* 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 (EU). 09/2006. Rev. 1.0

Draft_1st
2006. 09. 20
Version: KE480.01

SGH-E480
User’s Guide

Important safety precautions

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

Drive safely at all times

Do not use a hand-held phone while driving. Park the 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 the ear). Avoid unnecessary contact with the antenna when the phone is switched on.

Emergency call

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 123.

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**>

- **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 using your phone as a music player.

- **FM radio**
  Listen to your favourite radio stations anytime, anywhere.

- **Digital data printing**
  Print images, messages, and other personal data directly from your phone.

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

- **Offline mode**
  Switch your phone to use its none-wireless functions in an airplane.

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

- **Multimedia Message Service (MMS)**
  Send and receive MMS messages with a combination of text, image, video, and audio.

- **E-mail**
  Send and receive e-mails with image, video, and audio attachments.

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

- **Voice recorder**
  Record memos or sounds.

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

Install and charge the phone 7
Power on or off 9
Keys and display 10
Access menu functions 13
Customise your phone 14
Make/Answer calls 16

Step outside the phone **17**

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

Use the camera 17
Play music 18
Listen to the FM radio 20
Browse the web 20
Use Phonebook 21
Send messages 23
View messages 24
Send an SOS message 25
Use Bluetooth 26
Use a memory card 28

Enter text **30**

ABC, T9, Number, and Symbol modes

Call functions **33**

Advanced calling features

Menu functions **38**

All menu options listed

Solve problems **121**

Help and personal needs

Health and safety information **124**

Index **142**

Overview of menu functions

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

1 Call log p.38

1 Recent contacts p.38
2 Missed calls p.39
3 Dialled calls p.39
4 Received calls p.39
5 Delete all p.39
6 Call time p.39
7 Call costs[1] p.40

2 Phonebook p.40

1 Contact list p.41
2 FDN contacts* p.42
3 Create contact p.42
4 Group p.43
5 Speed dial p.44
6 My namecard p.45
7 Own number p.46
8 Management p.46
9 Service number[1] p.46

3 Applications p.47

1 Music Player p.47
2 Voice recorder p.50
3 Image editor p.51

3 Applications (continued)

4 FM radio p.52
5 Bluetooth p.54
6 Java world p.57
7 SIM-AT[1] p.58

4 Browser p.58

1 Home p.58
2 Bookmarks p.60
3 Enter URL p.60
4 Clear cache p.60
5 Profile settings p.60
6 Current profile p.62

5 Messages p.62

1 Create new message p.62
2 My messages p.67
3 Templates p.73
4 Delete all p.74
5 Settings p.74
6 SOS messages p.81
7 Broadcast messages p.82
8 Memory status p.82

6 My files p.83

1 Images p.83
2 Videos p.85
3 Music p.86
4 Sounds p.86
5 Other files p.87
6 Memory card[2] p.88
7 Memory status p.88

7 Planner p.89

1 Alarm p.89
2 Calendar p.90
3 Memo p.94
4 World clock p.95
5 Calculator p.96
6 Converter p.97
7 Timer p.97
8 Stopwatch p.98

8 Camera p.98

1 Take photo p.98
2 Record video p.102
3 Go to My photos p.106
4 Go to My video clips p.106

9 Settings p.106

1 Time and date p.106
2 Phone settings p.107
3 Display settings p.110
4 Sound settings p.112
5 Light settings p.114
6 Network services p.114
7 Security p.117
8 Memory status p.119
9 Reset settings p.119
10 Key management p.119
11 VOD settings[3] p.120

1. Shows only if supported by your SIM card.
2. Shows only if a memory card is inserted into the phone.
3. Shows only if supported by your service provider.

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

Get started

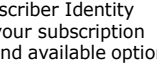
First steps to operating your phone

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.

Install and charge the phone

1 Remove the battery cover.



☑ If the phone is already on, first turn it off by pressing and holding [ ].

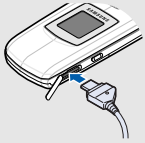
2 Insert the SIM card.

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

3 Install the battery.

4 Reattach the cover.

5 Plug the travel adapter into the phone.



6 Plug the adapter into a standard AC wall outlet.

7 When the phone is completely charged (the battery icon becomes still), unplug the adapter from the wall outlet.

8 Remove the adapter from the phone.

Low battery indicator

When the battery is low:

- a warning tone sounds,
- the battery low message displays, and
- the empty battery icon ▭ blinks.

If the battery level becomes too low, the phone automatically turns off. Recharge your battery.

Power on or off

Switch on Do not turn 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 connections 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 and 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 display

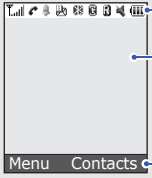
Keys

	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 ▶ p. 107 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 numbers recently dialled, 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. In Idle mode, press and hold [**1**] to access your voicemail. Press and hold [**0**] to enter an international call prefix.

*, #	Enter special characters. In Idle mode, press and hold [#] to activate or deactivate Silent mode. Press and hold [*] to enter a pause between numbers.
▲ ▼	Adjust the phone volume. In Idle mode, with the phone open, adjust the key tone volume.
📷	In Idle mode, access the **Camera** menu. Press and hold to turn on the camera. In Camera mode, take a photo or record a video.

Display

Layout



Icons
display various icons.

Text and graphics
display messages, instructions, and information you enter.

Soft key function indicators
show the current functions assigned to the soft keys.

Icons[1]

- Received signal strength
- Call in progress
- Out of your service area; you cannot make or receive calls
- Alarm set ▶ p. 89
- SOS message feature active ▶ p. 81

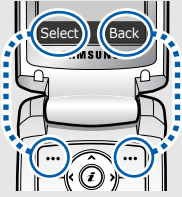
- New text message
- New voicemail
- New multimedia message
- New e-mail
- Call diverting feature active ▶ p. 114
- Bluetooth active ▶ p. 54
- Bluetooth headset or hands-free car kit connected ▶ p. 55
- GPRS network
- Transferring data in GPRS network
- EDGE network
- Transferring data in EDGE network
- Home Zone, if registered for the appropriate service
- Office Zone, if registered for the appropriate service
- Browsing Internet ▶ p. 58
- Memory card inserted ▶ p. 29
- Silent mode (Vibration)
- Silent mode (Mute)
- Ringer type ▶ p. 112
  - None: Melody
  - : Vibration
  - : Melody and vibration
  - : Melody then vibration
  - : Vibration then melody
- Battery power level

1. Depending on your country or service provider, the icons shown on the display may vary.

Access menu functions

Use the soft keys

The roles of the soft keys vary depending on the function you are using. The bottom line of the display indicates their current role.



Press the left soft key to select the highlighted option.

Press the right soft key to return to the previous menu level.

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 [*i*] to confirm the function displayed or option highlighted.
4. To exit, choose either of the following methods:
   - Press <**Back**> to move up one level.
   - Press [☎] to return to Idle mode.

Use shortcuts

Press the number key corresponding to the option you want.

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** → **Ring tone**.
2. Press [Left] or [Right] to access a ringtone category.
3. Press [Up] or [Down] to select a ringtone.
4. Press <**Save**>.

Idle mode wallpaper

You can set wallpaper for the idle screen on the main display.

1. In Idle mode, press <**Menu**> and select **Settings** → **Display settings** → **Wallpaper** → **Main display** → **Main display**.
2. Select an image category.
3. Select an image.
4. 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 [Left], [Right], or [Down] 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 mode

You can set up a menu for your own favourite menu items.

To set a My menu item:

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.

To access a My menu item:

1. In Idle mode, press [Up].
2. Scroll to an item.
3. Press [*i*].

Silent mode

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

Press and hold [#] in Idle mode.

Phone lock

You can protect the phone against unauthorised use with a phone password. The phone will require the password on power-up.

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/Answer calls

Make a call

1. 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 [▲/▼].

Step outside the phone

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

Use the camera

Take a photo

1. In Idle mode, press and hold [ ] to turn on the camera.
2. Aim the lens at the subject and make any desired adjustments.
3. Press [*i*] or [ ] to take a photo. The photo is saved automatically.
4. Press <**Back**> to take another photo.

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 [ ] to turn on the camera.
2. Press [**1**] to switch to Record mode.
3. Press [ ] to start recording.
4. Press [ ], [ ], or < > to stop recording. The video is saved automatically.
5. Press < > to record another video.

Play a video

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

Play music

Copy music files to the phone

Use these methods:

- Download from the wireless web ▶ p. 58
- Download from a computer using the optional Samsung PC Studio ▶ Samsung PC Studio User's Guide

- Receive via Bluetooth
  ▶ p. 56
- Copy to a memory card and insert it into the phone
  ▶ p. 28

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 [*i*] to select the files you want and press <**Add**>.

Play music files

1. From the music player screen, press [*i*].
2. During playback, use the following keys:
   - *i* : pauses or resumes playback.
   - Up: opens the current play list.
   - Left: returns to the previous file. Moves backward in a file when held down.
   - Right: skips to the next file. Skips forward in a file when held down.
   - ▲/▼ : adjusts the volume.
3. Press [Down] to stop playback.

Listen to the FM radio

Listen to the radio

1. Plug the connecter of the supplied headset into the jack on the right side of the phone.
2. In Idle mode, press <**Menu**> and select **Applications** → **FM radio**.
3. Press [*i*] to turn on the radio.
4. Press [Left] or [Right] to find available radio stations.
5. To turn off the radio, press [*i*] or disconnect the headset from the phone.

Store radio stations

1. From the station list, press <**Options**> and select **Add**.
2. Enter the title of the station and the frequency of the station and press <**Save**>.
3. Select a location in which you want to store the station.

Browse the web

Using a 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 [*i*] or press <**Menu**> and select **Browser** → **Home**.

Navigate the web

- To scroll through browser items, press [Up] or [Down].
- To select an item, press <✓> or [*i*].
- To return to the previous page, press <**Back**> or [**C**].
- To return to the homepage, press and hold [**C**].
- To access browser options, select or press [*].
- To access other phone menus, press [#].

Use Phonebook

Add a contact

To the phone's memory:

1. In Idle mode, enter a phone number and press <**Save**>.
2. Select **Phone** → **New** → a number type.
3. Specify contact information: First name, Last name, Mobile, Home, Office, Fax, Other, Email, Graphic ID, Ringtone, Group, and Notes.
4. Press <**Options**> and select **Save**, or press <**Save**> to save the contact.

Add a contact (continued)

To the SIM card:

1. In Idle mode, enter a phone number and press <**Save**>.
2. Select **SIM** → **New**.
3. Enter a name.
4. Press <**Options**> and select **Save**, or 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.
3. Select a contact.
4. Scroll to a number and press [ ] to dial, or press [*i*] to edit contact information.

Create and send a name card

1. In Idle mode, press <**Menu**> and select **Phonebook** → **My namecard**.
2. Specify your contact information.
3. Press [*i*] 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 new message** → **Text message**.
2. Enter the message text and press [*i*].
3. Enter destination numbers.
4. Press [*i*] to send the message.

Send a multimedia message (MMS)

1. In Idle mode, press <**Menu**> and select **Messages** → **Create new message** → **Multimedia message**.
2. Select **Subject**.
3. Enter the message subject and press [*i*].
4. Select **Image or video** or **Music or sound**.
5. Select **Add image** or **Add video** and add an image or a video clip.

   Alternatively, select **Add music** or **Add sound** and add a music file or a sound clip.
6. Select **Text**.
7. Enter the message text and press [*i*].
8. Press <**Options**> and select **Send**.
9. Enter destination numbers or addresses.
10. Press [*i*] to send the message.

