

- * 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



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SPH-A900G

User's Guide





Important safety precautions



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

Drive safely at all times

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

Switch off the phone when refuelling

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

Switch off in an aircraft

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

Switch off the phone near all medical equipment

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

Interference

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



Be aware of special regulations

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

Water resistance

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

Sensible use

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

Emergency calls

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

Keep your phone away from small children

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

Accessories and batteries

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

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



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

Qualified service

Only qualified service personnel may repair your phone.

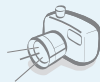
For more detailed safety information, see "Health and safety information" on page 77.

About this Guide

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

In this guide, the following instruction icons appear:

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



- **Camera**

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

Special features of your phone



- **MP3 player**

Play music files using your phone as an MP3 player.



- **Web browser**

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



- **Bluetooth**

Connect to a headset or hands-free car kit using wireless Bluetooth technology.



- **Get personal with photo caller ID**

See who's calling you when their very own photo displays.



- **Phonebook**

Store home, office, or cellular phone numbers for your contacts.

- **Multimedia Message Service (MMS)**

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

- **Photo studio**

Add a frame or apply special effects to decorate your photos.



- **Scheduler**

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



- **Alarm**

Use your phone as an alarm clock to wake you up in the morning or notify you of an impending event.



- **Voice recorder**

Record memos or sounds.



- **Countdown**

Use your phone as a countdown timer for an important event.

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Overview of menu functions

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

1 Calls	▶ p. 32	4 Display	▶ p. 48	7 Advanced tools	▶ p. 59	9 Settings	▶ p. 73
1 Outgoing	▶ p. 32	1 Set backgrounds	▶ p. 48	1 MP3	▶ p. 59	1 Auto answer	▶ p. 73
2 Incoming	▶ p. 33	2 Banner	▶ p. 49	2 Bluetooth	▶ p. 62	2 Answer mode	▶ p. 73
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2 Phonebook	▶ p. 34	6 Dialing font	▶ p. 50	6 User memory	▶ p. 66	6 GPS settings	▶ p. 75
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3 Group settings	▶ p. 35	5 Message	▶ p. 50	2 Today	▶ p. 70		
4 My phone #	▶ p. 35	1 Text MSG	▶ p. 50	3 Task list	▶ p. 70		
5 Memory info	▶ p. 35	2 MMS	▶ p. 52	4 Memo pad	▶ p. 71		
3 Camera	▶ p. 36	3 Browser alert	▶ p. 55	5 Alarm	▶ p. 71		
1 Take Photo	▶ p. 36	4 *151 Voice mail	▶ p. 55	6 World time	▶ p. 72		
2 My album	▶ p. 40	5 Internal VM	▶ p. 56	7 Countdown	▶ p. 72		
3 Photo studio	▶ p. 44	6 MSG setting	▶ p. 56				
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5 Settings	▶ p. 48	1 Ringer	▶ p. 57				
		2 Ringer Vol./Type	▶ p. 57				
		3 Key tone	▶ p. 58				
		4 Function alert	▶ p. 58				
		5 Hour alert	▶ p. 58				

Press [Right] in Idle mode.

VAS	▶ p. 27
Internet Portal	▶ p. 27
Games & applications	▶ p. 28
Ringtones	▶ p. 29
Animations	▶ p. 29
Voice Portal	▶ p. 30
SMS INFO	▶ p. 30
Telephone Navigator	▶ p. 30

Unpack

Make sure you have each item



Phone



Travel Adapter



Battery



User's Guide

You can obtain various accessories from your local Samsung dealer.



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

Your phone

Keys, features, and locations

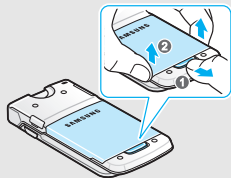


Get started

First steps to operating your phone

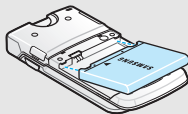
Install and charge the phone

- 1 Remove the battery cover.

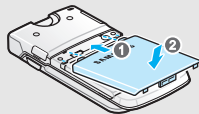


- ✓ If the phone is already on, first turn it off by pressing and holding [].

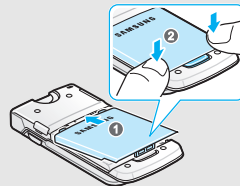
- 2 Install the battery.



- 3 Reattach the battery cover.



- 4 Plug the travel adapter into the phone.



- 5 Plug the adapter into a standard AC wall outlet.

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

7 Remove the adapter from the phone.



Low battery indicator

When the battery is low:

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

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

Power on or off

Switch on

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

1. Open the phone.

2. Press [].

Switch off

1. Open the phone.

2. Press and hold [].

Keys and display

Keys



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



In Idle mode, access the following menus directly:

- Up: **MP3**
- Down: **Mobile Shop**
- Left: **Message**
- Right: **VAS**

In Menu mode, scroll through menu options.



