

- * Depending on the software installed or your service provider or country, some of the descriptions in this guide may not match your phone exactly.
- * Depending on your country, your phone and accessories may appear different from the illustrations in this guide.

SAMSUNG ELECTRONICS



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

Printed in Korea
Code No.:GH68-XXXXXA
English (LTN). 12/2006. Rev. 1.0



SGH-E576
User's Guide





Important safety precautions

- Failure to comply with the following precautions may be dangerous or illegal.

Copyright information

- Bluetooth® is a registered trademark of the Bluetooth SIG, Inc. worldwide.
- Java™ is a trademark or registered trademark of Sun Microsystems, Inc.

Drive safely at all times

Do not use a hand-held phone while driving. Park your vehicle first.

Switch off the phone when refuelling

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

Switch off in an aircraft

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

Switch off the phone near all medical equipment

Hospitals or health care facilities may be using equipment that could be sensitive to external radio frequency energy. Follow any regulations or rules in force.

Interference

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



Be aware of 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.


Water resistance

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

Sensible use

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

Emergency calls

Key in the emergency number for your present location, then press 

Keep your phone away from small children

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

Accessories and batteries

Use only Samsung-approved batteries and accessories, such as headsets and PC data cables. Use of any unauthorised accessories could damage you or your phone and may be dangerous.

- The phone could explode if the battery is replaced with an incorrect type.
- Dispose of used batteries according to the manufacturer's instructions.



At very high volumes, prolonged listening to a headset can damage your hearing.

Qualified service







Only qualified service personnel may repair your phone.

For more detailed safety information, see "Health and safety information" on page 103.

About this Guide

This User's Guide provides you with condensed information about how to use your phone. To quickly learn the basics for your phone, please refer to "Get started" and "Step outside the phone."

In this guide, the following instruction icons appear:

-  Indicates that you need to pay careful attention to the subsequent information regarding safety or phone features.
-  Indicates that you can get more information on the referenced page.
-  Indicates that you need to press the Navigation keys to scroll to the specified option and then select it.
-  Indicates a key on the phone. For example, []
-  Indicates a soft key, whose function is displayed on the phone screen. For example, < **Menu** >

2



- **Camera and camcorder**

Use the camera module on your phone to take a photo or record a video.

Special features of your phone



- **Music player**

Play music files on your phone.



- **Java**

Enjoy Java™-based embedded games and download new games.



- **Offline mode**

Switch your phone to Offline mode to use its non-wireless functions while on an airplane.



- **Bluetooth**

Transfer media files and personal data, and connect to other devices using wireless Bluetooth technology.



- **Web browser**

Access the wireless web to get up-to-the-minute information and a wide variety of media content.



- **Multimedia Message Service (MMS)**

Send and receive MMS messages with a combination of text, images, video, and audio.



- **Name card**

Create name cards with your number and profile. Whenever introducing yourself to others, use this convenient electronic name card.



- **Voice recorder**

Record memos or sounds.



- **Women's life**

Use multiple features designed for women in our modern world.



- **Organiser**

Keep track of your daily, weekly, and monthly schedule.

Contents

Unpack 6

Make sure you have each item

Your phone 6

Keys, features, and locations

Get started 7

First steps to operating your phone

Assemble and charge the phone	7
Power on or off.....	9
Keys and icons	10
Access menu functions	13
Customise your phone.....	14
Make or answer calls.....	17

Step outside the phone 17

Begin with your camera, music player, web browser, and other special features

Use the camera.....	17
Play music	18

Browse the web.....	20
Use Phonebook.....	20
Send messages	21
View messages.....	23
Send an SOS message.....	24
Use Bluetooth.....	25
Use a memory card.....	26

Enter text 28

ABC, T9, Number, and Symbol modes

Call functions 30

Advanced calling features

Menu functions 35

All menu options listed

Solve problems 101

Help and personal needs

Health and safety information 103

Overview of menu functions

To access Menu mode, press < **Menu**> in Idle mode.

1 Call log	p. 35	3 Applications	p. 42	5 Messages	p. 59	8 Camera	p. 79
1 Recent contacts	p. 35	1 Music player	p. 42	1 Create message	p. 59		
2 Missed calls	p. 36	2 Women's life	p. 44	2 My messages	p. 63		
3 Dialed calls	p. 36	3 Pedometer	p. 47	3 Templates	p. 67	9 Settings	p. 84
4 Received calls	p. 36	4 Voice recorder	p. 48	4 Delete all	p. 68	1 Time and date	p. 84
5 Delete all	p. 36	5 Browser	p. 50	5 Settings	p. 68	2 Phone settings	p. 85
6 Call time	p. 37	6 Java world	p. 53	6 SOS messages	p. 71	3 Display settings	p. 87
7 Call cost ¹	p. 37	7 World clock	p. 54	7 Memory status	p. 72	4 Sound settings	p. 89
		8 Alarm	p. 55			5 Network services	p. 90
2 Phonebook	p. 37	9 Calculator	p. 56	6 My files	p. 72	6 Bluetooth	p. 93
1 Contact list	p. 37	10 Converter	p. 56	Images	p. 72	7 Security	p. 96
2 Create contact	p. 38	11 Timer	p. 57	Videos	p. 73	8 Connection settings	p. 98
3 Group	p. 39	12 Stopwatch	p. 57	Music	p. 75	9 Reset settings	p. 99
4 Speed dial	p. 39	13 Memo	p. 57	Sounds	p. 75		
5 My namecard	p. 40	14 SIM Application Toolkit ¹	p. 58	Other files	p. 76		
6 Own number	p. 41			Memory card ³	p. 76		
7 Management	p. 41	4 Yahoo search²	p. 58	Memory status	p. 77		
8 Service number ¹	p. 41						
				7 Calendar	p. 77		

1. Available only if supported by your SIM card.
2. Shows only if supported by your service provider or country.
3. Available only if a memory card is inserted.

Unpack

Make sure you have each item

- Phone
- Travel Adapter
- Battery
- User's Guide

You can obtain various accessories from your local Samsung dealer.

- The items supplied with your phone and the accessories available at your Samsung dealer may vary, depending on your country or service provider.

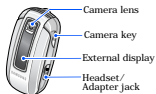
Your phone

Keys, features, and locations

With the phone open



With the phone closed



Get started

First steps to operating your phone

SIM card information

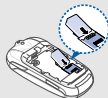
When you subscribe to a cellular network, you receive a plug-in SIM (Subscriber Identity Module) card loaded with your subscription details, such as your PIN, and available optional services.

Assemble and charge the phone

1 Insert the SIM card.



Make sure that the gold-coloured contacts on the card are face down.



Get started

- 2** Insert the battery.



- 3** Reattach the battery cover.



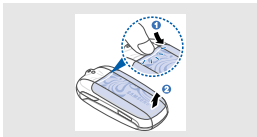
- 4** Plug the travel adapter into the phone.



- 5** Plug the adapter into a standard AC power outlet.

- 6** When the phone is completely charged, unplug the adapter from the power outlet and from the phone.


Removing the battery cover




Power on or off

Switch on

Do not switch on the phone when mobile phone use is prohibited.

1. Open the phone.
2. Press and hold [].
3. If necessary, enter the PIN and press < **OK** > .

Switch off

1. Open the phone.
2. Press and hold [].

Offline mode

You can switch the phone to Offline mode, in which the phone functions requiring network connection are deactivated. This mode is helpful when you want to use your phone in a place where you are not allowed to use mobile devices, such as in an airplane or at a hospital.

To switch to Offline mode, press < **Menu** > and select **Settings** → **Phone settings** → **Offline mode** → **On**.

In Offline mode, you can use non-wireless functions, such as games, calendar, camera, and music player.

Keys and icons

Keys



Perform the function indicated on the bottom line of the display.



In Idle mode, access the following menus directly:

- Up: My menu mode
- Down/Left/Right: your favourite menus directly.
▶ p. 86

In Menu mode, scroll through menu options.



In Idle mode, launch the web browser.

In Menu mode, select the highlighted menu option or confirm input.



Make or answer a call.

In Idle mode, retrieve the numbers recently dialed, missed, or received.



Delete characters from the display or items in an application.



Press and hold to switch the phone on or off.

End a call.

In Menu mode, cancel input and return the phone to Idle mode.



Enter numbers, letters, and some special characters.





Enter special characters or perform special functions.



Adjust the phone volume.



In Idle mode, press and hold to turn on the camera.

In Camera mode, take a photo or record a video.

Icons

The following icons may appear on the top line of the screen to indicate your phone's status. Depending on your country or service provider, the icons shown on the display may vary.



Signal strength



GPRS (2.5G) network



EDGE network



Call in progress



















Out of your service area or Offline mode; you cannot make or receive calls




SOS message feature active
▶ p. 71

Get started

	Memory card inserted ▶ p. 26		Bluetooth hands-free car kit or headset connected ▶ p. 94
	Alarm set ▶ p. 55		Pedometer active ▶ p. 47
	Call ringer set to vibrate ▶ p. 89		Silent mode (Mute)
	Roaming network		Silent mode (Vibration)
	Call diverting feature active ▶ p. 90		Whisper mode, during a call ▶ p. 34
	Home Zone, if registered for the appropriate service		New message
	Office Zone, if registered for the appropriate service		New voicemail
	Bluetooth active ▶ p. 94		Battery power level

Access menu functions

Select an option	1. Press a desired soft key.
	2. Press the Navigation keys to move to the next or previous option.
	3. Press <Select> or [OK/√] to confirm the function displayed or option highlighted.
	4. To exit, choose either of the following methods: <ul style="list-style-type: none">• Press <Back> to move up one level.• Press [] to return to Idle mode.

Use menu numbers

Press the number key corresponding to the option you want.

Get started

Customise your phone

Display language

1. In Idle mode, press **<Menu>** and select **Settings** → **Phone settings** → **Language**.
2. Select a language.

Call ringer melody

1. In Idle mode, press **<Menu>** and select **Settings** → **Sound settings** → **Incoming call** → **Ringtone**.
2. Select a ringtone category.
3. Select a ringtone.
4. Press **<Save>**.

Keystone volume

In Idle mode, press [Volume] to adjust the keystone volume.

Idle mode wallpaper

You can set the wallpaper for the idle screen.

1. In Idle mode, press **<Menu>** and select **Settings** → **Display settings** → **Wallpaper** → **Main display**.
2. Select an image or video category.
3. Select an image or a video clip.
4. Press **<Select>**.
5. Press **<Save>**.

Menu mode skin colour

You can change the colour for the display components, such as title bars and highlight bars.

1. In Idle mode, press <Menu> and select **Settings** → **Display settings** → **Skin**.
2. Select a colour pattern.

Menu shortcuts

You can set the Navigation keys to function as shortcuts to access your favourite menus.

1. In Idle mode, press <Menu> and select **Settings** → **Phone settings** → **Shortcuts**.
2. Select a key.

3. Select a menu to be assigned to the key.

My menu

You can set up a menu of your own, using your favourite menu items.

To set up My menu item access:

1. In Idle mode, press <Menu> and select **Settings** → **Phone settings** → **My menu**.
2. Select an item to be changed.
3. Select the menu item you want.

My menu
(continued)

To access a My menu item:

1. In Idle mode, press [Up].
2. Select the item you want.

Silent mode

You can switch the phone to Silent mode to avoid disturbing other people.

In Idle mode, press and hold [#].

Phone lock

You can protect the phone against unauthorised use with a phone password. The phone will require the password when turned on.

1. In Idle mode, press <Menu> and select **Settings** → **Security** → **Change password**.
2. Enter the default password, **00000000**, and press <OK>.
3. Enter a new 4- to 8-digit password and press <OK>.
4. Enter the new password again and press <OK>.
5. Select **Phone lock**.
6. Select **Enable**.
7. Enter the password and press <OK>.

Make or answer calls

Make a call

1. In Idle mode, enter an area code and phone number.
2. Press [↵].
3. To end the call, press [⏏].

Answer a call

1. When the phone rings, press [↵].
2. To end the call, press [⏏].

Adjust the volume during a call

Press [Volume].

Step outside the phone

Begin with your camera, music player, web browser, and other special features

Use the camera

Take a photo

1. Open the phone.
2. In Idle mode, press and hold [📷] to turn on the camera.
3. Aim the lens at the subject and make any desired adjustments.
4. Press [OK/⏏] or [📷] to take a photo. The photo is saved automatically.
5. Press <Preview> to take another photo.

Step outside the phone

View a photo

1. In Idle mode, press <Menu> and select **My files** → **Images** → **My photos**.
2. Select the photo you want.

Record a video

1. In Idle mode, press and hold [CAM] to turn on the camera.
2. Press [1] to switch to Record mode.
3. Press [OK/⏏] or [CAM] to start recording.
4. Press [OK/⏏], <⏏>, or [CAM] to stop recording. The video is saved automatically.
5. Press <Preview> to record another video.

View a video

1. In Idle mode, press <Menu> and select **My files** → **Videos** → **My video clips**.
2. Select the video you want.

Play music

Copy music files to the phone

Use these methods:

- Download from the wireless web ▶ p. 50
- Download from a computer using the optional Samsung PC Studio ▶ Samsung PC Studio User's Guide
- Receive via Bluetooth ▶ p. 26
- Copy to a memory card and insert the card into the phone ▶ p. 26

Create a play list

1. In Idle mode, press <Menu> and select **Applications** → **Music player**.
2. Press <Options> and select **Add music from** → a memory location.
3. Press [OK/↵] to select the files you want and press <Add>.
4. Press <Back> to return to the music player screen.

Play music files

1. From the music player screen, press [OK/↵].
2. During playback, use the following keys:
 - **OK/↵** : pause or resume playback.
 - **Left**: return to the previous file.
 - **Right**: skip to the next file.
 - **Volume**: adjust the volume.
3. Press [Down] to stop playback.

Step outside the phone

Browse the web

Using the built-in web browser, you can easily access the wireless web to get a variety of up-to-date services and information and to download web content.

Launch the web browser

In Idle mode, press [**OK/⌵**]. The homepage of your service provider opens.