Send an e-mail

1. In Idle mode, press <**Menu**> and select **Messages** → **Create new message** → **Email**.
2. Select **Subject**.
3. Enter the message subject and press [*i*].
4. Select **Message**.
5. Enter the e-mail text and press [*i*].
6. Select **File attach**.
7. Add image, video, sound, music files, or document files.
8. Press <**Options**> and select **Send**.
9. Enter e-mail addresses.
10. Press [*i*] to send the e-mail.

View messages

View a text message

When a notification appears:

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 a notification appears:

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 MMS message ( ).

View an e-mail

1. In Idle mode, press <**Menu**> and select **Messages** → **My messages** → **Email inbox**.
2. Select **Check new mail**.
3. Select an e-mail or a header.
4. If you selected a header, press <**Options**> and select **Retrieve** to view the body of the e-mail.

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** from the **Sending SOS** line.

Set up SOS message options (continued)

3. Select **Recipients**.
4. Enter the phone numbers to which you want to send the SOS message and press [i].
5. Press <**Options**> and select **Save**.
6. Press <**Yes**> to send a notification to the registered numbers.

Send the SOS message

In Idle mode, with the phone closed, press [▲/▼] 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 **Applications** → **Bluetooth** → **Activation** → **On**.
2. Select **My phone's visibility** → **On** to allow other devices to find your phone.

Search for and pair with a Bluetooth device

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

Send data

1. Access an application, **Phonebook**, **My files**, **Calendar**, or **Memo**.
2. Select the item you want to send.
3. Press <**Options**> and select **Send via** → **Bluetooth**.
4. For Phonebook, select which data you want to send.
5. Select a device.
6. If necessary, enter the Bluetooth PIN and press <**OK**>.

Receive data

To receive data via Bluetooth, your phone's Bluetooth feature must be active.

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 an optional microSD memory card to increase your phone's memory capacity.

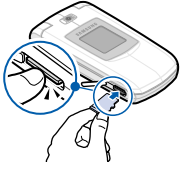
Important memory card information

- Frequent erasing and writing will shorten a card's lifespan.
- Do not 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 subject cards to strong shocks.
- 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 electro-static discharge and/or electrical noise.

Insert a memory card

1. Slide 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. Slide the card out of the slot.

Use a card adapter

Using a card adapter and a USB card reader/writer, you can read the card on a PC.

1. Insert a memory card into a card adapter, and then the adapter into a card reader/writer.
2. Plug the USB connector of the card reader/writer into the USB port on your PC.
3. Access the appropriate memory disk and copy to and from the card.

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

The text input mode indicator displays when the cursor is in a text field.

- Press and hold [∗] to switch between T9 (T9EAb) and ABC (Abc) modes.
- Press [∗] to change case or to switch to Number mode (123).
- Press and hold [#] to switch to Symbol mode (SYM).

Using ABC mode

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

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

(Creating an SMS message with GSM-alphabet encoding)

Other ABC mode operations

- 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.
- 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 key in 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.

   For example, press [**4**], [**3**], [**5**], [**5**], and [**6**] to enter *Hello* in T9 mode.

   T9 predicts the word that 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.

   For example, *Of* and *Me* use [**6**] and [**3**].
4. Press [#] to insert a space and enter the next word.

Other T9 mode operations

- Press [**1**] to enter periods or apostrophes automatically.
- 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 that you want to add.
2. Press [**0**] to display alternative words for your key presses. When there are no more alternative words, **Spell** displays on the bottom line.
3. Press <**Spell**>.
4. Enter the word you want using ABC mode and press <**Add**>.

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 symbols	[**C**].
insert the symbols	<**OK**>.

Call functions

Advanced calling features

Making a call

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

   - Press [**C**] to clear the last digit or press and hold [**C**] to clear the whole display.
   - 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 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. 40

You can also use the speed dial feature to assign your most frequently dialled numbers to specific number keys. ▶ p. 44

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

1. In Idle mode, enter the location number for the phone number you want and press [#].
2. Scroll through other numbers, if necessary.
3. Press <**Dial**> or [ ] to dial the number you want.

Answering a call

When you receive a call, the phone rings and displays the incoming call image.

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

Tips for answering a call

- When **Anykey answer** is active, you can press any key to answer a call, except for <**Reject**> and [ ]. ▶ p. 110
- When **Active flip** is active, you can simply open the phone. ▶ p. 110
- Press <**Reject**> or [ ] to reject a call.
- Press and hold [▲/▼] to reject a call or mute the ringer, depending on the **Volume key** setting. ▶ p. 109

Viewing missed calls

If you have missed calls, the screen displays 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.

Using the headset

Use the headset to make or answer calls without holding the phone.

Connect the headset to the jack on the left side of the phone. The button on the headset works as follows:

To	Press
redial the last call	the button and then press and hold it again.
answer a call	the button and hold.
end a call	the button and hold.

Options during a call

You can access a number of functions during a call.

Adjusting the volume during a call

Use [▲/▼] to adjust the earpiece volume during a call.

Press [▲] to increase the volume level and [▼] to decrease the volume level.

Placing a call on hold/Retrieving

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

Making a second call

You can make another 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 an incoming call while already on the phone, if your network supports this function and you have activated the call waiting feature. ▶ p. 116

1. Press [ ] to answer the call. The first call is automatically put on hold.
2. Press <**Swap**> to switch between the calls.

Using the speakerphone feature

Use the speakerphone feature to talk and listen with the phone a short distance away.

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

Using In-call options

Press <**Options**> to access the following options during a call:

- **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. 55
- **Voice clarity on**/**Voice clarity off**: remove extraneous noise and increase call quality so that the person with whom you are speaking can hear you clearly even if you are in a noisy place.

  ☑ If you are using the speakerphone feature, you must first deactivate it in order to use the voice clarity feature.

- **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.
- **Mute**/**Unmute**: switch off the phone's microphone so that the other person on the phone cannot hear you, or switch it back on.

- **Mute keys/Send keys**: switch the key tones on or off.

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

- **Phonebook**: access the contact list.
- **Send DTMF**: send the DTMF (Dual tone multi-frequency) tones as a group. The DTMF tones are the tones used in phones for tone dialling, sounding when you press the number keys. This option is helpful for entering a password or an account number when you call an automated system, like a banking service.
- **Message**: read an incoming message and send a new message. ▶ p. 62
- **Join**: set up a multi-party call by adding a caller on hold to a currently active call. You can include up to five people on a multi-party call.
- **Split**: 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.
- **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.
- **Remove**: disconnect the selected participant.
- **End held call**: disconnect the call currently on hold.
- **SIM service**: access special services, such as news, weather forecasts, entertainment, and location services, provided by your SIM card. This option is available when you use a SIM card supporting SIM AT menus.

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 the 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 log

1. Press [Left] or [Right] to move to another call type.
2. Press [Up] or [Down] to scroll through the call list.
3. Press [ ] to dial a number, or press [*i*] to view the details of a call.

Using call log options

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

- **Details**: access the call details.
- **Call**: make a call to the number.
- **Add to Phonebook**: save the number in Phonebook.
- **Send message**: send an SMS or MMS message.
- **Delete**: delete the selected call log or all call logs.
- **Reject list**: specify numbers from which you do not want to accept calls.
- **Add to reject list**: add the number to the Reject list.

- **View contact details**: access contact information, if the caller is saved in Phonebook.

Missed calls *(Menu 1.2)*

This menu displays the most recent received calls that 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 logs in each call type.

1. Press [*i*] 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 log for calls made and received. The actual time invoiced by your service provider will vary.

- **Last call time**: check the length of your last call.
- **Total sent**: check the total length of all the calls you have dialled.
- **Total received**: check the total length of all the calls you have received.

- **Reset timers**: reset the call timers. You need to enter the phone password.

  ☑ The password is preset to **00000000**. You can change this password. ▶ p. 118

Call costs *(Menu 1.7)*

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

- **Last call cost**: check the cost of your last call.
- **Total cost**: check the total cost of all your calls. If the total cost exceeds the maximum cost set in **Set max cost**, you must reset the counter before you can make another call.
- **Max cost**: check the maximum cost limit set in **Set max cost**.
- **Reset counters**: reset the cost counters.
- **Set max cost**: set the maximum cost authorised for your calls.
- **Price/Unit**: set the price per unit that is applied when the cost of your calls is calculated.

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 contacts in Phonebook.

> ☑ You can quickly access this menu by pressing <**Contacts**> in Idle mode.

Finding a contact

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

Using Phonebook options

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

- **Edit**: edit contact information.
- **Send message**: send an SMS or MMS message to the selected number, or send an MMS message or e-mail to the selected e-mail address.
- **Copy**: copy the number to the phone's memory, to the SIM card, or to the FDN list.
- **Copy to phone**: copy the e-mail address with the name to a new contact.
- **Send via**: send the contact via SMS, MMS, e-mail, or Bluetooth.
- **Delete**: delete the selected contact.
- **Mark as default number**: set the selected number as the default for the contact.
- **Print via Bluetooth**: print the contact information by connecting the phone to a printer via Bluetooth.

> ☑ Some printers may not be compatible with the phone.

FDN contacts *(Menu 2.2)*

Use this menu to create a list of contacts to be used in FDN (Fixed Dialling Number) mode, in which the phone allows outgoing calls only to the specified phone numbers, if your SIM card supports this feature.

> ☑ You can activate FDN mode in the FDN mode menu. ▶ p. 118

Adding a contact

1. Press <**Options**> and select **Add**.
2. Enter your PIN2 and press <**OK**>.
3. Enter information about the contact:
   - **Name**: assign a name.
   - **Phone number**: add a number.
   - **Location**: assign a location number.
4. Press <**Save**> to save the contact.

Using contact options

From the FDN list, you can access the same contact options as in Phonebook by pressing <**Options**>.

Create contact *(Menu 2.3)*

Use this menu to add a new contact to Phonebook.

Storing a contact to the phone's memory

1. Select **Phone**.
2. Change the settings or enter information about the contact:
   - **First name**/**Last name**: assign a name.
   - **Mobile**/**Home**/**Office**/**Fax**/**Other**: add a number in any category.
     You can change the number type by pressing <**Options**> and selecting **Change type**.

- **Email**: assign an e-mail address.

  ☑ You can set domain name extensions and retrieve one by pressing <**Options**> and selecting **Common address**.

- **Graphic ID**: assign a caller ID image to alert you to a call from the person.
- **Ringtone**: assign a ringtone to alert you to a call from the person.

  ☑ The settings specified in **Graphic ID** and **Ringtone** are given priority over group settings.

- **Group**: assign the number to a caller group.
- **Notes**: add a memo about the person.

3. Press <**Options**> and select **Save**, or press <**Save**> to save the contact.

Storing a contact on the SIM card

1. Select **SIM**.
2. Enter information about the contact.
   - **Name**: assign a name
   - **Phone number**: add a number.
   - **Location**: assign a location number.

   ☑ To assign a caller ID image, ringtone, or group, the contact must be saved to the phone's memory.

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

Group *(Menu 2.4)*

Use this menu to organise your contacts in caller groups.

Adding members to a caller group

1. Select a group.

2. Press <**Add**>.
3. Press [*i*] to select the contacts you want.
4. Press <**Add**>.

Managing caller groups

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

- **View**: display the members of the selected group.
- **Add**: add a new group.
- **Edit**: change the properties of the selected group.
- **Send message**: send an SMS, MMS, or e-mail to the members you want.
- **Delete**: delete the selected group. Group members, however, will not be deleted from Phonebook.

Speed dial *(Menu 2.5)*

Use this menu to assign speed dial numbers (2 to 9) for 8 of your most frequently dialled numbers.