In Idle mode, access the **3G-TV** menu.
In Menu mode, select the highlighted menu option or confirm input.



In Idle mode, access the **Camera** menu.
Press and hold to turn on the camera.
In Camera mode, take a photo or record a video.
During a call, record your conversation when pressed and held.



Make or answer a call.
In Idle mode, retrieve numbers recently dialed, missed, or received.



Delete characters from the display.
In Menu mode, return to the previous menu level.
In Idle mode, press to activate the answering machine feature when a call comes in. Press and hold to record a voice memo. ▶ p. 64



Press and hold to switch the phone on or off.
End a call.
In Menu mode, cancel input and return the phone to Idle mode.



Enter numbers, letters, and some special characters.
In Idle mode, press and hold [1] to access your voicemail server.



Enter special characters.
In Idle mode, press and hold [#] to activate or deactivate Silent mode.



In Idle mode, adjust the keypad tone volume.
In Menu mode, scroll through menu options.



Move backward in a file or to the previous file.



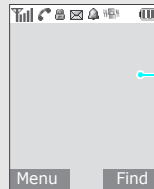
Press and hold to launch the MP3 player.
Pause or resume playback.



Move forward in a file or to the next file.

Display

Layout



Icons

display various icons.

Text and graphics

display messages, instructions, and information you enter.

Soft key function indicators

show the current functions assigned to the soft keys.

Icons*



Received signal strength



Call in progress



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



Roaming network



New message



New voicemail

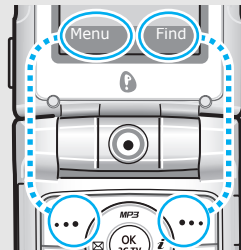
-  Bluetooth active ▶ p. 62
-  Alarm set ▶ p. 71
-  Call ringer type setting ▶ p. 57
 -  : Ringer only
 -  : Silent
 -  : 1 Beep
 -  : Vibration
 -  : Vib. & ringer
 -  : Vib. then ringer
 -  : Ringer then vib.
-  Phone locked ▶ p. 74
-  Silent mode
-  Battery power level

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

Access menu functions

Use the soft keys

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



Press the left soft key to access **Menu** mode.

Press the right soft key to access **Find** in the **Phonebook** menu.

Select an option

1. Press a desired soft key.
2. Press the Navigation keys to move to the next or previous option.
3. Press [] or **<Select>** to confirm the function displayed or option highlighted.
4. To exit, choose either of the following methods:
 - Press [] to move up one level.
 - Press [] to return to Idle mode.

Use shortcuts

Press the number key corresponding to the option you want.

Customise your phone

Display language

1. In Idle mode, press **<Menu>** and select **Display** → **Language/שפה**.
2. Select a language.

Call ringer melody

1. In Idle mode, press **<Menu>** and select **Sounds** → **Ringer**.
2. Select **Incoming calls** and press [Down].
3. Press [Left] or [Right] to select a ringtone category.
4. Press [Up] or [Down] to scroll to a ringtone.
5. Press **<Play>** to listen to a ringtone.
6. When you find the melody you want, press **<Save>**.

Idle mode wallpaper

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

1. In Idle mode, press **<Menu>** and select **Display → Set backgrounds → Wallpaper**.
2. Select an image or video category.
3. Select an image or video clip.
4. Press **<Select>**.

Menu style

You can customise the menu display in Menu mode.

To set a menu style:

1. In Idle mode, press **<Menu>**.
2. Press **<Options>** and select **Menu style**.
3. Select a menu style.

Silent mode

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

Press and hold [**#**] in Idle mode.

Phone lock

You can protect the phone against unauthorised use with a phone password.

1. In Idle mode, press **<Menu>** and select **Settings → Security**.
2. Enter the default password, **0000**, and press **<Done>**.
3. Select **Change lock**.
4. Enter a new 4-digit password and press **<Done>**.
5. Enter the new password again and press **<Done>**.
6. Select **Phone lock**.
7. Select **Once** or **On**.

Make/Answer calls

Make a call

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

Answer a call

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

Adjust the volume during a call

Press [/.

Step outside the phone

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

Use the camera

Take a photo

1. Open the phone.
2. In Idle mode, press and hold [ \ ].
3. Aim the lens at the subject by rotating the camera lens and make any desired adjustments.
4. Press [**1**] until the  icon or  icon appears.
5. Press [] or [ \ ] to take a photo.
6. Press <**Save**>.

View a photo

1. In Idle mode, press [ \ 00] and select **My album**.
2. Select a gallery.
3. Scroll to the photo you want and press <**Expand**>.

Record a video

1. In Idle mode, press and hold [ \ 00].
2. Press [**1**] until the  icon appears.
3. Aim the lens at the subject by rotating the camera lens and make any desired adjustments.
4. Press [], or [ \ 00] to start recording.
5. Press the right soft key or [ \ 00] to stop recording.
6. Press <**Save**>.

