys (**1** to **9**) corresponding to their location on the screen.

Press the **Menu** soft key and enter the number of the menu you want.

Notes:
- The numbers assigned to each menu are indicated on the list on page 80. They may not match the menu number on the phone, depending on the services supported by your SIM card.
- For the menu number 10, use the **0** key.

Example: Accessing the **Language** menu.

1. Press the **Menu** soft key.
2. Press the **9** key for **Phone settings**.
3. Press the **5** key for **Language**.

   The languages available display.

List of menu functions

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

1. SIM AT menu* (see page 85)

2. Call records (see page 86)

- 2.1 Missed calls
- 2.2 Received calls
- 2.3 Dialled calls
- 2.4 Delete all
- 2.5 Call time
  - 2.5.1 Last call time
  - 2.5.2 Total sent
  - 2.5.3 Total received
  - 2.5.4 Reset timers
- 2.6 Call costs**
  - 2.6.1 Last call cost
  - 2.6.2 Total cost
  - 2.6.3 Max cost
  - 2.6.4 Reset counters
  - 2.6.5 Set max cost
  - 2.6.6 Price/Unit

3. Network services (see page 90)

- 3.1 Call diverting
  - 3.1.1 Divert always
  - 3.1.2 Busy
  - 3.1.3 No reply
  - 3.1.4 Unreachable
  - 3.1.5 Cancel all

* May be available only if you use a SIM AT card.
** Shows only if supported by your SIM card.

3. Network service (continued)

- 3.2 Call barring
  - 3.2.1 All outgoing
  - 3.2.2 International
  - 3.2.3 International except to home
  - 3.2.4 All incoming
  - 3.2.5 Incoming while abroad
  - 3.2.6 Cancel all
  - 3.2.7 Change barring password
- 3.3 Call waiting
  - 3.3.1 Voice calls
  - 3.3.2 Data calls
  - 3.3.3 Cancel all
- 3.4 Network selection
- 3.5 Caller ID
- 3.6 Closed user group
  - 3.6.1 Index list
  - 3.6.2 Outside access
  - 3.6.3 Default group
  - 3.6.4 Deactivate*
- 3.7 Band selection

4. Sound settings (see page 97)

- 4.1 Ring tone
- 4.2 Ring volume
- 4.3 Alert type
- 4.4 Keypad tone
- 4.5 Message tone
  - 4.5.1 SMS tone
  - 4.5.2 SMS-CB tone
  - 4.5.3 MMS tone
  - 4.5.4 Off
- 4.6 Slider tone
- 4.7 Power on/off
- 4.8 Alert on call
- 4.9 Extra tones

* Shows only if the Closed user group Feature is active.

5. Messages (see page 102)

- 5.1 Text messages
  - 5.1.1 Create
  - 5.1.2 Inbox
  - 5.1.3 Outbox
  - 5.1.4 Templates
  - 5.1.5 Settings
- 5.2 Multimedia messages
  - 5.2.1 Create
  - 5.2.2 Inbox
  - 5.2.3 Outbox
  - 5.2.4 Draft
  - 5.2.5 Templates
  - 5.2.6 Settings
  - 5.2.7 MMS profile
- 5.3 Push messages
  - 5.3.1 Inbox
  - 5.3.2 Receive
  - 5.3.3 Delete all
- 5.4 Delete all
  - 5.4.1 Text messages
  - 5.4.2 Multimedia messages
- 5.5 Voice mail
  - 5.5.1 Connect to voice server
  - 5.5.2 Voice server number
- 5.6 Broadcast messages
  - 5.6.1 Read
  - 5.6.2 Receive
  - 5.6.3 Channel list
  - 5.6.4 Language
- 5.7 Memory status
  - 5.7.1 Text messages
  - 5.7.2 Multimedia messages

6. Funbox (see page 125)

- 6.1 WAP browser
  - 6.1.1 Home
  - 6.1.2 Favorite
  - 6.1.3 http://
  - 6.1.4 Settings
  - 6.1.5 Clear cache

6. Funbox (continued)

- 6.2 Fun club
  - 6.2.1 SFC home
  - 6.2.2 Gift box
  - 6.2.3 Service area
- 6.3 Games & More
- 6.4 Sounds
- 6.5 Images
- 6.6 Delete all
- 6.7 Memory status
  - 6.7.1 Games
  - 6.7.2 Sounds&Images
- 6.8 Match Match

7. Organiser (see page 140)

- 7.1 Alarm
  - 7.1.1 Once alarm
  - 7.1.2 Daily alarm
  - 7.1.3 Morning call
  - 7.1.4 Remove alarm
  - 7.1.5 Autopower
- 7.2 Calendar
- 7.3 Time & Date
  - 7.3.1 Set time
  - 7.3.2 Set date
  - 7.3.3 World time
  - 7.3.4 Time format
  - 7.3.5 Date format
- 7.4 Calculator
- 7.5 To do list
- 7.6 Sketch memo
  - 7.6.1 Read memo
  - 7.6.2 Sketch memo
  - 7.6.3 Setup
- 7.7 Voice memo
  - 7.7.1 Record
  - 7.7.2 Memo list
  - 7.7.3 Delete all
  - 7.7.4 Memory status
- 7.8 Currency exchange
- 7.9 Dictionary

8. Camera (see page 156)

- 8.1 Take photos
- 8.2 My photos
- 8.3 Video
  - 8.3.1 Record
  - 8.3.2 Video clips
- 8.4 Memory status

9. Phone settings (see page 163)

- 9.1 Activate infrared
  - 9.1.1 With PC
  - 9.1.2 With other phone
- 9.2 Display settings
  - 9.2.1 Wallpaper
  - 9.2.2 Menu style
  - 9.2.3 Brightness
  - 9.2.4 Back light
  - 9.2.5 Service light
  - 9.2.6 Graphic logo
- 9.3 Greeting message
- 9.4 Own number
- 9.5 Language
- 9.6 Security
  - 9.6.1 PIN check
  - 9.6.2 Change PIN
  - 9.6.3 Phone lock
  - 9.6.4 Change password
  - 9.6.5 Privacy
  - 9.6.6 SIM lock
  - 9.6.7 FDN mode*
  - 9.6.8 Change PIN2*
- 9.7 Extra settings
- 9.8 Reset settings

* Shows only if supported by your SIM card.

SIM AT menu

This menu is available if you use a SIM AT card that provides additional services, such as news, weather, sports, entertainment, and location services. Available services may vary, depending on your service provider's service plans.

For further details, see your SIM card instructions or contact your service provider.

Call records

In this menu, you can view the:

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

Notes:
- You can access the numbers in the three types of call records by pressing the key in Idle mode.
- The number of call records the phone can store may be different depending on your SIM card.

Missed calls *(Menu 2.1)*

This menu lets you view the most recent 20 numbers of the calls you received, but did not answer.

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

Press the key to dial the number.

By selecting **Options** or pressing the *i* key, you can use the following options:

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

Delete: deletes the call from the list.

Received calls *(Menu 2.2)*

This menu lets you view the most recent 20 numbers of the calls you received.

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

Press the key to dial the number.

By selecting **Options** or pressing the *i* key, you can use the following options:

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

Delete: deletes the call from the list.

Dialled calls *(Menu 2.3)*

This menu lets you view the most recent 20 numbers you dialled.

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

Press the key to dial the number.

By selecting **Options** or pressing the *i* key, you can use the following options:

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

Delete: deletes the call from the list.

Delete all *(Menu 2.4)*

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

1. Select a call type to place a check mark. Repeat this step to select more call types

   You can remove the check mark by selecting it again.

2. Select **Delete** to delete the marked records.

3. When a confirmation message displays, select **Yes** to confirm.

4. When the phone asks for your confirmation again, select **Yes**.

Call time *(Menu 2.5)*

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

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

The following options are available:

Last call time: length of the last call.

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

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

Reset timers: option used to reset the call timers. You must first enter the phone password and then select **OK**.

Note: The password is preset to “00000000.” To change this password, see page 172.

Call costs *(Menu 2.6)*

This network feature lets you view the cost of calls. This menu may not be available, depending on your SIM card.

The following options are available:

Last call cost: cost of the last call you made.

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

Max cost: maximum cost set in the **Set max cost** menu.

Reset counters: option used to reset the cost counter. You must first enter your PIN2 (see page 181) and then select **OK**.

Set max cost: option used to enter the maximum cost that you authorise for your calls. You must first enter your PIN2 (see page 181) and then select **OK**.

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 181) and then select **OK**.

Network services

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

Call diverting *(Menu 3.1)*

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.

You can use the following options to divert voice calls and/or data calls:

Divert always: all calls are diverted.

Busy: calls are diverted when you are already on another call.

No reply: calls are diverted when you do not answer the phone.

Unreachable: calls are diverted when you are not in an area covered by your service provider or when your phone is switched off.

Cancel all: all of the call diverting options are cancelled.

To set your call diverting options:

1. Select a call diverting option.
2. Select the type of calls, voice or data.

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

3. If you selected **No reply** in step 1, select the length of time the network waits for before diverting a call.

4.

To	Select the
activate call diverting	**Activate** option. Go to step 5.
change the number to be called	**Change** option. Go to step 5.
deactivate call diverting	**Remove** option.

5. Enter the number to which the calls are to be diverted and select **OK**.

   To enter an international code, press and hold the **0** key until the **+** sign displays.

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

You can deactivate all call diverting settings by selecting **Cancel all**.

Call barring *(Menu 3.2)*

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

You can use the following options to restrict voice calls and/or data calls:

All outgoing: calls cannot be made.

International: international calls cannot be made.

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

All incoming: calls cannot be received.

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

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

To set your call barring options:

1. Select a call barring option.
2. Select the type of calls, voice or data.
3. select **Activate** to confirm your settings.
4. Enter your call barring password supplied by your service provider.

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

To deactivate specific call barring settings:

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

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

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

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 *(Menu 3.3)*

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

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

To set your call waiting options:

1. Select the type of calls, voice or data, to which you want to apply the call waiting option.

   The screen informs you whether call waiting is activated or deactivated.

2. You can activate or deactivate the call waiting feature as necessary by selecting **Activate** or **Deactivate** respectively.

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

Network selection *(Menu 3.4)*

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

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

To automatically or manually select the network when roaming:

1. Select the appropriate option.

   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 2.

2. Select the network you want.

   You are connected to that network.

Caller ID *(Menu 3.5)*

You can prevent your phone number from being displayed on the phone of the person being called.

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

The following options are available:

Default: the default setting provided by the network is used.

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

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

Closed user group *(Menu 3.6)*

Closed user group (CUG) is a network service which allows incoming and outgoing calls to be restricted to a selected user group. You can create up to ten user groups.

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

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

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

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

Add a new CUG index as advised by your service provider or delete a group.

To	Select
add a new CUG index	**Options**, select the **Add** option, and enter the index.
delete a CUG index	**Options** and select the **Delete** option.
activate a CUG index	**Options** and select the **Activate** option.

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

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

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

Sound settings

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

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

Notes:
- You can quickly access this menu by pressing the Up key in Idle mode.
- When the phone is in Silent mode (see page 37), you cannot change the sound settings.

Ring tone *(Menu 4.1)*

This menu allows you to select a ring melody.

You can choose between many different melodies. If you have downloaded sounds from the Internet or the optional EasyGPRS programme, you can use them in this menu.