Navigate the web

- To scroll through browser items, press [Up] or [Down].
- To select an item, press [**OK/⌵**].
- To return to the previous page, press < **Back** >.
- To access browser options, press < **Options** >.

Use Phonebook

Add a contact

1. In Idle mode, enter a phone number and press < **Options** >.
2. Select **Save contact** → a memory location → **New**.
3. For Phone, select a number type.
4. Specify contact information.
5. Press < **Save** > to save the contact.

Find a contact

1. In Idle mode, press < **Contacts** >.
2. Enter the first few letters of the name you want.

Create and send a name card

3. Select a contact.
 4. Scroll to a number and press [↶] to dial, or press [OK/⏏] to edit contact information.
-
1. In Idle mode, press <Menu> and select **Phonebook** → **My namecard**.
 2. Specify your contact information.
 3. Press <Save> to save the name card.
 4. To send the name card, press <Options> and select **Send via** → a sending method.

Send messages

Send a text message (SMS)

1. In Idle mode, press <Menu> and select **Messages** → **Create message** → **Text message**.
2. Enter the message text.
3. Press <Options> and select **Send only** or **Save and send**.
4. Enter destination numbers.
5. Press [OK/⏏] to send the message.

Step outside the phone

**Send a
multimedia
message
(MMS)**

1. In Idle mode, press <Menu> and select **Messages** → **Create message** → **Multimedia message**.
2. Select **Subject**.
3. Enter the message subject and press [**OK/↵**].
4. Select **Image or video** and add an image or a video clip.
5. Select **Sound** and add a sound clip.
6. Select **Message**.
7. Enter the message text and press [**OK/↵**].
8. Press < **Options** > and select **Send**.
9. Enter destination numbers or email addresses.
10. Press [**OK/↵**] to send the message.

View messages

View a text message

When you receive a message:

1. Press < **View** >.
2. Select the message from the **Inbox**.

From the Inbox:

1. In Idle mode, press < **Menu** > and select **Messages** → **My messages** → **Inbox**.
2. Select an SMS message (☒).

View a multimedia message

When you receive a message:

1. Press < **View** >.
2. Press < **Options** > and select **Retrieve**.
3. Select the message from the **Inbox**.

From the Inbox:

1. In Idle mode, press < **Menu** > and select **Messages** → **My messages** → **Inbox**.
2. Select an MMS message (☒).

Step outside the phone

Send an SOS message

You can send an SOS message to your family or friends for help in an emergency.

Set up SOS message options

1. In Idle mode, press <Menu> and select **Messages** → **SOS messages** → **Sending options**.
2. Select **On** on the **Sending SOS** line.
3. Select **Recipients**.
4. Enter the phone numbers to which you want to send the SOS message and press [OK/✓].
5. Press <Options> and select **Save** to save your settings.

Send the SOS message

6. Press <Yes> to send the notification to the registered numbers.

In Idle mode, with the phone closed, press [Volume] 4 times.

The phone sends the SOS message.

Use Bluetooth

Your phone is equipped with Bluetooth technology, enabling you to connect the phone wirelessly to other Bluetooth devices and exchange data with them, talk hands-free, or control the phone remotely.

Turn on Bluetooth

1. In Idle mode, press **<Menu>** and select **Settings** → **Bluetooth** → **Activation** → **On**.
2. Select **My phone's visibility** → **On** to allow other devices to locate your phone.

Search for and pair with a Bluetooth device

1. In Idle mode, press **<Menu>** and select **Settings** → **Bluetooth** → **My devices** → **Search for new devices**.
2. Select a device.
3. Enter a Bluetooth PIN or the other device's Bluetooth PIN, if it has one, and press **<OK>**.
When the owner of the other device enters the same code, pairing is complete.

Step outside the phone

Send data

1. Access an application, **Phonebook**, **My files**, **Calendar**, or **Memo**.
2. Select an item.
3. Press < **Options** > and select **Send via** → **Bluetooth**.
4. Search for and select a device.
5. If necessary, enter the Bluetooth PIN and press < **OK** >.

Receive data

1. When a device attempts to access your phone, press < **Yes** > to permit the connection.
2. If necessary, press < **Yes** > to confirm that you are willing to receive.

Use a memory card

You can use a memory card to increase your phone's memory capacity.

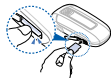
Important memory card information

- Frequent erasing and writing will shorten a card's lifespan.
- Do not subject cards to strong shocks.

-
- Do not remove a card from the phone or turn off the phone while data is being accessed or transferred. This could result in loss of data and/or damage to the card or phone.
 - Do not touch card terminals with your fingers or metal objects. If dirty, wipe the card with a soft cloth.
 - Keep cards away from small children or pets.
 - Do not expose cards in a place subject to electrostatic discharge and/or electromagnetic interference.

Insert a memory card

1. Insert the card into the card slot, with the label side face up.



2. Press the card until it locks into place.

Remove the memory card




1. Press the card so that it is disengaged from the phone.
2. Remove the card from the slot.

Enter text

ABC, T9, Number, and Symbol modes

You can enter text in some features, such as Messages, Phonebook, or Calendar, using ABC mode, T9 mode, Number mode, and Symbol mode.

Changing the text input mode

- Press and hold [*] to switch between T9 mode () and ABC mode (). Depending on your country, you may also be able to access an input mode for your specific language.
- Press [*] to change case or switch to Number mode ().
- Press and hold [#] to switch to Symbol mode.

Using ABC mode

Press the appropriate key until the character you want appears on the display.

To enter the same letter twice or to enter a different letter on the same key, wait for the cursor to move to the right automatically or press [Right]. Then, enter the next letter.

Other ABC mode operations

- Press [1] to enter special characters.
- Press [#] to insert a space.
- Press the Navigation keys to move the cursor.
- Press [C] to delete characters one by one. Press and hold [C] to clear the entire display.

Using T9 mode

T9 is a predictive text input mode that allows you to enter any character using single keystrokes.

Entering a word in T9 mode

1. Press [2] to [9] to start entering a word. Press each key once for each letter. T9 predicts the word you are typing, and it may change with each key that you press.
2. Enter the whole word before editing or deleting characters.
3. When the word displays correctly, go to step 4. Otherwise, press [0] to display alternative word choices for the keys that you have pressed.
4. Press [#] to insert a space and enter the next word.

Other T9 mode operations

- Press [1] to enter periods or apostrophes automatically.
- Press [#] to insert a space.
- Press the Navigation keys to move the cursor.
- Press [C] to delete characters one by one. Press and hold [C] to clear the entire display.

Adding a new word to the T9 dictionary

This feature may not be available for some languages.

1. Enter the word you want to add.
2. Press [0] to display alternative words for your key presses. When there are no more alternative words, **Add** appears on the bottom line.
3. Press <Add>.
4. Enter the word you want using ABC mode and press <OK>.

Using Number mode

Number mode enables you to enter numbers. Press the keys corresponding to the digits you want.

Using Symbol mode

Symbol mode enables you to insert symbols.

To	Press
scroll to a symbol set	the Navigation keys.
select a symbol	the corresponding number key.
clear the entered symbols	[C].
insert the symbols	< OK >.

Call functions

Advanced calling features

Making a call

1. In Idle mode, enter an area code and phone number.

Press and hold [*] to enter a pause between numbers.

2. Press [↵].
3. When you want to end the call, press [⏏].

Making an international call

1. In Idle mode, press and hold [0]. The + character appears.
2. Enter the country code, area code, and phone number, then press [↵].

Redialling recent numbers

1. In Idle mode, press [↶] to display the list of recent numbers.
2. Scroll to the number you want to call and press [↶].

Making a call from Phonebook

Once you have stored a number in Phonebook, you can dial the number by selecting it from Phonebook. ▶ p. 37

You can also use the speed dialling feature to assign your most frequently dialled numbers to specific number keys. ▶ p. 39

You can quickly dial a number from the SIM card using its location number assigned when stored.

1. In Idle mode, enter a location number and press [#].

2. Press [Left] or [Right] to scroll through other numbers.
3. Press <Dial> or [↶] to dial the number you want.

3-digit dialling

You can quickly dial a number in Phonebook or call record list by entering any 3 consecutive digits of the phone number you want.

1. In Idle mode, enter the 3 consecutive digits of the phone number you want.
2. Scroll to the number and press [↶].

Answering a call

When you receive a call, the phone rings or vibrates, depending on your call alert type setting. ▶ p. 89

Press <Accept> or [↶] to answer the call.

Call functions

Tips for answering a call

- When **Anykey answer** is active, you can press any key, except for < **Reject**> and [📞]. ▶ p. 87
- When **Active flip** is active, you can simply open the phone. ▶ p. 87
- Press < **Reject**> or [📞] to reject a call.
- Press and hold [Volume] to reject a call or mute the ringer, depending on the **Volume key** setting. ▶ p. 87

Viewing missed calls

When you have missed calls, the display shows how many calls you have missed.

1. Press < **View**>.
2. If necessary, scroll through the missed calls.
3. Press [↶] to dial the number you want.

Options during a call

You can access a number of functions during a call.

Adjusting the volume during a call

Use [Volume] to adjust the earpiece volume during a call.

Press [Volume up] to increase the volume level and press [Volume down] to decrease the volume level.


Placing a call on hold/Retrieving

Press < **Hold**> to place a call on hold, or press < **Retrieve**> to retrieve the call.

Making a second call



You can make a second call if your network supports this function.

1. Press < **Hold**> to put the call on hold.

2. Make the second call in the normal way.
3. Press < **Swap** > to switch between the calls.
4. Press < **Options** > and select **End held call** to end the call on hold.
5. To end the current call, press [].

Answering a second call

You can answer a call while already on the phone, if your network supports the call waiting feature and you have activated it. ▶ p. 92

1. Press [] to answer the call. The first call is automatically put on hold.
2. Press < **Swap** > to switch between the calls.
3. Press < **Options** > and select **End held call** to end the call on hold.
4. To end the current call, press [].

Using the speakerphone feature

Use your phone as a speaker phone to talk and listen with the phone a short distance away.

Press [**OK/⏏**] and then < **Yes** > to activate the speakerphone feature. Press [**OK/⏏**] again to switch back to the earpiece.

Using menu shortcuts during a call

- Press [Left] to access the **My messages** menu, or press and hold [Left] to access the **Text message** menu.
- Press [Right] to access the **Phonebook** menu, or press and hold [Right] to access the **Contact list** menu.

Call functions

Using In-call options

During a call, press < **Options** > to access the following options:

- **Speaker on/Normal:** turn on the Speakerphone feature or switch back to Normal mode.
- **Switch to headset/Switch to phone:** switch the call to a Bluetooth headset or hands-free car kit or back to the phone. To use this feature, you first need to connect your headset or car kit to the phone.
 - ▶ p. 94
- **Whisper mode on/Whisper mode off:** turn on or off Whisper mode. Whisper mode automatically increases the microphone's sensitivity to allow the other person to hear your voice even though you may be whispering.
- **Menu:** access the phone's menu functions.

- **Voice off/Voice on:** mute the phone's mouthpiece so that the person you are talking with is unable to hear you, or unmute it.
- **Mute keys/Send keys:** turn the key tones off or on.



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

- **Send DTMF:** send DTMF (Dual tone multi-frequency) tones of a specific number as a group. This option is helpful for entering a password or an account number when you call an automated system, like a banking service.
- **Contacts:** access the contact list to locate or store contact information.
- **End held call:** disconnect the call currently on hold.

- **Transfer:** transfer the currently active call to a caller on hold. The two callers can talk to each other, but you are disconnected from the call.
- **Join:** set up a multi-party call by adding a caller on hold to a currently active call. You can include up to 5 people on a multi-party call.
- **Select one:** select one of the multi-party call participants. You can then use the following options:
 - Private:** have a private conversation with the selected participant. The other participants can converse with each other. After the private conversation, select **Join** to return both private participants to the multi-party call.
 - Removed:** disconnect the selected participant.

Menu functions

All menu options listed

Call log *(Menu 1)*

Use this menu to view the calls you have dialled, received, or missed, and the length of the calls. You can also check the cost of your calls, if your SIM card supports this function. To access this menu, press < **Menu**> in Idle mode and select **Call log**.

Recent contacts *(Menu 1.1)*

This menu displays the most recent calls dialled, received, or missed.

Accessing a call record

1. Press [Left] or [Right] to move to another call type.

Menu functions

2. Press [Up] or [Down] to scroll through the call list.
3. Press [**OK/⌘**] to view the details of a call, or press [**↶**] to dial a number.

Using call record options

While viewing call details, press < **Options** > to access the following options:

- **Call**: make a call to the number.
- **Add to Phonebook**: save the number to Phonebook.
- **Send**: send a message to the selected number.
- **Delete**: delete the selected call record or all records.

Missed calls *(Menu 1.2)*

This menu displays the most recent calls you did not answer.

Dialled calls *(Menu 1.3)*

This menu displays the most recent calls you have dialled.

Received calls *(Menu 1.4)*

This menu displays the most recent calls you have received.

Delete all *(Menu 1.5)*

Use this menu to delete all of the records in each call type.

1. Press [**OK/⌘**] to select the call types to be cleared.
2. Press < **Delete** >.
3. Press < **Yes** > to confirm the deletion.

Call time *(Menu 1.6)*

This menu displays the time record for calls made and received. The actual time invoiced by your service provider may vary.

To reset the call timers, press < **Reset**>. You need to enter the phone password.

The password is preset to **00000000**. You can change this password. ▶ p. 96

Call cost *(Menu 1.7)*

This network feature displays the cost of your calls. This menu is available only if supported by your SIM card. Note that this is not intended to be used for billing purposes.

Phonebook *(Menu 2)*


You can store phone numbers on your SIM card and in your phone's memory. The SIM card and phone's memory are physically separate, but they are used as a single entity called Phonebook.

To access this menu, press < **Menu**> in Idle mode and select **Phonebook**.

Contact list *(Menu 2.1)*

Use this menu to search for contact information stored in Phonebook.