Play a video

1. In Idle mode, press [ \ 00] and select **My album**.
2. Select a gallery.
3. Scroll to the video clip you want and press <**Play**>.

Play music

Save music files to the phone

Use these methods:

- Download from the wireless web ► p. 27

Create a play list

1. In Idle mode, press <**Menu**> and select **Advanced tools** → **MP3** → **MP3 files**.
2. Press <**Menu**> and select **Add to play list**.
3. Press <**Check**> to select the files you want and press <**Add**>.
4. Press [CLR/STD] to return to the file list.

Play music files

1. In Idle mode, press [Up] and select **MP3 player**.
2. During playback, use the following keys:
 - [OK 3G TV]: pauses or resumes playback.
 - [Up]: changes the repeat mode.
 - [Left]: returns to the previous file. Moves backward in a file when held down.
 - [Right]: skips to the next file. Skips forward in a file when held down.
 - [▲/▼]: adjusts the volume.
3. Press [Down] to move to the playlist.

Browse the web

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

Launch the web browser

In Idle mode, press [Right] and select **Internet Portal**.

Navigate the web

- To scroll through browser items, press the Navigation key.
- To select an item, press [✓] or [OK 3GTV].
- To return to the previous page, press <**Back**>, <**Dismiss**>, <**Cancel**>, or [CLR/00].
- To return to the homepage, press and hold [Right].
- To access options, press <**Menu**> and select **Menu**.

Use Phonebook

Add a contact

1. In Idle mode, enter a phone number and press <**Save**>.
2. Select **New entry** → a number type.
3. Specify contact information: Image, Name, Mobile, Home, Office, Pager, Fax, Entry location number, E-Mail1, E-Mail2, URL, Group, Ringer, and ETC.
4. Press <**Save**> to save the contact.

Find a contact

1. In Idle mode, press <Find>.
2. Press [Up] and select a search method.
3. Press [Down].
4. Enter the first few letters of the name you want or the entry's location number, or select a caller group.
5. Select a contact.
6. Scroll to a number and press [↵] to dial.

Send messages

Send a text message (SMS)

1. In Idle mode, press <Menu> and select **Message** → **Text MSG** → **New messages**.
2. Enter the message text and press <OK>.
3. Press <OK> again.
4. Enter destination numbers.
5. Press <OK> to send the message.

Send a multimedia message (MMS)

1. In Idle mode, press <Menu> and select **Message** → **MMS** → **New message**.
2. Enter a destination number or address and press <OK>.
3. Move to **Subject**.

Send a multimedia message (MMS) (continued)

4. Enter the message subject and press **<OK>**.
5. Move to the **Slide** field.
6. If necessary, press **<Menu>** and select **Add** to add a slide.
7. Move to **Picture**.
8. Press **<Menu>** and select **My Album** or **Saved image** → an image.
9. To add a video, press [Left] or [Right] to move to **Video**.
10. Press **<Menu>** and select **Video Album** or **Saved Video** → a video clip.
11. Move to **Message**.
12. Enter the message text and press **<OK>**.

13. Move to **Sound**.

14. Press **<Menu>** and select **Voice Memo, Melody**, or **Saved sound** → a sound.

15. Press **<OK>**.

16. Press **<Send>** to send the message.

View messages

View a text message

When a notification appears:

Press **<Select>**.

From the Inbox:

1. In Idle mode, press **<Menu>** and select **Message** → **Text MSG** → **Inbox**.
2. Select a message.

View a multimedia message

When a notification appears:

1. Press <**Download**> to retrieve the message from the server.
2. Select **Yes**.
3. Select the message from the Inbox.

From the Inbox:

1. In Idle mode, press <**Menu**> and select **Message** → **MMS** → **Inbox**.
2. Select a message.

Access a voicemail

When a notification appears:

Press [>] to connect to the voicemail server to listen to your message.

From the Inbox:

1. In Idle mode, press <**Menu**> and select **Message** → ***151 Voice mail**.
2. Follow the instructions from the system.

Use Bluetooth

Your phone is equipped with Bluetooth technology, enabling you to connect the phone wirelessly to a Bluetooth headset or hands-free car kit.

Turn on Bluetooth

1. In Idle mode, press <Menu> and select **Advanced tools** → **Bluetooth** → **Activation** → **On**.
2. Select **Settings** → **Discovery mode** → **On** to allow other devices to find your phone.

Search for and connect to a Bluetooth device

1. In Idle mode, press <Menu> and select **Advanced tools** → **Bluetooth** → **Devices** → **Search**.
 2. Scroll to a device and press <Pair>.
 3. Enter a Bluetooth PIN, if it has one, and press <OK>. When the owner of the other device enters the same code, pairing is complete.
 4. If necessary, change the paired device name.
 5. Press <Connect> to add the device to the paired device list.
- ☒ Your phone enables an Internet connection when the phone is connected to a computer via Bluetooth dongle.