Ring volume *(Menu 4.2)*

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

Alert type *(Menu 4.3)*

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

The following options are available:

Light only: the service light flashes; the phone neither rings nor vibrates.

Melody: the phone rings using the ring tone selected in the **Ring tone** menu.

Vibration: the phone vibrates but does not ring.

Keypad tone *(Menu 4.4)*

This menu allows you to select a tone type that the phone sounds when you press a key.

To turn off the sound, select **Off**.

Message tone *(Menu 4.5)*

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

SMS tone

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

Off: the phone does not use an SMS tone.

Light only: the service light flashes.

Vibration: the phone vibrates.

Single beep: the phone beeps once.

SMS tone x: the phone uses one of several SMS tones.

SMS-CB tone

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

Off: the phone does not use a CB tone.

Light only: the service light flashes.

Vibration: the phone vibrates.

Single beep: the phone beeps once.

SMS-CB tone x: the phone uses one of several CB tones.

MMS tone

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

Off: the phone does not use an MMS tone.

Light only: the service light flashes.

Vibration: the phone vibrates.

Single beep: the phone beeps once.

MMS tone x: the phone uses one of several MMS tones.

Off

Selecting this menu turns off all of the message tones.

Slider tone *(Menu 4.6)*

This menu allows you to select a tone type that the phone sounds when you open or close the phone.

To turn off the sound, select **Off**.

Power on/off *(Menu 4.7)*

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

To turn off the sound, select **Off**.

Alert on call *(Menu 4.8)*

This menu allows you to choose whether or not the phone informs you when you receive a new message or when the time for an alarm comes during a call.

Off: the phone doesn't actively alert you to incoming messages or alarms. It only displays the corresponding notification.

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

Extra tones *(Menu 4.9)*

You can customise additional tones used for the phone.

To use a tone, select it to place a check mark. You can remove the check mark by selecting it again.

The following options are available:

Error tone: sets whether or not the phone informs you when you make a mistake.

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

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

Messages

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

- short text messages
- multimedia messages
- WAP push messages
- voice mail
- cell broadcast messages

Note: You can quickly access this menu by pressing the Left key in Idle mode.

Text messages *(Menu 5.1)*

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

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

Note: You can quickly open the Inbox and Outbox of text messages by tapping from any screen.

Create

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

Note: When you add media objects to the message, the number of characters you can enter decreases.

Creating a simple text message

1. Create your message.

Note: For further details about how to enter characters, see page 50.

2. When you finish entering the message, select **Options**. The following options are available:

   - **Send only**: allows you to send the message. The message is deleted after sending.
   - **Save and send**: allows you to save a copy of the message and then send the message. You can read the message in your Outbox.
   - **Save only**: allows you to save the message so that it can be sent later. You can read the message in your Outbox.
   - For further details about **Add content**, **Add templates**, **Add from phonebook**, and **Add from bookmark** options, see page 104.

3. Select **Send only** or **Save and send**.

   If you want to just save the message, select **Save only**. After saving the message, the phone returns to the **Text messages** menu screen.

4. If you select a save option, choose the memory location.

5. Enter a destination number and select **OK**.

   The message is sent.

Note: When the phone fails to send the message, it asks you if you want to retry. Select **Yes** to confirm. Otherwise, press the **No** soft key to return to the Create screen.

Creating a text message using the options

1. Create a message.

2. Press the **Options**.

3. Select one of the following options:

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

   - **Add templates**: allows you to apply one of the preset message templates to the text. Select one of five messages stored in the **Templates** box. For further details, see page 107.

   - **Add from phonebook**: allows you to add a Phonebook entry to your message. Select one from the list.

   - **Add from bookmark**: allows you to add a web page's address stored in your Favorite list. Select one from the list.

4. Complete the message, and send or save it by following the procedure from step 2 on page 103.

Inbox *(Menu 5.1.1)*

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

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

1. Select a message from the list to read the message contents.
2. Scroll through the contents, if necessary.
3. To scroll to the previous or next message, press the * or # key.

While reading a message, you can choose the following options by selecting the **Options**:

Delete: allows you to delete the message.

Send: allows you to send/resend the message. For further details, see page 103.

Text reply: allows you to reply to the sender by sending a text message.

Call back: allows you to call the sender back.

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

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

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

Select content: allows you to save media contents, such as sounds or images, from the message into your phone. You can use the contents when writing a message. For details, see page 104.

Outbox *(Menu 5.1.2)*

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

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

1. Select a message from the list to read the message contents.
2. Scroll through the contents, if necessary.
3. To scroll to the previous or next message, press the * or # key.

While reading a message, you can choose the following options by selecting **Options**:

Delete: allows you to delete the message.

Send: allows you to send/resend the message. For further details, see page 103.

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

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

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

Select content: allows you to save media contents, such as sounds or images, from the message into your phone. You can use the contents when writing a message. For details, see page 104.

Templates *(Menu 5.1.3)*

Using this menu, you can preset a maximum of five messages that you use most frequently.

Select an empty location or the message template you want and select **Options**.

The following options are available:

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

Note: For further details about how to enter characters, see page 50.

Send: allows you to retrieve the message. Once you have completed the message, you can send, save and send, or simply save it. For further details about how to send a message, see page 103.

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

Settings *(Menu 5.1.4)*

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

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

Setting x (where **x** is the setting group number): each group has its own sub-menu.

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

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

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

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

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

Common settings: The following options are available:

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

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

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

Multimedia messages *(Menu 5.2)*

This menu allows you to use the Multimedia Message Service.

Multimedia Message Service (MMS) is a messaging service very similar to Short Message Service (SMS). It provides automatic and immediate delivery of personal multimedia messages from phone to phone or from phone to e-mail.

In addition to the familiar text content of text messages, multimedia messages can contain images, graphics, voice, and audio clips. An MMS message is a multimedia presentation in a single entry. It is not a text file with attachments.

Using the MMS feature, your phone can receive and send multimedia messages that contain multimedia files, such as your photos, sounds and images you downloaded from the Internet, and voice memos you recorded. This function is available only if it is supported by your service provider. Only phones that offer multimedia message features can receive and display multimedia messages.

Create *(Menu 5.2.1)*

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

Creating and sending a multimedia message

1. Enter the subject of your message and select **Next**.

   For further details about how to enter characters, see page 50.

2. When **Add here** highlights, select **Options** and add the message contents using one of the following options:

   - **Add text**: allows you to enter the message text.
   - **Add photo**: allows you to add a photo you took using the camera on your phone. Select **Take photo** to take a new photo, or **Select photo** to add one of the photos stored in the phone's memory. For further details about using the camera, see page 156.
   - **Add picture**: allows you to add a picture stored in the **Images** folder. You may not be able to add some downloaded images if they are not in the correct format.
   - **Add sound**: allows you to add a sound file. Select **Record voice** to record a new voice memo, or select **Sound list** to add one of the sounds in the phone's memory. You may not be able to add some downloaded sounds if they are not in the correct format.

- **Add sketch**: allows you to add a sketch memo. Select **New memo** to create a new memo, or **Saved memo** to add one of the memos stored in the phone's memory. For further details, see page 149.
- **Send**: allows you to send the message. Use this option when you finish creating the message.
- **Save**: saves the message in the **Draft** or **Templates** box for later use. For further details, see page 118.
- **Settings**: allows you to change the message settings. For further details about each setting option, see page 119. After changing the settings, you need to select or press the **C** key to go back to the Write options screen.
- **Add destination**: allows you to enter destination numbers or addresses. See steps 6 to 11. After adding them, you need to select or press the **C** key to go back to the Write options screen.
- **Preview**: shows your message as it will display on the recipient's phone.

Note: You can add text, an image and a sound once for each page.

3. Repeat step 2 until you finish creating your message.

4. If you want to change the added items, highlight one and select **Options** to display the Write Options list.

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

The following options are available:

- **Edit text**/**picture**/**sound**: allows you to change the text or replace the image or sound with another one.
- **Add page**: allows you to add up to five pages. After you add a page, the display shows you the current page number and memory space used for the page. You can move to each page using the Left or Right key on the message screen.
- **Delete**: deletes the item from your message.
- **Duration**: allows you to set when and how long text, an image, a sound, or a page displays on the message presentation screen. If the duration you set is shorter than the content duration for a particular page, the content duration is automatically decreased.
- **Send**: allows you to send the message.
- **Save**: saves the message in the **Draft** or **Templates** box for later use. For further details, see page 118.
- **Settings**: allows you to change the message settings. For further details about each setting option, see page 119.
- **Add destination**: allows you to enter destination numbers or addresses. See steps 6 to 11. After adding them, you need to select or press the **C** key to go back to the Write options screen.
- **Preview**: shows your message as it will display on the recipient's phone.

5. When you are finished creating the message, select **Send**.

6. Select a destination type (**To**, **Cc**, or **Bcc**).

7. Choose one of the following options:

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

8. Enter a number or an e-mail address and select **OK**, or select a number from Phonebook.

9. To add a destination, select **Add destination** and repeat from step 7.

   If you want to edit the destinations, select one and select **Options**. You can change or delete it.

10. To enter additional numbers or addresses to the other destination types, select and repeat steps 6 through 10.

    You can enter up to 10 destinations each for **To**, **Cc**, and **Bcc**.

11. When you are finished entering the destinations, select **Send message**.

    Your phone sends the message.

Inbox *(Menu 5.2.1)*

Viewing a message when you receive it

When a new multimedia message comes in, the display shows the MMS Message icon ( ) and a text notification along with the message subject.

1. Choose **Select** to view brief information about the message, such as the sender's number, the message size and the subject.

   If you want to view the message later in the Inbox, select **Exit** or press the **C** key.

2. Scroll through the message information, if necessary.

   You can use the following options by selecting **Options**:

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

3. To read the message, select **Retrieve**.

   Your phone retrieves the message contents from the server and displays it.

4. Scroll through the message, if necessary.

5. When you are finished, press the key.

Viewing a received message in the inbox

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

- : MMS notifications that have been opened.
- : MMS notifications that are unopened.
- : MMS notifications that you sent an enquiry to the MMS server for retrieving the message.
- : MMS notifications that the phone is retrieving the messages from the MMS server.
- : MMS notifications of which the phone couldn't retrieve the message.
- : Messages that have been unopened.
- : Messages that are unopened.

1. Select a message on the list.

   The phone presents the message and scrolls to the next page, if it has one, after a specified time.

2. Press the **OK** to go to the message view screen.

   Or, the display automatically switches to the screen after a few seconds.

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

   If the message has more than one page, you can scroll through the pages by using the Left and Right keys.

While viewing a message, you can choose the Message options by selecting **Options**.

If you are viewing a new message, the options are the same as when you view a message as soon as you receive it. See page 114.

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

Delete: deletes the message.

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

Callback: allows you to call the sender back.

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

Forward: allows you to forward the message to another person. When the message contains media contents locked by your service provider, this option is not available.

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

Save sound: allows you to save a sound from the message into the **Sounds** folder.

Properties: shows you information about the message, such as the message status, subject, sender's e-mail address or phone number, message size, priority, and the time and date when the message was received.

Outbox *(Menu 5.2.2)*

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

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

1. Select a message on the list.

   The phone presents the message and scrolls to the next page, if it has one, after a specified time.

2. Select **OK** to go to the message view screen.

   Or, the display automatically switches to the screen after a few seconds.

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

   If the message has more than one page, you can scroll through the pages by using the Left and Right keys.

While viewing a message, you can choose the following options by selecting **Options**:

Delete: deletes the message.

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

Send: allows you to send/resend the message.

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

Properties: shows you information about the message, such as the message status, subject, sender and recipients' e-mail addresses or phone numbers, message size, priority, and the time and date when the message was sent.

Draft *(Menu 5.2.3)*

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

For further details about viewing a message, see "Outbox" on page 117.

Templates *(Menu 5.2.4)*

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

Select a message template from the list. The phone presents the message

Select **OK** to use the following options, or the display automatically shows the options after a specified time:

Edit: allows you to send a message using the template. For further details about how to send a message, see page 110.

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

Settings *(Menu 5.2.5)*

You can change the default settings for sending or receiving multimedia messages.

The following options are available:

Delivery report: when this option is enabled, the network informs you whether or not your message has been delivered.

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

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

On: the phone automatically retrieves new messages from the server. As soon as you receive a message you can use more options while you are reading. See page 116 for details about the options.

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

Message acceptance: you can specify the category of messages you want to receive.

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

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

Delivery time: you can set a delay time before the phone sends your messages.

Priority: you can select the priority level of your messages.

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

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

MMS profile *(Menu 5.2.6)*

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

Notes:
- The last profile you accessed is automatically activated for sending messages.
- If you change the MMS settings without first checking with your service provider, the MMS feature may not work properly.
- The availability of the setting options may vary depending on your country.

The following options are available for each profile:

Profile name: enter a name that you wish to assign to the MMS server.

Connection URL: enter the address of your MMS server.

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

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

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

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

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

For further details, contact your service provider.

Push messages *(Menu 5.3)*

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

The following options are available:

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

Receive: allows you to set whether or not your phone receives web messages. Select **Always** to receive web messages, or **Never** to reject web messages.

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

Delete all *(Menu 5.4)*

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

1. Select a message type.
2. Select a message box to place a check mark. Repeat this step to select more boxes to be cleared.

   You can remove the check mark by selecting the box again.
3. Select **Delete** to delete the marked messages.
4. When a confirmation message displays, select **Yes** to confirm.
5. When the display asks for your confirmation again, select **Yes**.

Voice mail *(Menu 5.5)*

This menu allows you to access your voice mail box, if your network supports this service.

The following options are available:

Connect to voice server: before using the Voice Mail feature, you must enter the voice server number obtained from your service provider. You can then select this option to listen to your voice messages.

You can quickly connect to the voice server by pressing and holding the **1** key in Idle mode.

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

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

Broadcast messages *(Menu 5.6)*

This network service allows you to receive text messages on various topics, such as the weather or traffic.

Cell Broadcast (CB) messages display as soon as they are received, provided that:

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

The following options are available:

Read: lets you view the received messages.

The **Volatile** box displays the messages from the network, but loses its contents as soon as the phone is switched off. Scroll through the message by using the Up and Down keys.

You can save a CB message in the **Archive** box for later retrieval. When a text notification appears, select **Options** and then select **Save**.

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

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

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

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

Delete: use to remove a channel from the list.

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

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

Please contact your service provider for further details.

Memory status *(Menu 5.7)*

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

The following options are available:

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

Multimedia messages: shows the total space, including the free and used space, and how much space is currently occupied by each message box. Press the Up or Down key to scroll through the screen.

Funbox

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

WAP browser *(Menu 6.1)*

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

Home *(Menu 6.1.1)*

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

The contents of the WAP Browser startup homepage depends on your Wireless Web service provider. To scroll through the screen, use the Up and Down keys.

Note: To access the startup homepage from any other screen in the WAP browser, use the **Home** option. For further details about the WAP Browser menu options, see page 127.

Exiting the WAP browser

To exit the browser at any time, simply press and hold the key.

Navigating the WAP browser

To	Press the
scroll through and select browser items	Up or Down key. Press the *i* key, or press the **Options** soft key and then choose **Select**.
return to the previous page	**C** key, or press the **Options** soft key and then select **Back**.
return to the startup homepage	**Menu** soft key and select **Home**. For further details about this option, see page 127.

Entering text in the WAP browser

When you are prompted to enter text, the current text input mode is indicated on the screen. To change the text input mode, press the *i* key one or more times.

The following modes are available:

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

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

Note: You can also enter special characters in Upper-case or Lower-case Character mode. For details about available characters, see page 65.

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

Number mode (**1**): allows you to enter numbers.

Selecting and using browser menu options

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

To access a menu option:

1. Press the **Menu** soft key.
   A menu list displays.
2. Highlight a menu by pressing the Up or Down key.
3. Select an option by pressing the **Select** soft key or *i* key.
4. If necessary, select a secondary option using the Up and Down keys, and press the **Select** soft key or *i* key to confirm.

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

The following options are available:

Bookmarks: shows the bookmark list. You can bookmark the current web page or access one of boookmarked pages.

Reload: reloads the current page.

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

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

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

To	Press the
set the current page as your startup home page	**Option** soft key or *i* key and select the **Save to home** option.
set a bookmark for the current page	**Option** soft key or *i* key and select the **Save to bookmark** option.
cancel your setting	**Back** soft key or **C** key.

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

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

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

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

Favorite *(Menu 6.1.2)*

This menu allows you to store the URL addresses of up to 16 of your favourite web sites.

To store your favourite web site:

1. Select an empty location.
2. Enter the address you want to store and select **Enter**.

   For further details about how to enter characters, see page 50.

3. Enter a name for the Favorite item and select **OK**.

Once you have stored a Favorite item, you can use the following options when you select **Options**:

Go to URL: takes you to the corresponding web site.

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

Delete: allows you to delete the item.

http:// *(Menu 6.1.3)*

This menu allows you to manually enter the URL address of the web site that you wish to access.

After entering an address, select **Enter** to access the associated site.

For further details about how to enter characters, see page 50.

Settings *(Menu 6.1.4)*

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

Note: The availability of the setting options may vary depending on your country.

For each server, the following options are available:

Profile name: enter a name that you wish to assign to the HTTP proxy server.

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

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

Bearer: select a bearer to be used for each type of network address accessed; **GPRS** or **Data**.

The remaining options depend on the Bearer setting.

When the bearer is set to **GPRS**:

IP address: enter the WAP gateway address required to connect to the Internet.

User name: enter the user ID required to connect to the GPRS network.

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

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

When the bearer is set to **Data**:

IP address: enter the WAP gateway address required to connect to the Internet.

Login name: enter the PPP server login ID.

Password: enter the PPP server password.

Dial-up number: enter the PPP server phone number.

Data call type: select a data call type; **Analogue** or **ISDN**.

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

Clear cache *(Menu 6.1.5)*

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

Fun Club *(Menu 6.2)*

You can access Samsung Fun Club on the Internet and download various media items, such as melodies and images.

Note: You can quickly access Samsung Fun Club by pressing the *i* key in Idle mode and then selecting **Fun club**.

Samsung Fun Club is the preset web site providing Samsung phone users with attractive download services.

You can download:

- images and ring tones via SMS.
- 4-level greyscale and colour images from WAP.
- 64-polyphonic melodies from WAP.
- customer services.
- information and electronic catalogues for Samsung Electronics products.

SFC home *(Menu 6.2.1)*

In this menu, you can access the Samsung Fun Club homepage.

Note: Before accessing Samsung Fun Club for the first time, please connect your service provider's WAP homepage first. Then reconnects to Samsung Fun Club. This service requires WAP subscription and is unavailable depending on your local system and services.

Gift box *(Menu 6.2.2)*

Through Samsung Fun Club, you can receive images and ring tones from other people as gifts.

This menu stores notification messages from the Fun Club server to inform you that you have a gift received. After selecting a notification, you can access Samsung Fun Club to download the gift to your phone. Downloaded gift items are saved in Images or Sounds menu.

Service area *(Menu 6.2.3)*

Each time you move to HongKong or China, you need to change this setting to use the SFC service, according to the area where you are. You can choose either **China** or **China HK**.

For further details about this service, contact your service provider.

Games & More *(Menu 6.3)*

You can enjoy downloaded Java applications or download applications from the web site provided by your service provider. You can also change the DNS setting required for accessing Java services, if necessary.

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

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

Launching a MIDlet

Note: The following procedure is for the default games. For downloaded games, the procedure may be different.

1. Select the MIDlet you want on the game list.
2. On the startup screen of the MIDlet, scroll to an option using the Navigation keys or the **2** and **8** keys.

The following options are available:

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

3. Press the **5** key or *i* key to confirm your selection.

While you are playing a game, to	Press the
adjust the sound volume	Volume keys.
stop the game and return to the startup screen	**C** key.
exit the game	key.

To view MIDlet information:

1. Scroll to the MIDlet you want on the game list and select **Prop**.

   The display shows information about the MIDlet, such as the file size, application version, and its vendor.

2. To scroll to other MIDlet information, press the Navigation keys.

3. If you want to delete the MIDlet, select **Delete** and then select **Yes** to confirm the deletion.

   Note: When you select the default games from the list, the **Delete** option is not available, so that you cannot delete them.

4. To exit and return to the game list, select **Back**.

Entering text

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

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

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

Number mode (**1**): allows you to enter numbers.

Symbol mode: allows you to enter symbols. After highlighting a symbol by pressing the Navigation keys, press the **OK** soft key or *i* key to insert it.

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

To change the text input mode, press the * key until the appropriate indicator appears.

Changing the DNS settings

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

1. Select **Setting** on the game list.
2. Enter the primary address using the number keypad and select **OK**.
3. Enter the secondary address and select **OK**.

Sounds *(Menu 6.4)*

In this menu, you can listen to the sounds downloaded from the web server or received in multimedia messages. You can set the downloaded sounds as the current ring tone.

Select sound you want on the Sounds list.

By selecting **Options**, you can use the following options:

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

Delete: deletes the sound.

Set as ringtone: sets the sound as your ring tone.

Images *(Menu 6.5)*

In this menu, you can view the images downloaded from the web server or received in messages. You can set the downloaded pictures as the current background image. If you set a photo as your wallpaper, it is designated as **My photo** on the list.

Select the image you want on the Images list.

By selecting **Options**, you can use the following options:

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

Delete: deletes the image.

Set as wallpaper: sets the image as your wallpaper.

Delete all *(Menu 6.6)*

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

1. Select a folder to place a check mark. Repeat this step to select more folders to be cleared.

   You can remove the check mark by selecting the folder again.

2. Select **Delete** to delete the marked items.

3. When a confirmation message displays, select **Yes** to confirm.

4. When the display asks for your confirmation again, select **Yes**.

Memory status *(Menu 6.7)*

You can check the memory being used and the memory remaining for games, sounds, and images.

The following options are available:

Games: the display shows the percentage of the free and used space for games as well as the number of the games you downloaded.

Sounds&Images: the display shows the percentage of the free and used space, including the memory status used for objects in the **Sounds** and **Images** menus.

Match Match *(Menu 6.8)*

You can enjoy the Match Match game, which is a touch game.

The object of this game is to find all of matching pairs of cards as quickly as possible. The score will be come up with fast speed of touch and lower number of touch. Have a fun time and improve your memory skill.

On the startup screen of the game, the following options are available:

New game: starts a new game.

High score: shows the 5 highest scores.

Setting: allows you to select the time limit for one game and select the theme of the card.

Help: opens the help screen.

To start a game:

1. Select **New game**.

2. Select two of the cards by tapping on the card.

   If both cards are the same, those cards will stay flipped over. If they are different, remember what is on the card so you can try again. After a few seconds, they face down again.

3. Select more cards.

   The game is over when you have matched all of the pairs and all the cards are flipped over. Then you can continue the game of the next level.

Notes:
- You can pause the game by pressing the **C** key. To resume, tap anywhere on the screen.
- To exit the current game, tap **X** on the bottom of the screen.

Organiser

The Organiser feature enables you to:

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

Alarm *(Menu 7.1)*

This feature allows you to:

- set the alarm to ring at a specific time.
- set the phone to switch on automatically and ring the alarm, even if the phone is switched off.

The following options are available:

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

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

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

To set an alarm:

1. Choose the type of alarm to be set.

2. Enter the time for the alarm to sound and select **OK**.

   Note: Your phone is preset to use 24-hour format. To change the format, see page 145.

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

   - **Remove alarm**: deactivates the current alarm.
   - **Alarm tone**: allows you to select the alarm melody.

3. If applicable, select **AM** or **PM**.

4. If you select **Morning call** in step 1, choose the repeat option, **Monday to friday** or **Monday to saturday**.

To stop the alarm when it rings, select **Exit** or press one of the Volume keys, **C** key, or ⏻ key.

Remove alarm: deactivates all alarm settings.

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

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

Calendar *(Menu 7.2)*

With the Calendar feature, you can:

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

Consulting the calendar

When you select the **Calendar** menu, the calendar with today's date highlighted displays. On the bottom line, the date in the lunar calendar appears.

The following options are available when you select **Options**:

Search all: displays all of the memos, starting with the oldest regardless of the day.

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

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

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

Writing a memo

You can make new memos for the calendar.

To write or edit a memo on a specific date:

1. Select a date on the calendar.

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

   An empty memo screen displays allowing you to enter your memo.

2. Enter your memo and then select **OK**.

   Note: For further details about how to enter characters, see page 50.

   You are asked if you wish to set an alarm.

3. If you want an alarm to ring on the chosen day, select **Yes**.

   Otherwise, select **Skip**. The memo is saved and the display returns to the calendar.

4. If you selected **Yes** at the previous step, enter the time for the alarm and select **OK**.

   Note: Your phone is preset to use 24-hour format. To change the format, see page 145.

   You can also select the melody for the alarm by selecting **Melody**.

5. If applicable, select **AM** or **PM**.

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

When the time for an alarm comes and the phone is ringing the selected alarm melody, select **View** to read the associated memo. Alternatively, select **Exit** or press the **C** or key.

Viewing a memo

When you select a day for which a memo already exists on the calendar, the latest memo for the day displays.

If more than one memo is stored, press the Up or Down key to scroll to the previous or next memo.

Select **New** to add a new memo for the day.

You can use the following options by selecting **Options**:

Edit: allows you to change the memo text.

Alarm: allows you to set an alarm to ring at a specified time to remind you of the memo. If you set the alarm earlier, you can change or delete it.

Delete: allows you to delete the memo.

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

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

Send via IrDA: allows you to send the memo to another phone via the infrared port. For details, see page 166.

Time & Date *(Menu 7.3)*

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

The following options are available:

Set time: allows you to enter the current time.

Note: Before setting the time, you must specify your time zone in the **World time** menu.

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

World time: allows you to find out what time it is in another part of the world.

The screen shows the:

- city name, the time difference between the selected city and your time zone, and the current time and date.
- city selected as your time zone and the current time and date.

To select your time zone:

1. Scroll to the city corresponding to your time zone.

   The local time and date display.

2. Select **Set**.

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

Date format: allows you to change the date format.

Calculator *(Menu 7.4)*

With this feature, you can use the phone as a calculator.

The calculator provides you with scientific calculations using trigonometric functions, logarithms, logical operators, and factorials, as well as four basic arithmetic functions

Bin Oct Dec Hex	Selects the format of the calculator, binary, octonal, decimal, hexadecimal.
√ log ln exp 1/x sin cos tan x² 10ˣ xʸ x! int abs rad deg	Selects or enters various scientific calculation factors.
DEL	clears your input forward.
←	clears your input backward.
=	shows the result of your calculation.
CE	clears the last number you entered.
MC	clears any value stored in the calculator's memory.

MR	retrieves the stored value from the calculator's memory.
MS	saves the current value in the calculator's memory.
M+	places the current value into the calculator's memory until MC is tapped.
← → ↑ ↓	moves the cursor left/right/up/down.
EXIT	exits the calculator.

To do list *(Menu 7.5)*

This feature allows you to:

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

Creating the to do list

1. Select **New**.
2. Enter the first task.

   Note: For further details about how to enter characters, see page 50.

3. Select **OK**.
4. Select a priority status of high, normal, or low.
5. Enter your deadline and select **OK**.

   If you don't want to set the deadline, select **Skip**.

Editing the to do list

When you select the **To do list** menu, the current contents display with the status mark, if the task has been done, and priority; for High, for Normal, and for Low.

To view the details for a task, select it from the list. You can scroll to other task by pressing the Up or Down key.

To change the status of a task, press the * key to mark the task as completed as of the current time and date.

By pressing the **Options** soft key on the list or the task view, you can use the following options:

New: allows you to create a new task.

Mark: allows you to change the status of the current task to either **Done** or **Undo**.

Edit: allows you to change the text, priority and/or deadline for the current task

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

Copy: makes a copy of the current task.

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

Delete: deletes the current task.

Delete all: allows you to delete all of the tasks.

Exit: exits the To do list.

Sketch memo *(Menu 7.6)*

In this menu you can make a memo by drawing a sketch using stylus on the touch screen yourself.

Creating a new sketch memo

1. Tap on the tool icons panel.

   An empty sketch memo screen opens.

2. Draw a sketch using the stylus pen on the screen.

You can use the following tools at the bottom line of the screen:

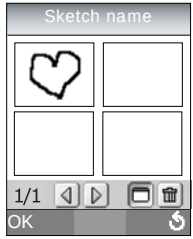
Tool	Function
	Clears your drawing on the screen.
	Erases the drawing as you move the stylus.
	Cancels you last action.
	Opens the line picker screen so that you can change the line thickness.

Tool	Function
	Opens the line picker screen so that you can change the thickness of the line.
	Allows you to set an alarm for your sketch memo. You can select a date from the calendar and set the time for the alarm.

3. When you are finished, select **OK** to save the memo.

Read memo *(Menu 7.6.1)*

This menu allows you to review your sketch memos. The display shows the memos in Thumbnail mode.



- To view a memo on the full screen or edit the memo, select it and then tap or select **OK**.
- To delete a memo, select it and then tap .

Sketch memo *(Menu 7.6.2)*

Selecting this menu opens a new sketch memo. For further details about creating a new memo, see page 149.

Setup *(Menu 7.6.3)*

This menu allows you to activate or deactivate the alarm feature for sketch memos or delete all of the memos.

Alarm: when this option is set to **On**, all of the alarms settings for your memos.

Erase all: selecting this option allows you to erase all of your memos. Select **Yes** to confirm the deletion. When the display asks for your confirmation again, select **OK**.

Voice memo *(Menu 7.7)*

In this menu, you can record voice memos. After recording, you can send a memo to other people using the Multimedia Message Service (MMS).

Note: You can quickly access this menu by pressing the Right soft key in Idle mode.

Record *(Menu 7.7.1)*

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

1. To start recording, select **Record**.

2. Record a memo by speaking into the microphone.

3. When you select **Stop** or if the recording time goes off, the following options display:

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

4. To save the memo, select **Save**.

5. Press the **C** key to clear the default name, if necessary, and enter a name for the memo.

   For further details about how to enter characters, see page 50.

6. When you are finished, select **OK**.

   The memo is saved and then the display shows the memo information.

After saving, the phone displays the information about the memo. Select **Options** to use the following memo options:

Send: allows you to send the memo to other people by using the MMS feature. Follow the procedure on page 110.

Rename: allows you to change the memo's name.

Delete: deletes the memo.

Memo list *(Menu 7.7.2)*

This menu shows your voice memo list.

Select a memo to use the following options:

Play: plays the memo.

Send: allows you to send the memo to other people by using the MMS feature. See page 110 for further details about sending a message.

Rename: allows you to change the memo's name.

Properties: displays information about the memo, such as the name, the date when the memo was made, recording duration, and memory size.

Delete: deletes the memo.

Delete all *(Menu 7.7.3)*

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

When the confirmation message appears, select **Yes**. When the display asks for your confirmation again, select **Yes**.

Memory status *(Menu 7.7.4)*

In this menu, you can check the number of memos you recorded and the total number of memos you can record.

Currency exchange *(Menu 7.8)*

Using this menu, you can figure out currency conversions.

1. Enter the current exchange rate of your source currency and select **OK**.

   You can insert a decimal point by pressing the # key.

2. Enter the amount to convert and select **OK**.

   The amount you entered and its equivalent value display.

3. Select **Exit** or press the **C** key to exit the currency convertor.

Dictionary *(Menu 7.9)*

Your phone provides you with the English-Chinese or Chinese-English dictionary.

Note: You can quickly open the **Dictionary** screen by tapping A中 from any screen.

To look for a word from the dictionary:

1. Select **Input**.

2. Enter the Chinese or English word you want.

   For further details about how to enter characters, see page 50.

3. Select **OK**.

   The displays shows the pronunciation of the associated word you entered and the corresponding English or Chinese words.

   If you entered an English word, you can view the word in simplified Chinese or traditional Chinese by tapping **T** or **S** on the right of the input field.

4. To look for another word, repeat from step 1.

Camera

Using the camera module in your phone, you can take photos of people or events while on the move. Additionally, you can send photos to other people in a multimedia message or set it as a wallpaper.

You can also record videos using your phone as a camcorder.

Note: In Idle mode, you can quickly enter the **Camera** menu by pressing the Down key.

CAUTION:
- Do not take photos of people without their permission.
- Do not take photos in a place where cameras are not allowed.
- Do not take photos in a place where you may interfere with another person's privacy.

Take photos *(Menu 8.1)*

This menu allows you to take photos. Your camera produces JPEG photos.

Note: When you take a photo in direct sunlight or in bright conditions, shadows may appear on the photo.

1. Accessing the **Take photos** menu turns on the camera on the top left of your phone. You can also press and hold the Down key in Idle mode.

   The image to be captured appears on the display.

2. Adjust the image by rotating the camera module and aiming it at the subject.

   You can also use the following options:

   - Select **Options** to use the camera options. For details of each option, see the following page.
   - Press the Right key to zoom in or out.
   - Press the Left key to change the frame size.
   - Press the Up or Down key to adjust the image brightness.
   - Press the ↑ key to flip the image vertically or the ↓ key to see its mirror image.

3. Select **Take** to take the photo.

4. Select **Save** to save the photo.

   To discard the photo, select **Cancel**.

5. Enter a name for the photo and select **OK**.

6. Choose one of the following options:

To	Select
use the photo options	**Options**. For details, see page 159.
return to Preview mode	**Preview** or press the **C** key.

Using the camera options

In Preview mode, you can use various options for the camera by selecting **Options**.

The following options are available:

Effects: allows you to change the colour tone or apply special effects to the photo.

Frames: allows you to use a decorated frame. Select a frame from the list using the Navigation keys.

Multi shot: allows you to take a series of action stills. Select the capture speed to **High speed** or **Normal speed** and the number of photos for the camera to take. When you select **Take** in Preview mode, the camera takes photos successively.

After taking photos, select **Save All** to save all of them. To save the selected one(s), scroll to the photo you want and select **Select** to place a check mark. Repeat to select more photos and then select **Save**.

Rotation: allows you to rotate the photo. You can flip the photo vertically, see its mirror image, or do both at the same time.

Self timer: allows you to have a delay time before the camera takes the photo. Select the length of time you want. When you select **Take** in Preview mode, the camera takes the photo after the specified time.

Settings: allows you to change the image settings.

Photo size: allows you to select the image size. The selected image size displays on the preview screen.

Photo quality: allows you to select the image quality. The selected quality displays on the preview screen.

My photos *(Menu 8.2)*

This menu allows you to review your photos.

When you access this menu, your phone displays the photos in Thumbnail mode, which shows them as small images.

To view the photos on the full screen, select **View**. To go back to Thumbnail mode, select **Multi**.

Select **Options** or press the *i* key to use the following photo options:

Send: allows you to send the photo as a multimedia message. For further details, see page 110.

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

Set as wallpaper: allows you to set the photo as your wallpaper on the idle screen.

Protection: allows you to protect the photo from being deleted.

Delete this: allows you to delete the photo.

Delete all: allows you to delete all of the photos saved in your phone.

Edit: allows you to change the color tone of the photo or apply special effects on the photo.

Properties: shows the properties of the photo, such as the time and date when it was taken, file size, photo size, protection status, file format, and file name.

Video *(Menu 8.3)*

You can record and play videos using your phone as a camcorder.

Record *(Menu 8.3.1)*

In this menu, you can record a new video.

1. When the camera turns on, adjust the image by aiming the camera at the subject.

   You can also use the following options:

   - Select **Options** to use the camera options. For details of each option, see the following page.
   - Press the Right key to zoom in or out.
   - Press the Left key to change the frame size. You can also select **Small** or **Large**.
   - Press the Up or Down key to adjust the image brightness.
   - Press the ↑ key to flip the image vertically or the ↓ key to see its mirror image.

2. Select **Record** to start recording.

3. When you are finished, select **Stop** to stop recording.

   The phone will automatically stop if the recording time expires.

4. Enter a name for the video and select **OK**.

   The phone saves the video file and then returns to Preview mode.

Video clips *(Menu 8.3.2)*

When you access this menu, the thumbnail images of your videos display.

To play a video:

1. Select the video you want to review.
2. Select **Play** to start playing the video.
3.

To	Select
pause the playing	**Pause**.
resume	**Play**.
stop	**Stop**.

Select **Options** on the video list to use the following video options:

Rename: allows you to change the file name.

Delete: allows you to delete the current video file.

Delete all: allows you to delete all of your video files.

Protection: allows you to protect the video from being deleted.

Properties: shows the properties of the video, such as the time and date when it was recorded, file size, protection status, and playing time.

Memory status *(Menu 8.4)*

You can check the percentage of the memory being used and the remaining memory for photos and videos in the camera.

Phone settings

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

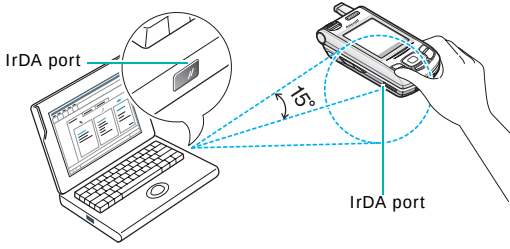
Activate infrared *(Menu 9.1)*

This feature allows you to send or receive data to or from IrDA-compatible computers or phones through the infrared port.

With PC

To use an infrared connection with a computer, you must:

- configure and activate an IrDA-compliant infrared port on your PC.
- activate the infrared feature on the phone; the IrDA icon ( ) appears on the top line of the display.
- align the IrDA port on the phone with the IrDA port on your computer or another phone.



The connection is ready for data transmission.

If there is no communication between your phone and the IrDA-compliant device within 30 seconds of activating the feature, it is automatically deactivated.

Note: For optimal performance, use the PC link cable. supplied with your phone.

With other phone *(Menu 9.1.1)*

Using the infrared connection, you can send or receive Phonebook entries and calendar memos from another compliant phone.

Note: If you receive a call while sending or receiving data, you can either answer or reject the call without interrupting the IrDA connection. But, picking up your phone may break the connection between the phones, so use the supplied headset to answer the call.

Receiving data from another phone

1. Align the IrDA ports on both phones with each other.

2. Activate the infrared feature on the phones. For this phone, access the **Activate infrared** menu and select **With other phone**.

   The connection between the phones is established and your phone receives data from the other phone. You can receive up to 20 items in succession.

3. When the list of the received data displays, you have two options:

   To save an individual item:

   ① Select one item on the list. The display shows the Phonebook entry or calendar memo.

   ② Select **OK**.

   ③ Select **Options**.

   The following options are available:

   - **Discard**: deletes the data.
   - **Save**: allows you to save the selected data in your phone's memory.

   ④ Select **Save**.

   To save all of the data:

   ① Select **Options**.

   The following options are available:

   - **Save All**: allows you to save all data.
   - **Save All vCard**: saves all the Phonebook entries from the received data.
   - **Save All vCalendar**: saves all the calendar memos from the received data.
   - **Discard All**: deletes all of the data.
   - **Discard All vCard**: deletes all the Phonebook entries from the received data.
   - **Discard All vCalendar**: deletes all the calendar memos from the received data.
   - **Exit**: exits the IrDA function. When the phone asks if you want to delete the remaining data, select **Yes** or **No**.

   ② Select a save option .

4. When FDN (Fixed Dial Number) mode is enabled on your phone, enter the PIN2 and select **OK**.

   For further details about the FDN mode, see page 173.

5. Select **Save** .

   The entries are saved.

Sending Your Phone Book

1. Align the IrDA ports on both phones with each other to establish the IrDA connection.

   The IrDA port of the other phone must be activated.

2. Access a Phone Book entry and select **Options**. See page 45.

3. Select **Send via IrDA**.

4. Select **Selected data** or **All data**.

   Your phone begins sending the data.

Sending a Calendar Memo

1. Align the IrDA ports on both phones with each other to establish the IrDA connection.

   The IrDA port of the other phone must be activated.

2. Access the **Calendar** menu and select the memo you want to send. Seepage 144.

3. Select **Options** and select **Send via IrDA**.

   Your phone begins sending the memo.

Display settings *(Menu 9.2)*

In this menu, you can change various settings for the display and the lights.

Wallpaper *(Menu 9.2.1)*

This menu allows you to change the background image or the colour of the text to be displayed in Idle mode.

The following options are available:

Wallpaper list: you can select a background image to be displayed on the idle screen. You have various preset images available. You can also select a blank background or any images downloaded from the Internet and the optional EasyGPRS programme or received in messages.

To change the background image:

1. Select an image from the list.
2. When the image displays, you can scroll to other images by pressing the Up or Down key.
3. When the image you want displays, choose **Select** to display it on the idle screen.

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

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

Menu style *(Menu 9.2.2)*

This menu allows you to select the menu display style. You can choose either **Grid style**, **Bar style**, or **Page style**.

Brightness *(Menu 9.2.3)*

You can adjust the display brightness to see it better in different lighting conditions.

Service light *(Menu 9.2.4)*

The keys on the top of the phone backlight as a service light to indicate when service is available. This menu allows you to select whether or not the service light is used. It also allows you to select a color in which the service light flashes.

Select one of the seven color settings. When the phone is ready for use, the service light flashes in the appropriate color.

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

Back light *(Menu 9.2.5)*

You can select the length of time the backlight is on. The backlight turns on when you press a key or receive a call or message and remains on for the specified length of time.

Graphic logo *(Menu 9.2.6)*

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

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

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

Greeting message *(Menu 9.3)*

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

For further details about how to enter characters, see page 50.

Own number *(Menu 9.4)*

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

You can:

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

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

Language *(Menu 9.5)*

You can select a display language. Select either **English**, **Chinese S** (Simplified Chinese), or **Chinese T** (Traditional Chinese).

Note: Depending on your language selection, available input modes may change. For details, see page 51.

Security *(Menu 9.6)*

The Security feature enables you to restrict the use of your phone by others and the types of calls.

Various codes and passwords are used to protect features of your phone. They are described in the following sections. Also see pages 179-182.

PIN check *(Menu 9.6.1)*

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

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

The following options are available:

Disable: the phone connects directly to the network when you switch it on.

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

Change PIN *(Menu 9.6.2)*

This feature allows you to change your current PIN to a new one, provided that the PIN Check feature is enabled. You must enter the current PIN before you can specify a new one.

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

Phone lock *(Menu 9.6.3)*

When the Phone Lock feature is enabled, the phone is locked and you must enter a 4- to 8-digit phone password each time the phone is switched on.

The password is preset to “00000000” at the factory. To change the phone password, see the **Change password** menu on page 172.

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

The following options are available:

Disable: you are not asked to enter the phone password when you switch on the phone.

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

Change password *(Menu 9.6.4)*

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

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

Privacy *(Menu 9.6.5)*

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

1. Select the item you want to lock in order to place a check mark. Repeat this step to select more items.

   You can remove the check mark by selecting it again.

2. Select **OK**.

3. When the phone asks for the phone password, enter the password and select **OK**.

Note: The password is preset to “00000000” at the factory. To change this password, see page 172.

SIM lock *(Menu 9.6.6)*

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

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

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

FDN mode *(Menu 9.6.7)*

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

The following options are available:

Disable: you can call any number.

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

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

Change PIN2 *(Menu 9.6.8)*

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

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

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

Extra settings *(Menu 9.7)*

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

Select the option you want to activate. A check mark displays in front of the option. To deactivate the option, just select it again.

The following options are available:

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

Note: The interval between two attempts varies.

Active slide: when this option is checked, you can simply open the phone to answer a call.

When it is unchecked, you must open the phone and press a key to answer a call, depending on the setting of the **Anykey answer** option.

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

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

Reset settings *(Menu 9.8)*

You can easily reset your phone to its default settings.

To reset your phone, enter the 4- to 8-digit phone password and select **OK**.

Note: The password is preset to “00000000.” To change this password, see page 172.

Solving problems

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

When you switch your phone on, the following messages may appear:

Insert SIM card

- Check that the SIM card is correctly installed.

Enter password

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

Enter PIN

- You are using your phone for the first time. You must enter the Personal Identification Number (PIN) supplied with the SIM card.
- The PIN Check feature is enabled. Every time the phone is switched on, the PIN has to be entered. To disable this feature, use the **PIN check** menu. See page 170.

Enter PUK

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

“No service,” “Network failure” or “Not done” displays

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

You have entered a number but it was not dialled

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

Your correspondent cannot reach you

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

Your correspondent cannot hear you speaking

- Have you switched off the microphone?
- Are you holding the phone close enough to your mouth? The microphone is located at the bottom of the phone.

The phone starts beeping and "**Warning** Low battery" flashes on the display

- Your battery is insufficiently charged. Recharge the battery.

The audio quality of the call is poor

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

No number is dialled when you recall a Phonebook entry

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

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

- the model and serial numbers of your phone
- your warranty details
- a clear description of the problem

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

Access codes

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

When requested for any of the codes explained below, enter the appropriate code, displayed as asterisks, and select **OK**. If you make a mistake, press the **C** key one or more times until the incorrect digit is cleared and then continue entering the correct code.

The access codes, except for the PUK and PUK2 codes, can be changed using the **Security** menu. See page 170 for further details.

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

Phone password

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

To	See
activate/deactivate the Phone Lock feature	page 171.
change the phone password	page 172.

PIN

The **P**ersonal **I**dentification **N**umber or PIN (4 to 8 digits) protects your SIM card against unauthorised use. It is usually supplied with the SIM card.

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

To	See
activate/deactivate the PIN Check feature	page 170.
change the PIN	page 171.

PUK

The 8-digit PUK (**P**IN **U**nblocking **K**ey) is required to change a disabled PIN. The PUK may be supplied with the SIM card. If not, or you have lost it, contact your service provider.

To re-enable your PIN:

1. Enter the PUK and select **OK**.
2. Enter a new PIN of your choice and select **OK**.
3. When the **Confirm new PIN** message displays, enter the same code again and select **OK**.

If you enter an incorrect PUK ten times in succession, the SIM card becomes invalid. Contact your service provider for a new card.

PIN2

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

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

To change the PIN2, see page 173.

PUK2

The 8-digit PUK2 (**P**IN **U**nblocking **K**ey **2**), supplied with some SIM cards, is required to change a disabled PIN2. If you lose the code, contact your service provider.

To re-enable your PIN2:

1. Enter the PUK2 and select **OK**.
2. Enter a new PIN2 of your choice and select **OK**.
3. When the **Confirm PIN2** message displays, enter the same code again and select **OK**.

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

Barring password

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

You can change this password in the **Call barring** menu. See page 91 for further details.

Health and safety information

Exposure to radio-frequency energy (SAR information)

This phone meets European Union (EU) requirements concerning exposure to radio waves.

Your mobile phone is a radio transmitter and receiver. It is designed and manufactured so as not to exceed the limits for exposure to radio-frequency (RF) energy, as recommended by the EU Council. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines were developed by independent scientific organisations through the periodic and thorough evaluation of scientific studies. The limits include a substantial safety margin designed to ensure the safety of all persons, regardless of age and health.

The exposure standard for mobile phones employs a unit of measurement known as SAR (Specific Absorption Rate). The SAR limit recommended by the EU Council is 2.0W/kg.*

* The SAR limit for mobile phones used by the public is 2.0 watts/kilogram (W/kg) averaged over ten grams of body tissue. The limit incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements. The SAR values may vary depending on national reporting requirements and the network band.

SAR tests are conducted using standard operating positions with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a base station, the lower the power output of the phone.

Before a new model phone is available for sale to the public, compliance with the European R&TTE Directive must be shown. This directive includes as one of its essential requirements the protection of the health and safety of the user and any other person.

Precautions when using batteries

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

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

Road safety

Your wireless phone gives you the powerful ability to communicate by voice, almost anywhere, anytime. But an important responsibility accompanies the benefits of wireless phones, one that every user must uphold.

When driving a car, driving is your first responsibility. When using your wireless phone behind the wheel of a car, make sure that you are following the special regulations in a given area or country.

Operating environment

Remember to follow any special regulations in force in any area and always switch off your phone whenever it is forbidden to use it, or when it may cause interference or danger.

When connecting the phone or any accessory to another device, read its user's guide for detailed safety instructions. Do not connect incompatible products.

As with other mobile radio transmitting equipment, users are advised that for the satisfactory operation of the equipment and for the safety of personnel, it is recommended that the equipment should only be used in the normal operating position (held to your ear with the antenna pointing over your shoulder).

Electronic devices

Most modern electronic equipment is shielded from radio frequency (RF) signals. However, certain electronic equipment may not be shielded against the RF signals from your wireless phone. Consult the manufacturer to discuss alternatives.

Pacemakers

Pacemaker manufacturers recommend that a minimum distance of 15 cm (6 inches) be maintained between a wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research and recommendations of Wireless Technology Research.

Persons with pacemakers:

- Should always keep the phone more than 15 cm (6 inches) from their pacemaker when the phone is switched on
- Should not carry the phone in a breast pocket
- Should use the ear opposite the pacemaker to minimise potential interference

If you have any reason to suspect that interference is taking place, switch off your phone immediately.

Hearing aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may wish to consult your hearing aid manufacturer to discuss alternatives.

Other medical devices

If you use any other personal medical devices, consult the manufacturer of your device to determine if it is adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information. switch off your phone in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle.

You should also consult the manufacturer of any equipment that has been added to your vehicle.

Posted facilities

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

Potentially explosive environments

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

Users are advised to switch off the phone while at a refuelling point (service station). Users are reminded of the need to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants or where blasting operations are in progress.

Areas with a potentially explosive atmosphere are often but not always clearly marked. They include the areas below decks on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas, such as propane or butane, areas where the air contains chemicals or particles, such as grain, dust or metal powders, and any other area where you would normally be advised to turn off your vehicle engine.

Emergency calls

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

Remember, to make or receive any calls the phone must be switched on and in a service area with adequate signal strength. Emergency calls may not be possible on all wireless phone networks or when certain network services and/or phone features are in use. Check with local service providers.

To make an emergency call, proceed as follows.

1. If the phone is not on, switch it on.
2. Key in the emergency number for your present location (for example, 112 or any other official emergency number). Emergency numbers vary by location.
3. Press the key.

If certain features are in use (call barring, for example), you may first need to deactivate those features before you can make an emergency call. Consult this document and your local cellular service provider.

When making an emergency call, remember to give all the necessary information as accurately as possible. Remember that your phone may be the only means of communication at the scene of an accident; do not cut off the call until given permission to do so.

Other important safety information

- Only qualified personnel should service the phone or install the phone in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty applicable to the device.
- Check regularly that all wireless phone equipment in your vehicle is mounted and operating properly.
- Do not store or carry flammable liquids, gases or explosive materials in the same compartment as the phone, its parts or accessories.
- For vehicles equipped with an air bag, remember that an air bag inflates with great force. Do not place objects, including both installed or portable wireless equipment in the area over the air bag or in the air bag deployment area. If wireless equipment is improperly installed and the air bag inflates, serious injury could result.
- Switch off your phone before boarding an aircraft. The use of wireless phones in an aircraft may be dangerous to the operation of the aircraft, and is illegal.
- Failure to observe these instructions may lead to the suspension or denial of telephone services to the offender, or legal action, or both.

Care and maintenance

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

- Keep the phone and all its parts and accessories out of the reach of small children.
- Keep the phone dry. Precipitation, humidity, and liquids contain minerals that corrode electronic circuits.
- Do not use the phone with a wet hand. Doing so may cause an electric shock to you or damage to the phone.
- Do not use or store the phone in dusty, dirty areas, as its moving parts may be damaged.
- Do not store the phone in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not store the phone in cold areas. When the phone warms up to its normal operating temperature, moisture can form inside the phone, which may damage the phone's electronic circuit boards.
- Do not drop, knock or shake the phone. Rough handling can break internal circuit boards.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the phone. Wipe it with a soft cloth slightly dampened in a mild soap-and-water solution.

- Do not paint the phone. Paint can clog the device's moving parts and prevent proper operation.
- Do not put the phone in or on heating devices, such as a microwave oven, a stove, or a radiator. The phone may explode when overheated.
- Use only the supplied or an approved replacement antenna. Unauthorised antennas or modified accessories may damage the phone and violate regulations governing radio devices.
- If the phone, battery, charger, or any accessory is not working properly, take it to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

Glossary

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

Active folder

Ability to answer a call simply by opening the phone.

Call barring

Ability to restrict outgoing and incoming calls.

Call diverting

Ability to reroute calls to another number.

Call holding

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

Call waiting

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

Caller line identification services (Caller ID)

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

EMS (Enhanced Message Service)

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

GPRS (General Packet Radio Service)

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

GSM (Global System for Mobile Communication)

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

Java

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

MMS (Multimedia Message Service)

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

Multi-party calling

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

Phone password

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

PIN (Personal Identification Number)

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

Proxy server

A proxy server resides between a Web client, such as a web browser, and a real Web server and acts as an intermediary between them. When some people browse a web site, their browser is not actually connecting to the web server. The request from their browser goes to a proxy server, and the proxy server makes the request to the web server.

A proxy server can improve performance for groups of users because it caches the results of all requests for a certain amount of time. If a user requests a web page that it already loaded for another user, it reloads the page instead of forwarding the request to the Web server, which can be a time-consuming operation.

PUK (PIN Unblocking Key)

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

Roaming

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

SDN (Service Dialling Numbers)

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

SIM (Subscriber Identification Module)

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

SMS (Short Message Service)

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

Soft keys

Two keys marked 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.

SGH-D428 GPRS Telephone

Quick Reference Card

Search for a Number in Phonebook	① Tap , or select **Name** in Idle mode and select **Search**. ② Enter the first few letters of the name. ③ Select **OK**. ④ Select the name from the list. ⑤ Press the key to dial.
Choose the Alert Type	① Select the **Alert type** menu. ② Select an option: • **Light only** • **Melody** • **Vibration**
Take a Photo	① Press and hold the Down key. ② Select **Take**. ③ Select **Save**. ④ Enter a name. ⑤ Select **OK**.

Switch On/Off	Press and hold the key.
Make a Call	① Enter the number. ② Press the key.
End a Call	Briefly press the key or close the phone.
View Missed Calls Shortly After Missing Them	① Open the phone and select **View**. ② Scroll through the missed calls. ③ To return the call, press the key.
Answer a Call	Open the phone or press the key.
Adjust the Volume	Press the ↑ or ↓ key on the left side of the phone.

Select an Item on the Display	Choose one of the following options: • Tap the item on the touch screen. • Scroll to the item using the Navigation keys and press the **Select** or **OK** soft key. • If the item is numbered, press the corresponding number key.
Access the Menu Functions	① Select **Menu**. ② Scroll through the list of the menus until you reach the menu you want. ③ Select the menu. ④ Scroll through the list of the options until the one you want is selected. ⑤ Select the option.
Each of the two soft keys perform the function indicated by the text above it, on the bottom line of the display.	

Use the Tool Icons below the Display	• : Tap to return to Idle mode. • : Tap to search for a Phonebook entry. • : Tap to open the dictionary. • : Tap to make a sketch memo • : Tap to open the Inbox or Outbox of text messages.
Store Number in Phonebook	① Enter the number and select **Save**. ② Select an icon. ③ Select a memory. ④ Enter a name. ⑤ Select **OK**. ⑥ If necessary, change the location number. ⑦ Select **OK**. ⑧ Press the key to return to Idle mode.

Health and Safety Information

Exposure to Radio Frequency (RF) Signals

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on the safety standards that were developed by independent scientific organizations through periodic and through evaluation of scientific studies.

The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless phones employs a unit of measurement known as Specific Absorption Rate (SAR). The SAR limit set by the FCC is 1.6W/kg *.

*In the U.S. and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

SAR tests are conducted using standard operating positions specified by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output of the phone.
Before a new model phone is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/oet/fccid after searching on FCC ID printed in the label on the phone.

FCC certification information for this model phone is attached separation paper.

For Body Operation
To maintain compliance with FCC RF exposure requirements, use only belt-clips, holsters or similar accessories that maintain a 1.5 cm. separation distance between the user's body and the back of the phone, including the antenna. The use of belt-clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

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

Federal Communications Commission (FCC)
http://www.fcc.gov/rfsafety

Cellular Telecommunications Industry Association (CTIA):
http://www.wow-com.com

U.S.Food and Drug Administration (FDA)
http://www.fda.gov/cdrh/consumer

World Health Organization (WHO)
http://www.who.int/peh-emf/en

Precautions When Using Batteries

- Never use any charger or battery that is damaged in any way.
- Use the battery only for its intended purpose.
- If you use the phone near the network's base station, it uses less power; talk and standby time are greatly affected by the signal strength on the cellular network and the parameters set by the network operator.
- Battery charging time depends on the remaining battery charge and the type of battery and charger used. The battery can be charged and discharged hundreds of times, but it will gradually wear out. When the operation time (talk time and standby time) is noticeably shorter than normal, it is time to buy a new battery.
- If left unused, a fully charged battery will discharge itself over time.
- Use only Samsung-approved batteries and recharge your battery only with Samsung-approved chargers. When a charger is not in use, disconnect it from the power source. Do not leave the battery connected to a charger for more than a week, since overcharging may shorten its life.
- Extreme temperatures will affect the charging capacity of your battery: it may require cooling or warming first.

- Do not leave the battery in hot or cold places, such as in a car in summer or winter conditions, as you will reduce the capacity and lifetime of the battery. Always try to keep the battery at room temperature. A phone with a hot or cold battery may temporarily not work, even when the battery is fully charged. Li-ion batteries are particularly affected by temperatures below 0 °C (32 °F).
- Do not short-circuit the battery. Accidental short-circuiting can occur when a metallic object (coin, clip or pen) causes a direct connection between the + and – terminals of the battery (metal strips on the battery), for example when you carry a spare battery in a pocket or bag. Short-circuiting the terminals may damage the battery or the object causing the short-circuiting.
- Dispose of used batteries in accordance with local regulations. Always recycle. Do not dispose of batteries in a fire.

Road Safety

Your wireless phone gives you the powerful ability to communicate by voice, almost anywhere, anytime. But an important responsibility accompanies the benefits of wireless phones, one that every user must uphold.

When driving a car, driving is your first responsibility. When using your wireless phone behind the wheel of a car, practice good common sense and remember the following tips.

1. Get to know your wireless phone and its features, such as speed dial and redial. If available, these features help you to place your call without taking your attention off the road.

2. When available, use a hands-free device. If possible, add an extra layer of convenience and safety to your wireless phone with one of the many hands-free accessories available today.

3. Position your wireless phone within easy reach. Be able to access your wireless phone without removing your eyes from the road. If you get an incoming call at an inconvenient time, let your voice mail answer it for you.

4. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow, ice and even heavy traffic can be hazardous.
5. Do not take notes or look up phone numbers while driving. Jotting down a To Do list or flipping through your phonebook takes your attention away from your primary responsibility, driving safely.

6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan calls when your car will be stationary. If you need to make a call while moving, dial only a few numbers, check the road and your mirrors, then continue.

7. Do not engage in stressful or emotional conversations that may be distracting. Make the people with whom you are talking aware that you are driving and suspend conversations that have the potential to divert your attention from the road.

8. Use your wireless phone to call for help. Dial the emergency number in the case of fire, traffic accident or medical emergencies. Remember, it is a free call on your wireless phone!

9. Use your wireless phone to help others in emergencies. If you see a car accident, crime in progress or other serious emergency where lives are in danger, call the emergency number, as you would want others to do for you.

10. Call roadside assistance or a special non-emergency wireless assistance number when necessary. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured, or a vehicle you know to be stolen, call roadside assistance or any other special non-emergency wireless number.

Operating Environment

Remember to follow any special regulations in force in any area and always switch off your phone whenever it is forbidden to use it, or when it may cause interference or danger.

When connecting the phone or any accessory to another device, read its user's guide for detailed safety instructions. Do not connect incompatible products.

As with other mobile radio transmitting equipment, users are advised that for the satisfactory operation of the equipment and for the safety of personnel, it is recommended that the equipment should only be used in the normal operating position (held to your ear with the antenna pointing over your shoulder).

Electronic Devices

Most modern electronic equipment is shielded from radio frequency (RF) signals. However, certain electronic equipment may not be shielded against the RF signals from your wireless phone. Consult the manufacturer to discuss alternatives.

Pacemakers

Pacemaker manufacturers recommend that a minimum distance of 15 cm (6 inches) be maintained between a wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research and recommendations of

Wireless Technology Research.

Persons with pacemakers:

- Should always keep the phone more than 15 cm (6 inches) from their pacemaker when the phone is switched on
- Should not carry the phone in a breast pocket
- Should use the ear opposite the pacemaker to minimize potential interference

If you have any reason to suspect that interference is taking place, switch off your phone immediately.

Hearing Aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may wish to consult your hearing aid manufacturer to discuss alternatives.

Other Medical Devices

If you use any other personal medical devices, consult the manufacturer of your device to determine if it is adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information. Switch off your phone in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its

representative regarding your vehicle.
You should also consult the manufacturer of any equipment that has been added to your vehicle.

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

Potentially Explosive Atmospheres

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

Users are advised to switch off the phone while at a refueling point (service station). Users are reminded of the need to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants or where blasting operations are in progress.

Areas with a potentially explosive atmosphere are often but not always clearly marked. They include below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), areas where the air contains chemicals or particles, such as grain, dust or metal powders, and any other area where you would normally be advised to turn off your vehicle engine.

Emergency Calls

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

Remember, to make or receive any calls the phone must be switched on and in a service area with adequate signal strength. Emergency calls may not be possible on all wireless phone networks or when certain network services and/or phone features are in use. Check with local service providers.

To make an emergency call, proceed as follows.
1. If the phone is not on, switch it on.
2. Key in the emergency number for your present location. Emergency numbers vary by location.
3. Press the <SEND> key.

If certain features are in use (call barring, for example), you may first need to deactivate those features before you can make an emergency call. Consult this document and your local cellular service provider.

When making an emergency call, remember to give all the necessary information as accurately as possible. Remember that your phone may be the only means of communication at the scene of an accident; do not cut off the call until given permission to do so.

Other Important Safety Information

- Only qualified personnel should service the phone or install the phone in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty applicable to the device.

- Check regularly that all wireless phone equipment in your vehicle is mounted and operating properly.

- Do not store or carry flammable liquids, gases or explosive materials in the same compartment as the phone, its parts or accessories.

- For vehicles equipped with an air bag, remember that an air bag inflates with great force. Do not place objects, including both installed or portable wireless equipment in the area over the air bag or in the air bag deployment area. If wireless equipment is improperly installed and the air bag inflates, serious injury could result.

- Switch off your phone before boarding an aircraft. The use of wireless phones in aircraft may be dangerous to the operation of the aircraft, and is illegal.

- Failure to observe these instructions may lead to the suspension or denial of telephone services to the offender, or legal action, or both.

Care and Maintenance

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

- Keep the phone and all its parts and accessories out of the reach of small children's.

- Keep the phone dry. Precipitation, humidity and liquids contain minerals that will corrode electronic circuits.

- Do not touch the phone with a wet hand while it is charging. Doing so may cause an electric shock to you or damage to the phone.

- Do not use or store the phone in dusty, dirty areas, as its moving parts may be damaged.

- Do not store the phone in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.

- Do not store the phone in cold areas. When the phone warms up to its normal operating temperature, moisture can form inside the phone, which may damage the phone's electronic circuit boards.

- Do not drop, knock or shake the phone. Rough handling can break internal circuit boards.

- Do not use harsh chemicals, cleaning solvents or strong detergents to clean the phone. Wipe it with a soft cloth slightly dampened in a mild soap-and-water solution.

- Do not paint it. Paint can clog the device's moving parts and prevent proper operation.

- Do not put the phone in or on heating devices, such as a microwave oven, a stove or a radiator. The phone may explode when overheated.

- Use only the supplied or an approved replacement antenna. Unauthorized antennas or modified accessories may damage the phone and violate regulations governing radio devices.

- If the phone, battery, charger or any accessory is not working properly, take it to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

Acknowledging Special Precautions and the FCC and Industry Canada Notice

Cautions

Modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. **FCC Compliance Information**

This device complies with Part 15 of FCC Rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received.
Including interference that may cause undesired operation.

Information to User

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

Appendix A: CERTIFICATION INFORMATION (SAR)

THIS MODEL PHONE MEETS THE GOVERNMENT'S REQUIREMENTS FOR
EXPOSURE TO RADIO WAVES.

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency(RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on safety standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate(SAR). The SAR limit set by the FCC is 1.6 W/kg. SAR Tests are conducted using standard operating positions accepted by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

Before a new model phone is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations(e.g., at the ear and worn on the body) as required by the FCC for each model.

The highest SAR values for this model phone as reported to the FCC are Head: 0.464 W/Kg, Body-worn: 0.287 W/Kg. The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/oet/fccid after searching on FCC ID A3LSGHD428.

In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kilogram(W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

Appendix B: Guide to Safe and Responsible Wireless Phone Use

Cellular Telecommunications & Internet Association

“Safety is the most important call you will ever make.”

A Guide to Safe and Responsible Wireless Phone Use

TENS OF MILLIONS OF PEOPLE IN THE U.S. TODAY TAKE ADVANTAGE OF THE UNIQUE COMBINATION OF CONVENIENCE, SAFETY AND VALUE DELIVERED BY THE WIRELESS TELEPHONE. QUITE SIMPLY, THE WIRELESS PHONE GIVES PEOPLE THE POWERFUL ABILITY TO COMMUNICATE BY VOICE-ALMOST ANYWHERE, ANYTIME-WITH THE BOSS, WITH A CLIENT, WITH THE KIDS, WITH EMERGENCY PERSONNEL OR EVEN WITH THE POLICE. EACH YEAR, AMERICANS MAKE BILLIONS OF CALLS FROM THEIR WIRELESS PHONES, AND THE NUMBERS ARE RAPIDLY GROWING.

But an important responsibility accompanies those benefits, one that every wireless phone user must uphold. When driving a car, driving is your first responsibility. A wireless phone can be an invaluable tool, but good judgment must be exercised at all times while driving a motor vehicle-whether on the phone or not.

The basic lessons are ones we all learned as teenagers. Driving requires alertness, caution and courtesy. It requires a heavy dose of basic common sense-keep your head up, keep your eyes on the road, check your mirrors frequently and watch out for other drivers. It requires obeying all traffic signs and signals and staying within the speed limit. It means using seatbelts and requiring other passengers to do the same.

But with wireless phone use, driving safely means a little more. This brochure is a call to wireless phone users everywhere to make safety their first priority when behind the wheel of a car. Wireless telecommunications is keeping us in touch, simplifying our lives, protecting us in emergencies and providing opportunities to help others in need. When it comes to the use of wireless phones, safety is your most important call.

Wireless Phone “Safety Tips”

Below are safety tips to follow while driving and using a wireless phone which should be easy to remember.

1. Get to know your wireless phone and its features such as speed dial and redial. Carefully read your instruction manual and learn to take advantage of valuable features most phones offer, including automatic redial and memory. Also, work to memorize the phone keypad so you can use the speed dial function without taking your attention off the road.

2. When available, use a hands free device. A number of hands free wireless phone accessories are readily available today. Whether you choose an installed mounted device for your wireless phone or a speaker phone accessory, take advantage of these devices if available to you.

3. Position your wireless phone within easy reach. Make sure you place your wireless phone within easy reach and where you can grab it without removing your eyes from the road. If you get an incoming call at an inconvenient time, if possible, let your voice mail answer it for you.

4. Suspend conversations during hazardous driving conditions or situations. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow and ice can be hazardous, but so is heavy traffic. As a driver, your first responsibility is to pay attention to the road.

5. Do not take notes or look up phone numbers while driving. If you are reading an address book or business card, or writing a “to do” list while driving a car, you are not watching where you are going. It’s common sense. Don’t get caught in a dangerous situation because you are reading or writing and not paying attention to the road or nearby vehicles.

6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan your calls before you begin your trip or attempt to coincide your calls with times you may be stopped at a stop sign, red light or otherwise stationary. But if you need to dial while driving, follow this simple tip-dial only a few numbers, check the road and your mirrors, then continue.

7. Do not engage in stressful or emotional conversations that may be distracting. Stressful or emotional conversations and driving do not mix-they are distracting and even dangerous when you are behind the wheel of a car. Make people you are talking with aware you are driving and if necessary, suspend conversations which have the potential to divert your attention from the road.

8. Use your wireless phone to call for help. Your wireless phone is one of the greatest tools you can own to protect yourself and your family in dangerous situations-with your phone at your side, help is only three numbers away. Dial 9-1-1 or other local emergency number in the case of fire, traffic accident, road hazard or medical emergency. Remember, it is a free call on your wireless phone!

9. Use your wireless phone to help others in emergencies. Your wireless phone provides you a perfect opportunity to be a “Good Samaritan” in your community. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.

10. Call roadside assistance or a special wireless non-emergency assistance number when necessary. Certain situations you encounter while driving may require attention, but are not urgent enough to merit a call for emergency services. But you still can use your wireless phone to lend a hand. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured or a vehicle you know to be stolen, call roadside assistance or other special non-emergency wireless number.

Careless, distracted individuals and people driving irresponsibly represent a hazard to everyone on the road. Since 1984, the Cellular Telecommunications Industry Association and the wireless industry have conducted educational outreach to inform wireless phone users of

their responsibilities as safe drivers and good citizens. As we approach a new century, more and more of us will take advantage of the benefits of wireless telephones. And, as we take to the roads, we all have a responsibility to drive safely.

“The wireless industry reminds you to use your phone safely when driving.”

Cellular Telecommunications & Internet Association
For more information, please call 1-888-901-SAFE.
For updates: http://www.wow-com.com/consumer/issues/driving/articles.cfm?ID=85

Appendix C: Consumer Update on Wireless Phones

U.S. Food and Drug Administration

1. What kinds of phones are the subject of this update?

The term wireless phone refers here to hand-held wireless phones with built-in antennas, often called cell, mobile, or PCS phones. These types of wireless phones can expose the user to measurable radiofrequency energy (RF) because of the short distance between the phone and the user s head. These RF exposures are limited by Federal Communications Commission safety guidelines that were developed with the advice of FDA and other federal health and safety agencies. When the phone is located at greater distances from the user, the exposure to RF is drastically lower because a person's RF exposure decreases rapidly with increasing distance from the source. The so-called "cordless phones," which have a base unit connected to the telephone wiring in a house, typically operate at far lower power levels, and thus produce RF exposures well within the FCC's compliance limits.

2. Do wireless phones pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless phones. There is no proof, however, that wireless phones are absolutely safe. Wireless phones emit low levels of radiofrequency energy (RF) in the microwave range while being used. They also emit very low levels of RF when in the stand-by mode. Whereas high levels of RF can produce health effects (by heating tissue), exposure to

low level RF that does not produce heating effects causes no known adverse health effects. Many studies of low level RF exposures have not found any biological effects. Some studies have suggested that some biological effects may occur, but such findings have not been confirmed by additional research. In some cases, other researchers have had difficulty in reproducing those studies, or in determining the reasons for inconsistent results.

3. What is FDA's role concerning the safety of wireless phones?

Under the law, FDA does not review the safety of radiation-emitting consumer products such as wireless phones before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless phones are shown to emit radiofrequency energy (RF) at a level that is hazardous to the user. In such a case, FDA could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace or recall the phones so that the hazard no longer exists.

Although the existing scientific data do not justify FDA regulatory actions, FDA has urged the wireless phone industry to take a number of steps, including the following:

Support needed research into possible biological effects of RF of the type emitted by wireless phones;
Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and
Cooperate in providing users of wireless phones with the

best possible information on possible effects of wireless phone use on human health

FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of RF safety to ensure coordinated efforts at the federal level. The following agencies belong to this working group:

National Institute for Occupational Safety and Health
Environmental Protection Agency
Federal Communications Commission
Occupational Safety and Health Administration
National Telecommunications and Information Administration

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

FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply with FCC safety guidelines that limit RF exposure. FCC relies on FDA and other health agencies for safety questions about wireless phones.

FCC also regulates the base stations that the wireless phone networks rely upon. While these base stations operate at higher power than do the wireless phones themselves, the RF exposures that people get from these base stations are typically thousands of times lower than those they can get from wireless phones. Base stations are thus not the primary subject of the safety questions discussed in this document.

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

FDA is working with the U.S. National Toxicology Program and with groups of investigators around the world to ensure that high priority animal studies are conducted to address important questions about the effects of exposure to radiofrequency energy (RF).

FDA has been a leading participant in the World Health Organization International Electromagnetic Fields (EMF) Project since its inception in 1996. An influential result of this work has been the development of a detailed agenda of research needs that has driven the establishment of new research programs around the world. The Project has also helped develop a series of public information documents on EMF issues.

FDA and the Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative Research and Development Agreement (CRADA) to do research on wireless phone safety. FDA provides the scientific oversight, obtaining input from experts in government, industry, and academic organizations. CTIA-funded research is conducted through contracts to independent investigators. The initial research will include both laboratory studies and studies of wireless phone users. The CRADA will also include a broad assessment of additional research needs in the context of the latest research developments around the world.

5. What steps can I take to reduce my exposure to radiofrequency energy from my wireless phone?

If there is a risk from these products—and at this point we do not know that there is—it is probably very small. But if you are concerned about avoiding even potential risks, you can take a few simple steps to minimize your exposure to radiofrequency energy (RF). Since time is a key factor in how much exposure a person receives, reducing the amount of time spent using a wireless phone will reduce RF exposure.

If you must conduct extended conversations by wireless phone every day, you could place more distance between your body and the source of the RF, since the exposure level drops off dramatically with distance. For example, you could use a headset and carry the wireless phone away from your body or use a wireless phone connected to a remote antenna

Again, the scientific data do not demonstrate that wireless phones are harmful. But if you are concerned about the RF exposure from these products, you can use measures like those described above to reduce your RF exposure from wireless phone use.

6. What about children using wireless phones?

The scientific evidence does not show a danger to users of wireless phones, including children and teenagers. If you want to take steps to lower exposure to radiofrequency energy (RF), the measures described above would apply to children and teenagers using wireless phones. Reducing the time of wireless phone use and increasing the distance between the user and the RF source will reduce RF exposure.

Some groups sponsored by other national governments have advised that children be discouraged from using wireless phones at all. For example, the government in the United Kingdom distributed leaflets containing such a recommendation in December 2000. They noted that no evidence exists that using a wireless phone causes brain tumors or other ill effects. Their recommendation to limit wireless phone use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists.

7. Do hands-free kits for wireless phones reduce risks from exposure to RF emissions?

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that hands-free kits reduce risks. Hands-free kits can be used with wireless phones for convenience and comfort. These systems reduce the absorption of RF energy in the head because the phone, which is the source of the RF emissions, will not be placed against the head. On the other hand, if the phone is mounted against the waist or other part of the body during use, then that part of the body will absorb more RF energy. Wireless phones marketed in the U.S. are required to meet safety requirements regardless of whether they are used against the head or against the body. Either configuration should result in compliance with the safety limit.

8. Do wireless phone accessories that claim to shield the head from RF radiation work?

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that accessories that claim to shield the head from those emissions reduce risks. Some products that claim to shield the user from RF absorption use special phone cases, while others involve nothing more than a metallic accessory attached to the phone. Studies have shown that these products generally do not work as advertised. Unlike “hand-free” kits, these so-called “shields” may interfere with proper operation of the phone. The phone may be forced to boost its power to compensate, leading to an increase in RF absorption. In February 2002, the Federal trade Commission (FTC) charged two companies that sold devices that claimed to protect wireless phone users from radiation with making false and unsubstantiated claims. According to FTC, these defendants lacked a reasonable basis to substantiate their claim.

9. What about wireless phone interference with medical equipment?

Radiofrequency energy (RF) from wireless phones can interact with some electronic devices. For this reason, FDA helped develop a detailed test method to measure electromagnetic interference (EMI) of implanted cardiac pacemakers and defibrillators from wireless telephones. This test method is now part of a standard sponsored by the Association for the Advancement of Medical instrumentation (AAMI). The final draft, a joint effort by FDA, medical device manufacturers, and many other groups, was completed in late 2000. This standard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from wireless phone EMI.

FDA has tested hearing aids for interference from handheld wireless phones and helped develop a voluntary standard sponsored by the Institute of Electrical and Electronic Engineers (IEEE). This standard specifies test methods and performance requirements for hearing aids and wireless phones so that that no interference occurs when a person uses a compatible phone and a compatible hearing aid at the same time. This standard was approved by the IEEE in 2000.

FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occur, FDA will conduct testing to assess the interference and work to resolve the problem.

10. What are the results of the research done already?

The research done thus far has produced conflicting results, and many studies have suffered from flaws in their research methods. Animal experiments investigating the effects of radiofrequency energy (RF) exposures characteristic of wireless phones have yielded conflicting results that often cannot be repeated in other laboratories. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. However, many of the studies that showed increased tumor development used animals that had been genetically engineered or treated with cancer-causing chemicals so as to be pre-disposed to develop cancer in the absence of RF exposure. Other studies exposed the animals to RF for up to 22 hours per day. These conditions are not similar to the conditions under which people use wireless phones, so we don t know with certainty what

the results of such studies mean for human health.

Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, glioma, meningioma, or acoustic neuroma, tumors of the brain or salivary gland, leukemia, or other cancers. None of the studies demonstrated the existence of any harmful health effects from wireless phone RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of phone use in these studies was around three years.

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

A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the data that are needed. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer promoting effect if one exists. Epidemiological studies can provide data that is directly applicable to human populations, but 10 or more years follow-up may be needed to provide answers about some health effects, such as cancer. This is because the interval between the time of exposure to a cancer-causing agent and the time tumors develop - if they do - may be many, many years. The interpretation of epidemiological studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones. Many factors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

12. Which other federal agencies have responsibilities related to potential RF health effects?

Additional information on the safety of RF exposures from various sources can be obtained from the following organizations.

FCC RF Safety Program:
http://www.fcc.gov/oet/rfsafety/

Environmental Protection Agency (EPA):
http://www.epa.gov/radiation/

Occupational Safety and Health Administration's (OSHA):
http://www.osha-slc.gov/SLTC/radiofrequencyradiation/index.html

National Institute for Occupational Safety and Health (NIOSH):
http://www.cdc.gov/niosh/emfpg.html

World health Organization (WHO):
http://www.who.int/peh-emf/

International Commission on Non-Ionizing Radiation Protection:
http://www.icnirp.de

National Radiation Protection Board (UK):
http://www.nrpb.org.uk

Updated 4/3/2002: US Food and Drug Administration
http://www.fda.gov/cellphones