Assigning speed dial numbers

1. Scroll to a key location from **2** to **9**. Key **1** is reserved for your voicemail server.
2. Press <**Options**> and select **Add** → **Contact** or **FDN contact**.
3. Select a contact from the list.
4. 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. You can select a contact from Phonebook or the FDN list.

- **View**: check the name and number assigned to the key.
- **Change**: assign a different 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 2.6)*

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 number in the phone's memory. ▶ p. 42

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, e-mail, or Bluetooth.
- **Exchange namecard**: exchange the name card with another person via Bluetooth.
- **Remove**: delete the name card.
- **Print via Bluetooth**: print the name card by connecting the phone to a printer via Bluetooth.

☑ Some printers may not be compatible with the phone.

Own number *(Menu 2.7)*

Use this feature 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 2.8)*

Use this menu to manage Phonebook.

- **Save new contacts 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**: copy all of the contacts stored on the SIM card to the phone's memory, or vice versa.
- **List by**: sort your contacts by the first name or last name.
- **Delete all**: delete all of the contacts from your phone's memory, your SIM card, the FDN list, or all of them.
- **Memory status**: display the number of contacts you have stored in Phonebook.

Service number *(Menu 2.9)*

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

1. Scroll to the number you want.
2. Press <**Dial**> or [ ].

Applications *(Menu 3)*

Use this menu to play Java applications, play music files, or edit photos. You can also use the Bluetooth feature.

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

Music Player *(Menu 3.1)*

Use this menu to enjoy music. First, you need to save music files in your phone's memory. To enjoy high quality music, you can use an optional Bluetooth stereo headset.

☑ Normal headsets and Bluetooth mono headsets are not compatible with the music player.

Downloading or receiving music files

You can play *.mp3, *.aac, *.aac+, and *.m4a files.

Use the following methods to save music files to your phone:

- Download from the wireless web ▶ p. 58
- Download from a computer using the optional Samsung PC Studio programme ▶ Samsung PC Studio User's Guide
- Receive via an active Bluetooth connection ▶ p. 56
- Copy to a memory card and insert it into the phone ▶ p. 28

Creating a play list

Add the music files to the play list so you can play them.

1. From the music player screen, press <**Options**> and select **Add music from** → a memory location.
2. Press [*i*] to select the files you want and press <**Add**>.

Playing music files

1. From the music player screen, press <**Options**> and select **Play via**.
2. Select **Phone** to use the phone speaker. Select **Bluetooth stereo headset** to use a Bluetooth stereo headset, and then search for and connect the phone to the headset.

During playback, use the following keys:

Key	Function
i	Pauses or resumes playback.
Left	Returns to the previous file. Moves backward in a file when held down.
Right	Skips to the next file. Skips forward in a file when held down.
Up	Opens the current play list.
Down	Stops playback.
▲/▼	Adjusts the volume.
1	Changes the repeat mode. (: Off, : Repeat one, : Repeat all)
2	Changes the playback animation.
3	Sets the music player to play tracks in random order.

Using music player options

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

- **Play via**: play the selected file via the phone speaker or a Bluetooth stereo headset.
- **Play**/**Pause**: begin or pause playback.

- **Transfer to Bluetooth stereo headset**/ **Transfer to phone**: switch the sound output to a Bluetooth headset or the phone speaker.
- **Open playlist**: access the current play list or all play lists.
- **Remove from playlist**: remove the selected file from the play list.
- **Send via**: send the file via MMS, e-mail or Bluetooth.
- **Set as**: set the file as your ringtone, as a ringtone for a Phonebook entry, or as a ringtone for alarms.
- **Settings**: change the default settings for playing music files.

  Repeat mode: select a repeat mode.

  Shuffle: set the music player to play tracks in random order.

  Visualisation: change the playback animation.

  Volume: select a volume level.
- **Details**: access the file properties.
- **Activate key**: get a new licence key when the key for the selected DRM file expires.
- **Reactivate key**: get another licence key even when the key for the selected DRM file has not expired.
- **Key management**: manage the licence keys you have acquired.
- **Shortcuts**: view the functions of the keys you can use during playback.

Accessing the play list

From the music player screen, press [Up].

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

- **Play via**: play the selected file via the phone speaker or a Bluetooth stereo headset.
- **Add music from**: add files to the play list.

- **Move track in playlist**: move the selected file to the position you want within the play list.
- **Go to all playlists**: access all play lists.
- **Move to**: move the selected file to another play list.
- **Copy to**: copy the selected file to another play list.
- **Remove**: remove the selected file or all files from the play list.

Voice recorder *(Menu 3.2)*

Use this menu to record voice memos. A voice memo can be up to one hour long.

Recording a voice memo

1. Press [*i*] to start recording.
2. Speak into the microphone.
   Press [*i*] to pause or resume the recording.
3. When you have finished, press <**Save**> or [Down]. The voice memo is automatically saved.
4. Press [*i*] to review the voice memo, or press [Up] to record additional memos.

Playing a voice memo

1. From the Voice recorder screen, press <**Options**> and select **Go to My voice clips**.
2. Select a voice memo. The memo plays.

During playback, use the following keys:

Key	Function
i	Pauses or resumes playback.
Left	Moves backward in a memo.
Right	Skips forward in a memo.

Key	Function
▲/▼	Adjusts the volume.
Down	Stops playback.

Using voice recorder options

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

- **Record**: record a new voice memo.
- **Go to My voice clips**: access the voice memo list.
- **Settings**: customise the default settings for the voice recorder:

  Recording time: select a recording time.

  Volume: select a volume level.

  Default name: change the default prefix of file names.

  Visualisation: change the playback animation.

Image editor *(Menu 3.3)*

Use this menu to edit your photos using an assortment of editing tools.

Applying an effect

1. Press <**Options**> and select **New image** → **Open** or **Take photo**.
2. Select a photo or take a new photo.
3. Press <**Load**>, or press <**Options**> and select **Load**.
4. Press <**Options**> and select **Effects** → an effect option.
5. Press <**Done**>.
6. Press <**Options**> and select **Save as**.
7. Press <**Yes**>.
8. Enter a new file name and press [*i*].

Adding visual features

You can decorate photos by adding a frame, or an image.

1. Select a photo or take a new photo.
2. Press <**Load**>, or press <**Options**> and select **Load**.
3. Press <**Options**> and select **Insert** → a feature type.
   - **Frame**: add a decorative frame.
   - **Clip Art**: add an image clip.
   - **Emoticon**: add an emoticon.
4. Select an item.
5. Press <**Select**> to add the item to the photo.
6. Adjust the position of the inserted item and press <**Done**>.
7. Press <**Options**> and select **Save as**.
8. Press <**Yes**>.
9. Enter a new file name and press [*i*].

FM radio *(Menu 3.4)*

Use this menu to listen to music or news via the FM radio on your phone.

Turning on and listening to the radio

First, you must connect your phone with the headset, which serves as a radio antenna.

1. Plug the connecter of the supplied headset into the jack on the right side of the phone.
2. From the radio screen, press [*i*].
3. Press [Left] or [Right] to find the radio station you want.

   You can also press and hold [Left] or [Right] to scan through available radio stations.
4. To exit the FM Radio menu without turning off the radio, press [ ].

   This enables you to access other functions while listening to the radio.

Turning off the radio

From the radio screen, press [*i*], or disconnect the headset from the phone.

Setting up a radio station list

You can store your favourite radio stations to quickly access them.

1. Connect the headset to the phone and turn on the radio.
2. Press <**Options**> and select **Add**.
3. Enter a title for the station you want and the frequency of the station, and press <**Save**>.
4. Select a location in which you want to store the station.
5. Repeat from step 2 to store other stations.

To listen to your stored stations, press [Up] or [Down] from the radio screen.

Using radio options

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

- **FM radio off**/**FM radio on**: turn the radio off or on.
- **Add**: store a radio station.
- **Edit**: edit the title or frequency for a saved radio station.
- **Self-tuning**: let the phone automatically scan through and save available radio stations.
- **Remove**: remove the selected station or all stations.
- **Pop-up alert**: set the phone to alert you to listen to the radio at a specified time. When the pop-up notification appears on the screen, press <**Listen**> to turn on the specified radio station.

- **Speaker on**/**Earphone on**: change sound output to the phone speaker or headset.
- **Settings**: select the radio volume.

Bluetooth *(Menu 3.5)*

Using Bluetooth wireless, 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 metres. Since the devices communicate using radio waves, they do not need to be in line of sight to each other.

- If there are obstacles between the devices, the maximum operating distance may be reduced.
- It is recommended that you do not use the Bluetooth feature while using multimedia features, such as voice recorder, camera, and music player, or vice versa, for better performance.
- Some devices, especially those that are not tested or approved by 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 connect to your phone.

- **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

1. From the **Bluetooth** menu, select **My devices**.
2. Select **Search new device**.
   After searching, a list of devices to which you can connect displays. The following icons indicate the kind of device:
   - Stereo headset
   - Mobile phone
   - Computer
   - PDA
   - Unknown device
   - Printer
   - Mono headset/Hands-free car kit

   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 finished.

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

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**/**Unauthorise 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.

Sending data via Bluetooth

1. Activate the Bluetooth feature.
2. Select the application in which the item you want to send is stored.
3. Scroll to the item you want and press <**Options**>.
4. Select **Send via** → **Bluetooth**.
5. For a Phonebook entry, select which data you want to send.

   The phone searches for devices within range and displays a list of available devices.
6. Select a device.
7. If necessary, enter the Bluetooth PIN needed for pairing and press <**OK**>.

Receiving data via Bluetooth

To receive data via Bluetooth, your phone's Bluetooth feature must be active and its visibility must be enabled.

If an unauthorised Bluetooth device sends data to your phone, the phone displays a confirmation message. To receive data, press <**Yes**>.

Java world *(Menu 3.6)*

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

Playing a game

Select a game from the game list and follow the onscreen instructions. The procedure may differ from game to game.

Using Java application options

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

- **Start**: launch the selected application.
- **Delete**: delete the selected application.
- **Details**: access the application properties.
- **Permission**: set permission settings for services charging you additional costs, such as network access and SMS.
- **Lock**/**Unlock**: lock the application to protect it from being deleted, or unlock the application.
- **Upgrade**: upgrade the application to the latest version, except for embedded games.
- **Send information via text message**: send the URL address containing the application via SMS, except for embedded games.
- **Memory status**: access memory information for applications.
- **Network settings**: customise a connection profile to be used for applications requiring network access. The following options are available:

  APN: enter the access point name of the network gateway.

Login ID: enter the user ID.

Password: enter the password.

Proxy: select whether or not the phone uses a proxy server to launch the web browser.

Proxy settings: customise the following proxy settings:

*When the proxy is set to **Enable**:*

- **IP address**: enter the gateway address.
- **Port**: enter the port number.

*When the proxy is set to **Disable**:*

- **DNS1**: enter the primary address.
- **DNS2**: enter the secondary address.

SIM-AT *(Menu 3.7)*

This menu is available if you use a SIM-AT 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's plans.

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

Browser *(Menu 4)*

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

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

Home *(Menu 4.1)*

Use this menu to connect your phone to the network and load the homepage of the wireless web service provider. You can also press [*i*] in Idle mode.

Navigating the web browser

To	Press
scroll through browser items	[Up] or [Down].
select a browser item	<✓> or [*i*].
return to the previous page	<**Back**> or [**C**].
return to the homepage	and hold [**C**].

Using browser options

1. Select or press [*].
2. Select one of the following browser options:
   - **Back**: go back to the previous page.
   - **Home**: go back to the homepage.
   - **Exit**: exit the web browser.
   - **Reload**: reload the current page.
   - **Show URL**: display the URL address of the current web page.
   - **About ...**: access version and copyright information about the browser.

Accessing other phone menus

From any web page, press [#] to access the following options:

- **Enter URL**: enter a URL address manually.
- **Bookmarks**: switch to the **Bookmarks** menu.
- **Messages**: check the messages stored in the **My messages** folder. You can also create and send a new SMS message.
- **My files**: switch to the **My files** menu.

Exiting the browser

Press [⏻] to end the network connection and exit the browser.

Bookmarks *(Menu 4.2)*

Use this menu to save URL addresses in order to quickly access web pages, or access the preset bookmarks.

Adding a bookmark

1. Select an empty location.
2. Enter a title for the bookmark and press [Down].
3. Enter a URL address and press [*i*].

Accessing a bookmarked page

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

Using bookmark options

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

- **Open**: access the website.
- **Edit**: edit the address and name of the bookmark.
- **Delete**: delete the currently selected bookmark or all bookmarks.

Enter URL *(Menu 4.3)*

Use this menu to manually enter the URL address of a website and access the website.

Clear cache *(Menu 4.4)*

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

Profile settings *(Menu 4.5)*

Use this menu to set up servers for the web browser. Contact your service provider for details about your setting options.

For each server, the following options are available:

- **Profile name**: assign a name to the server profile.
- **Home URL**: enter the address of your homepage.
- **Bearer**: select a bearer for each type of network address accessed.
- **Proxy**: select whether or not the phone uses a proxy server to launch the web browser.
- **GPRS settings**: customise the GPRS network settings:

  *When the proxy is set to **Enable**:*

  Proxy IP: enter the web gateway address.

  Proxy port: enter the port number.

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

  Login ID: enter the user ID.

  Password: enter the password.

  *When the proxy is set to **Disable**:*

  DNS1: enter the primary address.

  DNS2: enter the secondary address.

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

  Login ID: enter the user ID.

  Password: enter the password.
- **GSM settings**: customise the following GSM network settings:

  *When the proxy is set to **Enable**:*

  Proxy IP: enter the web gateway address.

  Proxy port: enter the port number.

  Dial number: enter the PPP server phone number.

  Login ID: enter the user ID.

  Password: enter the password.

  Data call type: select a data call type.

  *When the proxy is set to **Disable**:*

  DNS1: enter the primary address.

DNS2: enter the secondary address.
Dial number: enter the PPP server phone number.
Login ID: enter the user ID.
Password: enter the password.
Data call type: select a data call type.

Current profile *(Menu 4.6)*

Use this menu to activate one of the proxy servers you have set up.

Messages *(Menu 5)*

Use the **Messages** menu to send and receive short messages, multimedia messages, and e-mails. You can also access push messages and cell broadcast messages.

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

Create new message *(Menu 5.1)*

Use this menu to create and send text messages, multimedia messages, or e-mails.

Text message *(Menu 5.1.1)*

Short Message Service (SMS) allows you to send or receive text messages including pictures, audio clips, and animated images.

Creating and sending an SMS message

1. Enter your message and press [*i*].

- 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 [*i*] 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**: save the message in **Sentbox** and then send it.
- **Insert**: add a text template, Phonebook entry, or bookmark.
- **Add picture**/**Add animation**/**Add melody**: attach a simple image, an animated image, or a melody.
- **Attach**: add a name card or calendar data as a data format attachment.
- **Save in**: save the message in another message folder.
- **Input language**: change the language to be used in T9 input mode.
- **Text style**: change the text attributes.

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 e-mail.

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 [*i*].
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 **Music or sound** line.
6. Select **Add musi**c or **Add sound** and add a music file or a sound clip.
7. Select the **Text** line.
8. Enter the message text and press [*i*].
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 [*i*] to send the message.

Using options while composing an MMS message

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

- **Add**: add the message subject or message text.
- **Add image**/**Add video**/**Add music**/**Add sound**: add media files stored in the phone's memory.
- **Change image**/**Change video**/**Change music**/**Change sound**: replace an item.
- **Edit**: edit the subject or text.
- **Preview**: view the message as it will be shown on the recipient's phone.
- **View**: open the selected attachment.

Attached files from the **Other files** folder cannot be open in your 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 forward or backward among the other pages.
- **Attach**: attach a Phonebook entry as a name card or calender data as a data format attachment, or a document file stored in the **Other files** folder.
- **Remove subject**/**Remove text**/**Remove media**/**Remove**: remove an added item.

Email *(Menu 5.1.3)*

You can create and send e-mails that include text, audio, and images. To use this feature, you need to subscribe to an e-mail service and set up your e-mail account and profile.

▶ p. 79, p. 80

Creating and sending an e-mail

1. Select the **Subject** line.

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

2. Enter the subject of your e-mail and press [*i*].
3. Select the **Message** line.
4. Enter the e-mail text and press [*i*].
5. Select the **File attach** line.
6. Add media files, document files stored in the **Other files** folder, or Phonebook entries as name cards or calender data as data format attachments.

   ☑ Depending on the file type or DRM (Digital Rights Management) system, some files may not be able to be forwarded.

7. When you have finished, press <**Options**> and select **Send**.

8. Enter an e-mail address.
   To send the e-mail to more than one recipient, fill in additional destination fields.
9. Press [*i*] to send the e-mail.

Using options while composing an e-mail

While composing an e-mail, press <**Options**> to access the following options:

- **Add**: add the subject of your e-mail or e-mail text.
- **Edit**: edit the subject or text.
- **Add image**/**Add videos**/**Add sounds**/**Add music**: add media files stored in the phone's memory.
- **Add other file**: add document files stored in the **Other files** folder.
- **Add from memory card**: add files stored on a memory card.
- **View**/**Play**: open the selected attachment.

  ☑ Attached files from the **Other files** folder cannot be open in your phone.
- **Send**: send the e-mail.
- **Save in**: save the e-mail in another message folder.
- **Attach**: attach Phonebook entries as name cards or calender data as data format attachments.
- **Remove subject**/**Remove message**: clear the subject or text.
- **Remove all attachments**: delete all attachments.
- **Remove**: delete the selected attachment or all attachments.

My messages *(Menu 5.2)*

Use this menu to access messages you have received, sent, or which have failed in sending.

Inbox *(Menu 5.2.1)*

This folder stores all of the messages you have received, except for e-mails.

Viewing a message

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

- SMS
- MMS
- MMS notification (: Being retrieved, : Failed to be retrieved)
- Voicemail
- Push message from web servers
- Configuration message, containing network parameters from your service provider
- Delivery report for your sent messages

A **!** icon next to a message means that the message is of high priority. A grey-coloured message icon indicates low priority.

Using message options

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

SMS messages

- **Reply via**: send a reply to the sender via SMS or 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.
- **Add to block list**: add the sender's number to the Block list to reject the messages from the sender.
- **Cut address**: extract URL addresses, e-mail addresses, or phone numbers from the message.
- **Attached items**: save media contents from the message to your phone's memory.
- **Print via Bluetooth**: print the message by connecting the phone to a printer via Bluetooth.

  ☑ Some printers may not be compatible with the phone.

- **Lock**/**Unlock**: lock the message to protect it from being deleted, or unlock the message.

MMS messages

- **Retrieve**: retrieve the MMS message from the server.
- **Reply via text message**: send a reply to the sender via SMS.
- **Reply via multimedia message to**: send a reply via MMS to the sender or all recipients.
- **Forward**: forward the message to other people.
- **Delete**: delete the message or all messages.
- **Add to block list**: add the sender's number to the Block list to reject the messages from the sender.
- **Cut address**: extract URL addresses, e-mail addresses, or phone numbers from the message.
- **Attached items**: save media contents from the message to your phone's memory.

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

Push messages

- **Open URL**: connect to the URL address specified in the message.
- **Delete**: delete the message.
- **Cut address**: extract URL addresses, e-mail addresses, or phone numbers from the message.

Configuration messages

- **Install**: apply the configuration value in the message to the phone.
- **Cut address**: extract URL addresses, e-mail addresses, or phone numbers from the message.
- **Delete**: delete the message.
- **Lock**/**Unlock**: lock the message to protect it from being deleted, or unlock the message.

Draft *(Menu 5.2.2)*

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

When you select an SMS or e-mail message, it opens in Edit mode so that you can edit and/or send the message.

When you select an MMS message, it opens in Preview mode as would a message from the Inbox. To edit the MMS message, press <**Options**> and select **Edit**.

Outbox *(Menu 5.2.3)*

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

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

- **View**/**Play**: open the selected attachment.
- **Register**: save the attached name cards and calendar items to the phone.

- **Save to My files**: save the selected attachment.
- **Send again**: retry sending the message.
- **Edit**: edit the message and then send it.
- **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.
- **Print via Bluetooth**: print the message by connecting the phone to a printer via Bluetooth.

  ☑ Some printers may not be compatible with the phone.

- **Lock**/**Unlock**: lock the message to protect 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 successfully.

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

- **View**/**Play**: open the selected attachment.
- **Register**: save the attached name cards and calendar items to the phone.
- **Save to My files**: save the selected attachment.
- **Forward**: forward the message to other people.
- **Delete**: delete the selected message.
- **Move to phone**/**Move to SIM**: move the message between the SIM card and the phone's memory.
- **Print via Bluetooth**: print the message by connecting the phone to a printer via Bluetooth.

> ☑ Some printers may not be compatible with the phone.

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

Email inbox *(Menu 5.2.5)*

This folder stores e-mails that you have received.

Viewing an e-mail

1. Press <**Select**> when **Check new mail** displays. The phone checks the e-mail server and downloads new e-mails.

   The following icons may appear on the list to show the e-mail status:
   - Retrieved from the server
   - Being retrieved
   - Failed to be retrieved

> ☑ A ! icon next to a message means that the e-mail is of high priority. A grey-coloured e-mail icon indicates low priority.

2. Select an e-mail or a header.
3. Press [▲/▼] to view other pages in the e-mail.

   Press and hold [▲/▼] to move to the first or last page in the e-mail.
4. Press [*] or [#] to view the next or previous e-mail.

Using e-mail options

While viewing the e-mail or header, press <**Options**> to access the following options:

- **Retrieve**: retrieve the body of the e-mail from the e-mail server.
- **View**/**Play**: open the selected attachment.
- **Register**: save the attached name cards and calendar items to the phone.

- **Save to My files**: save the selected attachment.
- **Replay**: send a replay to the sender via MMS or e-mail
- **Reply to all**: send a reply to the sender and all of the other recipients.
- **Forward**: forward the e-mail to other people.
- **Delete**: delete the e-mail from the phone's memory or from both the phone's memory and the e-mail server.
- **Add to block list**: add the sender's e-mail address or subject to the Block list to reject e-mails from that address or containing that subject.
- **Cut address**: extract URL addresses, e-mail addresses, and phone numbers.
- **Attached items**: save the selected attachment or all attachments from the e-mail to your phone's memory.
- **Print via Bluetooth**: print the e-mail by connecting the phone to a printer via Bluetooth.

  ☑ Some printers may not be compatible with the phone.

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

My folder *(Menu 5.2.6)*

Use this menu to view the messages you have moved to this folder using the **Move to my folder** option while viewing a message list.

Templates *(Menu 5.3)*

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

Text template *(Menu 5.3.1)*

You can create SMS templates with the sentences you use frequently so that you can retrieve and insert them when composing an SMS message or passages.

Creating a template

1. Select an empty location.
2. Enter a message and press [*i*].

Using template options

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

- **Edit**: edit the template.
- **Send**: create and send a new message via SMS, MMS, or e-mail using the selected template.
- **Delete**: delete the selected template.

Multimedia message templates *(Menu 5.3.2)*

You can access embedded MMS templates or ones you have saved so that you can use them in composing an MMS message.

Creating a template

1. Press <**Options**> and select **Add new**.
2. Create a template as you would when creating an MMS message.
3. Press <**Options**> and select **Save in** → **Templates**.

Using template options

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

- **View**: open the selected template.
- **Send**: send the selected template.
- **Edit**: edit the selected template.
- **Add new**: add a new template.
- **Delete**: delete the selected template or all templates. You cannot delete the embedded templates.

Delete all *(Menu 5.4)*

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

1. Press [*i*] to select the message folders to be cleared.
2. Press <**Delete**>.
3. Press <**Yes**> to confirm the deletion.

Settings *(Menu 5.5)*

Use this menu to set up for using the messaging service.

Text messages *(Menu 5.5.1)*

You can configure default SMS settings.

- **Sending options**: set up the options for sending SMS messages:

  Reply path: allow recipients to reply to you through your SMS server.

  Request delivery receipt: set the network to inform you when messages have been delivered.

  Character support: select a character encoding type. When you select **Auto**, the phone switches the encoding type from GSM-alphabet to Unicode if you enter an Unicode character. Use of Unicode encoding will reduce the maximum number of characters in a message to about half.

If this menu is not shown, your phone provides the automatic character encoding by default.

Validity period: set the length of time your messages are stored in the SMS server.

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

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

- **Block number**: store the phone numbers from which you want to reject SMS messages.

Multimedia messages *(Menu 5.5.2)*

You can configure default MMS settings.

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

  Request delivery receipt: set the network to inform you when your messages have been delivered.

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

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

  Priority: set the priority level of your messages.

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

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

- **Receiving options**: set up the options for receiving MMS messages:

  Anonymous reject: reject messages from unknown senders.

  Advert allowed: accept advertisements.

  Report allowed: set the network to inform the sender when a message has been delivered to you.

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

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

Reception within home network or abroad has the following options:

- **Automatic**: the phone automatically retrieves messages from the server.
- **Reject**: the phone rejects all messages.
- **Manual**: the phone displays notifications. Use the **Retrieve** option to manually download new messages.

- **Multimedia message profile**: set up an MMS profile and select a profile to be used.

  Current profile: select a profile.

  Profile settings: configure MMS profiles using different MMS servers:

  - **Profile name**: assign a name to the MMS profile.
  - **Server URL**: enter the address of your MMS server.
  - **Proxy**: connect to the GPRS network using the proxy server.
  - **GPRS settings**: customise the settings required for connecting to the GPRS network.

    *When the proxy is set to **Enable**:*

    IP address: enter the gateway address.

    Port: enter the port number.

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

    Login ID: enter the user ID.

    Password: enter the password.

    *When the proxy is set to **Disable**:*

    DNS1: enter the primary address.

    DNS2: enter the secondary address.

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

    Login ID: enter the user ID.

    Password: enter the password.

- **Version**: select an available OMA version and maximum size limit for sending or receiving messages.

> ☑ Depending on your service provider, it may not be possible to support the maximum limit 300 KB. In this case, try again after changing the setting to 100KB.

- **Block number**: specify phone numbers from which messages will not be accepted. Numbers specified here are also included in the SMS blocking list.
- **Message class**: select the type of message content you will add or the message size.

  Text only: you can add only text of up to 30 KB.

  Small imaging: you can add any type of items, except for video, of up to 30 KB.

  Moderate imaging: you can add any type of items, except for video of up to 100 KB.

  Small video: you can add any type of items of up to 100 KB.

  Moderate video: you can add any type of items of up to 300 KB.
- **Creation mode**: select an MMS creation mode.

  Warning: you can create a message with any type of content and of any size, but the phone will inform you when the content and size have exceeded the maximum.

  Free: you can create a message with any type of contents and of any size.

  Restricted: you can create a message with the type of content and size specified in **Message class**.

Emails *(Menu 5.5.3)*

You can configure default e-mails settings.

> ☑ You cannot change e-mail profile and account settings while an e-mail is being sent or retrieved.

- **Sending options**: set up the options for sending e-mails:

  Send copy to self: send a copy of your e-mail to your e-mail account.

  Request delivery receipt: set the network to inform you when e-mails have been delivered.

  Request read receipt: send a read-reply request along with your e-mails.

  Priority: select the priority level of your e-mails.

  Add signature: attach your name, phone number, or a simple memo to e-mails.

  Edit name: enter the name in your signature.

  Edit telephone number: enter the phone number in your signature.

  Edit note: enter the tag line in your signature.

- **Receiving options**: set up the options for receiving e-mails:

  Check interval: set how often the phone checks the e-mail server for downloading new e-mails. If you select **Not used**, use the **Check for new email** option to receive new e-mails manually.

  Send read receipt: determine whether or not the phone sends a read-reply for incoming e-mails. If you select **Announce**, the phone asks you to send a read-reply.

  Retrieve option: set whether the phone downloads e-mail headers only or e-mail headers and bodies both.

Delete option: determine whether e-mails are deleted immediately or the next time you connect to the server.

Keep in server: leave the copies of e-mails in the server after retrieving.

- **Email accounts**: set up an e-mail account and select an account to be used:

  Current account: select an account.

  Account settings: configure e-mail accounts using different e-mail servers. Press <**Create**>, or press <**Options**> and select **Create**, if one has already been saved.

  - **In use**: select this option to use the account and to display the account in **Email inbox**.
  - **Account name**: enter a name for the currently selected account.

  To access the following options, press <**Options**> and select **Next**, or press [*i*].

  - **User name**: enter a user name.
  - **Email address**: enter your e-mail address.
  - **Reply address**: enter your e-mil address to be used when the recipient sends a reply.

  To access the following options, press <**Options**> and select **Next**, or press [*i*].

  - **SMTP server**: enter the IP address or host name of the outgoing e-mail server.
  - **SMTP port**: enter the SMTP port number.
  - **SMTP user ID**: enter the SMTP user name.
  - **SMTP password**: enter the SMTP password.
  - **Retrieve server type**: select the protocol for the incoming e-mail server. The

remaining options depend on the protocol type setting.

*When the protocol type is **POP3**:*

- **POP3 server**: enter the IP address or host name of the server that receives your e-mail.
- **POP3 port**: enter the POP3 port number.
- **Same ID and password**: select if you want to have the same user ID and password with the outgoing e-mail server.
- **POP3 user ID**: enter the POP3 user name.
- **POP3 password**: enter the POP3 password.
- **APOP login**: connect to the server by using the APOP login scheme when this option is selected.

*When the protocol type is **IMAP4**:*

- **IMAP4 server**: enter the IP address or host name of the server that receives your e-mail.
- **IMAP4 port**: enter the IMAP4 port number.
- **Same ID and password**: select if you want to have the same user ID and password with the outgoing e-mail server.
- **IMAP4 user ID**: enter the IMAP4 user name.
- **IMAP4 password**: enter the IMAP4 password.
- **Include attachments**: select this option to receive attachments with e-mails.
- **Email retrieval limit**: set the number of headers you will retrieve from the server.

• **Email profiles**: set up an e-mail profile and select a profile to be used.

Current profile: select a profile.

Profile settings: configure e-mail profiles using different e-mail servers. Set the options for each profile:

- **Profile name**: enter a name for the e-mail profile.
- **APN**: enter the access point name used for the GPRS network address.
- **Login ID**: enter the user ID.
- **Password**: enter the password.
- **DNS1**: enter the primary address.
- **DNS2**: enter the secondary address.

- **Block list**: specify e-mail addresses or subjects you want to reject.

Push message *(Menu 5.5.4)*

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

- **Receive**: set how your phone receives push messages.
- **Service centre**: enter the address of the server from which you want to receive push messages.

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**: set up the options for sending an SOS message:

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

  Recipients: specify the phone numbers to which you want to send SOS messages.

  Repeat: set the number of times the phone resends the SOS messages.

  Message: enter the SOS message text you want.

- **Receiving options**: set an alert type for incoming SOS messages.

Broadcast messages *(Menu 5.7)*

The cell broadcast service delivers short messages on various topics such as the weather or traffic.

Use this menu to change the settings for the service and to access broadcast messages.

- **Read**: open received broadcast messages.

  The **Temporary** box saves broadcast messages until the phone is switched off. Press <**Options**> and select **Save** when a text notification appears to save to the **Archive** box.

  The **Archive** box saves broadcast messages indefinitely.
- **Activation**: select to receive broadcast messages, or not.
- **Receiving channels**: 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.

Memory status *(Menu 5.8)*

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

You can also access a message box by selecting it from this menu.

My files *(Menu 6)*

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

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

Tips for Digital Rights Management

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. You can acquire the key from the website which owns the rights to the content; use the **Activate key** option.

Note the following icons on the list:

- : Forwardable item with a valid key.
- : Forwardable item without a valid key.
- : Unforwardable item with a valid key.
- : Unforwardable item without a valid key.

Your service provider supports only count-based or unlimited-access DRM files.

Images *(Menu 6.1)*

This menu displays photos you have taken and images you have downloaded, received in messages, or imported from a computer.

Viewing an image

1. Select an image folder.
2. Select an image.

Viewing a slide show

You can view your images as a slide show, a sequential presentation of each image in the current folder.

1. Select an image folder.
2. Press <**Options**> and select **Slide show**.
3. Select a time interval. The slide show begins.
4. Press <**Back**> to stop the slide show.

Using image options

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

- **List**: return to the image list.
- **Full screen view**: open the image on a full screen.
- **Send via**: send the file via MMS, e-mail, or Bluetooth.
- **Set as**: set the image as your wallpaper for the display or as a caller ID image for a Phonebook entry.
- **Edit**: edit the image using the Image editor if it is a photo taken by the camera on the phone. ▶ p. 51
- **Move to**: move the file to another folder.
- **Copy to card**: copy the files to a memory card.
- **Delete**: delete the selected file.
- **Rename**: change the file name.
- **Slide show**: view all images as a slide show.
- **Bluetooth visibility**: share the file with other Bluetooth devices.
- **Print via**: print the image by connecting the phone to a printer via USB or Bluetooth.

  - To print via USB, you first need to set USB mode to **Pictbridge**. ▶ p. 109
  - Some printers may not be compatible with your phone.

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

- **Activate key**: get a new licence key when the key for the selected DRM file expires.
- **Reactivate key**: get another key even when the key for the selected DRM file has not expired.
- **Key management**: manage the licence keys you have acquired.

Videos *(Menu 6.2)*

This menu displays video clips you have recorded, downloaded, received in messages, or imported from a computer.

☑ 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.

During playback, use the following keys:

Key	Function
i	Pauses or resumes playback.
Left	Returns to the previous file. Moves backward in a file when held down.
Right	Skips to the next file. Skips forward in a file when held down.
Up	Opens the file list.
Down	Stops playback.
▲/▼	Adjusts the volume.

After playback, press <> to access the following options:

- **Play**: play the selected file.
- **Send via**: send the selected file via MMS, e-mail, or Bluetooth.

- **Move to**: move the file to another folder.
- **Copy to card**: copy the file to a memory card.
- **Delete**: delete the selected file.
- **Rename**: change the file name.
- **Bluetooth visibility**: share the selected file with other Bluetooth devices.
- **Lock**/**Unlock**: lock the file to protect it from being deleted, or unlock the file.
- **Details**: access the file properties.
- **Activate key**: get a new licence key when the key for the selected DRM file expires.
- **Reactivate key**: get another key even when the key for the selected DRM file has not expired.
- **Key management**: manage the licence keys you have acquired.

Music *(Menu 6.3)*

This menu displays music files you have downloaded, or imported from a computer.

1. Select **Music**.
2. Select a file. The music player opens. ▶ p. 48

Sounds *(Menu 6.4)*

This menu displays the voice memos you have recorded, and sound clips you have downloaded, received in messages, or imported from a computer.

Playing a sound clip

1. Select a sound folder.
2. Select a sound clip. For a voice memo, see **Voice recorder**. ▶ p. 50

Using sound options

While playing a sound clip, press <**Options**> to access the following options:

- **List**: return to the sound list.
- **Send via**: send the selected file via MMS, e-mail, or Bluetooth.
- **Set as**: set the file as your ringtone, as a ringtone for a Phonebook entry, or as a ringtone for alarms.
- **Move to**: move the file to another folder.
- **Copy to card**: copy the files to a memory card.
- **Delete**: delete the file.
- **Rename**: change the file name.
- **Bluetooth visibility**: share the currently selected file or the files you want with other Bluetooth devices.
- **Lock**/**Unlock**: lock the file to protect it from being deleted, or unlock the file.
- **Details**: access the file properties.
- **Activate key**: get a new licence key when the key for the selected DRM file expires.
- **Reactivate key**: get another key even when the key for the selected DRM file has not expired.
- **Key management**: manage the licence keys you have acquired.

Other files *(Menu 6.5)*

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.

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

- **Send via**: send the file via MMS, e-mail, or Bluetooth.

- **Move to card**: move the file to a memory card.
- **Copy to card**: copy the file to a memory card.
- **Delete**: delete the selected file or all files.
- **Rename**: change the file name.
- **List by**: change the sort order of the file list.
- **Bluetooth visibility**: share the selected file or the files you want with other Bluetooth devices.
- **Print via Bluetooth**: print the image by connecting the phone to a printer via Bluetooth.

  ☑ Some printers may not be compatible with the phone.

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

- **Activate key**: get a new licence key when the key for the selected DRM file expires.
- **Reactivate key**: get another key even when the key for the selected DRM file has not expired.
- **Key management**: manage the licence keys you have acquired.

Memory card *(Menu 6.6)*

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.

Memory status *(Menu 6.7)*

You can check the total amount of memory and the amount of memory currently in use in each media box.

You can access a media box by selecting it from this menu.

Planner *(Menu 7)*

Use this menu to keep track of your schedule. You can also use convenient features, such as an alarm clock, calculator, converter, timer, and stopwatch.

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

Alarm *(Menu 7.1)*

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

Setting an alarm

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

Stopping an alarm

- For a non-wake-up alarm, press any key.
- For a wake-up alarm, press <**OK**> or [*i*].

  Press any key, except for <**OK**> and [*i*], to cause it to sound again after 5 minutes. You can do this a maximum of 5 times.

Deactivating an alarm

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

Setting alarms to sound when the phone is off

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

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

Calendar *(Menu 7.2)*

Use this menu to keep track of your schedule.

Selecting a day on the calendar

When you access the **Calendar** menu, the calendar in Month view appears with today's date indicated by a grey 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, miscellaneous items, and tasks on the calendar. More than one item per day can be stored.

Entering an appointment or a miscellaneous item

1. Select a date on the calendar.
2. Press <**Options**> and select **Create** → **Appointment** or **Miscellany**.
3. Enter information or change the settings:
   - **Subject**: enter a title for the item.
   - **Details**: enter item details.
   - **Start date** and **Start time**: enter the starting date and time for the item.
   - **AM/PM**: select **AM** or **PM** in 12-hour time format.
   - **End date** and **End time**: enter the ending date and time for the item.

- **AM/PM**: select **AM** or **PM** in 12-hour time format.
- **Location**: (for Appointment) enter information about the appointed location.
- **Alarm**: set an alarm for the item.
- **before**: set how long before the item the alarm is to alert you.
- **Alarm tone**: select an alarm tone.
- **Repeat**: (for Appointment) select to set the item to recur and select a repeat unit.
- **until**: (for Appointment) set the ending date, if the item will recur.

4. Press <**Save**> to save the item.

Entering an anniversary

1. Select a date on the calendar.
2. Press <**Options**> and select **Create** → **Anniversary**.
3. Enter information or change the settings:
   - **Occasion**: enter information about the anniversary.
   - **Date**: enter the date.
   - **Alarm**: set an alarm for the anniversary.
   - **before**: set how long before the anniversary the alarm is to alert you.
   - **Alarm time**: enter the time for the alarm to ring.
   - **AM/PM**: select **AM** or **PM** in 12-hour time format.
   - **Alarm tone**: select an alarm tone.
   - **Repeat every year**: set the phone to remind you of the anniversary every year.
4. Press <**Save**> to save the anniversary.

Entering a task

1. Select a date on the calendar.

2. Press <**Options**> and select **Create** → **Task**.
3. Enter information or change the settings:
   - **Task**: enter information about the task.
   - **Start date**: enter the starting date.
   - **Due date**: enter the ending date.
   - **Priority**: select a priority level.
   - **Alarm**: set an alarm for the task.
   - **before**: set how long before the task the alarm is to alert you.
   - **Alarm time**: enter the time for the alarm to ring.
   - **AM/PM**: select **AM** or **PM** in 12-hour time format.
   - **Alarm tone**: select an alarm tone.
4. Press <**Save**> to save the task.

Consulting the calendar

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

- Appointment
- Anniversary
- Task
- Miscellaneous item

Viewing an item

1. Select a date on the calendar to display the items for that 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, e-mail, or Bluetooth.
- **View by**: change the view mode of the calendar.
- **Done**/**Not done**: change the status of the task item.
- **Delete**: delete the item.
- **Print via Bluetooth**: print the item details by connecting the phone to a printer via Bluetooth.

  ☑ Some printers may not be compatible with the phone.

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 items stored on the calendar by using various deleting options.
- **Settings**: change the default settings for the calendar.

  Starting day: select which day of the week the calendar starts with.

  Default view by: select the default calendar view mode.
- **Missed alarm events**: access 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 status:

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

Select an item to view its details.

Week view

You can view items for the selected week. A cell on the timetable indicates the presence of item information. Select a cell in the day you want.

Memo *(Menu 7.3)*

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

Creating a memo

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

Viewing memos

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, e-mail, or Bluetooth.

- **Delete**: delete the memo.
- **Print via Bluetooth**: print the memo details by connecting the phone to a printer via Bluetooth.

  ☑ Some printers may not be compatible with the phone.

- **Memory status**: check how many memos you have created.

World clock *(Menu 7.4)*

Use this menu to find out the current time in another part of the world.

Setting the local time zone

1. From the world map, press <**Options**> on the upper line ( ) 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. Select **Set daylight saving time**, if necessary.
5. Press <**OK**> to save the city as your local time zone.
6. Press <**Save**>.

Viewing world time

1. From the world map, press [Left] or [Right] to scroll to the city you want on a foreign time zone line (or). As the time line moves, the time and date of the given zone display.
2. Press [*i*] to save the time zone.

Using world clock options

From the world map, press <**Options**> to access the following options:

- **Edit**: change the local time zone.
- **Save**: save the selected foreign time zone.
- **Apply daylight saving time**: apply daylight saving time to the time zone you want.
- **Mark a second clock**: set the selected time zone to be displayed for a dual clock type.
- **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.

> ☑ You cannot display the dual clock and calendar in Idle mode at the same time. Whichever you select last will be displayed.

Calculator *(Menu 7.5)*

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

1. Enter the first number.
   - Press [*] to insert a decimal point.
   - Press [#] to insert a bracket.
   - Press [▲/▼] to move the cursor.
   - Press <**Options**> to use additional arithmetic functions or to switch to the Converter screen.
2. Press one of the Navigation keys to access the math function you want.
3. Enter the second number.
4. Press [*i*] to view the result.
5. If necessary, repeat from step 2 to continue the calculation.

Converter *(Menu 7.6)*

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

Performing a conversion

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.

Using converter options

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

- **Clear**: clear the current values.
- **Reverse**: reverse the conversion.
- **Exchange rate**: edit the currency rate list.

Timer *(Menu 7.7)*

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 [*i*] to start counting down.

Stopping the timer

- Press any key when the timer sounds.
- Press [*i*] on the Timer screen to stop the timer before it sounds.

Stopwatch *(Menu 7.8)*

Use this menu to measure elapsed time. The maximum time is 10 hours.

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

Camera *(Menu 8)*

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

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

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

Take photo *(Menu 8.1)*

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 **Take photo** 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. 100
3. Press [*i*] to take a photo. The photo is saved in the **My photos** folder.

4

To	Press
access photo options	<**Options**>. ▶ p. 101
delete the photo	[**C**] and then <**Yes**>.
return to Capture mode	<**Back**>.

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 a photo.

  Multi shot: take a series of action stills. You can select the number of photos the camera will take.

  Mosaic shot: take several stills and save them in one frame. You can select the layout.
- **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 a photo.

  Photo settings: change the following image settings:
  - **Size**: select an image size.
  - **Quality**: select an image quality setting.
  - **Viewfinder mode**: select a preview screen.
  - **Scene program**: set whether or not to use Night shot mode.
  - **Exposure metering**: select a method to determine the exposure of an image, based on a specific area of the image.
  - **White balance**: adjust the colour balance of the photo. You can make your photo appear warmer or cooler.

  Preferences: change the following camera settings:
  - **Shutter sound**: select the sound that you hear when you press the shutter release.
  - **Zoom sound**: turn the sound effect for zooming on or off.
  - **Brightness sound**: turn the sound effect for brightness adjustment on or off.
  - **Default name**: change the default prefix of file names.
- **Camera shortcuts**: view the functions of the keys you can use in Capture mode.

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	Zooms in or out.

Key	Function
▲	Flips the image vertically.
▼	Shows the mirror image.
1	Switches to Record mode. ▶ p. 102
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.
6	Changes the white balance setting.
7	Selects a decorative frame.
8	Sets the timer.
0	Goes to the **My photos** folder.
#	Changes the preview screen.

Using photo options

After saving a photo, press <**Options**> to access the following options:

- **View**: access one of the multi-shot photos.
- **Send via**: send the file via MMS, e-mail, or Bluetooth.
- **Viewfinder**: return to Capture mode.
- **Set as**: set the photo as your wallpaper for the displays or as a caller ID image for a Phonebook entry.
- **Edit**: edit the image using the Image editor. ▶ p. 51
- **Delete**: delete the file.

- **Multi shot delete all**: delete the multi-shot photos you want.
- **Rename**: change the file name.
- **Go to My photos**: access the **My photos** folder. ▶ p. 83
- **Bluetooth visibility**: share the selected file or the files you want with other Bluetooth devices.
- **Print via**: print the image by connecting the phone to a printer via USB or Bluetooth.

  - To print via USB, you first need to set USB mode to **Pictbridge**. ▶ p. 109
  - Some printers may not be compatible with your phone.

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

Taking a photo with the phone closed

1. Press and hold [📷]. The icon displays.
2. If necessary, press [▲] to switch to Capture mode.
3. Make any desired adjustments.
   - Press [▲] to switch to Record mode.
   - Press [▼] to show the mirror image.
4. Press [📷] to take a photo. The photo is saved automatically.

Record video *(Menu 8.2)*

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

Recording a video

1. Access the **Record video** menu.
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. 104

3. Press [*i*] or [📷] to start recording.
4. Press [*i*], <▶>, or [📷] to stop recording. The video is automatically saved in the **My video clips** folder.
5.

To	Press
play back the video clip	[*i*].
access video options	<▶>. ▶ p. 105
delete the video	[**C**] and then <**Yes**>.
return to Record mode	<↩>.

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 a video.
- **Go to My video clips**: access the **My video clips** folder.
- **Camcorder settings**: change the following settings for recording a video:

  Recording mode: select a video recording mode.

  Select **Limit for multimedia messages** or **Limit for emails** to record a video suitable for an MMS message or e-mail. The video clip is saved in 3GP format.

Select **Normal** to record a video within the limit of the currently available memory. The video clip is saved in MP4 format.

Size: select a frame size.

Quality: select an image quality setting.

Record audio: record a video clip with audio.

White balance: adjust the colour balance of the video. You can make your video appear warmer or cooler.

Zoom sound: turn the sound effect for zooming on or off.

Brightness sound: turn the sound effect for brightness adjustment on or off.

Default name: change the default prefix of file names.

- **Camcorder shortcuts**: view the functions of the keys you can use in Record mode.

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	Zooms in or out.
▲	Flips the image vertically.
▼	Shows the mirror image.
1	Switches to Capture mode. ▶ p. 98
2	Changes the frame size.
3	Changes the image quality.
4	Changes the video recording mode.

Key	Function
5	Changes the colour tone or applies a special effect.
6	Changes the white balance setting.
7	Mutes or unmutes the audio.
8	Sets the timer.
0	Goes to the **My video clips** folder.

Using video options

After saving a video clip, press <> to access the following options:

- **Viewfinder**: return Record mode.
- **Send via**: send the file via MMS, e-mail, or Bluetooth.
- **Delete**: delete the file.
- **Rename**: change the file name.
- **Go to My video clips**: access the **My video clips** folder. ▶ p. 85
- **Bluetooth visibility**: share the file with other Bluetooth devices.
- **Lock**/**Unlock**: lock the file to protect it from being deleted, or unlock the file.
- **Details**: access the file properties.

Recording a video with the phone closed

1. Press and hold [ ]. The icon displays.
2. If necessary, press [▲] to switch to Record mode.
3. Make any desired adjustments.
   - Press [▲] to switch to Capture mode.
   - Press [▼] to show the mirror image.
4. Press [ ] to start recording.

5. Press [ ] to stop recording. The video clip is saved automatically.

Go to My photos *(Menu 8.3)*

Use this menu to access a list of photos you have taken. ▶ p. 83

Go to My video clips *(Menu 8.4)*

Use this menu to access a list of videos you have recorded. ▶ p. 85

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 values.

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

Time and date *(Menu 9.1)*

Use this menu to set the current time and date on your phone.

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

  Prompt first: the 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 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.

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

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

- **Time zone**: set the home time zone. Select the city that corresponds to your home zone. To set the daylight saving time, select **Set daylight saving time**.
- **Time**: enter the current time.
- **AM/PM**: select **AM** or **PM** in 12-hour time format.
- **Time format**: select a time format.
- **Date**: enter the current date.
- **Date format**: select a date format.

Phone settings *(Menu 9.2)*

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

Language *(Menu 9.2.1)*

Use this menu to select a language for the display text.

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 [Left], [Right], and [Down]. [Up] is fixed as a shortcut to **My menu**.

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:

- **Assign**: assign a shortcut menu.

- **Change**: change a shortcut menu 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.

Advanced shortcuts *(Menu 9.2.5)*

Use this menu to activate the Advanced shortcut feature, which allows you to access the text message, alarm, calendar, calculator, and converter applications from the dialling screen.

Launching menus by number

1. From the **Advanced shortcuts** menu, select **On** and press <**Save**>.
2. In Idle mode, enter the number for the action you want.

   For example, enter time as 4-digit to set an alarm or date as 4-digits to enter your schedule.
3. Press one of the Navigation keys.

You can access the following applications by default:

- Up: Alarm ▶ p. 89
- Down: Converter ▶ p. 97
- Left: SMS ▶ p. 62
- Right: Calendar ▶ p. 90

Changing an Advanced shortcut key

1. From the **Advanced shortcuts** menu, press [Down] and select a key to be used as a shortcut key.
2. Select a menu to be assigned to the key.

Using Advanced shortcut options

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

- **Assign**: assign a shortcut menu.
- **Change**: change a shortcut menu.
- **Remove**: deactivate the shortcut assignment to the selected key.
- **Remove all**: deactivate all shortcut assignments.

Volume key *(Menu 9.2.6)*

Use this menu to change the volume key settings.

- **Volume key function**: set whether the phone mutes the call ringer or rejects a call if you press and hold [▲/▼] when a call comes in. You can also set whether the phone sends an SMS message to the caller when a call is rejected.
- **Text message**: enter a message to be sent to the caller when a call is rejected.

USB settings *(Menu 9.2.7)*

Use this menu to select a USB mode to be used when you connect your phone to a PC via USB.

- **Modem**: you can use your phone as a modem for PC network connections.

- **Mass storage**: you can access a memory card from your PC. This option is only available when you insert a memory card into the phone.
- **Pictbridge**: you can connect your phone to a PictBridge-compatible printer.

Extra settings *(Menu 9.2.8)*

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

- **Auto redial**: set the phone to make up to ten attempts to redial a phone number after an unsuccessful call.
- **Anykey answer**: answer an incoming call by pressing any key, except for <**Reject**> and [☎].
- **Voice clarity**: remove extraneous noise and increase call quality so that the person with whom you are speaking can hear you clearly even if you are in a noisy place.
- **Active filp**: answer an incoming call by opening the phone.

Offline mode *(Menu 9.2.9)*

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.

Wallpaper *(Menu 9.3.1)*

You can change the background image that is displayed on the display.

- **Main display**: access the following option for the main display.

  Main display: select a background image in Idle mode.

Menu background: set whether or not to display the same background image in Menu mode.

Transparency: adjust the transparency of the menu background image.

- **Cover display**: select an image or text to be displayed on the external display.

  Clock: select a clock type.

  Cover title: enter the text you want.

  Wallpaper images: select an image.

Main menu style *(Menu 9.3.2)*

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

Text display *(Menu 9.3.3)*

You can change the display settings for the text displayed on the idle screen.

- **Text position**: select a position. If you do not want text to display in Idle mode, select **Off**.
- **Text style**: select a font style.
- **Text colour**: select a font colour.

Skin *(Menu 9.3.4)*

You can select a skin colour pattern for Menu mode.

Brightness *(Menu 9.3.5)*

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

Contrast *(Menu 9.3.6)*

You can adjust the contrast of the brightness for the main display and external display. Adjust this setting with the display brightness to see the display clearly in different lighting conditions.

Dialling display *(Menu 9.3.7)*

Use this menu to select a font size and colour for the numbers entered and the background colour of the display while dialling.

Calendar *(Menu 9.3.8)*

Use this menu to display the calendar of the current month on the idle screen.

Show caller ID *(Menu 9.3.9)*

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 **Also on 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 select a volume level and alert type for incoming calls.

- **Alert type**: specify how you are to be informed of incoming calls.
- **Ring tone**: select a ringtone for the call ringer.
- **Volume**: select a ringtone volume.

Keypad tone *(Menu 9.4.2)*

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

☑ You can adjust the key tone volume using [▲/▼] in Idle mode.

Message tone *(Menu 9.4.3)*

Use this menu to set up the ringtone for incoming messages and e-mails.

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

Power-on/off tone *(Menu 9.4.4)*

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

Flip tone *(Menu 9.4.5)*

Use this menu to select the tone that the phone sounds when you open or close the phone.

Silent mode *(Menu 9.4.6)*

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

Extra tones *(Menu 9.4.7)*

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 an outgoing call is connected to the system.
- **Alerts 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.

Light settings *(Menu 9.5)*

Use this menu to change settings for the light.

Backlight time *(Menu 9.5.1)*

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

- **Main display on**: 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.

Keypad light *(Menu 9.5.2)*

Use this menu to set how the phone controls the use of the keypad light.

- **Any time**: the keypad light is always used.
- **Night time**: the keypad light is used only between 5:00 PM and 9:00 AM.
- **Custom time**: you can specify the time period that the keypad light is used.

Network services *(Menu 9.6)*

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 9.6.1)*

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

1. Select a call diverting option:
   - **Divert always**: divert 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.
5. Enter the number to which calls are to be diverted and press <**Select**>.
6. If you selected **No reply**, move to the **Sec** line and select the length of time the network delays before diverting a call.

Call barring *(Menu 9.6.2)*

This network service allows you to restrict your calls.

1. Select a call barring option:
   - **All outgoing**: prohibit outgoing calls.
   - **International**: prohibit international calls.
   - **International except home**: only allow calls to numbers within the current country when you are abroad, and to your home country.
   - **All incoming**: prohibit incoming calls.
   - **Incoming while abroad**: prohibit incoming calls when you use your phone outside of your home service area.
   - **Cancel all**: cancel all call barring settings, allowing 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.
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 9.6.3)*

This network service informs you when someone is trying to reach you while you are on another call.

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

Network selection *(Menu 9.6.4)*

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 9.6.5)*

This network service allows you to hide your phone number from the person you are calling. However, some networks do not allow the user to change this setting. If you select **Default**, the phone will use the default setting provided by the network.

Voice mail server *(Menu 9.6.6)*

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

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

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

Band selection *(Menu 9.6.7)*

For the phone to make and receive phone calls, it must register with an available network.

Your phone can handle any of the following types of networks: Combined GSM 900/1800, GSM 1900, and GSM 900/1800/1900.

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

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 network operator.

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 *(Menu 9.7.2)*

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

Phone lock *(Menu 9.7.3)*

The Phone lock feature locks the phone 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 call logs, messages, or files. When a privacy options enabled, you must enter the phone password to access the locked items or functions.

SIM lock *(Menu 9.7.6)*

The SIM lock feature allows your phone to work only with the current SIM by assigning a SIM lock code. You must enter the SIM lock code to use a different SIM card.

FDN mode *(Menu 9.7.7)*

If supported by your SIM card, Fixed Dialling Number (FDN) 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 *(Menu 9.7.8)*

If supported by your SIM card, the Change PIN2 feature changes 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 Tracker feature.

1. Enter the phone password and press <**OK**>.

2. Specify the following options:
   - **Mobile tracker**: activate or deactivate 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.

Memory status *(Menu 9.8)*

Use this menu to check the amount of memory being used for storing data in Messages, My files, Calendar, Phonebook, and JAVA world. You can also view the amount of shared memory.

Reset settings *(Menu 9.9)*

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

1. Press [*i*] to select the setting categories to be reset.
2. Press <**Reset**>.
3. Press <**Yes**> to confirm the reset.
4. Enter the phone password and press <**OK**>.

> ☑ The password is preset to **00000000**. You can change this password. ▶ p. 118

Key management *(Menu 9.10)*

Use this menu to manage the licence keys you have acquired to activate media files locked by DRM systems.

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

- **Details**: access the properties of the licence key.
- **Display**/**Preview**/**Play**/**Execute**: open the corresponding media content.
- **Delete**: delete the selected licence key.
- **Go to My messages**/**Go to My files**/ **Go to Java world**: access the message containing the media content, the corresponding file folder, or the corresponding game.

VOD settings *(Menu 9.11)*

Use this menu to select a connection profile to be used for accessing a video streaming server. This menu may not be shown depending on your service provider.

- **Current profile**: select a profile.
- **Profile settings**: customise the options for each profile.

  Profile name: assign a name to the profile.

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

  Login ID: enter the user ID.

  Password: enter the password.

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"

- Be sure that the SIM card is correctly installed.

"Phone lock"

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

"Enter PIN"

- You are using your phone for the first time. You must enter the PIN supplied with the SIM card.
- The PIN check feature is enabled. Every time the phone is switched on, the PIN has to be entered. To disable this feature, use the **PIN check** menu.

"Enter PUK"

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

"No network," "Network unavailable," or "No service" displays

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

- 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 you have switched on the microphone.
- 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 "Battery low" flashes on the display

- Your battery is insufficiently charged. Recharge the battery.

The audio quality of the call is poor

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

No number is dialled when you re-call a Phonebook entry

- Use the **Contact list** menu 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.

Exposure to Radio Frequency (RF) Signals

Certification Information (SAR)

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the exposure limits for radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. government. These FCC exposure limits are derived from the recommendations of two expert organizations, the National Counsel on Radiation Protection and Measurement (NCRP) and the Institute of Electrical and Electronics Engineers (IEEE). In both cases, the recommendations were developed by scientific and engineering experts drawn from industry, government, and academia after extensive reviews of the scientific literature related to the biological effects of RF energy.

The exposure limit set by the FCC for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate (SAR). The SAR is a measure of the rate of absorption of RF energy by the human body expressed in units of watts per kilogram (W/kg). The FCC requires wireless phones to comply with a safety limit of 1.6 watts per kilogram (1.6 W/kg). The FCC exposure limit incorporates a substantial margin of safety to give additional protection to the public and to account for any variations in measurements.

SAR tests are conducted using standard operating positions accepted by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

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

The highest SAR values for this model phone as reported to the FCC are:

GSM1900 Head: 0.456 W/Kg, Body-worn:0.514 W/Kg.

For body worn operation, this model phone has been tested and meets the FCC RF exposure guidelines whenused with a Samsung accessory designated for this product or when used with an accessory that contains no metal and that positions the handset a minimum of 1.5 cm from the body.

Non-compliance with the above restrictions may result in violation of FCC RF exposure guidelines.

SAR information on this and other model phones can be viewed on-line at www.fcc.gov/oet/fccid. This site uses the phone FCC ID number, A3LSGHE480. Sometimes it may be necessary to remove the battery pack to find the number. Once you have the FCC ID number for a particular phone, follow the instructions on the website and it should provide values for typical or maximum SAR for a particular phone. Additional product specific SAR information can also be obtained at www.fcc.gov/cgb/sar.

Consumer Information on Wireless Phones

The U.S. Food and Drug Administration (FDA) has published a series of Questions and Answers for consumers relating to radio frequency (RF) exposure from wireless phones. The FDA publication includes the following information:

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.

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.

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

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

Although the existing scientific data do not justify FDA regulatory actions, FDA has urged the wireless phone industry to take a number of steps, including the following:

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

FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of RF safety to ensure coordinated efforts at the federal level. The following agencies belong to this working group:

- "National Institute for Occupational Safety and Health
- "Environmental Protection Agency
- "Federal Communications Commission
- "Occupational Safety and Health Administration
- "National Telecommunications and Information Administration

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

FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply with FCC safety guidelines that limit RF

exposure. FCC relies on FDA and other health agencies for safety questions about wireless phones.

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

What are the results of the research done already?

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

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 ten or more years' follow-up may be needed to provide answers about some health effects, such as cancer. This is because the interval between the time of exposure to a cancer-causing agent and the time tumors develop - if they do - may be many, many years. The interpretation of epidemiological studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones. Many factors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

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

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

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

FDA and 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.

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.

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.

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.

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.

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 wireless phones and helped develop a voluntary standard sponsored by the Institute of Electrical and Electronic Engineers (IEEE). This standard specifies test methods and performance requirements for hearing aids and wireless phones so that no interference occurs when a person uses a compatible phone and a compatible hearing aid at the same time. This standard was approved by the IEEE in 2000.

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

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.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

Road Safety

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

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

1. Get to know your wireless phone and its features, such as speed dial and redial. If available, these features help you to place your call without taking your attention off the road.
2. When available, use a hands-free device. If possible, add an additional layer of convenience and safety to your wireless phone with one of the many hands free accessories available today.

3. Position your wireless phone within easy reach. Be able to access your wireless phone without removing your eyes from the road. If you get an incoming call at an inconvenient time, let your voice mail answer it for you.
4. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow, ice and even heavy traffic can be hazardous.
5. Do not take notes or look up phone numbers while driving. Jotting down a “to do” list or flipping through your address book takes attention away from your primary responsibility, driving safely.
6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan calls when your car will be stationary. If you need to make a call while moving, dial only a few numbers, check the road and your mirrors, then continue.
7. Do not engage in stressful or emotional conversations that may be distracting. Make people you are talking with aware you are driving and suspend conversations that have the potential to divert your attention from the road.
8. Use your wireless phone to call for help. Dial 9-1-1 or other local emergency number in the case of fire, traffic accident or medical emergencies. Remember, it is a free call on your wireless phone!
9. Use your wireless phone to help others in emergencies. If you see 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 non-emergency wireless assistance number when necessary. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured, or a vehicle you know to be stolen, call roadside assistance or other special non-emergency number.

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

For more information, please call 1-888-901-SAFE, or visit our web-site www.wow-com.com

Provided by the Cellular Telecommunications & Internet Association

Operating Environment

Remember to follow any special regulations in force in any area and always switch your phone off whenever it is forbidden to use it, or when it may cause interference or danger. 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).

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

Vehicles

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

Posted Facilities

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

Potentially Explosive Environments

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

Users are advised to switch the phone off while at a refueling point (service station). Users are reminded of the need to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution

areas), chemical plants or where blasting operations are in progress.

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

Emergency Calls

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

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

To make an emergency call:

1. If the phone is not on, switch it on.
2. Key in the emergency number for your present location (for example, 911 or other official emergency number). Emergency numbers vary by location.
3. Press .

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

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

Restricting Children's access to your Phone

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

FCC Notice and Cautions

FCC Notice

- This device complies with Part 15 of the 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.

  -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

an 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.

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 your phone off before boarding an aircraft. The use of wireless phone 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.

Product Performance

Getting the Most Out of Your Signal Reception

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

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

Understanding the Power Save Feature

If your phone is unable to find a signal after 15 minutes of searching, a Power Save feature is automatically activated. If your phone is active, it periodically rechecks service availability or you can check it yourself by pressing any key.

Anytime the Power Save feature is activated, a message displays on the screen. When a signal is found, your phone returns to standby mode.

Understanding How Your Phone Operates

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

Maintaining Your Phone's Peak Performance

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

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

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

- Avoid exposing your phone and accessories to rain or liquid spills. If your phone does get wet, immediately turn the power off and remove the battery. If it is inoperable, call Customer Care for service.

Availability of Various Features/Ring Tones

Many services and features are network dependent and may require additional subscription and/or usage charges. Not all features are available for purchase or use in all areas. Downloadable Ring Tones may be available at an additional cost. Other conditions and restrictions may apply. See your service provider for additional information.

Battery Standby and Talk Time

Standby and talk times will vary depending on phone usage patterns and conditions. Battery power consumption depends on factors such as network configuration, signal strength, operating temperature, features selected, frequency of calls, and voice, data, and other application usage patterns.

Battery Precautions

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

Index

A
ABC mode, text input • 30
Active filp • 110
Alarm • 89
Answering
    call • 34
    second call • 35
Anykey answer • 110
Auto redial • 110

B
Background image • 110
Backlight, set
    display • 114
    keypad • 114
Band selection • 117
Barring, calls • 115
Battery
    charging • 7
    low indicator • 8
    precautions • 124
Bluetooth
    receiving, data • 56
    sending, data • 56
    settings • 54
Broadcast messages • 82
Browser, web • 58

C
Calculator • 96
Calendar • 90
Call costs • 40
Call log
    dialled • 39
    missed • 39
    received • 39
Call time • 39
Caller groups • 43
Caller ID • 116
Calls
    answering • 34
    barring • 115
    diverting • 114
    holding • 35
    making • 33
    redialling • 33
    rejecting • 34
    waiting • 116
Camera
    photos • 98
    videos • 102
CB (Cell Broadcast) messages • 82
Characters, enter • 30
Configuration messages • 69
Connection tone • 113
Converter • 97
Creating messages
    e-mail • 65
    MMS • 63
    SMS • 62

D
Date, set • 107
Deleting
calendar items • 93
call log • 38, 39
e-mail • 72, 74
memos • 95
MMS • 68, 70, 74
phonebook • 46
SMS • 67, 70, 74
Dialled calls • 39
Dialling display, set • 112
Display
brightness • 111
icons • 11
language • 107
layout • 11
settings • 110
Diverting, calls • 114
Document files • 87
DRM (Digital Rights Management) • 83
DTMF tones, send • 37

E
E-mails
creating/sending • 65
deleting • 72, 74
setting • 78
viewing • 71
Emergency calls • 128

F
FDN (Fixed Dialling Number) mode • 118
FDN contacts • 42
File manager • 83
FM radio • 52

G
Games • 57
Greeting message • 107

H
Health and safety • 123
Holding, call • 35

I
Icons, descriptions • 11
Image editor • 51
Images, downloaded • 83
Inbox, messages
e-mail • 71
MMS/SMS • 67
International calls • 33
Internet • 58

J
Java applications • 57

K
Key management • 119
Key tones
selecting • 112
sending/muting • 36
volume • 112

L
Language, select • 107
Last number, redial • 33

Light settings • 114
Locking
    menu functions • 118
    phone • 117
    SIM card • 118
Low battery indicator • 8

M

Memo • 94
Memory card
    accessing files • 88
    inserting • 29
Memory status
    file manager • 88
    messages • 82
    phone • 119
    phonebook • 46
Menu style • 111
Message tone • 113
Messages
    broadcast • 82
    configuration • 69
    e-mail • 65
    greeting • 107
    MMS • 63
    push • 69
    SMS • 62
Minute minder • 113
Missed calls • 39
MMS messages
    creating/sending • 63
    deleting • 68, 74
    setting • 75
    viewing • 67
Mobile tracker • 118
Multiparty-call • 37
Music player • 47
Music, downloaded • 86
My files • 83
My menu • 108

N

Name card • 45
Names
    entering • 30
    searching • 41
Network band, select • 117
Network selection • 116
Network services • 114
Numbers
    searching • 41
    storing • 42

O

Offline mode • 9, 110
Outbox, messages • 69

P

Password
    call barring • 115
    phone • 118
Phone
    care and maintenance • 130
    display • 11
    icons • 11
    locking • 117

- password • 118
- resetting • 119
- switching on/off • 9
- unpacking • 6

Phonebook
- adding • 42
- deleting • 41, 46
- editing • 41
- finding • 41
- managing • 46
- options • 41
- speed dialling • 44

Photos
- editing • 51
- taking • 99
- viewing • 83

PIN, change • 117
PIN2, change • 118
Planner • 89
Power on/off tone • 113
Privacy • 118
Push messages • 69, 81

R

Received calls • 39
Received messages
- e-mail • 71
- MMS/SMS • 67

Recording
- videos • 102
- voice memos • 50

Redialling
- automatically • 110
- manually • 33

Resetting phone • 119
Ringer
- incoming calls • 112
- messages • 113

Road safety • 126
Roaming • 116

S

Safety
- information • 123
- precautions • 1

Security, calls • 117
Sent messages • 70
Shortcut • 107
Silent mode
- setting • 113
- switching • 16

SIM card
- inserting • 7
- locking • 118

Skin colour • 111
Slide tone • 113
SMS messages
- creating/sending • 62
- deleting • 67, 74
- setting • 74
- viewing • 67

Sound settings • 112
Sounds, downloaded • 86
Speakerphone • 36
Speed dial • 44
Stopwatch • 98
Switching on/off
- microphone • 36

phone • 9

T
T9 mode, text input • 31
Templates, message • 73
Text, enter • 30
Time, set • 107
Timer • 97

U
USB settings • 109

V
Videos
playing • 85
recording • 102
Voice clarity • 36, 110
Voice recorder
playing • 50
recording • 50
Voicemail server • 116

W
Waiting call • 116
Wallpaper • 110
Web browser
access • 58
bookmarks • 60
World clock • 95