Finding a contact

1. Enter the first few letters of the name that you want to find.
2. Select a contact from the list.
3. Scroll to a number and press [] to dial, or press [**OK/✓**] to edit contact information.

Menu functions

Finding a contact in Idle mode

You can find contacts in Idle mode, by the spelling of a contact name. The phone searches for the contact names starting with the letters labelled on any of the keys you pressed.

1. In Idle mode, press the number keys containing the letters you want.
2. Press < **Options** > and select **Search as spelling**.

The phone searches Phonebook for the matching contacts and shows results.

- Symbols or blank spaces you inserted to a contact name are excluded during a search.

Using contact options

While viewing contact details, press < **Options** > to access the following options:

- If you find a contact using **Search as spelling**, some options are not available.

- **Edit**: edit contact information.
- **Send message**: send a message to the selected number or email address.
- **Copy to**: copy the contact to the phone's memory or to the SIM card.
- **Send via**: send the contact via SMS, MMS, or Bluetooth.
- **Delete**: delete the selected contact.

Create contact *(Menu 2.2)*

Use this menu to add a new contact to Phonebook.

1. Select a memory location.
2. Change the settings or enter information about the contact.
3. Press < **Save** > to save the contact.

Group *(Menu 2.3)*

Use this menu to organise your contacts in caller groups.

Creating a caller group

1. Press < **Options**> and select **Add**.
2. Enter a name for the group.
3. Select the caller ID line and set an image.
4. Select the ringtone line and set a ringtone.
5. Press < **Save**> to save the group.

Adding members to a caller group

1. Select a group.
2. Press < **Add**>.
3. Press [**OK/ #**] to select the contacts to be added.
4. Press < **Select**>.

Managing caller groups

From the group list, press < **Options**> to access the following options:

- **View**: check the members of the selected group.
- **Add**: add a new group.
- **Edit**: change the group properties.
- **Send message**: send a message to the group members you want.
- **Delete**: delete the selected group or all groups. Group members, however, will not be deleted from Phonebook.

Speed dial *(Menu 2.4)*

Use this menu to assign a speed dial number (2 to 9) for your most frequently dialled numbers.

Menu functions

Assigning speed dial numbers

1. Select a key location from **2** to **9**. Key **1** is reserved for your voicemail server.
2. Select a contact from the contact list.
3. Select a number. If the contact has more than one number.

Managing speed dial entries

From the Speed dial screen, press < **Options**> to access the following options:

- **Add**: assign a number to an unassigned key.
- **View**: check the name and number assigned to a key.
- **Change**: assign a different phone number to a key.
- **Remove**: clear the speed dial setting for a key.

Dialling speed dial numbers

In Idle mode, press and hold the appropriate key.

My namecard *(Menu 2.5)*

Use this menu to create a name card and send it to other people.

Saving your name card

The procedure for creating your name card is the same as the one for saving a phone number in the phone's memory. ▶ p. 38

Using name card options

After saving your name card, press < **Options**> to access the following options:

- **Edit**: edit the name card.
- **Send via**: send the name card via SMS, MMS, or Bluetooth.

- **Exchange namecard:** exchange name cards with another person via Bluetooth.
- **Delete:** delete the name card.

Own number (Menu 2.6)

Use this menu to check your phone numbers, or to assign a name to each of the numbers. Changes made here do not affect the actual subscriber numbers on your SIM card.

Management (Menu 2.7)


Use this menu to manage contacts in Phonebook or change the default settings for Phonebook.

- **Save new contact to:** select a default memory location for saving contacts. If you select **Always ask**, the phone will ask you to select a memory location each time you save a number.

- **Copy all to:** copy all of the contacts stored on the SIM card to the phone's memory, or vice versa.
- **Delete all:** delete all of the contacts from your phone's memory, your SIM card, or all.
- **Memory status:** check the number of contacts you have stored in the phone's memory and on the SIM card.

Service number (Menu 2.8)

Use this menu to view the SDN (Service Dialling Number) list assigned by your service provider, including emergency numbers and numbers for directory enquiries. This menu is available if your SIM card supports SDN.

Select the service you want and press [].

Menu functions

Applications *(Menu 3)*

The **Applications** menu provides you with various entertaining and convenient features, such as games, music player, web browser, voice recorder, alarm clock, stopwatch, etc.

To access this menu, press < **Menu**> in Idle mode and select **Applications**.

Music player *(Menu 3.1)*

Use this menu to listen to music .

Downloading or receiving music files

You can play mp3 and aac(mp2) files. Use the following methods to save music files to your phone's memory:

- Your phone supports mp3 files with a bit rate of up to 192 kbps.

- Download from the wireless web ▶ p. 50
- Download from a PC using the optional Samsung PC Studio ▶ Samsung PC Studio User's Guide
- Receive via an active Bluetooth connection ▶ p. 26
- Copy to a memory card and insert the card into the phone ▶ p. 26

Downloaded or received files are stored in the **Music** folder.




Creating a play list

1. From the music player screen, press < **Options**> and select **Add music from** → a memory location.
2. Press [**OK/↵**] to select the files to be added and press < **Add**>.
3. Press < **Back**> to return to the music player screen.

Playing music files

From the music player screen, press [**OK/⏏**].

During playback, use the following keys:

Key	Function
OK/⏏	Pauses or resumes playback.
Left	Returns to the previous file.
Right	Skips to the next file.
Up	Opens the play list.
Down	Stops playback.
Volume	Adjusts the volume level.
2	Changes the playback animation.
3	Changes the repeat mode.  Off,  Repeat one,  Repeat all)
6	Turns Shuffle mode on or off.

Using music player options

From the music player screen, press

< **Options** > to access the following options:

- **Play/Pause**: begin or pause playback.
- **Open playlist**: access the play list.
- **Go to music**: access the **Music** folder.
- **Send via Bluetooth**: send the file via Bluetooth.
- **Set as**: set the file as your ringtone or as a ringtone for a Phonebook entry.
- **Remove from playlist**: remove the selected file from the play list.
- **Settings**: change the default settings for playing music files:
 - Repeat mode**: select a repeat mode type.
 - Shuffle**: set the music player to play tracks in random order.
 - Visualisation**: change the playback animation.
 - Volume**: select a volume level.

Menu functions

- **Details:** access the file properties.

Accessing the play list

From the music player screen, press [Up]. Press <**Options**> to access the following options:

- **Play:** play the currently selected file.
- **Add music from:** add files to the play list.
- **Move in playlist:** move the selected file to the position you want within the play list.
- **Remove:** remove the selected file or all files from the play list.
- **Details:** access the file properties.

Women's life *(Menu 3.2)*

Your phone has special menus, which can be useful for women in the modern world.

Fragrance type *(Menu 3.2.1)*

Use this menu to help you choose a personal style best suited for you according to your own preferences, such as favourite food and music, hobbies, fashion sense, and the places you love to go.

Creating a personal profile

1. Press <**Create**>.
2. Specify profile parameters.
3. When you have finished, press <**Save**>. The phone displays a style type for you.

Using personal profile options

While viewing the style options in a personal profile, press <**Options**> to access the following options:

- **Edit:** edit information stored in the profile.
- **Send via multimedia message:** send the profile via MMS.
- **Delete:** delete the profile.

Biorhythm (Menu 3.2.2)

Use this menu to check where you are in your biorhythm cycle. The biorhythm cycle is based on your birth date and displays how you are influenced physically, emotionally, and intellectually by your biorhythm at a particular moment.

Checking your biorhythm for a specific date

1. From the Biorhythm screen, select **Day view**.
2. Enter the date you want and press [Down].
3. Enter your birth date and press < **OK**>.
The graphics and numbers are displayed indicating your biorhythm states for that date.

While viewing your biorhythm cycle, press < **Options**> to access the following options:

- **Send via text message:** send the biorhythm via SMS.

- **Report via text message:** set to receive your biorhythm via SMS at a specified time.

Checking your biorhythm for the current month

1. From the Biorhythm screen, select **Month view**.
2. Enter your birth date and press < **OK**>.

Height/Weight ratio (Menu 3.2.3)

Use this menu to measure the percentage by which you are over or under the ideal weight for your height.

1. Press [Left] or [Right] to select your gender and press [Down].
2. Select the height unit and enter your height on the **Your height** line.
3. Press [Down].
4. Select the weight unit and enter your weight on the **Your weight** line.

Menu functions

5. Press < **OK** > to view the result.
Press < **Help** > to understand the significance of the percentage.

Calories (Menu 3.2.4)

Use this menu to measure calories you have consumed and burned, based on the amount of work and/or exercise you have done. You can also check the total calories consumed for a day.

Recording consumed calories

1. Select a date on the calendar.
2. Press < **Create** >.
3. Press [Left] or [Right] to select your work category.
4. Set each option for your work or exercise.
5. Move to the **How long?** line and enter the length of work time.
6. Press < **Save** >.

Checking consumed calories for a day

Select a day to view the details for the total calories consumed for the selected day.

From the calorie item list, press < **Options** > to access the following options:

- **Change time**: enter the amount of time you exercised or worked.
- **Create**: add a new calorie item.
- **Delete**: delete the selected calorie item or all calorie items.

Pink schedule (Menu 3.2.5)

Use this menu to check the date of your next ovulation and the period during which you are most likely to get pregnant.

1. Enter the first day of your last menstrual period.
2. Enter the average length (in days) of your menstrual cycle.

3. Press < **OK** >.
4. Press [Left] or [Right] to check the other months' schedule.
Press < **Help** > to understand the significance of the coloured cell.

Shopping list (Menu 3.2.6)

Use this menu to make a shopping list by entering information on items that you want or need to buy, and calculate the total expense.

Creating a shopping list

1. Select a shopping bag.
2. Press < **Add** >.
3. Enter information for the item.
4. Press < **Save** > to add the item to the bag.

Using options

From the item list of a shopping bag, press < **Options** > to access the following options:

- **Edit**: edit information on the item.
- **Add**: add a new item to the bag.
- **Delete**: remove the selected item or all items from the bag.

Pedometer (Menu 3.3)

Use this menu to keep track of how many steps you have taken and the calories you have burned while walking.

Starting the pedometer

1. Set up user information and press < **Save** >.
2. From the Pedometer counter screen, press [**OK/£**].
3. Close the phone.
4. To stop the counter, access the **Pedometer** menu and press [**OK/£**].

Menu functions

Using pedometer options

From the Pedometer screen, press < **Options** > to access the following options.

- **Counter on/Counter off:** activate or deactivate the counter.
- **View by:** view the history of counter results in different modes.
- **Settings:** change the counter settings:
 - Goal settings:** set an alarm to alert you when you reach the goal you set.
 - Basic information:** change user information.
- **Reset:** select a reset option.
 - Counter:** reset the counter.
 - All data:** clear the counter history and goal setting information.

Voice recorder *(Menu 3.4)*

Use this menu to record voice memos and any other sounds.

Recording a voice memo

1. Press [**OK/⏏**] to start recording.
2. Speak into the mouthpiece.
 - Press [**OK/⏏**] to pause or resume recording.
3. Press < **Stop** > or [Down] to end recording. The voice memo is automatically saved.
4. Press [**OK/⏏**] to review the voice memo, or press [Up] to record a new memo.

Playing a voice memo

1. Press < **Options** > and select **Go to My voice clips**.
2. Select a voice memo. The selected memo plays.

During playback, use the following keys:

Key	Function
OK/⏏	Pauses or resumes playback.
Left	Moves backward in a memo.
Right	Moves forward in a memo.
Volume	Adjusts the volume.
Down	Stops playback.

Using voice recorder options

After recording or playing a voice memo, press **<Options>** to access the following options:

- **Play:** play the selected voice memo in Review mode.
- **Record:** record a new voice memo.
- **Go to My voice clips:** access the voice memo list.
- **Send via:** send the file via MMS or Bluetooth.
- **Delete:** delete the file.
- **Rename:** change the file name.
- **Lock/Unlock:** lock the file to prevent it from being deleted, or unlock the file.
- **Details:** access the file properties.

Menu functions

Browser (Menu 3.5)

The Wireless Application Protocol (WAP) browser on your phone allows you to access the wireless web. From the wireless web, you can access up-to-date information and a wide variety of media content, such as games, wallpapers, ringtones, and music files.

Home (Menu 3.5.1)

Use this menu to connect your phone to the network and load the homepage of the wireless web service provider.

Navigating the web browser

Press [Up] or [Down] to scroll through browser items and press [OK/#] to select an item.

Using browser options

From any web page, press < **Options**> to access the following options:

- **Go to**: access the linked web page.
- **Go to homepage**: return to the homepage.
- **Enter URL**: enter a URL address manually.
- **Go**: move backward or forward through pages in history.
- **Reload**: reload the current page with updated information.
- **Bookmarks**: bookmark the current page or access the bookmark list.
- **Send URL via SMS**: send the URL address of the current page via SMS.
- **To SmartFit view/To Desktop view**: change the display mode of the browser.
- **Save**: save the selected image or the current page.
- **Page details**: access the page properties.

- **Browser options:** change the various settings for the browser.
Cache: change the cache mode or clear the cache. The cache is a temporary memory site that stores recently accessed web pages.
Cookies: change the cookie acceptance mode or delete cookies. Cookies are pieces of personal information sent to a web server while navigating the web.
Preferences: change the browser display and sound settings.
Certificates: access the WAP browser certificates.
About browser: access version and copyright information about the browser.

Enter URL (Menu 3.5.2)

Use this menu to manually enter a URL address and access the associated web page.

You can add the entered address to the bookmark list by selecting **Add bookmark**.

Bookmarks (Menu 3.5.3)

Use this menu to save URL addresses in order to quickly access web pages, or access ones you have bookmarked while navigating the wireless web.

Adding a bookmark

1. Press < **Add**>, or press < **Options**> and select **Add bookmark**.
2. Enter a title for the bookmark and press [Down].
3. Enter a URL address and press < **Save**>.

Accessing a bookmarked page

Selecting a bookmark item launches the web browser and accesses the associated web page.