Enter text

T9 English, English, Hebrew, T9 Hebrew, Number, and Symbol modes

You can enter text for some features, such as Messages, Phonebook, or Scheduler, using T9 English mode and English mode for English, and T9 Hebrew and Hebrew mode for Hebrew. You can also enter numbers and symbols.

Changing the text input mode

1. In the text entry field, press <**Mode**>.
2. Select the text input mode you want.

Using T9 English mode and T9 Hebrew 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 English mode.

T9 predicts the word that you are typing, and it may change with each key that you press.

2. Enter the whole word before editing or deleting characters.
3. When the word displays correctly, go to step 4. Otherwise, press [**0**] to display alternative word choices for the keys that you have pressed. For example, *Of* and *Me* use [**6**] and [**3**].
4. Press [**#**] to insert a space and enter the next word.

Other T9 English mode and T9 Hebrew mode operations

- Press [**1**] to enter periods or apostrophes automatically.
- Press [*****] to change case in T9 English mode.
- Press [**#**] to insert a space.
- Press the Navigation keys to move the cursor.
- Press [**CLR/⌫**] to delete characters one by one. Press and hold [**CLR/⌫**] to clear the display.

Using English mode and Hebrew mode

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

Key	Characters in order displayed	
	English	Hebrew
1	. - ' , @ : ; ? ! / _ " () # * % & + = 1	
2	A B C 2	א ב ג 2
3	D E F 3	ד ה ו 3
4	G H I 4	ז ח ט 4
5	J K L 5	י כ ל 5
6	M N O 6	מ נ ס 6
7	P Q R S 7	פ ק ר ש 7
8	T U V 8	ז ט ו 8
9	W X Y Z 9	ז ח ט 9
0	0	0

Other English mode and Hebrew mode operations

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

For Hebrew mode, wait for the cursor to move to the left or press [Left]. Then, enter the next letter.

- Press [*] to change case in English mode.
- Press [#] to insert a space.
- Press the Navigation keys to move the cursor.
- Press [CLR/σ] to delete characters one by one. Press and hold [CLR/σ] to clear the 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 display more symbols, press [Left] or [Right].
- To select a symbol, press the corresponding number key.

Call functions

Advanced calling features

Making a call

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



- Press [CLR/σD] to clear the last digit or press and hold [CLR/σD] to clear the whole display. You can move the cursor to edit an incorrect digit.
- Press <Pause> to enter a pause between numbers.

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

Redialling recent numbers

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

Making a call from Phonebook

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

► p. 34

You can quickly dial a number using its location number assigned when stored.

- For 1-digit locations, press and hold the corresponding number key in Idle mode.
- For other locations, press the first number key and press and hold the last number key in Idle mode.

Making an emergency call

You can make calls to standard emergency numbers, such as 100, 101, 102, and *166 on the Emergency # list, even if your phone is locked. ► p. 74

4-digit dialling

You can quickly dial a number in Phonebook by entering its last 4 consecutive digits.

1. In Idle mode, enter the last 4 digits of the phone number you want.
2. Scroll to the number and press [↵].

Answering a call

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

Press [] to answer the call.

Tips for answering a call

- When **By any key** is active, you can press any key, except for <Reject>, <Silent>, [▲/▼], and [].
▶ p. 73
- When **By folder open** is active, you can simply open the phone. If the phone is already open, press []. ▶ p. 73
- Press <Reject> to reject a call.
- Press <Silent> or press and hold [▲/▼] to mute the call ringer.

Viewing missed calls

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

1. Press the right soft key.
2. Press [] to dial the displayed number.

Using the headset

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

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

To	Press
redial the last call	and hold the button twice.
answer a call	and hold the button.
end a call	and hold the button.

Options during a call

You can access a number of functions during a call.

Adjusting the volume during a call

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

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

Answering a second call

You can answer an incoming call while already on the phone, if you have subscribed to the call waiting feature.

1. Press [↶] to answer a second call. The first caller is placed on hold and you are connected with the second caller.
2. Press [↶] again to switch between the calls.

Recording your conversation

You can record your conversation during a call.

Press [Down] and select **Record**. ► p. 64

Using the speakerphone feature

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

Press [OK
3GTV] to activate the speakerphone feature.

Press [OK
3GTV] again to switch back to the earpiece.

Using In-call options

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

- **Mute/Quit:** switch off the phone's microphone so that the other person on the phone cannot hear you, or switch it back on.
- **Calls:** access the **Calls** menu.
- **Phonebook:** access the **Phonebook** menu.
- **Silent/Quit:** switch the key tones off or on.



To communicate with answering machines or computerised telephone systems, key tones must be turned on.

- **Send my #:** send your phone number to the calling person or to automated services.
- **DTMF length:** manipulate the audible DTMF tones.
- **Switch to phone/BT headset:** switch the call to a Bluetooth headset or hands-free car kit or back to the phone.

Menu functions

All menu options listed

VAS

This menu is supplied by your service provider. The contents available in each menu option may be different, depending on the service provider. For further details, contact your service provider.

To access this menu, press [Right] in Idle mode.

Internet Portal

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

Selecting the **Internet Portal** menu or pressing and holding [Right] in Idle mode launches the web browser and access the homepage of your service provider.

Navigating the web browser

To	Press
scroll through browser items	the Navigation keys.
select a browser item	[✓] or [^{OK} _{3GTV}].
return to the previous page	< Back >, < Dismiss >, < Cancel >, or [CLR/GO].
return to the homepage	and hold [Right].

Using page options

From any web page, press <**Menu**> and select **Menu** to access the following options:

- **Back**: go back to the previous page.
- **Home**: return to the homepage.
- **Bookmarks**: bookmark the current page.
- **Go To URL**: enter a URL address of a web page.
- **Show URL**: display the URL address of the current page.
- **Reload**: refresh the current web page with updated information.

- **Settings:** customise further options.
 - Restart Browser:** restart the browser without exiting it.
 - Clear:** delete cookies or the Auto Fill form.
 - Scroll Mode:** set the scroll mode or the scroll speed.
 - Send Referrer:** set the browser to send HTTP referrer information to the web server each time the browser is launched.
 - Key Press Timeout:** set how long the phone waits after you have pressed a key in the text entry mode before moving the cursor to the right.
 - Connection Timeout:** set how long the phone remains connected to the current web page when you don't use the web page for a specified period.
 - Resend Data Prompt:** set whether or not the phone displays the prompt to confirm your browser session.
 - Security:** set up all of security-related information.
- **Exit:** exit the browser.
- **About...:** display the web browser version and copyright, encryption, and certificate information.

Exiting the browser

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

Games & applications

Use this menu to download Brew applications and change the application settings. You can also access the e-mail service and view help information.

Downloading applications

1. Select **MobileShop**.
2. Select **Catalog** or **Search**.
3. Browse or search for applications by entering a keyword.
4. Select the application you want to download and follow the instructions on the screen.

Accessing application navigator

You can use the Location Services menu, which allows you to determine your current location and show the way to the place you want.

Changing application settings

Select **Settings** and change the settings in each option.

- **Order Apps:** change the list order of the downloaded applications.
- **Move Apps:** move an application to another folder.
- **Manage Apps:** check the amount of the memory used for downloaded applications.
- **Main Menu View:** change the view mode of the main menu screen.
- **Screen Savers:** activate the screensaver application, if downloaded.
- **View Log:** display the records of your browsing and downloading.

Accessing help information

1. Select **Help**.
2. Select a help item you want.
3. Press [Up] or [Down] to scroll through help information.
4. Press [] to go back to the main help screen.

Ringtones

Use this menu to download ringtones and melodies from the wireless web and play them.

Download new ringtone

Selecting this menu loads the web page preset by your service provider so that you can download a variety of ringtones and melodies.

Saved ringtones

You can review ringtones and melodies you have downloaded.

Animations

Use this menu to download animations from the wireless web and play them.

Download new animation

Selecting this menu loads the web page preset by your service provider so that you can download a variety of animated images.

Saved animations

You can review animated images you have downloaded.

Voice Portal

Use this menu to access your service provider's voice-activated service. You can get headline news, get information on movies, weather, finance, or traffic. Please contact your service provider for further details.

SMS INFO

Use this menu to send an SMS query to receive information you want from the web server. A variety of topics are available, such as news, sports, entertainment, finance, and astrology.

Pelephone Navigator

You can use the Location Services menu, which allows you to determine your current location and show the way to the place you want.

3GTV

Use this menu to access web services, supplied by your service provider and download media content. You can also send MMS messages or configure MMS settings.

To access this menu, press [^{OK}_{3GTV}] in Idle mode.

Video Portal

Use this menu to access the website preset by your service provider and get up-to-date information and a wide variety of media content, such as music files, ringtones and melodies, and video clips.

To access this menu, press and hold [^{OK}_{3GTV}] in Idle mode.

Music

Use this menu to access the website preset by your service provider and download ringtones and melodies.

TV Channel

Use this menu to access the website preset by your service provider and use the online TV service. For further details, contact your service provider.

Multimedia Download

You can download video clips from the wireless web and play them.

Download new item

Use this menu to access the website preset by your service provider and download video clips.

Multimedia player

Use this menu to access video clips you have downloaded from the wireless web and play them.

Playing a video clip

Scroll to a file and press <**Play**>.

During playback, use the following keys:

Keys	Function
OK 3G TV	Pauses or resumes playback.
Up	Changes the repeat mode.
Down	Opens the file list.
Left	Returns to the previous file. Skips backward in a file when held down.
Right	Skips to the next file. Moves forward in a file when held down.
▲/▼	Adjusts the volume.

Using video options

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

- **Open files:** play the selected video clip.
- **Rename:** change the file name.
- **File info:** access the file properties.

- **Set wallpaper:** set the video clip as wallpaper for the idle screen.
- **Set ring:** set the video clip as a caller ID image and ringtone for a Contacts entry.
- **Erase:** delete the selected file.
- **Erase all:** delete all files.

MMS

You can send and receive MMS messages. ► p. 52

Memory Info

Use this menu to check the amount of memory being used for storing data, such as melodies, images, video clips, and music files, in the phone's memory.

Calls (Menu 1)

Use this menu to view the calls you have dialled, received, or missed, and the length of the calls. You can also delete all of the call records.

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

Outgoing (Menu 1.1)

This menu displays the most recent calls you have dialled.

Accessing a call record

1. Press [Up] or [Down] to scroll through the call list.
2. Press [$\begin{smallmatrix} \text{OK} \\ \text{3GTV} \end{smallmatrix}$] to view the details of a call, or press [$\hookrightarrow$] to dial a number.

Using call record options

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

- **Talk:** dial the currently selected number.
- **Save:** save the number to Phonebook.

- **Edit:** edit the number to dial or save it.
- **Erase:** delete the call record.

While viewing the call list, press <**Menu**> to access the following options:

- **Erase:** delete the call record.
- **Erase all:** delete the all call records.

Incoming (Menu 1.2)

This menu displays the most recent calls you have received.

Missed (Menu 1.3)

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

Erase history (Menu 1.4)

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

1. Select a call type to be cleared.
2. Press <**Yes**> to confirm the deletion.

Air time (Menu 1.5)

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

- **Last call:** check the length of your last call.
- **Total:** check the total length of all the calls you have dialled and received.
- **Erase total:** reset the call timers.
- **Life time:** check the total length of all the calls you have dialled and received since the phone was shipped from the factory.

Phonebook (Menu 2)

You can store phone numbers and their corresponding names in the phone's memory, which is called Phonebook. With the **Phonebook** menu, you can manage contacts in Phonebook.

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

Find (Menu 2.1)

Use this menu to search for contacts in Phonebook.

Finding a contact

1. Press [Up] and select a search method by pressing [Left] or [Right].
2. Press [Down].
3. Enter the first few letters of the name that you want to find or the entry's location number, or select a caller group.
4. Select the name you want from the list.
5. Scroll to a number and press [↵] to dial.

Using Phonebook options

From the contact list, press <**Menu**> to access the following options:

- **Edit**: edit contact information.
- **Erase**: delete the contact.
- **Erase multiple**: delete the selected contacts or all contacts.
- **Add new**: add a new contact.

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

- **Talk**: dial the selected number.
- **Edit**: edit contact information.
- **Erase**: delete the contact.

Add (Menu 2.2)

Use this menu to add a new contact to Phonebook.

1. Change the settings or enter information about the contact.
 - **Name:** assign a name.
 - **Mobile/Home/Office/Pager/Fax:** add a number in any type.
 - **Entry location number:** select the default number and enter an entry's location number.
 - **E-Mail1/E-Mail2:** assign an e-mail address.
 - **URL:** enter a homepage address.
 - **Group:** assign the contact to a caller group.
 - **Ringer:** assign a ringtone to alert you to a call from the person.
 - **ETC:** add a note about the person.
 - **Image:** assign an image to alert you to a call from the person.
2. Press <**Save**> to save the contact.

Group settings (Menu 2.3)

Use this menu to organise your contacts in caller groups.

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

- **Add New:** add a new group.
- **Edit:** edit the group properties.
- **Erase:** delete the selected group.

☒ You cannot change the settings for the ללא קבוצה group.

My phone # (Menu 2.4)

Use this menu to check your phone number.

Memory info (Menu 2.5)

Use this menu to check the number of contacts you have stored.

Camera (Menu 3)

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

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

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

Take photo (Menu 3.1)

Use this menu to take a single photo, a series of photos, or record a video. The camera produces JPEG photos and MP4 video clips.

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

Taking a photo

1. Access the **Take photo** menu or press and hold [] in Idle mode.
The camera turns on and the image to be captured displays.
2. When you use the camera first time, press [**2**] to change the preview screen until the [] icon appears.
3. Press [**1**] and select the camera mode you want:
 - Single (): take a photo.
 - Serial (): take a serial of action stills.
 - Divided (): take several stills and saves them in one frame.
 - Video (): record a video.
4. Adjust the image by rotating the camera lens and aiming it at the subject.

- You can use the following keys to customise the image settings.

Key	Function
▲	Flip the image vertically.
▼	Show the mirror image.
Left/Right	Zoom in or out.(Unavailable for 1280*960 resolution)
Up/Down	Adjust the image brightness.
1	Change the camera mode.
2	Switch the display between No icon view() , Icons view() , Guideline view() , and Actual ratio view() .
3	Set the time delay.
4	Turn on or off the flash.
0	Access Quick view mode.

- You can change settings by pressing **<Options>**. ► p. 38

- Press **<Capture>** or [] to take the photo.
When you are taking serial shot images, the camera takes photos successively.

To	Press
scroll through the image	the Navigation keys.
save the photo	<Save> . The photo saves in the My album folder. For serial-shot photos, press <Expand> to view the selected photo in full screen. Press <Select> to remove a check mark.
return to Capture mode	<Cancel> or [].
rotate the image	[ 360°].

Reviewing a photo immediately after saving

After saving a photo, you can view the photo by pressing [**0**] in Capture mode. The Captured image displays on the screen:

- To access file properties, press <**Options**> and select **Info**.
- To delete the file, press <**Options**> and select **Delete**.

To return to Capture mode, press [**0**] or [CLR/∅].

Using camera options in Capture mode

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

- **Mode:** use the following camera modes:
 - Single shot:** take a photo in normal mode.
 - Series shot:** take series of action stills. You can select the number of photos the camera will take.
 - Divided shot:** take several stills and save them in one frame. You can select the layout.
 - Video cam:** record a video clip.

- **Flash:** turn on or off the flash.
- **Size/Quality:** select an image size and an image quality setting.
- **White balance:** adjust the colour balance of the image. You can make your photo appear warmer or cooler.
- **Self timer:** set a time delay before the camera takes a photo.
- **Revision:** apply a special effect or use a decorative frame.
- **Preview layout:** select a preview screen.
- **Quick view:** switch to Quick view mode.

Recording a video

1. Access the **Take photo** menu.
2. Press [**1**] to select the  icon.
3. Adjust the image by rotating the camera lens and aiming it at the subject.

- You can use the following keys to customise the image settings.

Key	Function
▲	Flip the image vertically.
▼	Show the mirror image.
Up/Down	Adjust the image brightness.
Left/Right	Zoom in or out.
1	Change the camera mode.
2	Switch the display between No icon view([]), Icons view([]), Guideline view([]), and Actual ratio view([]).
3	Set the time delay.
4	Turn the flash on or off.
0	Access Quick view mode.

- You can change settings by pressing **<Options>**. ► p. 40

- Press **<[RECORDING]>** or [] to start recording.
To pause recording, press **<[PAUSE]>** and then press **<[RECORDING]>** to resume.
- When you are finished, press **<[STOP]>** or [].

To	Press
save the video clip	<Save> . The video saves in the My album folder.
return to Camcorder mode	<Cancel> or [].
review the video clip	[ _{3GTV}].

After saving a video clip, you can view the video clip in Quick View mode by pressing [**0**] in Camcorder mode. Pressing [ _{3GTV}] initiates playing of the video clip.

- To access file properties, press **<Options>** and select **Info**.
- To delete the file, press **<Options>** and select **Delete**.
- To return to Camcorder mode, press [**0**] or [].

Using options in Camcorder mode

When you press <**Options**> in Camcorder mode, the following options are available for the current shot:

- **Mode:** use the following camera modes:
 - Single shot:** take a photo in normal mode.
 - Series shot:** take series of action stills. You can select the number of photos the camera will take.
 - Divided shot:** take several stills and save them in one frame. You can select the layout.
 - Video cam:** record a video clip.
- **Flash:** turn on or off the flash.
- **Size/Quality:** select an image size or an image quality.
- **White balance:** adjust the colour balance of the video. You can make your video appear warmer or cooler.
- **Self timer:** set a time delay before the phone records a video.
- **Revision:** apply a special effect.
- **Voice Rec:** turn on or off the audio.

- **Preview layout:** select the default preview mode. When you select **Actual ratio**, the phone shows the image in actual ratio.
- **Quick view:** switch to Quick view mode.

My album *(Menu 3.2)*

Use this menu to review the photos you have taken and the videos you have recorded.

- ☒ Photos captured on other devices, such as digital cameras, may not display correctly.

When you access the **Gallery** folder, the following icons may appear on the file list to show the file type:

- No icon: photo
- : video clip
- : slide show file

Viewing a photo

1. Select **Gallery**.

Press [**▲**] to scroll through other photo albums. you can also press [**▼**] to scroll through photos in the selected album.

2. Scroll to the photo you want.
3. Press <**Expand**> to view the photo.
If you select a slide show file, the slide show begins.

To	Press
scroll through photos	[Left] or [Right].
switch to Thumbnail view mode	< Multi >.
view the enlarged image	< Enlarge >. To zoom in or out, press [▲/▼]. Press the Navigation keys to scroll through the image.

Creating a new folder

1. On the My album screen, press <**Options**> and select **Create folder**.
2. Enter the name for the folder and press <**OK**>.

Viewing a slide show

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

1. From the folder list, scroll to a folder.
2. Press <**Options**> and select **Slide show**.
3. Select a slide show effect.
The slide show begins.
4. Press [CLR/⊞] to stop the slide show.

Creating your own slide show file

1. On the file list, press <**Options**> and select **Slide show**.
2. Scroll to a location number and press <**Import**>.
3. Select a photo for the location.
4. To add more photos, select a location. Select photos by pressing <**Check**> and press <**Done**>.
5. When you have finished, move to the effect type field.
6. If you selected **Separate**, move to the effect type field and select a slide show effect.
If you selected **Common**, press [Left] or [Right] and select a slide show effect for each photo.
7. After adding photos, press <**Menu**> to access the following options:
 - **Preview**: view the photos as a slide show.

- **Change order:** change the order of the photos.
 - **Save:** save the photos as a slide show file.
 - **Erase:** erase the selected photo.
8. When you have finished, press **<Save>**.
 9. Select an image folder to store the slide show file.
 10. Enter a name for the slide show file and press **<OK>**.

Using photo options

While viewing a photo or the photo list, press **<Options>**, you can access the following options:

- **Send:** send the file as part of an e-mail.
- **Assign:** set the image as your wallpaper for the idle screen, or the opening or closing image.
- **Move:** move the file into another folder.
- **Copy:** copy the image into another folder.
- **Photo studio:** access the **Photo studio** menu.

- **Rename:** change the file name.

☒ Do not use special characters, such as /, :, *, ?, <, >, or \.

- **Lock/Unlock:** lock the file so that other people cannot access it without your lock code, or unlock the file.
- **Grid(4):** view the 4 photos on the screen.
- **Grid(9):** view the 9 photos on the screen.
- **Sort:** change the sort order of the file list.
- **Slide show:** create a new slide show file.
- **File info:** access the file properties.
- **Erase:** erase the file.

Viewing a video clip

1. Select **Gallery**.
2. Scroll to the video clip you want and press **<Expand>**.
3. Press **<Play>** to play the video clip.
To switch to thumbnail view mode, press **<Multi>**.

During playback, you can use the following keys:

Key	Function
	Pauses or resumes playback.
Up	Changes the repeat mode. • No icon: plays the file. • : repeats all files. • : repeats the current file. • : plays the files at random.
Down	Open the video clip list.
Left	Skip backward in a file.
Right	Skip forward in a file.
	adjust the volume.
Camera/ Voice memo	change the display size.

On the MP4 player screen, press <**Options**> to access the following options:

- **Set wallpaper:** set the video clip as your wallpaper for the idle screen.
- **File info:** access the file properties.

Using video options

While viewing a still image of a video clip, press <**Options**> to access the following options:

- **Send:** send the video clip via Picture Mail service.
- **Set wallpaper:** set the video clip as your wallpaper for the idle screen.
- **Move:** move the file to another folder.
- **Copy:** copy the file to another folder.
- **Rename:** change the file name.



Do not use special characters for a file or folder name, such as /, :, *, ?, ", <, >, or \.

- **Lock/Unlock:** lock the file so that other people cannot access it without your lock code, or unlock the file.
- **File info:** access the file properties.

- **Erase:** erase the file.

Using album options

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

- **Rename:** change the folder name.

☒ Do not use special characters for a file or folder name, such as /, :, *, ?, ", <, >, or \.

- **Lock/Unlock:** lock the selected image folder so that other people cannot access it without your lock code, or unlock the file.
- **Create folder:** add a new image folder.
- **Erase folder:** erase the selected image folder.
- **Slide show:** select a slide show effect and show the images stored in the selected folder as a slide show.

Photo studio (Menu 3.3)

Photo studio is a great tool for managing photos. Use this menu to edit photos by applying special effects and adding comments.

☒ You can only edit images you have captured by using your phone.

Wizard effect (Menu 3.3.1)

You can apply a special effect to a photo.

1. Select a photo from the **Gallery** folder.
2. Press [Left] or [Right] to select an effect.
You can compare the changed photo with the original by pressing <**Compare**> and press <**OK**>.
3. Press <**Save**>.
4. Enter a name for the photo and press <**OK**>.

Basic effect (Menu 3.3.2)

You can change the colour tone of a new photo or saved photo.

1. Select a photo from the **Gallery** folder.

2. Press [Left] or [Right] to select a tone.
You can compare the changed photo with the original by pressing <**Compare**> and press <**OK**>.
3. Press <**Save**>.
4. