* 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

Serene

Guide

Important safety precautions

Note: 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 calls

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

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 accessories and batteries. Use of any unauthorised accessories could damage your phone and may be dangerous.

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

Qualified service

Only qualified service personnel may repair your phone.

For more detailed safety information, see "Health and safety information" on page 60.

About this Guide

This 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 visual features appear:

Note 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.

BOLD Indicates a key on the phone. For example, **OK**

Special features of your phone

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

Camera
Use the camera module on your phone to take a photo.

Web browser
Access the wirelsess web and access various services and current information.

Get personal with photo caller ID
See who's calling you with their very own photo displays.

Name card
Create name cards with your number and profile.

Multimedia Message Service (MMS)
Send and receive MMS messages with a combination of text, images, and audio.

E-mail
Send and receive e-mails with images and audio attachments.

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

Voice recorder
Record memos or sounds.

Contents

Menu functions

To access Menu mode, press **OK** in Idle mode.

* Shows only if supported by your SIM card.

Your phone

Unpack

You can obtain various accessories from your local Samsung dealer.

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

Phone

Battery

User's Guide

Travel Adapter

Desktop charger

Screwdriver

Phone

Using the phone

Hold the phone with the display down.
*If you want to use the phone with the display up, rotate the display orientation 180 degrees by pressing **OK** in Idle mode and selecting **Settings** → **Phone settings** → **Table mode**.*

Keypad

Delete/Cancel key (C key)

Wheel

END key

SEND key

Menu access/
Confirm key
(OK key)

Camera lens

Display

Service light

Microphone

Get started
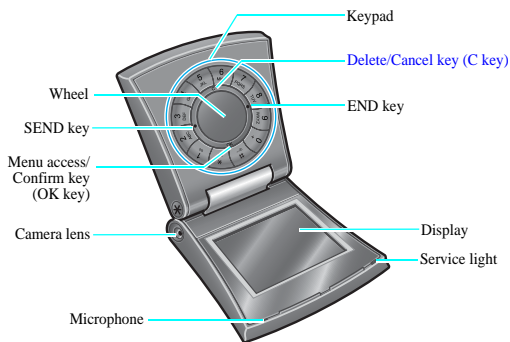
Install SIM and phone

1. If the phone is already on, first turn it off by pressing and holding **END**.

2. Loosen the screws on the sides using the supplied screwdriver.
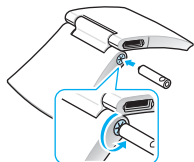
3. Lift the battery cover away, as shown.
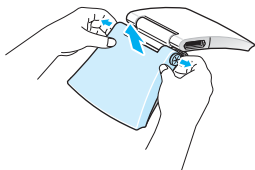
4. Insert the SIM card.
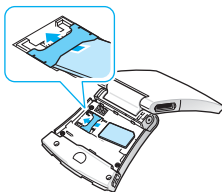
Note: Make sure that the gold-coloured contacts on the card face down into the phone.

5. Install the battery.
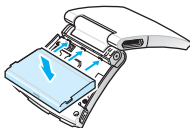
6. Align the cover with the bottom of the phone and press the cover down, as shown.
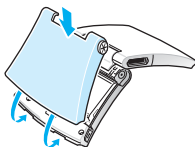
7. Screw on the battery cover.

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 code and available optional services.

Removing the battery

Lift the battery away, as shown.
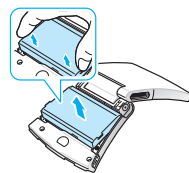
Charge the phone

Using the travel adapter

1. Plug the travel adapter into the phone.
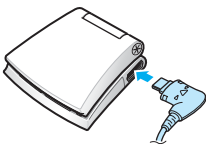
2. Plug the adapter into a standard AC wall outlet.

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

4. Remove the adapter from the phone.

Using the desktop charger

Place the desktop charger on a flat place and plug the phone into the charger, as shown.
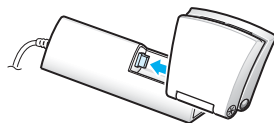
While charging,
*   the display orientation rotates 180 degrees.
*   when you receive an incoming message, the phone automatically opens.

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

To switch the phone on

1. Open the phone.
2. Press and hold **END** to turn on the phone.
3. If necessary, enter the PIN code and press **OK**.

Note: Do not turn on the phone where mobile phone use is prohibited.

To switch the phone off

1. Open the phone.
2. Press and hold **END**.

Keys

SEND (Left green)
- Make or answer a call.
- In Idle mode, retrieve the recent numbers dialled, missed, or received.
- In Capture mode, take a photo.
- In Record mode for a voice memo, start recording.

END (Right red)
- End a call.
- Press and hold to switch the phone on and off.
- In Menu mode, cancel input and return the phone to Idle mode.

OK (Down)
- In Idle mode, access Menu mode.
- In Menu mode, select a highlighted menu option or confirm input.
- In Capture mode, take a photo.

C (Up)
- Delete characters from the display.
- In Menu mode, return to the previous menu level.

wheel

- In Idle mode, move the wheel clockwise or counterclockwise to search for a Phonebook entry.
- In Menu mode, scroll through the menu options.

Enter numbers, letters, and special characters.

In Idle mode, press and hold **1** to access your voicemail server. Press and hold **0** to enter an international call prefix.

Enter special characters.

In Idle mode, press and hold ♯ to activate or deactivate Quiet mode.

Press and hold ✳ to enter a pause between numbers.

Display

Layout

Icons
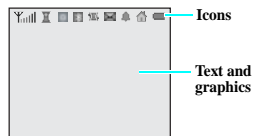
Text and graphics

Icons	Displays various icons.
Text and graphics	Displays messages, instructions, and information you enter.

Icons

Strength of the received signal
Call in progress
Outside your service area; you cannot send or receive calls
Active roaming network
GPRS network
GSM network
Home zone, if you have subscribed to this service

🖅	City zone, if you have subscribed to this service
🡒	Call diverting feature active
🗚	Bluetooth feature activated
🗚	Connected with a Bluetooth headset or hands-free car kit
✉	New text message /New multimedia message
✉	New e-mail
📼	New voicemail
🔔	Alarm set
📳	Call ringer set to vibrate
🔕	Quiet mode
▭	Battery power level

Access menu functions

To select an option

1. Press **OK** to access Menu mode.
2. Move the wheel clockwise or counterclockwise to scroll through menus.
3. Press **OK** to confirm the function displayed or option highlighted.
4. To exit, either:
   • Press **C** to move up one level.
   • Press **END** to return to Idle mode.

To use shortcuts

Press the number key for the option you want.

Customise your phone

Display language

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

Ringtone

1. In Idle mode, press **OK** and select **Settings** → **Sound settings** → **Ringtone**.
2. Select a ringtone.

Display item

You can select your display item for the idle screen.

1. In Idle mode, press **OK** and select **Settings** → **Display settings** → **Idle display**.
2. Select a display item.

Quiet mode (Silent)

You can quickly switch the phone to Quiet 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 **OK** 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. In Idle mode, enter an area code and phone number.
2. Press **SEND**.
3. To end the call, press **END**.

Answer a call

1. When the phone is ringing, press **SEND**.
2. To end the call, press **END**.

Adjust the volume during a call

Move the wheel clockwise or counterclockwise.

Use camera

Take a photo

1. In Idle mode, press **OK** and select **Camera**.
2. Select the shooting mode you want, **Single shot**, **Multi shot**, or **Night shot**.
3. If you select **Multi shot**, select the number of shots for the camera to take.
4. Adjust the image to be captured.
5. Press **SEND** or **OK** to take a photo. The photo is saved automatically.
6. Press **OK** and select **Take another** to take another photo.