Menu functions

Using bookmark options

From the Bookmarks screen, press < **Options**> to access the following options:

- **Go to**: access the bookmarked web page.
- **Go to homepage**: access the homepage.
- **Enter URL**: enter a URL address manually.
- **Edit bookmark**: edit the URL address and title of the bookmark.
- **Add bookmark**: add a new bookmark.
- **Send URL via SMS**: send the URL address of the bookmark via SMS.
- **Delete**: delete the selected bookmark or all bookmarks.

Saved pages (Menu 3.5.4)

You can access the list of pages you have saved while online.

Select a page name from the list to view the corresponding web page offline.

From the saved page list, press the < **Options**> to access the following options:

- **Show**: access the selected web page.
- **Edit title**: change the name for the selected web page.
- **Delete**: delete the selected web page or all pages.

History (Menu 3.5.5)

You can access the list of pages you have accessed recently.

Select a page from the list to access the corresponding web page.

From the history list, press the < **Options**> to access the following options:

- **Open**: access the selected web page.
- **Delete**: delete the selected web page or all pages.

Clear cache (Menu 3.5.6)

Use this menu to clear the cache. The cache is a temporary memory site that stores recently accessed web pages.

Browser settings (Menu 3.5.7)

Use this menu to select a connection profile to be used for accessing the wireless web. You can also create or edit a profile. ▶ p. 98

Java world (Menu 3.6)

Use this menu to access the embedded Java games and downloaded Java applications.

Launching a Java application

Select **My games** → an application from the application list and follow the onscreen instructions. The procedure may differ from application to application.

Using Java application options

From the application list, press < **Options**> to access the following options:

- **Start**: launch the selected application.
- **Move to**: move the application to another folder.
- **Delete**: delete the selected application or all applications, except for the embedded games.
- **Lock/Unlock**: lock the application to prevent it from being deleted, or unlock the application.
- **Details**: access the application properties.
- **Permissions**: set permission settings for services that charge you additional costs, such as network access and SMS.
- **Upgrade**: upgrade the application to the latest version.

Menu functions

- **Send information via Text message:** send the URL address containing the application via SMS.
- **Memory status:** access memory information for applications.
- **Settings:** select a connection profile to be used for applications requiring network access. You can also create or edit a profile.
▶ p. 98

World clock *(Menu 3.7)*

Use this menu to set your local time zone and find out the current time in another part of the world.

Setting the local time zone

1. From the World clock screen, press < **Options**> and select **Edit**.
2. Select **Time zone**.

3. Press [Left] or [Right] to scroll to the city you want. As the time line moves, the time and date of the given zone display.
4. Press < **Save**>.
5. Press < **Save**> to save the city as your local time zone.

Adding a time zone

1. From the World clock screen, press < **Options**> and select **Add**.
2. Press [Left] or [Right] to scroll to the city you want. As the time line moves, the time and date of the given zone display.
3. Press < **Save**>.

Using world clock options

From the World clock screen, press < **Options**> to access the following options:

- **Edit:** change the local time zone.

- **Add:** add a time zone.
- **Mark as second clock/Unmark second clock:** set the selected time zone to be displayed for a dual clock type, or cancel the setting.
- **Set daylight saving time:** apply daylight saving time to the time zone you want.
- **Delete:** delete the selected time zone.
- **Display settings:** select a clock type to be displayed on the idle screen. Changing the clock is only available when you have marked a time zone for a dual clock type.

Alarm (Menu 3.8)

Use this menu to set alarms. The alert type for a normal alarm corresponds to the call alert type setting. A wake-up alarm is not affected by your sound settings.

Setting an alarm

1. Select a type of alarm.
2. Set each alarm option:
 - **Alarm:** activate the alarm.
 - **Alarm time:** enter the time for the alarm to sound.
 - **AM/PM:** set **AM** or **PM** in 12-hour time format.
 - **Repeat:** select a repeat option.
 - **Alarm tone:** select an alarm ringtone.
3. Press < **Save**>.

Stopping an alarm

- For a non-wake-up alarm, press any key.
 - For a wake-up alarm, press < **Confirm**> or [**OK/⏏**].
- Press any key, except for < **Confirm**> and [**OK/⏏**], to cause it to sound again after 5 minutes.

Menu functions

Deactivating an alarm

1. Select the alarm you want to deactivate.
2. Select **Off** on the **Alarm** line.
3. Press < **Save** >.

Setting alarms to sound when the phone is off

From the Alarm screen, select **Auto power** → **On**.

If the phone is off when it is time for the alarm to sound, the phone switches on and sounds the alarm.

Calculator *(Menu 3.9)*

Use this menu to perform arithmetic functions, such as addition, subtraction, multiplication, and division.

1. Enter the first number.

- Press < **0** > to insert a decimal point or bracket.
 - Press [*****] or [**#**] to move the cursor.
2. Press one of the Navigation keys to access the arithmetic function you want.
 3. Enter the second number.
 4. Press [**OK/↵**] to view the result.
 5. If necessary, repeat from step 2 to continue the calculation.

Converter *(Menu 3.10)*

Use this menu for common conversions, such as length and temperature.

1. Select a converter.
2. Press [Left] or [Right] to select the original unit and press [Down].
3. Enter the value to be converted and press [Down].

- Press [*****] to insert a decimal point.
 - Press [**#**] to change the temperature to above zero (+) or below zero (-).
4. Press [Left] or [Right] to select the unit to which you want to convert.
The equivalent value for the amount you entered displays.

For the currency converter, you can view and set currency rates by pressing < **View rate**>.

Timer *(Menu 3.11)*

Use this menu to set a period of time for the phone to count down. The phone sounds an alarm when the specified period of time expires.

Starting the timer

1. Press < **Set**>.
2. Enter the length of time you want to count down and press < **OK**>.

3. Press [**OK/⏏**] to start counting down.

Stopping the timer

- Press any key when the timer sounds.
- Press [**OK/⏏**] on the timer screen to stop the timer before it sounds.

Stopwatch *(Menu 3.12)*

Use this menu to measure elapsed time.

1. Press [**OK/⏏**] to start the stopwatch.
2. Press [**OK/⏏**] to check an interval. You can repeat this step for a total of 4 intervals.

Memo *(Menu 3.13)*

Use this menu to make memos for things that are important and manage them.

Menu functions

Creating a memo

1. Press < **Options**> and select **Create**.
2. Enter the memo's text and press [**OK** / **✓**].

Viewing a memo

1. Select the memo you want to view.
2. Press [Left] or [Right] to view other memos.

Using memo options

While viewing memo details, press < **Options**> to access the following options:

- **Edit**: change the memo's text.
- **Send via**: send the selected memo via, SMS, MMS, or Bluetooth.
- **Delete**: delete the memo.
- **Memory status**: check how many memos you have created.

SIM Application Toolkit *(Menu 3.14)*

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

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

Yahoo search *(Menu 4)*

Yahoo search launches the Yahoo search engine to find information, news, images, videos, or local services from around the web.

To access this menu, press < **Menu**> in Idle mode and select **Yahoo search**.

- This menu may not be shown depending on your service provider or country.

Messages *(Menu 5)*

Use the **Messages** menu to send and receive text messages and multimedia messages. You can also access push messages and broadcast messages.

To access this menu, press < **Menu**> in Idle mode and select **Messages**.

Create message *(Menu 5.1)*

Use this menu to create and send messages.

Text message *(Menu 5.1.1)*

Short Message Service (SMS) allows you to send text messages that may include simple pictures, animated images, and melodies.

Creating and sending an SMS message

1. Enter the message text and press [**OK/↵**]:



- The maximum number of characters allowed in a message varies by service provider. If your message exceeds the maximum number of characters, the phone will split the message.
- You can use various options by pressing < **Options**>. ▶ next section

2. Enter a destination number.
To send the message to more than one recipient, fill in additional destination fields.
3. Press [**OK/↵**] to send the message.

Using options while composing an SMS message

While composing a message, press < **Options**> to access the following options:

- **Send only**: send the message.
- **Save and send**: send the message and then save it in the **Sentbox** folder.
- **Insert**: add a text template, Phonebook entry, or bookmarked URL address.

Menu functions

- **Add image/Add animation/Add melody:** add a media file stored in the phone's memory.
- **Attach:** attach a Phonebook entry as a name card or a calendar item as a data format attachment.
- **Save in:** save the message in another message folder.
- **Select language:** change the language to be used in T9 input mode.
- **Text style:** change the text attributes.
- **Input method:** change the text input mode.

Multimedia message (Menu 5.1.2)

Multimedia Message Service (MMS) delivers messages containing a combination of text, image, video, and audio, from phone to phone or from phone to email.

Creating and sending an MMS message

1. Select the **Subject** line.

You can use various options by pressing **<Options>** in each field. ▶ next section

2. Enter the message subject and press **[OK/↵]**.
3. Select the **Image or video** line.
4. Select **Add image** or **Add video** and add an image or a video clip.

• The maximum size allowed for a message can differ, depending on your service provider.
• Depending on the file type or DRM (Digital Rights Management) system, some files may not be able to be forwarded.

5. Select the **Sound** line.
6. Select **Add sound** and add a sound clip.
7. Select the **Message** line.

8. Enter the message text and press [**OK/↵**].
9. When you have finished, press < **Options**> and select **Send**.
10. Enter a phone number or an e-mail address. To send the message to more than one recipient, fill in additional destination fields.
11. Press [**OK/↵**] to send the message.

Using options while composing an MMS message

The table below shows all options without regarding whether an item is added or not. You can check common options in the last cell of the table:

Subject	<ul style="list-style-type: none"> • Add: add the message subject. • Edit: edit the subject. • Clear subject: remove the message subject.
---------	---

Image or video

- **Add image/Add video:** add a media file stored in the phone's memory.
- **Change image/Change video:** replace an added item.
- **Add memory card:** add a file stored on a memory card. This option is only available when you insert a memory card into the phone.
- **Remove media:** remove an added item.

Sound

- **Add sound:** add a media file stored in the phone's memory.
 - **Change sound:** replace an added item.
-

Menu functions

Sound	<ul style="list-style-type: none">• Add memory card: add a file stored on a memory card. This option is only available when you insert a memory card into the phone.• Remove sound: remove an added item.
Message	<ul style="list-style-type: none">• Add: add the message text.• Edit: edit the text.• Clear message: remove the message text.
Attached items	<ul style="list-style-type: none">• View: open the selected item.• Remove: remove the selected item or all items.

Common	<ul style="list-style-type: none">• Preview: view the message as it will be shown on the recipient's phone.• Send: send the message.• Save in: save the message in another message folder.• Add page: add pages. Move to each page by pressing [Left] or [Right].• Delete page: delete a page.• Edit page: change the duration of page display or move the page between the other pages.• Attach: attach a Phonebook entry as a name card or a calendar item as a data format attachment.
--------	--

My messages *(Menu 5.2)*







Use this menu to access messages you have received, sent, or that have failed during sending.



Inbox *(Menu 5.2.1)*

This folder stores all of the messages you have received.

Viewing a message

The following icons may appear on the list to show the message type:

-  : SMS message
-  : MMS message
-  : MMS notification (* Being retrieved,  : Failed to be retrieved)
-  : Push message from web servers/
Configuration message, containing network parameters from your service provider

-  : Broadcast message from your service provider
 -  : Delivery report for your sent messages
- Depending on the DRM (Digital Rights Management) system, messages having web content may not be able to be forwarded.
 - An ! icon next to a message means that the message is of high priority.

To view a message:

1. Select the message you want.
2. Press [*****] or [**#**] to view other messages.

Using message options

While viewing a message, press < **Options**> to access the following options:

SMS messages

- **Reply via text message:** reply to the sender via SMS.

Menu functions

- **Reply via multimedia message to:** reply to the sender via MMS.
- **Forward:** forward the message to other people.
- **Delete:** delete the message.
- **Move to phone/Move to SIM:** move the message between the SIM card and the phone's memory.
- **Cut address:** extract URL addresses, email addresses, or phone numbers from the message.
- **Cut media:** save media content from the message to your phone's memory.
- **Lock/Unlock:** lock the message to prevent it from being deleted, or unlock the message. You can protect only those messages stored in the phone's memory.
- **Add to Block list:** add the sender's number to the block list to reject the messages from the sender.

MMS messages

- **Retrieve:** retrieve the MMS message from the MMS server.
- **Reply via text message:** reply to the sender via SMS.
- **Reply via multimedia message to:** reply to the sender via MMS.
- **Forward:** forward the message to other people.
- **Delete:** delete the message.
- **Cut address:** extract URL addresses, email addresses, or phone numbers from the message.
- **Attached items:** save media content from the message to your phone's memory.
- **Lock/Unlock:** lock the message to prevent it from being deleted, or unlock the message.
- **Details:** access the message properties.

Configuration messages

- **Install:** apply the configuration specified in the message to your phone.
- **Delete:** delete the message.
- **Lock/Unlock:** lock the message to prevent it from being deleted, or unlock the message.

Push messages

- **Go to URL:** connect to the URL address specified in the message.
- **Delete:** delete the message.
- **Cut address:** extract URL addresses, email addresses, or phone numbers from the message.
- **Lock/Unlock:** lock the message to prevent it from being deleted, or unlock the message.

Broadcast messages

- **Save:** save the message to the phone's memory.
- **Cut address:** extract URL addresses, email addresses, or phone numbers from the message.
- **Delete:** delete the message.

Delivery reports

- **Cut address:** extract URL addresses, email addresses, or phone numbers from the report.
- **Delete:** delete the report.
- **Lock/Unlock:** lock the report to prevent it from being deleted, or unlock the report.

Drafts (Menu 5.2.2)

This folder stores messages you have saved to send at a later time.



Menu functions

When you select a message, it opens in Edit mode so that you can edit and send the message.

Outbox *(Menu 5.2.3)*

This folder stores messages that the phone is attempting to send or has failed to send.

The following icons may appear on the list to show the message status:

- : Being sent
- : Failed to be sent

While viewing a message, press < **Options**> to access the following options:

- **Send again**: retry sending the message.
- **Forward**: forward the message to other people.
- **Cut address**: extract URL addresses, email addresses, or phone numbers from the message.
- **Delete**: delete the message.

- **Lock/Unlock**: lock the message to prevent it from being deleted, or unlock the message.
- **Details**: access the message properties.

Sentbox *(Menu 5.2.4)*

This folder stores messages that you have sent.

While viewing a message, press < **Options**> to access the following options:

- **Send**: send the message.
- **Forward**: forward the message to other people.
- **Cut address**: extract URL addresses, email addresses, or phone numbers from the message.
- **Delete**: delete the message.
- **Lock/Unlock**: lock the message to prevent it from being deleted, or unlock the message.
- **Details**: access the message properties.

My folders *(Menu 5.2.5)*

Use this menu to create new folders and organise your messages.

Creating a new folder

1. Press < **Yes**>.
2. Enter a folder name and press < **OK**>.

Using folder options

From the folder list, press < **Options**> to access the following options:

- **Open**: open the selected folder.
- **Add folder**: add a new folder.
- **Rename folder**: change the selected folder's name.
- **Delete**: delete the selected folder.

Templates *(Menu 5.3)*

Use this menu to make and use templates of frequently used messages or passages.

Text templates *(Menu 5.3.1)*

You can access embedded text templates or create ones with the sentences you use frequently so that you can use them in composing an SMS message.

Creating a template

1. Select an empty location.
2. Enter a message and press < **OK**>.

Using template options

From the template list, press < **Options**> to access the following options:

- **Edit**: edit the selected template.
- **Send message**: create and send a new message using the selected template.
- **Delete**: delete the selected template.
- **Add new**: add a new template.

Menu functions

Multimedia message templates

(Menu 5.3.2)

You can access saved so that you can use them in composing an MMS message.

From the template list, press < **Options**> to access the following options:

- **View**: open the selected template.
- **Edit**: edit the selected template.
- **Send**: send the template via MMS.
- **Delete**: delete the selected template.

Delete all (Menu 5.4)

Use this menu to delete messages in each message folder all at once.

1. Press [**OK/⏏**] to select the message folders to be cleared.

Pressing the key twice displays the message types so that you can specify the ones to be deleted.

2. Press < **Delete**>.
3. Press [**OK/⏏**] to select **With protection** to delete locked messages, and then press < **Yes**>.
4. Press < **Yes**> to confirm the deletion.

Settings (Menu 5.5)

Use this menu to set up various options for using the messaging services.

Text message (Menu 5.5.1)

You can configure default SMS settings.

- **Send settings**: set up the options for sending SMS messages:
 - Reply path**: allow recipients to reply to you through your SMS server.
 - Delivery report**: set the network to inform you when your messages are delivered.

Character support: select a character encoding type. When you select **Automatic**, the phone switches the encoding type from GSM-alphabet to Unicode if you enter a Unicode character. Using Unicode encoding will reduce the maximum number of characters in a message to about half. If this menu is not shown, your phone provides automatic character encoding by default.

Bearer selection: select either **GSM** or **GPRS preferred**, depending on your network.

- **Block list:** specify phone numbers from which you want to reject messages.
- **Current profile:** select an SMS setting profile.
- **Profile settings:** set the properties of each profile:

Service centre: store or change the number of your SMS server.

Default destination: enter the default destination. It will be displayed in the first field on the destination field.

Default type: set the default message type. The network can convert messages into the selected format.

Default validity: set the length of time your messages are stored in the SMS server.

Setting name: enter a profile name.

Multimedia message (Menu 5.5.2)

You can configure default MMS settings.

- **Sending settings:** set up the options for sending MMS messages:

Delivery report: set the network to inform you when your messages are delivered.

Hide address: set your address to be hidden from the recipient's phone.

Read reply: send a read-reply request along with your messages.

Menu functions

Priority: set the priority level of messages.

Expiry date: set the length of time messages are stored in the MMS server.

Delivery time: set a time delay before messages are sent.

Outgoing message size: select a maximum size allowed for messages. Available message size may vary, depending on your country.

- **Retrieve settings:** set up the options for receiving MMS messages:

Reject unknown senders: reject messages from unknown senders.

Allow adverts: accept advertisements.

Allow information: accept information messages.

Allow reports: set the network to inform the sender when a message is delivered to you.

Recep. in home network: determine if your phone retrieves new messages automatically when you are in your home service area.

Reception when abroad: determine if your phone retrieves new messages automatically when you are roaming on another network.

Reception within your home network or abroad has the following options:

- **Manual:** the phone displays notifications. Use the **Retrieve** option to manually retrieve new messages.
 - **Automatic:** the phone automatically retrieves messages from the server.
 - **Reject:** the phone rejects all messages.
- **Block list:** specify phone numbers from which you want to reject messages.
 - **Profile:** select a connection profile to be used for MMS. You can also create or edit a profile. ▶ p. 98

Push message *(Menu 5.5.3)*

You can change the settings for receiving push messages from the wireless web server.

- **Receive:** set whether to receive push messages from the web server.
- **Black list:** manage blocked server addresses.

Broadcast messages *(Menu 5.5.4)*

You can change the settings for receiving broadcast messages.

- **Receive:** set whether to receive broadcast messages.
- **Channel list:** indicate the channels from which you wish to receive broadcast messages. Please contact your service provider for further details.
- **Language:** select the preferred languages in which broadcast messages display.

SOS messages *(Menu 5.6)*

In an emergency, you can send an SOS message to your family or friends for help. You can also receive an SOS message from other people who are in an emergency. Use this menu to specify options for sending and receiving an SOS message.

Sending options *(Menu 5.6.1)*

You can set up SOS message options.

- **Sending SOS:** activate or deactivate the SOS message feature. To send an SOS message, press [Volume] 4 times in Idle mode, with the phone closed.

- While the phone is attempting to send an SOS message, it turns to red and you cannot access menu functions in this mode. To use the phone as normal, press [Power] when the icon turns to blue.

Menu functions

- **Recipients:** specify the phone numbers to which you want to send an SOS message.
- **Repeats:** set the number of times the phone resends the SOS message.
- **Message:** check the preset SOS message text.

You can view the onscreen help by pressing <Options> and selecting **Help**.

Receiving options (Menu 5.6.2)

You can set whether or not the phone uses the preset alert type (siren and alert message) for incoming SOS messages. If you select **Normal**, the phone uses the message ringer setting.

Memory status (Menu 5.7)

Use this menu to view the amount of memory currently in use in each message folder.

My files (Menu 6)

The **My files** menu allows you to access images, videos, music files, and sound files stored in the phone's memory or on a memory card.

To access this menu, press < **Menu**> in Idle mode and select **My files**.

As a result of the Digital Rights Management (DRM) system, some of the media items you download from the Internet or receive by MMS may require a licence key to access them.

Images

Use this menu to access photos you have taken and images you have downloaded, received in messages, or imported from your PC.

Viewing an image

1. Select an image folder.

2. Select an image.
3. Press [Left] or [Right] to view other images.

Viewing a slide show

1. Select **My photos**.
2. Press < **Options** > and select **Slide show**.
3. Select an interval option. The slide show begins.
4. Press < **Stop** > to stop the slide show.

Using image options

While viewing an image, press < **Options** > to access the following options. Depending on the selected file, available options may vary:

- **List**: return to the image list.
- **Send via**: send the file via MMS or Bluetooth.
- **Set as**: set the image as your wallpaper for the main display or as a caller ID image for a Phonebook entry.

- **Delete**: delete the file.
- **Rename**: change the file name.
- **Move to**: move the file to another folder or to a memory card.
- **Copy to memory card**: copy the file to a memory card. This option is only available when you insert a memory card into the phone.
- **Visible to Bluetooth**: share the file or all files with other Bluetooth devices.
- **Lock/Unlock**: lock the file to prevent it from being deleted, or unlock the file.
- **Details**: access the file properties.

Videos

Use this menu to access video clips you have recorded, downloaded, received in messages, or imported from your PC.

Menu functions

- Video clips recorded on other devices, such as camcorders, may not play correctly.

Playing a video clip

1. Select a video folder.
2. Select a video clip. The selected video plays. During playback, use the following keys:

Key	Function
OK/ $\bar{\#}$	Pauses or resumes playback.
Volume	Adjusts the volume.
Down	Stops playback.

Using video options

After playing a video clip, press < **Options** > to access the following options. Depending on the selected file, available options may vary:

- **List:** return to the video list.
- **Send via:** send the file via MMS or Bluetooth.
- **Set as wallpaper:** set the video clip, if saved as a 3gp file, as your wallpaper for the main display.
- **Delete:** delete the file.
- **Rename:** change the file name.
- **Move to:** move the file to another folder or to a memory card.
- **Copy to memory card:** copy the file to a memory card. This option is only available when you insert a memory card into the phone.
- **Visible to Bluetooth:** share the file or all files with other Bluetooth devices.
- **Lock/Unlock:** lock the file to prevent it from being deleted, or unlock the file.
- **Details:** access the file properties.

Music

Use this menu to access music files you have downloaded or imported from your PC.

Playing a music file

Select a file. The music player opens and the selected music file plays. ▶ p. 43

Sounds

Use this menu to access voice memos you have recorded, and sound files you have downloaded, received in messages, or imported from your PC.

Playing a sound clip

1. Select a sound folder.
2. Select a sound clip. The selected sound plays. For a voice memo, see **Voice recorder**. ▶ p. 48

Using sound options

After playing a sound clip, press < **Options**> to access the following options. Depending on the selected file, available options may vary:

- **List**: return to the sound list.
- **Send via**: send the file via MMS or Bluetooth.
- **Set as**: set the sound as your ringtone or a ringtone for a Phonebook entry.
- **Delete**: delete the file.
- **Rename**: change the file name.
- **Move to**: move the file to another folder or to a memory card.
- **Copy to memory card**: copy the file to a memory card. This option is only available when you insert a memory card into the phone.
- **Visible to Bluetooth**: share the file or all files with other Bluetooth devices.

Menu functions

- **Lock/Unlock:** lock the file to prevent it from being deleted, or unlock the file.
- **Details:** access the file properties.

Other files

Files that you have received but which are not supported by your phone are stored in this folder. You cannot open these files on the phone. Unsupported file formats include doc, ppt, and txt.

From the file list, press < **Options**> to access the following options:

- **Send via Bluetooth:** send the file via Bluetooth.
- **Delete:** delete the selected file or all files.
- **Rename:** change the file name.
- **Move to memory card:** move the file to a memory card. This option is only available

when you insert a memory card into the phone.

- **Copy to memory card:** copy the file to a memory card. This option is only available when you insert a memory card into the phone.
- **Visible to Bluetooth:** share the file or all files with other Bluetooth devices.
- **Lock/Unlock:** lock the file to prevent it from being deleted, or unlock the file.
- **Details:** access the file properties.

Memory card

Use this menu to access the files stored on a memory card. This menu is only available when you insert a memory card into the phone.

- Your phone is preset to use FAT16-formatted memory cards. If you insert a FAT32-formatted memory card, the phone will ask you to reformat the memory card. If you do not, you will not be able to access the card from the phone.

Memory status

Use this menu to view memory information for media items in the phone's memory or on a memory card. For the phone's memory, press [Left] or [Right] to view the memory status by size or number of items.

Calendar *(Menu 7)*

The **Calendar** menu enables you to keep track of your schedule.

To access this menu, press < **Menu**> in Idle mode and select **Calendar**.

Selecting a day on the calendar

When you enter the **Calendar** menu, the calendar in Month view appears with the current date indicated by a coloured box.

- Press [Left] or [Right] to move by day.
- Press [Up] or [Down] to move by week.
- Press [Volume] to move by month.

Creating an item

You can store appointments, anniversaries, and tasks on the calendar.

1. Select a date on the calendar.
2. Press < **Options**> and select **Create** → an item type.
3. Enter information or change the settings.
4. Press < **Save**> to save the item.

Consulting the calendar

Once you have created items, the item type icons and the number of items for a specific day appear at the bottom of the calendar.

-  : Appointment
-  : Anniversary
-  : Task

Viewing an item

1. Select a date on the calendar to display the items for the day.
2. Select an item to view its details.
3. Press [Left] or [Right] to access the other items scheduled for the selected day.

While viewing an item, press < **Options**> to access the following options:

- **Edit**: edit the item.
- **Create**: add a new item.

- **Send via**: send the item via SMS, MMS, or Bluetooth.
- **View by**: change the view mode of the calendar.
- **Delete**: delete the selected item.
- **Memory status**: access memory information for the items stored on the calendar.

Using calendar options

On the calendar, press < **Options**> to access the following options:

- **View by**: change the view mode of the calendar.
- **Create**: add a new item.
- **Go to**: select today's date or enter a specific date.
- **Event list**: sort items by type of item.

- **Delete:** delete the items stored on the calendar by using various deleting options.

You can delete recurring items in Day view only.





- **Missed alarm events:** view items whose alarms you have missed.
- **Memory status:** access memory information for the items stored on the calendar.

Viewing items in a different mode

You can change the calendar display to Day view or Week view. Press < **Options**> and select **View by** → a view mode.

Day view

You can view items for the selected date. The following icons may display to indicate the item's status:

-  : Alarm set
-  : Recurring item
-  : Task priority (Red: high, Blue: normal, Grey: low)
-  : Completed task

Select an item to view its details.


Week view

You can view items for the selected week. A coloured box on the timetable indicates the presence of a schedule item.

Select a cell on the date you want.

Camera *(Menu 8)*

You can use the camera embedded in your phone to take photos and record videos.

To access this menu, press < **Menu**> in Idle mode and select **Camera**, or press and hold [].

Menu functions


- ☑ Do not take photos or record videos of people without their permission.
- Do not take photos or record videos in a place where cameras are not allowed.
- Do not take photos or record videos in a place where you may interfere with another person's privacy.


Taking a photo


You can take photos in various modes. The camera produces jpeg photos.

- ☑ When you take a photo in direct sunlight or in bright conditions, shadows may appear on the photo.