View a photo

1. In Idle mode, press **OK** and select **Camera** → **Go to photos**.
2. Select the photo you want.

Browse the web

Using a built-in web browser, you can get easy access to the wireless web to receive up-to-date information, use services, and download web content.

Launch the web browser

In Idle mode, press **OK** and select **WAP browser** → **Home**.

Navigate the web

- To scroll through browser items, move the wheel clockwise or counterclockwise.
- To select a browser item, press **OK** and select **Select**.
- To return to the previous page, press **C**.
- To access web page options, press **OK**.

Use Phonebook

Add an entry

From the Idle mode:

1. Enter a phone number.
2. Press **OK** and select **Save number** → a number type.
3. Specify the contact information: First name, Mobile, Home, Office, Email, Caller ID, and Group.
4. Select **Save** to save the entry.

After ending a call:

1. Press **OK** and select **Save number**.
2. Enter a name and specify other contact information.
3. Select **Save** to save the entry.

Find an entry

1. In Idle mode, move the wheel clockwise or counterclockwise to access Phonebook.
2. Select the first character of the name you want to find and scroll to the name.
3. To dial, press **SEND**.
   If the name has more than one number, scroll to the number you want and press **SEND**.
4. To view the contact information, press **OK** and select **View**.

Create and send your name card

1. In Idle mode, press **OK** and select **Phonebook** → **My business card**.
2. Specify your contact information.
3. Select **Save** to save the name card.
4. To send the name card to other people via Bluetooth, press **OK** and select **Send business card**.

Send messages

Send a text message (SMS)

1. In Idle mode, press **OK** and select **Messages** → **Create** → **Text message**.
2. Enter the message text.
3. Press **OK** and select **Send and save** or **Send only**.
4. Enter destination numbers.
5. Press **SEND** to send the message.

Send a multimedia message (MMS)

1. In Idle mode, press **OK** and select **Messages** → **Create** → **Multimedia message**.
2. Select **Subject**.
3. Enter the message subject and press **OK**.
4. Select **Picture** → **Add image**, or select **Sound** → **Add sound**.
5. Add an image or sound.
6. Select **Message** → **Add**.
7. Enter the message text.

8. Press **OK** and select **Done**.

9. Press **OK** and select **Send**.

10. Enter destination numbers or addresses.

11. Press **SEND** to send the message.

Send an e-mail

1. In Idle mode, press **OK** and select **Messages** → **Create** → **Email**.

2. Select **Subject**.

3. Enter the e-mail subject and press **OK**.

4. Select **Message** → **Add**.

5. Enter the e-mail text.

6. Press **OK** and select **Done**.

7. Select **File attach**.

8. Add media files, name cards, calendar data, or other files.

9. Press **OK** and select **Send**.

10. Enter destination addresses.

11. Press **SEND** to send the e-mail.

View messages

View a text message

When a notification appears:

1. Press **OK**.

2. Select the message from the Inbox.

From the Inbox:

1. In Idle mode, press **OK** and select **Messages** → **Inbox**.

2. Select a message (✉).

View a multimedia message

When a notification appears:

1. Press **OK** and select **Retrieve**.

2. Select the message from the Inbox.

From the Inbox:

1. In Idle mode, press **OK** and select **Messages** → **Inbox**.

2. Select a message (▤).

View an e-mail

1. In Idle mode, press **OK** and select **Messages** → **Email box**.

2. Select an account.

3. Press **OK** when **Check new Email** is displayed to download an e-mail or a header.

4. Select an e-mail or a header.

5. If you selected a header, press **OK** and select **Retrieve**.

Use Bluetooth wireless

Your phone is equipped with Bluetooth technology which enables 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

In Idle mode, press **OK** and select **Settings** → **Bluetooth** → **Activation** → **On**.

Search for and pair with a Bluetooth device

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

Send data

1. Access an application, such as **Phonebook**, **Library**, or **Organiser**.
2. Scroll to an item.
3. Press **OK** and select **Send** or **Send business card** → **Via Bluetooth**.
4. Select a device.
5. If necessary, enter the Bluetooth PIN code and press **OK**.

Receive data

1. Activate the Bluetooth feature.
2. Set other Bluetooth devices to search for your phone in the **My phone's visibility** option.
3. If necessary, press **OK** to confirm the reception.

Enter text

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

Changing the text input mode

- Press and hold ✳ to switch between T9 and ABC modes.
- Press ✳ to change case or switch to Number mode.
- Press and hold ♯ to switch to Symbol mode.

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.

Tips for using T9 mode

- Press **1** to enter periods or apostrophes automatically.
- Move the wheel clockwise or counterclockwise to move the cursor.
- Press **C** to delete characters one by one. Press and hold **C** to clear the entire display.

Using ABC mode

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

Key	Upper case	Lower case
1	. , - ' /	1
2	A B C 2	a b c 2
3	D E F 3	d e f 3
4	G H I 4	g h i 4
5	J K L 5	j k l 5
6	M N O 6	m n o 6
7	P Q R S 7	p q r s 7
8	T U V 8	t u v 8
9	W X Y Z 9	w x y z 9
0	0	

(Creating an SMS message with GSM-alphabet encoding)

Tips for using ABC mode

- 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 move the wheel clockwise. Then, enter the next letter.
- Press ♯ to insert a space.
- Move the wheel clockwise or counterclockwise to move the cursor.
- Press **C** to delete characters one by one. Press and hold **C** to clear the entire display.

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 access a symbol, move the wheel clockwise or counterclockwise.
- To insert the symbol in the message, press **OK**.

Call functions

Making a call

1. In Idle mode, enter the area code and phone number.
2. Press **SEND**.

Notes:
- Press **C** to clear the last digit or press and hold **C** to clear the whole display. You can move the cursor to edit an incorrect digit.
- Press and hold ✳ to enter a pause.

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 **SEND**.

Redialling recent numbers

1. In Idle mode, press **SEND** to display the list of recent numbers.
2. Scroll to the number you want and press **SEND**.

Making a call from Phonebook

Once you have stored a number in Phonebook, you can dial the number by selecting it from Phonebook. ▶ p. 41

You can also use the speed dial feature to assign your most frequently called numbers to specific number keys. ▶ p. 42

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

1. In Idle mode, enter a location number and press ♯.
2. Press **SEND** to dial the number.

Ending a call

Close the phone or press **END**.

Answering a call

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

Press **SEND** to answer the call, or press **OK** and select **Accept**.

Tips for answering a call
- When **Anykey Answer** is active, you can press any key, except **END** and **OK**. ▶ p. 48
- When **Active Folder** is active, you can simply open the phone. ▶ p. 48
- Press **END** to reject a call, or press **OK** and select **Reject call**.

Viewing missed calls

If you have missed calls, the screen displays how many calls you have missed.

1. Press **OK**.
2. If necessary, scroll through the missed calls.
3. Press **SEND** to dial the number you want.

Options during a call

You can access a number of functions during a call.

Adjusting the volume during a call

Use the wheel to adjust the earpiece volume during a call.

Move the wheel clockwise to increase the volume level and counterclockwise to decrease the volume level.

Placing a call on hold/Retrieving

Press **OK** and select **Hold** to place a call on hold, or select **Retrieve** to retrieve a call on hold.

Making a second call

You can make another call if your network supports it.

1. Press **OK** and select **Hold** to put the call on hold.
2. Make the second call in the normal way.
3. Press **OK** and select **Switch calls** to switch between the calls.
4. Press **OK** and select **End held call** to end the call on hold.
5. To end the current call, press **END**.

Answering a second call

You can answer an incoming call while already on the phone, if your network supports it and you have activated the call waiting feature. ▶ p. 50

1. Press **SEND** to answer the call. The first call is automatically put on hold.
2. Press **OK** and select **Switch calls** to switch between the calls.
3. Press **OK** and select **End held call** to end the call on hold.
4. To end the current call, press **END**.

Using In-call options

Press **OK** 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.
- **Menu**: access the phone's menu functions.
- **Mute/Unmute**: switch the phone's microphone off or on. When the microphone is switched off, the person on the other end of the line will not be able to hear you.
- **Mute key tone/Send keys**: switch the key tones on or off.

  Note: To communicate with answering machines or computerised telephone systems, **Send keys** must be selected.
- **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, for example, a password or an account number for an automated banking service.

- **Phonebook**: access the Phonebook list.
- **SIM service**: access special services, such as news, weather, entertainment, and location services, provided by your SIM card. This option is available when you use a SIM card supporting SIM AT menus.
- **End held call**: disconnect the call currently on hold.
- **Transfer**: transfer the currently active call to a caller on hold. The two callers can talk to each other, but you are disconnected from the call.
- **Join calls**: set up a multi-party call by adding a caller on hold to a currently active call. You can include up to 5 people on a multi-party call.
- **Private**: have a private conversation with one multi-party call participant. The other participants can converse with each other. After the private conversation, select **Join** to return to the multi-party call.
- **Reject call**: disconnect one multi-party call participant.

Messages

You can send and receive text messages, multimedia messages, and e-mails. You can also use Push Message and Cell Broadcast Message features.

To access this menu, press **OK** in Idle mode and select **Messages**.

Create *(Menu 1.1)*

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

Text message *(Menu 1.1.1)*

Short Message Service (SMS) allows you to send or receive text messages.

Note: The maximum number of characters allowed in a text message varies by service provider. If your message exceeds the maximum number of characters, the phone will split the message.

1. Enter your message.
2. Press **OK** to access the following options:
   • **Insert**: insert a Phonebook entry, bookmark, or text template to text.
   • **Attach**: attach a name card or calender data as a data format attachment.
3. When you have finished, press **OK** and select **Send and save** or **Send only**.

4. Enter a destination phone number.
5. Press **SEND** to send the message.

Multimedia message *(Menu 1.1.2)*

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

1. Select the **Subject** line.
2. Enter the subject of your message and press **OK**.
3. Select the **Picture** or **Sound** line.
4. Select **Add image** or **Add sound** and add an image or a sound.
   Notes:
   • The maximum size allowed for an MMS message can differ depending on your service provider.
   • The DRM (Digital Rights Management) system and the file type determine which files can or cannot be forwarded.
5. Select the **Message** line and select **Add**.
6. Enter the message text.
   Press **OK** and select **Insert** to insert a text template, Phonebook entry, or bookmark to text.
7. Press **OK** and select **Done**.

8. Press **OK** to access the following options for editing the message:
   - **Edit/Edit message**: edit the subject or text.
   - **Clear subject/Clear message**: clear the subject or text.
   - **Change image/Change sound**: change an added image or sound.
   - **Remove image/Remove sound**: remove an added image or sound.
   - **Add page**: add pages. Move to each page by selecting **Next Page** on the message screen, or selecting **Page move** from the option list.
   - **Delete page**: delete an added page.
   - **Page timing**: change the duration of page display.
   - **Attach**: attach a name card or calender data as a data format attachment.
9. When you have finished, press **OK** and select **Send**.
10. Enter a phone number or e-mail address.
11. Press **SEND** to send the message.

Email *(Menu 1.1.3)*

You can send e-mails that include text, images, and audio. To use this feature, you need to subscribe to an e-mail service and set up your e-mail account and profile. ▶ p. 29

1. Select the **Subject** line.
2. Enter the subject of your e-mail and press **OK**.
3. Select the **Message** line and select **Add**.
4. Enter the e-mail text.

   Press **OK** and select **Insert** to insert a Phonebook entry, bookmark, or text template to text.
5. Press **OK** and select **Done**.
6. Select the **Attach fils(s)** line.
7. Select one of the following options for adding files:
   - **Images/Sounds**: add images or sounds. You can also create and add an item to your e-mail.
     Note: The DRM (Digital Rights Management) system and the file type determine which files can or cannot be forwarded.
   - **Business card**: add name cards as a data format attachment.

- **Appointment**/**Anniversary**/ **Memo**/**To do**: add calendar data as a data format attachment.
- **Other files**: add files in a format which your phone does not support.

8. Press **OK** to access the following options for editing the message:

- **Edit**: edit the subject or text.
- **Clear subject**/**Clear message**: clear the subject or text.
- **Remove attachment**: remove the selected attachment.
- **Remove all attachments**: remove all attachments.

9. When you have finished, press **OK** and select **Send** or **Save and Send**.

10. Enter an e-mail address.

To send the e-mail to more than one recipient, fill in additional destination fields.

11. Press **SEND** to send the e-mail.

Inbox *(Menu 1.2)*

Use this menu to store all messages you have received, except e-mails.

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

- ✉ SMS
- ▦ MMS
- ✉¡ MMS notification (☀: Being retrieved, ✗: Failed to retrieve)
- ✉ Push messages from web servers
- ✉ Configuration messages, containing network parameters from your service provider
- ✉ CB messages from your service provider
- ✉ Delivery report for your sent messages

Notes:

- The DRM (Digital Rights Management) system limits the forwarding of some messages containing web content. They are indicated by ✉.
- A ! icon next to a message means that a message is of high priority. A grey-coloured message icon is of low priority.

Viewing a message

1. Scroll to the message you want.
2. Press **OK** and select **View**.

Using message options

While viewing a message, press **OK** to access the following options:

SMS messages
- **Reply**: send a reply message to the sender.
- **Forward**: forward the message to other people.
- **Delete**: delete the message.
- **Extract address**: extract URLs, e-mail addresses, or phone numbers from the message.
- **Extract media**: save media content from the message into your phone's memory.

MMS notifications/MMS messages
- **Retrieve**: (for MMS notification) retrieve the message from the server.
- **Reply**: send a reply message to the sender.
- **Forward**: forward the message to other people.
- **Delete**: delete the message.
- **Extract address**: extract URLs, e-mail addresses, or phone numbers from the message.
- **Extract media**: save media content from the message into your phone's memory.
- **Details**: view the message properties.

Configuration messages
- **Install**: apply the configuration specified in the message to your phone.
- **Delete**: delete the message.
- **Extract address**: extract URLs, e-mail addresses, or phone numbers from the message.

Push messages
- **Go to URL**: connect to the URL specified in the message.
- **Delete**: delete the message.
- **Extract address**: extract URLs, e-mail addresses, or phone numbers from the message.

CB messages
- **Save**: save the message to the phone's memory.
- **Extract address**: extract URLs, e-mail addresses, or phone numbers from the message.
- **Delete**: delete the message.

Delivery report messages
- **Extract address**: extract URLs, e-mail addresses, or phone numbers from the message.
- **Delete**: delete the message.

Outbox *(Menu 1.3)*

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

While viewing a message, press **OK** to access the following options:

- **Send again**: resend the message.
- **Delete**: delete the selected message.
- **Delete all**: delete all messages.
- **Move to my folder**: move the message to one of the folders you have created in **My folders**.
- **Details**: view the message properties.

Drafts *(Menu 1.4)*

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

Press **OK** and select **Edit** to edit and send the message.

Sent *(Menu 1.5)*

This folder stores messages that you have sent successfully.

While viewing a message, press **OK** to access the following options:

- **Forward**: forward the message to other people.
- **Sort**: change the sort order of the messages.
- **Delete**: delete the selected message.

- **Move to my folder**: move the message to one of the folders you have created in **My folders**.
- **Details**: view the message properties.

Email box *(Menu 1.6)*

This folder stores e-mails that you have received.

Viewing an e-mail

1. Select an e-mail account.
2. Press **OK** when **Check new email** displays, or press **OK** and select **Check new email**.

   The phone checks for new e-mails and downloads received e-mails.

   The following icons may appear on the list to show the e-mail status:

   - 📭 : Retrieved from the server
   - 📬 : Being retrieved
   - 📪 : Failed to retrieve

   Note: A ! icon next to a message means that a message is of high priority. A grey-coloured message icon is of low priority.

3. Scroll to an e-mail or header and press **OK** and select **View**.
4. If the e-mail has more than one page, move the wheel clockwise or counterclockwise to scroll through pages one by one.
5. Select an attached file to view or play it.

Using e-mail options

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

- **Reply**: send a reply message.
- **Forward**: forward the e-mail to other people.
- **Retrieve**: (for headers) retrieve the body of the e-mail from the e-mail server.
- **Delete**: delete the selected e-mail.
- **Extract address**: extract URLs, e-mail addresses, or phone numbers from the message.
- **Extract media**: save media content from the message into your phone's memory.
- **Details**: view the e-mail properties.

While viewing the e-mail list, press **OK** to access the following options:

- **View**: open the selected item.
- **Check new email**: check the Email box for new e-mails.
- **Reply**: send a reply message.
- **Forward**: forward the e-mail to other people.
- **Sort**: change the order of the e-mails.
- **Delete**: delete the selected e-mail.
- **Delete all**: delete all e-mails.

- **Add to filtering list**: add the sender's e-mail address or e-mail subject to the Block list to reject e-mails from that address or containing that subject.
- **Move to my folder**: move the e-mail to one of the folders you have created in **My folders**.
- **Details**: view the e-mail properties.

My folders *(Menu 1.7)*

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

Creating a new folder

Enter a name for the folder and press **OK**.

Note: If there are any folders created, select **Create**.

Using folder options

On the folder list, press **OK** to access the following options:

- **Open**: open the folder.
- **Change folder name**: change the name for the folder.
- **Delete**: delete the selected folder.
- **Delete all**: delete all folders.

Text template *(Menu 1.8)*

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

Creating a text template

1. Select an empty location.
2. Enter a message.
3. Press **OK** and select **Done**.

Using template options

From the template list, press **OK** to access the following options:

- **Send & Save**: send a new message using the template and save the message in the Sent box.
- **Send only**: send a new message using the template.
- **Delete all**: delete all templates.

Settings *(Menu 1.9)*

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

Text message *(Menu 1.9.1)*

You can change the default SMS settings.

- **Send settings**: set up the following options for sending a text message:

  Reply path: allow the recipient to reply to you through your message server.

  Delivery report: set the network to inform you when your message has been delivered.

  Character support: select a character encoding type. If you select **Automatic**, the phone switches the encoding type from GSM-alphabet to Uni-code if you enter a 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.

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

- **Profile settings**: select a profile or edit a profile. Press **OK** and select **Edit** to access the following properties in a profile:

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

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

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

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

  Setting name: enter a name for the profile.

Multimedia message *(Menu 1.9.2)*

You can change the default MMS settings.

• **Send settings**: set up the following options for sending a multimedia message:

Delivery report: set the network to inform you when your message has been delivered.

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

Read reply: determine whether or not your phone sends a read-reply request.

Priority: set the priority level of your messages.

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

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

Outgoing message size: select a maximum size of attached items allowed for an MMS message.

• **Retrieve settings**: set up the following options for receiving a multimedia message:

Reject unknown sender: reject messages from unknown senders.

Advert allowed: accept advertisements.

Information allowed: accept information messages.

Personal allowed: accept personal messages.

Report allowed: send a delivery report from the network to the sender.

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

Roaming reception: determine if your phone retrieves new messages automatically when you are roaming in another network.

Home reception and **Roaming reception** have 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 retrieve new messages.

• **Profile**: select a connection profile to be used for MMS.

Note: You can edit a profile using the **Connection settings** menu. ▶ p. 55

Email *(Menu 1.9.3)*

You can configure the default network settings.

Note: You cannot change e-mail profile settings while an e-mail is being sent or retrieved.

• **Send settings**: set up the following options for sending an e-mail:

Delivery report: set the network to inform you when your e-mail has been delivered.

Reply to address: set recipients to send read-reply messages to your e-mail address.

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

Include signature: attach your name, phone number, or simple memo to your e-mail.

Edit name: enter your name.

Edit telephone number: enter your phone number.

Edit note: enter a simple memo.

• **Receive settings**: set up the following options for receiving an e-mail:

Check interval: determine how often the phone checks the server for incoming e-mails.

If this option is set to **Do not notify**, you can use the **Check new email** option to check your e-mail manually.

Read reply: determine whether or not your phone sends a read-reply.

When this option is set to **Announce**, the phone asks you to send a read-reply to the sender.

Reject if larger than: determine the maximum size for incoming e-mails.

Leave copy on server: leave copies of e-mails on the e-mail server after retrieving.

• **Block list**: access e-mail addresses or e-mail subjects in Block list. You can also specify and delete the e-mail addresses or e-mail subjects.

• **Email account**: select an account to be used or set up an e-mail account. Press **OK** and select **Edit** to access the following properties for each account:

Account name: enter a name for the selected account.

User name: enter a user name.

Email address: enter your e-mail address.

User ID: enter your e-mail ID.

Password: enter your e-mail password.

SMTP server: enter the IP address or domain name of the outgoing e-mail server.

SMTP port: enter the SMTP port number.

Protocol 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 domain name of the server that receives your e-mail.

POP3 port: enter the POP3 port number.

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 domain name of the server that receives your e-mail.

IMAP4 port: enter the IMAP4 port number.

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 profile**: select a connection profile to be used for e-mail services.

Note: You can edit a profile using the **Connection settings** menu. ▶ p. 55

Push message *(Menu 1.9.4)*

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, when the **Receive** option is set to **SMS-C specific**.

Broadcast *(Menu 1.9.5)*

You can change the settings for receiving CB messages.

• **Receive**: select the reception of CB messages.

• **Channel list**: indicate the channels from which you wish to receive CB messages. Please contact your service provider for further details.

• **Language**: select the preferred languages in which broadcast messages display.

Memory status *(Menu 1.0)*

Use this menu to view the maximum memory and available memory for each message type. You can also view the memory currently in use in each folder.

You can use the built-in camera module to take photos in various modes. The camera produces JPEG photos.

To access this menu, press **OK** in Idle mode and select **Camera**.

Notes:
- 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.

Single shot *(Menu 2.1)*

You can take a photo in Single shot mode.

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

Taking a single shot

1. From the Camera menu screen, select **Single shot**.
2. When the camera turns on and an image appears on the display, position yourself at a right angle to the subject and aim the camera lens at the subject.

Notes:
- Be careful not to cover the camera lens with your hand.
- Tilt and rotate the phone until the subject is in the centre of the image.
- To change the colour tone of photos, press **C** and select **Effects**.
3. Press **SEND** or **OK** to take a photo. The photo is saved in the **Photos** folder.

Using photo options

After taking a single shot, press **OK** to access the following options:
- **Take another**: return to Capture mode to take another photo.
- **Send via**: send the photo via MMS, e-mail, or Bluetooth.
- **Set as caller ID**: set the photo as a caller ID image for a Phonebook entry.
- **Delete**: delete the selected photo.
- **Rename**: change the name of the photo.
- **Go to photos**: go to the **Photos** folder. ▶ p. 39
- **Protection**: lock the photo to protect it from being deleted, or unlock the photo.
- **Details**: view the photo properties.

Multi shot *(Menu 2.2)*

You can take a series of action stills in Multi shot mode.

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

Taking a multi-shot series

1. From the Camera menu screen, select **Multi shot**.
2. Select the number of photos to be taken.
3. When the camera turns on and an image appears on the display, position yourself at a right angle to the subject and aim the camera lens at the subject.

   Notes:
   - Be careful not to cover the camera lens with your hand.
   - Tilt and rotate the phone until the subject is in the centre of the image.
   - To change the colour tone of photos, press **C** and select **Effects**.
4. Press **SEND** or **OK** to take a photo. The selected number of photos will be taken in succession. The photos are saved in the **Photos** folder.

Using photo options

After taking a multi shot, press **OK** to access the options. ▶ p. 31

Night shot *(Menu 2.3)*

You can take a photo in Night shot mode. This mode allows you to take photos in dim light.

Taking a night shot

1. From the Camera menu screen, select **Night shot**.
2. When the camera turns on and an image appears on the display, position yourself at a right angle to the subject and aim the camera lens at the subject.

   Notes:
   - Be careful not to cover the camera lens with your hand.
   - Tilt and rotate the phone until the subject is in the centre of the image.
   - To change the colour tone of photos, press **C** and select **Effects**.
3. Press **SEND** or **OK** to take a photo. The photos are saved in the **Photos** folder.

Using photo options

After taking a night shot, press **OK** to access the options. ▶ p. 31

Go to photos *(Menu 2.4)*

You can view photos you have taken. ▶ p. 39

Effects *(Menu 2.5)*

You can change the colour tone of photos the camera will take.

When you select the colour tone you want, the image to be captured appears on the display.

Settings *(Menu 2.6)*

You can change the default camera settings.

- **Size**: select an image size.
- **Picture quality**: select an image quality setting.
- **Brightness**: adjust the image brightness.

WAP browser

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

To access this menu, press **OK** in Idle mode and select **WAP browser**.

Home *(Menu 3.1)*

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

Navigating the web
• To scroll though browser items, move the wheel clockwise or counterclockwise.
• To select a browser item, press **OK** and select **Select**.
• To return to the previous page, press **C**.

Using web page options
From any web page, press **OK** to access the following options:
• **Go to link**: access the linked web page.
• **Select**: select the browser item.

• **Home**: go back to the homepage.
• **Bookmarks**: display the Bookmarks list.
• **Reload**: reload the current page.
• **Go to URL**: enter a URL address manually.
• **Show URL**: display the URL address of the current web page. You can also set the current page as the homepage for the web browser or a bookmark.
• **Clear cache**: clear the cache memory.
• **Inbox**: access push messages in the web browser.
• **Show images**: display images on the current page.
• **Certificate**: display the web browser certificate. You can also delete the certificate.

Exiting the web browser
Press **END** to exit the browser.

Bookmarks *(Menu 3.2)*

Use this menu to save URL addresses in order to quickly access websites.

Adding a bookmark

1. Select **New**.
2. Select **Enter name**.
3. Enter a name for the bookmark and press **OK**.
4. Select **Enter URL**.
5. Enter a URL address and press **OK**.
6. Select **Save**.

Accessing a bookmarked page

Scroll to a bookmark item and press **OK** and select **Go to URL**.

Using bookmark options

After saving an item, press **OK** to access the following options:

• **Go to URL**: access the bookmarked website.
• **Edit**: edit the address and name of the bookmark.
• **Delete**: delete the selected bookmark.
• **Delete all**: delete all bookmarks.

Enter URL *(Menu 3.3)*

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

WAP profile *(Menu 3.4)*

Use this menu to select a connection profile for accessing the wireless web. You can also edit a profile. ▶ p. 55

Clear cache *(Menu 3.5)*

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

Organiser

The Organiser feature enables you to keep track of your schedule and tasks, to view missed events, and to make a memo.

To access this menu, press **OK** in Idle mode and select **Organiser**.

Month view *(Menu 4.1)*

Use this menu to keep track of your monthly schedule. When you select **Month view**, the calendar displays with today's date highlighted.

Selecting a day
Move the wheel clockwise or counterclockwise to move by day.

Entering a new appointment
1. Select a date on the calendar.
2. Press **OK** and select **Appointments**.
   Note: If there are any appointments already stored for the date, press **OK** and select **Create → Appointments**.
3. Enter information or change the settings.
   - **Subject**: enter the title of the event.
   - **Details**: enter information about the event.
   - **Start date** and **Start time**: enter the starting date and time.
   - **End date** and **End time**: enter the ending date and time.
   - **Location**: enter information about the event location.
   - **Alarm**: select how long before the event the alarm is to alert you. If you do not want an alarm for the event, select **Off**.
   - **Expiry**: select the expiry date.
4. Select **Save** to save the event.

Entering a new anniversary
1. Select a date on the calendar.
2. Press **OK** and select **Anniversary**.
   Note: If there are any anniversaries already stored for the date, press **OK** and select **Create → Anniversary**.
3. Enter information or change the settings.
   - **Occasion**: enter information about the event.
   - **Date**: enter the date.
   - **Alarm**: select how long before the event the alarm is to alert you. If you do not want an alarm for the event, select **Off**.
     Note: If you set an alarm for the anniversary, the alarm rings at 8 am.
   - **Repeat every year**: set the phone to remind you of the event every year.
4. Select **Save** to save the event.

Entering a memo

1. Select a date on the calendar.
2. Press **OK** and select **Memo**.

   Note: If there are any memos already stored for the date, press **OK** and select **Create** → **Memo**.
3. Enter information.
   • **Memo**: enter a memo.
   • **Date**: enter the date.
4. Select **Save** to save the event.

Entering a task

1. Select a date on the calendar.
2. Press **OK** and select **To do**.

   Note: If there are any tasks already stored for the date, press **OK** and select **Create** → **To do**.
3. Enter information or change the settings.
   • **To do**: enter information about the event.
   • **Date**: enter the date.
   • **Due date**: enter the ending date.
   • **Select priority**: select a priority level.
4. Select **Save** to save the event.

Accessing an event

1. Select a date on the calendar to display the events for that day.

   The following icons indicate the type of events.

   • Appointments
   • ☆ Anniversaries
   • Memos
   • Tasks
2. Scroll to an event and press **OK** and select **View**.
3. Move the wheel clockwise or counterclockwise to view the whole event information.

Using event options

While viewing an event, press **OK** to access the following options:

• **Edit**: edit the event.
• **Send**: send the event via SMS, MMS, e-mail, or Bluetooth.
• **Delete**: delete the event.
• **Month view**: switch to the month view screen.
• **Week view**: switch to the week view screen.
• **Day view**: switch to the day view screen.

Week view *(Menu 4.2)*

Use this menu to view events for the selected week. The highlighted cells on the timetable indicate appointments scheduled for the week. Select the cell that contains the event you want.

Day view *(Menu 4.3)*

Use this menu to view events scheduled for the current date. Select the event you want.

Appointments *(Menu 4.4)*

This menu displays appointments you have created on the calendar. If you have set the Alarm option, the 🔔 icon is activated.

Anniversary *(Menu 4.5)*

Use this menu to view anniversaries you have created on the calendar. If you have set the Repeat and Alarm options, the 🔁 and 🔔 icons are activated.

To do *(Menu 4.6)*

Use this menu to view tasks you have created on the calendar.

The colour of the ❗ icon indicates the task priority:

- Red for high priority
- Blue for normal

A check mark appears in the status check box if the task has been completed (☑). To change the task status, on the task list, press **OK** and select **Done** or **Undone**.

Memo *(Menu 4.7)*

Use this menu to view memos you have stored on the calendar.

Delete all *(Menu 4.8)*

Use this menu to delete all events stored on the calendar at one time.

Missed events *(Menu 4.9)*

When you are unable to acknowledge an alarm for an appointment and anniversary, the phone stores the missed event alarm until you confirm and delete it.

Memory status *(Menu 4.0)*

This menu displays the maximum number of events you can store on the calendar and the number of events you have created.

Library

The **Library** menu allows you to access images, sounds, and other files in the phone's memory.

To access this menu, press **OK** and select **Library**.

Images *(Menu 5.1)*

This menu displays photos you have taken and images you have downloaded or received in messages.

Viewing an image

1. Select an image folder.
2. Scroll to the image you want.
3. Press **OK** and select **View**.
4. Move the wheel clockwise or counterclockwise to view other images.

Viewing a slide show

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

1. Select an image folder.
2. Press **OK** and select **Slide show**. The slide show begins.
3. Press **C** to stop the slide show.

Using image options

While viewing an image, press **OK** to access the following options:

- **List**: display the file list.
- **Send**: send the file via MMS, e-mail, or Bluetooth.
- **Caller ID**: set the file as a caller ID image for a Phonebook entry.
- **Delete**: delete the file.
- **Rename**: change the name of the file.
- **Move to Favourite images/Move to Downloaded images/Move to Photos**: move the file to another folder.
- **Lock/Unlock**: lock the file to protect it from being deleted, or unlock the file.
- **Details**: view the file properties.

Sounds *(Menu 5.2)*

This menu displays voice memos you have recorded and sounds you have downloaded or received in messages.

Playing a sound

1. Select a sound folder.
2. Scroll to the sound you want.
3. Press **OK** and select **Play**.

If you are playing a voice memo you have recorded, see **Voice memo**.

While playing a sound, press **OK** to access the following options:

- **List**: display the file list.
- **Send**: send the file via MMS, e-mail, or Bluetooth.
- **Delete**: delete the selected file.
- **Rename**: change the name of the file.
- **Move to Favourite sounds/Move to Downloaded sounds/Move to Voice list**: move the file to another folder.
- **Lock/Unlock**: lock the file to protect it from being deleted, or unlock the file.
- **Details**: view the file properties.

Other files *(Menu 5.3)*

This menu displays other files which are not supported by the phone. You cannot open these files on the phone.

Press **OK** to access the following options:

- **Send as email**: send the file via e-mail.
- **Delete**: delete the selected file.
- **Delete all**: delete all files.
- **Details**: view the file properties.

Memory status *(Menu 5.4)*

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

Phonebook

You can store phone numbers in your phone's memory and copy them to the SIM card. 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 **OK** in Idle mode and select **Phonebook**.

Contacts list *(Menu 6.1)*

Use this menu to search for contacts in Phonebook.

Finding an entry

1. Select the first character of the name you want to find and scroll to the name.
2. To dial, press **SEND**.
    If the name has more than one number, scroll to the number you want and press **SEND**.
3. To view the contact information, press **OK** and select **view**.

Using Phonebook options

While viewing a contact in Phonebook, press **OK** to access the following options:

Note: Depending the number type you select, options may vary.

-   **Call**: dial the number.
-   **Send message**: send an SMS or MMS to the selected number.
-   **Send email**: send an e-mail to the selected e-mail address.

-   **Send number**: send the number via SMS, MMS, or e-mail.
-   **Send address**: send the e-mail address via SMS, MMS, or e-mail.
-   **Send business card**: send the contact via SMS, MMS, e-mail, or Bluetooth.
-   **Edit**: edit the contact information.
-   **Add item**: add additional numbers.
-   **Delete number**: delete the selected number when there is more than one number.
-   **Delete address**: delete the selected e-mail address.
-   **Delete contact**: delete the selected contact from the Phonebook.

Add new contact *(Menu 6.2)*

Use this menu to add new contacts to Phonebook.

1. Change the settings or enter information about the contact.
    -   : assign a name.
    -   : enter a mobile phone number.
    -   : enter a home phone number.
    -   : enter an office phone number.

- @ : assign an e-mail address.
- : assign an image as a caller ID image to alert you to a call from the person.
- : assign the contact to a caller group.
2. Select **Save** to save the contact.

Group *(Menu 6.3)*

Use this menu to organise your contacts in caller groups.

Creating a new caller group

Enter a name for the group and press **OK**.

Adding members to a caller group

1. Select a group.
2. Select **View members** → **Add members**.
   The Phonebook list screen is displayed.
3. Select the contact you want to add to the group.
4. To add more members, select **Add members** → a contact.

Managing caller groups

From the group list, press **OK** to access the following options:

- **View members**: display the members of the selected group.
- **Change group name**: change the name of the group.

- **Delete**: delete the selected group. Group members, however, will not be deleted from Phonebook.
- **Delete all**: delete all groups.

Speed dial *(Menu 6.4)*

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

Assigning speed dial entries

1. Select a key number from **2** to **9**. Key **1** is reserved for your voicemail server.
2. Select the contact you want from the contact list.
3. Scroll to the number you want and press **OK**.

Managing speed dial entries

While viewing the Speed dial screen, scroll to an entry and press **OK** to access the following options:

- **Change**: assign a different number to an assigned key.
- **Remove**: clear speed dial setting.

Dialling speed dial entries

Press and hold the appropriate key in Idle mode.

My business card *(Menu 6.5)*

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

Saving your name card

The procedure for creating your name card is the same as the one for saving a number in the phone's memory. ▶ p. 41

Using name card options

After saving your name card, press **OK** to access the following options:

- **Send number**: send the name card as a data format attachment via SMS, MMS, or e-mail.
- **Send business card**: send the name card via Bluetooth.
- **Edit**: edit the name card.
- **Remove**: delete the name card.

Own number *(Menu 6.6)*

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.

Settings *(Menu 6.7)*

Use this menu to change the method for searching contacts in Phonebook.

Copy to SIM *(Menu 6.8)*

Use this menu to copy the selected contact in the phone's memory to the SIM card.

Delete all *(Menu 6.9)*

Use this menu to delete all of the contacts both in your phone's memory and on your SIM card.

Memory status *(Menu 6.0)*

Use this menu to display the number of contacts you have stored in Phonebook.

Service Numbers *(Menu 6. *)*

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

Scroll to the number you want and press **SEND**.

Use this menu to view the calls you have dialled, received, or missed, the length of your calls, and the cost of your calls, if supported by your SIM card.

To access this menu, press **OK** in Idle mode and select **Call log**.

Recent calls *(Menu 7.1)*

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

Accessing a call log

1. Move the wheel clockwise or counterclockwise to scroll through the call log list.
2. Scroll to the call log you want and press **SEND** to dial a number, or press **OK** and select **Details** to view the details of a call.

Using call log options

While viewing the call details, press **OK** to access the following options:

- **Details**: view the call details.
- **Use number**: edit and save the number.
- **Save to Phonebook**: save the number in Phonebook.
- **Send message**: send an SMS or MMS message to the selected number.

Missed calls *(Menu 7.2)*

This menu displays the most recently received calls that you did not answer.

Dialled calls *(Menu 7.3)*

This menu displays the most recent calls you have dialled.

Received calls *(Menu 7.4)*

This menu displays the most recent calls you have received.

Delete all *(Menu 7.5)*

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

Call time *(Menu 7.6)*

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 you have calls received.

To reset call time:

1. Press **OK** and select **Reset**.
2. Enter the phone password and press **OK**.

   Note: The password is preset to **00000000**. You can change this password. ▶ p. 55

Applications

Use this menu to record a voice memo, to set alarms, or to use the phone as a world clock, calculator, and converter. You can also synchronise the Phonebook or calendar date in the phone's memory with data stored on a PC.

To access this menu, press **OK** in Idle mode and select **Applications**.

Voice memo *(Menu 8.1)*

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

Recording and saving a voice memo

1. Press **SEND**, or press **OK** and select **Record** to start recording.
2. Speak into the microphone.
   • To adjust the volume, move the wheel clockwise or counterclockwise.
   • To pause recording, press **Send** or **OK**. To resume recording, select **Continue record** from the option list.
3. When you have finished, press **OK** and select **Stop**. The voice memo is automatically saved.

Using voice memo options

After recording, press **OK** to access the following options:

• **Play**: play the voice memo.
• **Send**: send the voice memo via MMS, e-mail, or Bluetooth.

• **Record another**: return to Record mode for a new voice memo.
• **Go to voice memos**: access voice memos you have recorded.
• **Delete**: delete the voice memo.
• **Rename**: change the name of the voice memo.
• **Lock**/**Unlock**: lock the voice memo to protect it from being deleted.
• **Setting**: select a recording time.
• **Details**: view the voice memo properties.

Playing a voice memo

1. From the Voice memo screen, press **OK** and select **Go to voice memos**.
2. Select a voice memo and select **Play**. The voice memo plays.

During playback,

• To adjust the volume, move the wheel clockwise or counterclockwise.
• To pause playback, press **SEND**. To resume playback, press **SEND** again.
• To stop playback, press **OK** and select **Stop**.

Changing voice memo settings

You can select a recording time before starting recording.

From the Voice memo screen, press **OK** and select **Setting**.

- **Limit for message**: record a voice memo for adding to an MMS.
- **Limit for Email**: record a voice memo for adding an e-mail.
- **Max 1 hour**: record a voice memo up to one hour long.

World clock *(Menu 8.2)*

Use this menu to find out what time it is in another part of the world.

From the world map, move the wheel clockwise or counterclockwise to select the city you want. As the time line moves, the current time and date of the given zone display.

Alarm *(Menu 8.3)*

Use this menu to set alarms to ring at a specific time. A wake-up alarm is not affected by your sound settings.

Setting an alarm

1. Select the type of alarm.
2. Specify the alarm settings.
   - **Alarm**: activate the alarm.
   - **Set time**: enter the time for the alarm to sound using the wheel.
   - **Repeat**: select a repeat option.
   - **Alarm tone**: select an alarm tone.

3. Select **Save** to save the alarm settings.

Stopping an alarm

When the alarm sounds, choose either of the following options to stop the alarm:

- Select **Confirm**.
- Select **Snooze** or any key to pause the alarm for 5 minutes. You can do this a maximum of 5 times.

Calculator *(Menu 8.4)*

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

1. Enter the first number.

   To insert a decimal point, scroll to the decimal point mark (**.**) using the wheel and press **OK**.
2. Move the wheel clockwise or counterclockwise to access the math function you want and press **OK**.
3. Enter the second number.
4. Scroll to the equal sign (**=**) using the wheel and press **OK** to view the result.
5. If necessary, repeat from step 2 to continue the calculation.

Currency converter *(Menu 8.5)*

Use this menu to convert currency values.

1. Select **Unit** in the upper line and select the original unit.
2. Move down and select the input field.
3. Enter the value to be converted and press **OK**.

   Press ✳ to insert a decimal point.
4. Select **Unit** in the lower line and select the unit you want to convert to.

   The equivalent value for the amount you entered displays.

Note: You can edit the currency rate by selecting **Set currency rate**.

PIM sync *(Menu 8.6)*

Use this menu to synchronise personal data in the phone's memory with data on a PC by using the optional Widesync programme.

Creating a synchronisation profile

1. Select **New**.
2. Specify the following properties of the profile:
   - **Profile name**: enter a name for the profile.
   - **Sync category**: select the applications you want to synchronise.
   - **Sync type**: select a synchronisation type.

3. Select **Save** to save the profile.

Note: You can add up to five profiles.

Starting synchronisation

1. Make sure that your PC has the Widesync programme and MS Outlook installed.
2. Run MS Outlook.
3. Select the profile you want on your phone.
4. Press **OK** and select **Start sync**.

Using synchronisation options

From the synchronisation profile list, press **OK** to access the following options:

- **Start sync**: start synchronisation for the selected profile.
- **View result**: view the result of the last synchronisation.
- **New sync profile**: add a new synchronisation profile.
- **Edit sync profile**: edit the properties of the selected profile.
- **Delete**: delete the selected profile.
- **Delete all**: delete all profiles.

Settings

Use this menu to customise your phone settings. You can also reset the settings to their default values.

To access this menu, press **OK** in Idle mode and select **Settings**.

Time & Date *(Menu 9.1)*

Use this menu to change the time and date settings for your phone.

- **Set time**: enter the current time using the wheel.
- **Set date**: enter the current date using the wheel.
- **Time zone set**: select your time zone. Move the wheel clockwise or counterclockwise to scroll to your time zone and press **OK** to save the time zone.
- **Time format**: select 12-hour or 24-hour time 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 one of several languages for the display text.

Table mode *(Menu 9.2.2)*

Use this menu to rotate the display orientation 180 degrees.

Auto folder *(Menu 9.2.3)*

Use this menu to open or close the phone semi-automatically.

Auto Redial *(Menu 9.2.4)*

Use this menu to set the phone to make up to ten attempts to redial a phone number after an unsuccessful call.

Active Folder *(Menu 9.2.5)*

Use this menu to answer an incoming call by opening the phone.

Anykey Answer *(Menu 9.2.6)*

Use this menu to answer an incoming call by pressing any key, except **END** and **OK**.

When this option is set to **Off**, you must press **SEND**, or press **OK** and select **Accept** to answer a call.

Display settings *(Menu 9.3)*

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

Idle display *(Menu 9.3.1)*

Use this menu to select a display item for the Idle screen.

Brightness *(Menu 9.3.2)*

Use this menu to adjust the brightness of the display for varying lighting conditions.

Backlight *(Menu 9.3.3)*

Use this menu to select the length of time the backlight of the display stays on.

Dim *(Menu 9.3.4)*

Use this menu to select the length of time the display is in Dimming mode after the backlight turns off. After a specified time has elapsed, the display turns off.

Sound settings *(Menu 9.4)*

Use this menu to customise sound settings to suit your preferences.

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

  Mute: the phone mutes the call ringer.

  Melody: the phone rings using the selected ringtone.

  Vibration: the phone vibrates but not rings.

  Vibration then melody: the phone vibrates three times and then starts ringing.

- **Message tone**: select a ringtone for incoming messages.

- **Message alert type**: specify how you are to be informed of incoming messages.
- **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.
- **Quiet mode**: set how the phone acts to alert you to a specific event in Quiet mode, instead of making sounds.

Network services *(Menu 9.5)*

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

Call diverting *(Menu 9.5.1)*

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

1. Select a call diverting option:
   - **Divert always**: divert all calls.
   - **Busy**: divert calls when you are on another call.
   - **No reply**: divert calls when you do not answer the phone.
   - **Unreachable**: divert calls when you are not in an area covered by your service provider 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 **OK**.
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 9.5.2)*

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 to 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 the phone outside of your home country.
   • **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 **OK**.

Call waiting *(Menu 9.5.3)*

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 9.5.4)*

This network service allows you to either automatically or manually select the network used when roaming outside of your home area.

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

Caller ID *(Menu 9.5.5)*

This network service allows you to prevent your phone number from being displayed on the phone of the person being called.

If you select **Default**, the phone will use the default setting provided by the network.

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

Voice mail server *(Menu 9.5.6)*

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

Note: You must enter the voice server number before you can access your voicemails. Your service provider can give the voicemail server number.

- **Connect to voice server**: connect to the voicemail server to allow you to listen to your messages. You can also connect to the voicemail server by pressing and holding **1** in Idle mode.
- **Voice server number**: store or change the voicemail server number.

Closed user group *(Menu 9.5.7)*

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

- **Index list**: add, delete, or activate CUG index numbers. Press **OK** to access the numbers for setting up an index list.

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

Band selection *(Menu 9.5.8)*

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: GSM 1900 and Combined GSM 900/1800.

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.

Bluetooth *(Menu 9.6)*

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

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

Notes:

- If there are obstacles between the devices, the operating distance may be reduced.
- It is recommended that you do not use the Bluetooth feature while using multimedia features such as voice recorder and camera, or vice versa.
- Some devices may not be compatible 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 search for 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 setting options, 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 type of device:

   - Mobile phone
   - Computer
   - Headset or hands-free car kit
   - PDA
   - Printer
   - Unknown device

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

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

3. Select a device.

4. Enter a Bluetooth PIN code and press **OK**. This code is used just once and you don't need to memorise it.

   When the owner of the other device enters the same code, pairing is complete.

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

Using device options

From the paired device list, scroll to a device you want and press **OK** to access the following options:

Note: Options may vary depending on the paired device.

- **Connect**: connect to the currently selected device.
- **Disconnect**: end the connection with the device.
- **Browse files**: search for data from the device and import data directly to your phone.
- **Service list**: display the Bluetooth service list for the selected device.
- **Rename**: change the name of the device.

- **Authorise device**/**Unauthorised device**: determine whether or not the phone asks you to permit connection when other devices try to connect to your phone.
- **Delete**: remove the device from the device list.
- **Delete all**: remove all devices from the device list.

Sending data via Bluetooth

1. Activate the Bluetooth feature.
2. Select an application, **Phonebook**, **Library**, or **Organiser**, in which the item you want to send is stored.
3. Scroll to the item you want.
4. Press **OK** and select **Send** or **Send business card** → **Via Bluetooth**.

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

Receiving data via Bluetooth

1. Activate the Bluetooth feature.
2. Set other Bluetooth devices to search for your phone in the **My phone's visibility** option.
3. If an unauthorised Bluetooth device sends data to your phone, press **OK** to receive data.

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.

Note: If you enter an incorrect PIN / PIN2 three times in succession, 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 code each time it is switched on.

Change PIN *(Menu 9.7.2)*

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

Phone lock *(Menu 9.7.3)*

This 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 all menu functions on the phone, except call functions.

When this feature is enabled, you must enter the phone password to access menu 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.

Change PIN2 *(Menu 9.7.7)*

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

Connection settings *(Menu 9.8)*

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

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

Creating a profile

1. Press **OK**.

   Note: If a profile has already been saved, press **OK** and select **New connection**.

2. Specify following information:
   • **Profile name**: enter a name for the profile.
   • **Home URL**: enter the address of the homepage of your service provider.
   • **Proxy**: activate or deactivate the proxy server. When this option is activated, the **IP address** and **Port** options are activated.
   • **DNS**: activate or deactivate the DNS address. When this option is selected, **DNS1** and **DNS2** are activated.
   • **Bearer**: select the network bearer type.
   • **Advanced settings**: change the advanced options.

When the bearer is set to GPRS:
APN: enter the access point name.
Login ID: enter the login ID.
Password: enter the login password.
When the bearer is set to GSM:
Dial number: enter the PPP phone number.
Login ID: enter the login ID.
Password: enter the login password.
Data call type: select a call type for data transmission.

3. Select **Save** to save the profile.

Using profile options

Press **OK** to access the following options:
• **Edit**: edit the profile.
• **Delete**: delete the selected profile.
• **New connection**: add a new profile.

56

Docking station *(Menu 9.9)*

When your phone is connected to the docking station, you can use your phone as a DECT phone, which will be operated via the associated base station (house or office phone).

Note: For further information, see the User's Guide for the Docking station.

Reset settings *(Menu 9.0)*

Use this menu to reset all the settings in your phone at the same time.

Enter the phone password and press **OK**.

Note: The password is preset to **00000000**. You can change this password. ▶ p. 54

SIM services

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

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

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:

"Please insert SIM card"

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

"No service," "Network failure," or "Not done" 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 **SEND**.
- Be sure that you have accessed the right cellular network.
- Make sure that you have not set an outgoing call barring option.

Your correspondent cannot reach you

- Be sure that your phone is switched on. (**END** pressed for more than one second.)
- Be sure that you are accessing the correct 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 Phonebook feature to ensure the number has been stored correctly.

• Re-store the number, if necessary.

The battery doesn't 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. Body-worn operations are restricted to Samsung-supplied, approved, or non- Samsung designated accessories that have no metal and must provide at least 1.5 cm separation between the device, including its antenna (whether extended or retracted) and the user's body. Non-compliance with the above restrictions may result in violation of FCC RF exposure guidelines.

The FCC has granted an Equipment Authorization for this mobile phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. The maximum SAR values for this model phone as reported to the FCC are:

1900

- Head: 0.331 W/Kg.
- Body-worn: 0.355 W/Kg.

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 A3LSGHE910. 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.

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

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

Cautions

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

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

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

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.
- Use only Samsung-approved batteries and recharge your battery only with Samsung-approved chargers. When a charger is not in use, disconnect it from the power source. Do not leave the battery connected to a charger for more than a week, since

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

regulations. In some areas, the disposal of batteries in household or business trash may be prohibited. For safe disposal options for Li-Ion batteries, contact your nearest Samsung authorized service center. Always recycle. Do not dispose of batteries in a fire.

Care and Maintenance

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

*   Keep the phone and all its parts and accessories out of the reach of small children.
*   Keep the phone dry. Precipitation, humidity and liquids contain minerals that will corrode electronic circuits.
*   Do not use the phone with a wet hand. Doing so may cause an electric shock to you or damage to the phone.
*   Do not use or store the phone in dusty, dirty areas, as its moving parts may be damaged.
*   Do not store the phone in hot areas. High

temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.

*   Do not store the phone in cold areas. When the phone warms up to its normal operating temperature, moisture can form inside the phone, which may damage the phone's electronic circuit boards.
*   Do not drop, knock or shake the phone. Rough handling can break internal circuit boards.
*   Do not use harsh chemicals, cleaning solvents or strong detergents to clean the phone. Wipe it with a soft cloth slightly dampened in a mild soap-and-water solution.
*   Do not paint the phone. Paint can clog the device's moving parts and prevent proper operation.
*   Do not put the phone in or on heating devices, such as a microwave oven, a stove or a radiator. The phone may explode when overheated.
*   When the phone or battery gets wet, the label indicating water damage inside the phone changes color. In this case, phone repairs are no longer

guaranteed by the manufacturer's warranty, even if the warranty for your phone has not expired.

• If your phone has a flash or light, do not use it too close to the eyes of people or animals. This may cause damage to their eyes.

• Use only the supplied or an approved replacement antenna. Unauthorized antennas or modified accessories may damage the phone and violate regulations governing radio devices.

• If the phone, battery, charger or any accessory is not working properly, take it to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

•