Taking a photo


1. Access the **Camera** menu or press and hold [] to turn on the camera.
2. Make any desired adjustments.

- Press <  > to access camera options.
 - ▶ next section
- Use the keypad to change the camera settings or switch to other modes.
 - ▶ p. 82

3. Press [**OK/∫**] or [] to take a photo. The photo is saved in the **My photos** folder.

- | To | Press |
|------------------------|---------------------------------------|
| access photo options | < Options >. |
| send the photo via MMS | [OK/∫]. |
| delete the photo | [C] and then < Yes >. |
| return to Capture mode | < Preview >. |

Using camera options in Capture mode

In Capture mode, press <  > to access the following options:

- **Record video:** switch to Record mode.
- **Shooting mode:** take a photo in the following modes:
 - **Single shot:** take a photo in Normal mode. You can select whether or not the camera automatically saves the photo.
 - **Multi-shot:** take a series of action stills. You can select the number of photos the camera will take and the shooting speed.
 - **Mosaic shot:** take several stills and save them on one frame. You can select the layout and shooting mode.
- **Effects:** change the colour tone or apply a special effect.
- **Frames:** apply a decorative frame.
- **Timer:** set a time delay before the camera takes a photo.
- **Go to My photos:** access the **My photos** folder.
- **Camera settings:** change the default settings for taking photos:
 - **Size:** select an image size.
 - **Quality:** select an image quality setting.
 - **Viewfinder:** select a preview screen.
 - **Scene programs:** set whether to use Night shot mode.
 - **Shutter sound:** select the sound that you hear when you press the shutter release key.
 - **Zoom sound:** turn the sound effect for zooming on or off.
 - **Brightness sound:** turn the sound effect for brightness adjustment on or off.
- **Camera shortcuts:** view the functions of the keys you can use in Capture mode.

Menu functions

Using the keypad in Capture mode

You can use the keypad to customise your camera settings in Capture mode.

Key	Function
Left/Right	Adjusts the brightness.
Up/Down/ Volume	Zooms in or out.
1	Switches to Record mode. ▶ p. 82
2	Changes the image size.
3	Changes the image quality.
4	Changes the shooting mode.
5	Changes the colour tone or applies a special effect.
7	Selects a decorative frame.

Key	Function
8	Sets the timer.
0	Goes to the My photos folder.
#	Changes the preview screen.

Recording a video

You can record a video of what is displayed on the camera screen.

Recording a video

1. In Capture mode, press [1].
2. Make any desired adjustments.
 - Press < [] > to access camera options.
▶ next section
 - Use the keypad to change the camera settings or switch to other modes.
▶ p. 84

- Press [**OK/⏏**] or [**⏏**] to start recording.
- Press [**OK/⏏**], < **⏏** >, or [**⏏**] to stop recording. The video is automatically saved in the **My video clips** folder.

To	Press
play back the video clip	[OK/⏏].
access video options	< Options >.
delete the video clip	[C] and then < Yes >.
return to Record mode	< Preview >.

Using camera options in Record mode

In Record mode, press < **⏏** > to access the following options:

- **Take photo:** switch to Capture mode.
- **Effects:** change the colour tone or apply a special effect.
- **Timer:** set a time delay before the camera starts recording.
- **Go to My video clips:** access the **My video clips** folder.
- **Camcorder settings:** change the following settings for recording videos:
 - Size:** select a frame size.
 - Viewfinder:** select a preview screen.
 - Audio record:** record a video with audio.
 - Zoom sound:** turn the sound effect for zooming on or off.
 - Brightness sound:** turn the sound effect for brightness adjustment on or off.
- **Camcorder shortcuts:** view the functions of the keys you can use in Record mode.

Menu functions

Using the keypad in Record mode

You can use the keypad to customise your camera settings in Record mode.

Key	Function
Left/Right	Adjusts the brightness.
Up/Down/ Volume	Zooms in or out.
1	Switches to Capture mode. ▶ p. 80
2	Changes the frame size.
5	Changes the colour tone or applies a special effect.
7	Mutes or unmutes audio.
8	Sets the timer.

Key	Function
0	Goes to the My video clips folder.
#	Changes the preview screen.

Settings (Menu 9)

The **Settings** menu provides you with various setting options to customise the phone to your preferences and needs. You can also reset the settings to their default status.

To access this menu, press < **Menu**> in Idle mode and select **Settings**.

Time and date (Menu 9.1)

Use this menu to change the time and date displayed on your phone.

- **Time zone updating:** select a mode for updating the current time and date.

Prompt first: your phone will read the MCC (Mobile Country Code) from the network and automatically update the current time for the country that you are in when you travel abroad. Before updating, the phone will ask you if you want to update time information.

- Time information may not be updated when you move to one time zone to another within a country.

Manual only: you can set the time and date manually.

Automatic: your phone will receive time information from the network.

- **Time zone:** set the home time zone. Select the city that corresponds to your home zone.
- **Daylight saving:** select to apply daylight saving time.

- **Set time:** enter the current time.
- **AM/PM:** set **AM** or **PM** in 12-hour time format.
- **Time format:** select a time format.
- **Set date:** enter the current date.
- **Date format:** select a date format.
- **Calendar starting day:** set which day of the week the calendar starts with.

Phone settings (Menu 9.2)

Many different features of your phone's system can be customised to suit your preferences.

- Some menus may not be available, depending on your service provider.

Language (Menu 9.2.1)

Use this menu to select a language for the display text. If you select **Automatic**, the phone uses the same language as the SIM card.

Menu functions

Greeting message (Menu 9.2.2)

Use this menu to enter the greeting that is displayed briefly when the phone is switched on.

Shortcuts (Menu 9.2.3)

You can use the Navigation keys as shortcuts to access specific menus directly from Idle mode. Use this menu to change the shortcut assignments for [Down], [Left], and [Right]. [Up] is fixed as a shortcut to My menu mode.

Assigning a shortcut menu

1. Select a key to be used as a shortcut key.
2. Select a menu to be assigned to the key.

Using shortcut options

Press <Options> to access the following options:

- **Change:** assign or change a shortcut assignment.

- **Remove:** deactivate the shortcut assignment to the selected key.
- **Remove all:** deactivate all shortcut assignments.

My menu (Menu 9.2.4)

You can set up a menu of your own using your favourite menu items, which can be easily accessed by pressing [Up] in Idle mode.

Setting up My menu items

1. Select an item to be changed.
2. Select the menu item you want.

Using item options

Press <Options> to access the following options:

- **Assign:** assign an item.
- **Change:** change the selected item.
- **Remove:** remove the selected item.

- **Remove all:** remove all items.

Volume key (Menu 9.2.5)

Use this menu to set whether the phone mutes the call ringer or rejects a call if you press and hold [Volume] when a call comes in. You can also set whether the phone sends an SMS message to the caller when a call is rejected.

Extra settings (Menu 9.2.6)

Use this menu to change additional settings for using the phone.

- **Auto redial:** set the phone to make up to ten attempts to redial a phone number after an unsuccessful call.
- **Active flip:** set whether a call is automatically answered when you open your phone.
- **Anykey answer:** set whether a call is answered when you press any key, except for <Reject> and [⏏].

Offline mode (Menu 9.2.7)

Use this menu to switch the phone to Offline mode, or back to Online mode.

Display settings (Menu 9.3)

Use this menu to change settings for the display and the light.

Wallpaper (Menu 9.3.1)

You can set up the idle screen on the main display.

- **Main display:** select an image or a video clip to be displayed on the main display. You can also select a motion detection activated image, from **Motion wallpaper**. The objects in the image detect the phone's movement and move accordingly.
- **Calendar wallpaper:** set the phone to display the calendar of the current month.

Menu functions

- **Text position:** select a text position. If you do not want to display text, select **Off**.
- **Text mode:** select a font style.
- **Text colour:** select a font colour.
- **Graphic logo:** set the phone to display a graphic icon instead of the service provider's logo. This is only available if a graphic icon has been received in a message.

Main menu style *(Menu 9.3.2)*

You can select a display style for the main menu screen.

Skin *(Menu 9.3.3)*

You can select a skin colour pattern for Menu mode.

Brightness *(Menu 9.3.4)*

You can adjust the brightness of the display for varying lighting conditions.

Backlight *(9.3.5)*

You can select the length of time the backlight or display stays on when the phone is not used.

- **Main display normal:** select the length of time the backlight stays on.
- **Main display dim:** select the length of time the display stays on in Dim mode after the backlight turns off. After a specified time, the display turns off.
- **Show cover indicators:** set whether or not the icons are shown on the external display after the display turns off.

Dialling display *(Menu 9.3.6)*

Use this menu to customise the settings for numbers entered and the background colour of the display while dialling.

Clock style (Menu 9.3.7)

Use this menu to select a clock type to be displayed on the idle screen. Changing the clock is only available when you have marked a time zone for a dual clock type.

Show caller information (Menu 9.3.8)

Use this menu to set the phone to display missed call notifications with the most recently missed caller's information. To set the external display to show caller information, select **With cover display**.

Sound settings (Menu 9.4)

Use this menu to customise various sound settings.

Incoming call (Menu 9.4.1)

Use this menu to change the sound settings for incoming calls.

- **Ringtone:** select a call ringtone.
- **Volume:** select a ringtone volume.
- **Alert type:** specify how you are to be informed of incoming calls.

Keypad tone (Menu 9.4.2)

Use this menu to select the tone that the phone sounds when you press a key.

Message tone (Menu 9.4.3)

Use this menu to change the sound settings for incoming messages individually according to message type.

- **Tone:** select one of the several message tones.
- **Alert type:** specify how you are to be informed when a message comes in.
- **Repetition:** specify how often the phone informs you of a new message.

Menu functions

Power on/off (Menu 9.4.4)

Use this menu to select the melody that the phone sounds when it is switched on or off.

Silent mode (Menu 9.4.5)

Use this menu to set how the phone acts to alert you to a specific event while in Silent mode.

Extra tones (Menu 9.4.6)

Use this menu to customise additional tones for the phone.

- **Minute minder:** set the phone to beep every minute during an outgoing call to keep you informed of the length of your call.
- **Connection tone:** set the phone to beep when a call is connected to the system.
- **Alert on call:** set the phone to beep when you receive a new message or when the time for an alarm comes during a call.

- **Indicative tone:** set the phone to beep when a pop-up window displays.

Network services (Menu 9.5)

Use this menu to access network services. Please contact your service provider to check their availability and subscribe to them, if you wish.

Call diverting (Menu 9.5.1)

This network service reroutes incoming calls to a phone number that you specify.

1. Select a call diverting option:
 - **Divert always:** divert all calls.
 - **Busy:** divert calls when you are on another call.
 - **No reply:** divert calls when you do not answer the phone.

- **Unreachable:** divert calls when you are not in your service area or when your phone is switched off.
 - **Cancel all:** cancel all call diverting options.
2. Select the type of calls to be diverted.
 3. Select **Activate**. To deactivate call diverting, select **Deactivate**.
 4. Move to the **Divert to** line and enter the number to which calls are to be diverted.
 5. If you selected **No reply**, move to the **Seconds** line and select the length of time the network delays before diverting a call.
 6. Press < **Select** >.

Call barring (Menu 9.5.2)

This network service allows you to restrict your calls.

1. Select a call barring option:
 - **All outgoing calls:** prohibit all outgoing calls.
 - **International:** prohibit international calls.
 - **International except home:** only allow calls to numbers within the current country, and to your home country when you are abroad.
 - **All incoming calls:** prohibit all incoming calls.
 - **Incoming while abroad:** prohibit incoming calls when you use your phone outside of your service area.
 - **Cancel all:** cancel all call barring settings, allowing calls to be sent and received normally.
 - **Change barring password:** change the call barring password obtained from your service provider.
2. Select the type of calls to be barred.

Menu functions

3. Select **Activate**. To deactivate call barring, select **Deactivate**.
4. Enter the call barring password supplied by your service provider and press < **Select**>.

Call waiting (Menu 9.5.3)

This network service informs you when someone is calling you while you are on another call.

1. Select the type of calls to which call waiting option will apply.
2. Select **Activate**. To deactivate call waiting, select **Deactivate**.

Network selection (Menu 9.5.4)

This network service allows you to manually select the network to be used while roaming outside of your home area, or to let the network be chosen automatically.

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

Caller ID (Menu 9.5.5)

This network service allows you to hide your phone number from the person you are calling. If you select **Default**, the phone will use the default setting provided by the network.

- Some networks may not allow you to change this setting.

Voice mail server (Menu 9.5.6)

Use this menu to store the number of the voicemail server and access your voicemails.

- **Connect to voice server:** connect to the voicemail server to listen to your messages.
- **Voice server number:** enter the voicemail server number.

- You must store the voicemail server number before accessing the server. Your service provider can give you the number.

Closed user group (Menu 9.5.7)

Use this menu to set incoming and outgoing calls to be restricted to a selected user group. For details about how to create a closed user group (CUG), contact your service provider.

- **Index list:** add, delete, or activate CUG index numbers.
- **Outside access:** enable calls to numbers other than those in the closed user group. This feature depends on the nature of your CUG subscription.
- **Default group:** enable the default CUG, if you have set one with your service provider. When making a call, you are given the option of using your default CUG, instead of selecting one from the list.

- **Deactivate:** disable an activated CUG index number.

Bluetooth (Menu 9.6)

Using the Bluetooth feature, you can connect the phone wirelessly to other Bluetooth devices and exchange data with them, talk hands-free, or control the phone remotely.

Bluetooth technology allows free wireless connections between all Bluetooth-compliant devices within a range of 10 meters. Since the devices communicate using radio waves, they do not need to be in the line of sight to each other.

Menu functions

- If there are obstacles between the devices, the operating distance may be reduced.
- It is recommended that for better performance, you do not use the Bluetooth feature while using multimedia features.
- Some devices, especially those that are not tested or approved by Bluetooth SIG, may be incompatible with your phone.

Setting up the Bluetooth feature

The **Bluetooth** menu provides the following options:

- Activation:** activate or deactivate the Bluetooth feature.
- My devices:** search for connectable Bluetooth devices.
- My phone's visibility:** allow other Bluetooth devices to locate your phone, or hide your visibility.

- My phone's name:** assign a Bluetooth device name to your phone, which is then displayed on other devices.
- Secure mode:** determine if the phone asks for your confirmation when other devices access your data.
- Bluetooth services:** display available Bluetooth services.





Searching for and pairing with a Bluetooth device

- From the **Bluetooth** menu, select **My devices**.

- Select **Search for new devices**.

After searching, a list of devices to which you can connect displays. The following icons indicate the type of device:

-  : Mobile phone
-  : Stereo headset
-  : Mono headset/Hands-free car kit

-  : Printer
-  : PDA
-  : Computer
-  : Unknown device

The colour of the icon indicates the status of the device:

- Grey for unpaired devices
- Blue for paired devices
- Orange for devices that are currently connected to your phone

3. Select a device.
4. Enter a Bluetooth PIN and press < **OK** >. This code is used just once and you do not need to memorise it.
When the owner of the other device enters the same code, pairing is complete.

- Some devices, especially headsets or hands-free car kits, may have a fixed Bluetooth PIN, such as **0000**. If the other device has a code, you must enter it.

Using device options

From the device list, press < **Options** > to access the following options:

- **Connect**: connect to a headset or hands-free car kit.
- **Disconnect**: end the connection with the connected device.
- **Browse files**: search for data from the device and import data directly to your phone.
- **Service list**: access the Bluetooth service list of the device.
- **Rename**: rename the paired device.
- **Authorise device/Unauthorised device**: determine whether or not the phone asks you to permit connection when other devices try to connect to your phone.
- **Delete**: remove the selected device or all devices from the list.

Menu functions

Security (Menu 9.7)

Use this menu to protect the phone against unauthorised use by managing the several access codes of your phone and SIM card.

If you enter an incorrect PIN/PIN2 three times, the SIM card is blocked. To unblock it, you need to enter your PUK/PUK2 (Personal Unblocking Key). The codes are supplied by your service provider.

PIN check (Menu 9.7.1)

The 4- to 8-digit PIN (Personal Identification Number) protects your SIM card against unauthorised use. When this feature is enabled, the phone requires your PIN each time it is switched on.

Change PIN code (Menu 9.7.2)

Use this menu to change your PIN. The PIN check feature must be enabled to change the PIN.

Phone lock (Menu 9.7.3)

Use this menu to lock the phone, and keep it safe from unauthorised use. When this feature is enabled, you must enter a 4- to 8-digit phone password each time the phone is switched on.

The password is preset to **00000000**. To change the password, use the **Change password** menu.

Change password (Menu 9.7.4)

Use this menu to change your phone password.

Privacy (Menu 9.7.5)

Use this menu to lock access to messages, files, or all menu functions on the phone, except for call functions. When a privacy option is enabled, you must enter the phone password to access the locked items or functions.

SIM lock (Menu 9.7.6)

This menu allows your phone to work only with the current SIM card by assigning a SIM lock password. You must enter the password to use a different SIM card.

Fixed dialling mode (Menu 9.7.7)

If supported by your SIM card, FDN (Fixed Dialling Number) mode restricts your outgoing calls to a limited set of phone numbers. When this feature is enabled, you can make calls only to phone numbers stored on the SIM card.

Change PIN2 code (Menu 9.7.8)

If supported by your SIM card, use this menu to change your current PIN2.

Mobile tracker (Menu 9.7.9)

When someone tries to use your phone with another SIM card, the phone will automatically send the preset tracking message to your family or friends. You can check the phone number from which the messages are sent and then track your phone. This feature is useful when the phone is stolen or lost.

- Sending of the tracking message will be billed to the user of the unauthorised SIM card. To use your phone with any other SIM card, you must first deactivate the mobile tracking feature.

1. Enter the phone password and press < **OK**>.
2. Specify the following options:

Menu functions

- **Mobile tracker:** activate the Mobile tracker feature.
 - **Recipients:** specify phone numbers to which you want to send the tracking messages.
 - **Sender:** enter the sender's name.
 - **Message:** check the preset tracking message text.
3. When you have finished, press < **Save**>.
 4. Press < **Accept**> if you agree to the terms and conditions of service listed on the screen.

Connection settings *(Menu 9.8)*

Use this menu to create and customise the profiles containing the settings for connecting your phone to the network. You need these settings to use the web browser or send MMS messages.

Your phone is set up by default for connecting to the network. If you change the settings without first checking with your service provider, the web browser and MMS features may not work properly.

Creating a profile

1. Press < **New**>. If a profile has previously been saved, press < **Options**> and select **Add new connection**.
2. Set profile parameters:
 - **Profile name:** enter a profile name.
 - **Homepage URL:** enter the URL address of the page to be used as your homepage.
 - **Proxy:** activate or deactivate the proxy server.
 - **IP address:** enter the IP address of the proxy server.

- **Port:** enter the port number of the proxy server.
- **Linger time:** set a time period after which the network is disconnected if there has been no new data traffic in that time.
- **DNS:** activate or deactivate the DNS (Domain Name Server) addresses.
- **DNS 1 and DNS 2:** enter the primary and secondary DNS addresses.
- **Bearer:** select the network bearer type.
- **Advanced settings:** change the advanced options. Depending on the bearer setting, available options vary.

When the bearer is set to GPRS:

APN: enter the access point name.

Login ID: enter the login ID.

Password: enter the login password.

When the bearer is set to GSM:

Dial number: enter the PPP phone number.

Login ID: enter the login ID.

Password: enter the login password.

Data call type: select a call type for data transmission.

3. Press < **Save** > to save the profile.

Using profile options

Press < **Options** > to access the following options:

- **Edit:** edit the selected profile.
- **Delete:** delete the profile.
- **Add new connection:** add a new profile.

Reset settings *(Menu 9.9)*

Use this menu to reset the phone's settings you have changed.

1. Press [**OK/↵**] to select the setting categories to be reset.

Menu functions

2. Press < **Reset**>.
3. Press < **OK**> to confirm the reset.
4. Enter the phone password and press < **OK**>.

The password is preset to **00000000**. You can change this password. ▶ p. 96

Solve problems

Help and personal needs

To save the time and expense of an unnecessary service call, perform the simple checks in this section before contacting a service professional.

When you switch on your phone, the following messages may appear:

"Insert SIM card"

- Be sure 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.

"PIN lock"

- You are using your phone for the first time. You must enter the PIN supplied with the SIM card.
- The PIN locking 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.

"PUK lock"

- The PIN code was entered incorrectly three times, and the SIM card is now blocked. Enter the PUK supplied by your service provider.


"No service" or "Service unavailable" displays

- The network connection has been lost. You may be in a weak signal area. Move and try again.


Solve problems

- You are trying to access an option for which you have no subscription with your service provider. Contact the service provider for further details.

You have entered a number but it was not dialled

- Be sure that you have pressed [].
- Be sure that you have accessed the right cellular network.
- Be sure that you have not set an outgoing call barring option.

Your correspondent cannot reach you

- Be sure that your phone is switched on. ([] pressed for more than one second.)
- Be sure that you have accessed the right cellular network.
- Be sure that you have not set an incoming call barring option.




Your correspondent cannot hear you speaking

- Be sure that the mouthpiece is switched on.
- Be sure that you are holding the phone close enough to your mouth. The microphone is located at the bottom of the phone.

The phone starts beeping and “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 dialed when you re-call a Phonebook entry

- Use the **Contact list** feature to ensure the number has been stored correctly.
- Re-store the number, if necessary.

The battery does not charge properly or the phone sometimes turns itself off

- Wipe the charging contacts both on the phone and on the battery with a clean soft cloth.

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

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

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

Health and safety information

Exposure to Radio Frequency (RF) Signals

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on the safety standards that were developed by independent scientific organizations through periodic and through evaluation of scientific studies.

Health and safety information

The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless phones employs a unit of measurement known as Specific Absorption Rate (SAR). The SAR limit recommended by the FCC is 1.6W/kg.¹

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

1. 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.

locations (e.g., at the ear and worn on the body) as required by the FCC for each model. While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of <http://www.fcc.gov/oet/fccid> after searching on FCC ID printed in the label on the phone.

For body operation

For body worn operation, this model phone has been tested and meets the FCC RF exposure guidelines when used with a Samsung-supplied or approved accessory designated for this product or when used with an accessory that contains no metal and that positions the handset a minimum from the body.

The minimum distance for this model phone is written in the FCC certification information from the body. None compliance with the above conditions may violate FCC RF exposure guidelines.

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

Health and safety information

Federal Communications Commission (FCC)

<http://www.fcc.gov>

Cellular Telecommunications Industry
Association (CTIA):

<http://www.wow-com.com>

U.S. Food and Drug Administration (FDA)

<http://www.fda.gov/cdrh/consumer>

World Health Organization (WHO)

<http://www.who.int/peh-emf/en>

Precautions when using batteries

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

shorter than normal, it is time to buy a new battery.

- If left unused, a fully charged battery will discharge itself over time.
- Use only Samsung-approved batteries and recharge your battery only with Samsung-approved chargers. When a charger is not in use, disconnect it from the power source. Do not leave the battery connected to a charger for more than a week, since overcharging may shorten its life.
- Extreme temperatures will affect the charging capacity of your battery: it may require cooling or warming first.
- Do not leave the battery in hot or cold places, such as in a car in summer or

winter conditions, as you will reduce the capacity and lifetime of the battery.

Always try to keep the battery at room temperature. A phone with a hot or cold battery may temporarily not work, even when the battery is fully charged. Li-ion batteries are particularly affected by temperatures below 0 °C (32 °F).

- Do not short-circuit the battery. Accidental short-circuiting can occur when a metallic object (coin, clip or pen) causes a direct connection between the + and – terminals of the battery (metal strips on the battery), for example when you carry a spare battery in a pocket or bag. Short-circuiting the terminals may damage the battery or the object causing the short-circuiting.

Health and safety information

- Dispose used batteries in accordance with local regulations. Always recycle. Do not dispose batteries in a fire.

Road safety

Your wireless phone gives you the powerful ability to communicate by voice, almost anywhere, anytime. But an important responsibility accompanies the benefits of wireless phones, one that every user must uphold.

When driving a car, driving is your first responsibility. When using your wireless phone behind the wheel of a car, practice good common sense and remember the following tips:

- Get to know your wireless phone and its features, such as speed dial and redial. If available, these features help you to place your call without taking your attention off the road.
- When available, use a hands-free device. If possible, add an extra layer of convenience and safety to your wireless phone with one of the many hands-free accessories available today.
- Position your wireless phone within easy reach. Be able to access your wireless phone without removing your eyes from the road. If you get an incoming call at an inconvenient time, let your voice mail answer it for you.

- Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow, ice, and even heavy traffic can be hazardous.
- Do not take notes or look up phone numbers while driving. Jotting down a To Do list or flipping through your Address Book takes your attention away from your primary responsibility, driving safely.
- Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan calls when your car will be stationary. If you need to make a call while moving, dial only a few numbers, check the road and your mirrors, then continue.
- Do not engage in stressful or emotional conversations that may be distracting. Make the people with whom you are talking aware that you are driving and suspend conversations that have the potential to divert your attention from the road.
- Use your wireless phone to call for help. Dial the emergency number in the case of fire, traffic accident or medical emergencies. Remember, it is a free call on your wireless phone!
- Use your wireless phone to help others in emergencies. If you see a car accident, crime in progress or other serious emergency where lives are in danger, call the emergency number, as you would want others to do for you.

Health and safety information

- 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.

Health and safety information

Vehicles

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

Posted facilities

Switch 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 refueling point (service station). Users are reminded of the need to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants or where blasting operations are in progress.

Areas with a potentially explosive atmosphere are often but not always clearly marked. They include the areas below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), areas where the air contains chemicals or particles, such as grain, dust or metal powders, and any other area where you would normally be advised to turn off your vehicle engine.

Emergency calls

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

Remember, to make or receive any calls the phone must be switched on and in a service area with adequate signal strength. Emergency calls may not be possible on all wireless phone networks or when certain network services and/or phone features are in use. Check with local service providers.

To make an emergency call:

If the phone is not on, switch it on.

1. Key in the emergency number for your present location (for example, 911 or other official emergency number).
Emergency numbers vary by location.
2. Press [TALK].

Health and safety information

If certain features are in use (call barring, for example), you may first need to deactivate those features before you can make an emergency call. Consult this document and your local cellular service provider.

When making an emergency call, remember to give all the necessary information as accurately as possible. Remember that your phone may be the only means of communication at the scene of an accident; do not end the call until given permission to do so.

Other important safety information

- Only qualified personnel should service the phone or install the phone in a vehicle. Faulty installation or service may

be dangerous and may invalidate any warranty applicable to the device.

- Check regularly that all wireless phone equipment in your vehicle is mounted and operating properly.
- Do not store or carry flammable liquids, gases, or explosive materials in the same compartment as the phone, its parts or accessories.
- For vehicles equipped with an air bag, remember that an air bag inflates with great force. Do not place objects, including both installed or portable wireless equipment in the area over the air bag or in the air bag deployment area. If wireless equipment is improperly installed and the air bag inflates, serious injury could result.

- Switch off your phone before boarding an aircraft. The use of wireless phones in aircraft is illegal and may be dangerous to the aircraft's operation.
- Failure to observe these instructions may lead to the suspension or denial of telephone services to the offender, or legal action, or both.

Care and maintenance

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

- Keep the phone and all its parts and accessories out of the reach of small children's.
- Keep the phone dry. Precipitation, humidity and liquids contain minerals that will corrode electronic circuits.
- Do not use the phone with a wet hand. Doing so may cause an electric shock to you or damage to the phone.
- Do not use or store the phone in dusty, dirty areas, as its moving parts may be damaged.
- Do not store the phone in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not store the phone in cold areas. When the phone warms up to its normal operating temperature, moisture can form inside the phone, which may

Health and safety information

damage the phone's electronic circuit boards.

- Do not drop, knock or shake the phone. Rough handling can break internal circuit boards.
 - Do not use harsh chemicals, cleaning solvents or strong detergents to clean the phone. Wipe it with a soft cloth slightly dampened in a mild soap-and-water solution.
 - Do not paint the phone. Paint can clog the device's moving parts and prevent proper operation.
 - Do not put the phone in or on heating devices, such as a microwave oven, a stove or a radiator. The phone may explode when overheated.
- Use only the supplied or an approved replacement antenna. Unauthorized antennas or modified accessories may damage the phone and violate regulations governing radio devices.
 - If the phone, battery, charger or any accessory is not working properly, take it to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

Acknowledging Special Precautions and the FCC and Industry Canada Notice

FCC Notice

- 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.
- 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.

Health and safety information

- 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.

The phone may cause TV or radio interference if used in close proximity to receiving equipment. The FCC can require you to stop using the phone if such interference cannot be eliminated. Vehicles using liquefied petroleum gas (such as propane or butane) must comply with the National Fire Protection Standard (NFPA-58). For a copy of this standard, contact the National Fire Protection Association, One Battery March Park, Quincy, MA 02269, Attn: Publication Sales Division.

Cautions

Changes or modifications made in the radio phone, not expressly approved by Samsung, will void the user's authority to operate the equipment.

Only use approved batteries, antennas and chargers. The use of any unauthorized accessories may be dangerous and void the phone warranty if said accessories cause damage or a defect to the phone.

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

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

Health and safety information

use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

Before a new model phone is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model.

The highest SAR values of this model phone
- GSM850 Head: 1.07W/kg, Body-worn: 0.360 W/kg.

- GSM1900 Head: 0.828 W/kg, Body-worn: 0.290W/kg

Body-worn operations are restricted to Samsung-supplied, approved or none Samsung designated accessories that have no metal and must provide at least 1.5cm separation between the device, including its antenna whether extended or retracted, and the user's body. None compliance to the above restrictions may violate FCC RF exposure guidelines.

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 A3LSGHE576. ¹

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

1. 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.

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

Health and safety information

while driving a motor vehicle whether on the phone or not.

The basic lessons are ones we all learned as teenagers. Driving requires alertness, caution and courtesy. It requires a heavy dose of basic common sense-keep your head up, keep your eyes on the road, check your mirrors frequently and watch out for other drivers.

It requires obeying all traffic signs and signals and staying within the speed limit. It means using seat belts and requiring other passengers to do the same.

But with wireless phone use, driving safely means a little more. This brochure is a call to wireless phone users everywhere to make safety their first priority when behind the wheel of a car. Wireless telecommunications is keeping us in touch, simplifying our lives,

protecting us in emergencies and providing opportunities to help others in need. When it comes to the use of wireless phones, safety is your most important call.

Wireless Phone "Safety Tips"

Below are safety tips to follow while driving and using a wireless phone which should be easy to remember:

1. Get to know your wireless phone and its features such as speed dial and redial. Carefully read your instruction manual and learn to take advantage of valuable features most phones offer, including automatic redial and memory. Also, work to memorize the phone keypad so you can use the speed dial function without taking your attention off the road.

2. When available, use a hands free device. A number of hands free wireless phone accessories are readily available today. Whether you choose an installed mounted device for your wireless phone or a speaker phone accessory, take advantage of these devices if available to you.
3. Position your wireless phone within easy reach. Make sure you place your wireless phone within easy reach and where you can grab it without removing your eyes from the road. If you get an incoming call at an inconvenient time, if possible, let your voice mail answer it for you.
4. Suspend conversations during hazardous driving conditions or situations. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow and ice can be hazardous, but so is heavy traffic. As a driver, your first responsibility is to pay attention to the road.
5. Do not take notes or look up phone numbers while driving. If you are reading an address book or business card, or writing a "to do" list while driving a car, you are not watching where you are going. It's common sense. Don't get caught in a dangerous situation because you are reading or writing and not paying attention to the road or nearby vehicles.
6. Dial sensibly and assess the traffic; if possible, place calls when you are not

Health and safety information

moving or before pulling into traffic. Try to plan your calls before you begin your trip or attempt to coincide your calls with times you may be stopped at a stop sign, red light or otherwise stationary. But if you need to dial while driving, follow this simple tip-dial only a few numbers, check the road and your mirrors, then continue.

7. Do not engage in stressful or emotional conversations that may be distracting. Stressful or emotional conversations and driving do not mix-they are distracting and even dangerous when you are behind the wheel of a car. Make people you are talking with aware you are driving and if necessary, suspend conversations which have the potential to divert your attention from the road.
8. Use your wireless phone to call for help. Your wireless phone is one of the greatest tools you can own to protect yourself and your family in dangerous situations-with your phone at your side, help is only three numbers away. Dial 9-1-1 or other local emergency number in the case of fire, traffic accident, road hazard or medical emergency. Remember, it is a free call on your wireless phone!
9. Use your wireless phone to help others in emergencies. Your wireless phone provides you a perfect opportunity to be a "Good Samaritan" in your community. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.

10. Call roadside assistance or a special wireless non emergency assistance number when necessary. Certain situations you encounter while driving may require attention, but are not urgent enough to merit a call for emergency services. But you still can use your wireless phone to lend a hand. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured or a vehicle you know to be stolen, call roadside assistance or other special non-emergency wireless number.

Careless, distracted individuals and people driving irresponsibly represent a hazard to everyone on the road. Since 1984, the

Cellular Telecommunications Industry Association and the wireless industry have conducted educational outreach to inform wireless phone users of their responsibilities as safe drivers and good citizens. As we approach a new century, more and more of us will take advantage of the benefits of wireless telephones.

And, as we take to the roads, we all have a responsibility to drive safely.

“The wireless industry reminds you to use your phone safely when driving.”

Cellular Telecommunications & Internet Association For more information, please call 1-888-901-SAFE.

For updates: <http://www.wow-com.com/consumer/issues/driving/articles.cfm?ID=85>

Appendix C: Consumer Update on Wireless Phones

U.S. Food and Drug Administration

- 1.** What kinds of phones are the subject of this update?

The term wireless phone refers here to hand-held wireless phones with built-in antennas, often called cell, mobile, or PCS phones. These types of wireless phones can expose the user to measurable radio frequency energy (RF) because of the short distance between the phone and the user's head. These RF exposures are limited by Federal Communications Commission safety guidelines that were developed with the advice of FDA and other federal health and safety agencies. When the phone is located

at greater distances from the user, the exposure to RF is drastically lower because a person's RF exposure decreases rapidly with increasing distance from the source. The so-called "cordless phones," which have a base unit connected to the telephone wiring in a house, typically operate at far lower power levels, and thus produce RF exposures well within the FCC's compliance limits.

- 2.** Do wireless phones pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless phones. There is no proof, however, that wireless phones are absolutely safe. Wireless phones emit low levels of radio frequency energy (RF) in the microwave range while being used. They

also emit very low levels of RF when in the stand-by mode. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low level RF that does not produce heating effects causes no known adverse health effects. Many studies of low level RF exposures have not found any biological effects. Some studies have suggested that some biological effects may occur, but such findings have not been confirmed by additional research. In some cases, other researchers have had difficulty in reproducing those studies, or in determining the reasons for inconsistent results.

3. What is FDA's role concerning the safety of wireless phones?

Under the law, FDA does not review the safety of radiation emitting consumer products such as wireless phones before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless phones are shown to emit radio frequency energy (RF) at a level that is hazardous to the user. In such a case, FDA could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace or recall the phones so that the hazard no longer exists.

Although the existing scientific data do not justify FDA regulatory actions, FDA has

Health and safety information

urged the wireless phone industry to take a number of steps, including the following:

- Support needed research into possible biological effects of RF of the type emitted by wireless phones;
- Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and
- Cooperate in providing users of wireless phones with the best possible information on possible effects of wireless phone use on human health

FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of RF safety to ensure coordinated efforts at the

federal level. The following agencies belong to this working group:

- National Institute for Occupational Safety and Health
- Environmental Protection Agency Federal Communications Commission
- Occupational Safety and Health Administration
- National Telecommunications and Information Administration
- The National Institutes of Health participates in some interagency working group activities, as well. FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply

with FCC safety guidelines that limit RF exposure. FCC relies on FDA and other health agencies for safety questions about wireless phones.

FCC also regulates the base stations that the wireless phone networks rely upon. While these base stations operate at higher power than do the wireless phones themselves, the RF exposures that people get from these base stations are typically thousands of times lower than those they can get from wireless phones. Base stations are thus not the primary subject of the safety questions discussed in this document.

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

FDA is working with the U.S. National Toxicology Program and with groups of investigators around the world to ensure that high priority animal studies are conducted to address important questions about the effects of exposure to radio frequency energy (RF).

FDA has been a leading participant in the World Health Organization International Electromagnetic Fields (EMF) Project since its inception in 1996. An influential result of this work has been the development of a detailed agenda of research needs that has driven the establishment of new research programs around the world. The Project has also helped develop a series of public information documents on EMF issues.

Health and safety information

FDA and the Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative Research and Development Agreement (CRADA) to do research on wireless phone safety. FDA provides the scientific oversight, obtaining input from experts in government, industry, and academic organizations. CTIA-funded research is conducted through contracts to independent investigators. The initial research will include both laboratory studies and studies of wireless phone users. The CRADA will also include a broad assessment of additional research needs in the context of the latest research developments around the world.

5. What steps can I take to reduce my exposure to radio frequency energy from my wireless phone?

If there is a risk from these products—and at this point we do not know that there is—it is probably very small. But if you are concerned about avoiding even potential risks, you can take a few simple steps to minimize your exposure to radio frequency energy (RF). Since time is a key factor in how much exposure a person receives, reducing the amount of time spent using a wireless phone will reduce RF exposure.

If you must conduct extended conversations by wireless phone every day, you could place more distance between your body and the source of the RF, since the exposure level drops off dramatically with distance. For

example, you could use a headset and carry the wireless phone away from your body or use a wireless phone connected to a remote antenna

Again, the scientific data do not demonstrate that wireless phones are harmful. But if you are concerned about the RF exposure from these products, you can use measures like those described above to reduce your RF exposure from wireless phone use.

6. What about children using wireless phones?

The scientific evidence does not show a danger to users of wireless phones, including children and teenagers. If you want to take steps to lower exposure to radio frequency energy (RF), the measures described above would apply to children and

teenagers using wireless phones. Reducing the time of wireless phone use and increasing the distance between the user and the RF source will reduce RF exposure.

Some groups sponsored by other national governments have advised that children be discouraged from using wireless phones at all. For example, the government in the United Kingdom distributed leaflets containing such a recommendation in December 2000. They noted that no evidence exists that using a wireless phone causes brain tumors or other ill effects. Their recommendation to limit wireless phone use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists.

Health and safety information

7. Do hands-free kits for wireless phones reduce risks from exposure to RF emissions?

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that hands-free kits reduce risks. Hands-free kits can be used with wireless phones for convenience and comfort. These systems reduce the absorption of RF energy in the head because the phone, which is the source of the RF emissions, will not be placed against the head. On the other hand, if the phone is mounted against the waist or other part of the body during use, then that part of the body will absorb more RF energy. Wireless phones marketed in the U.S. are required to meet safety requirements

regardless of whether they are used against the head or against the body. Either configuration should result in compliance with the safety limit.

8. Do wireless phone accessories that claim to shield the head from RF radiation work?

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that accessories that claim to shield the head from those emissions reduce risks. Some products that claim to shield the user from RF absorption use special phone cases, while others involve nothing more than a metallic accessory attached to the phone. Studies have shown that these products generally do not work as advertised. Unlike "hand-free"

kits, these so-called “shields” may interfere with proper operation of the phone. The phone may be forced to boost its power to compensate, leading to an increase in RF absorption. In February 2002, the Federal Trade Commission (FTC) charged two companies that sold devices that claimed to protect wireless phone users from radiation with making false and unsubstantiated claims. According to FTC, these defendants lacked a reasonable basis to substantiate their claim.

9. What about wireless phone interference with medical equipment?

Radio frequency energy (RF) from wireless phones can interact with some electronic devices. For this reason, FDA helped develop a detailed test method to measure

electromagnetic interference (EMI) of implanted cardiac pacemakers and defibrillators from wireless telephones. This test method is now part of a standard sponsored by the Association for the Advancement of Medical Instrumentation (AAMI). The final draft, a joint effort by FDA, medical device manufacturers, and many other groups, was completed in late 2000. This standard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from wireless phone EMI.

FDA has tested hearing aids for interference from handheld wireless phones and helped develop a voluntary standard sponsored by the Institute of Electrical and Electronic Engineers (IEEE). This standard specifies

Health and safety information

test methods and performance requirements for hearing aids and wireless phones so that no interference occurs when a person uses a compatible phone and a compatible hearing aid at the same time. This standard was approved by the IEEE in 2000.

FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occur, FDA will conduct testing to assess the interference and work to resolve the problem.

10. What are the results of the research done already?

The research done thus far has produced conflicting results, and many studies have suffered from flaws in their research methods. Animal experiments investigating

the effects of radio frequency energy (RF) exposures characteristic of wireless phones have yielded conflicting results that often cannot be repeated in other laboratories. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. However, many of the studies that showed increased tumor development used animals that had been genetically engineered or treated with cancer causing chemicals so as to be pre-disposed to develop cancer in the absence of RF exposure. Other studies exposed the animals to RF for up to 22 hours per day. These conditions are not similar to the conditions under which people use wireless phones, so we don't know with certainty

what the results of such studies mean for human health.

Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, glioma, meningioma, or acoustic neuroma, tumors of the brain or salivary gland, leukemia, or other cancers. None of the studies demonstrated the existence of any harmful health effects from wireless phone RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of phone use in these studies was around three years.

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

A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the data that are needed. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer promoting effect if one exists. Epidemiological studies can provide data that is directly applicable to human populations, but 10 or more years follow-up may be needed to provide answers about some health effects, such as cancer. This is because the interval between the time of exposure to a cancer-causing agent and the

Health and safety information

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>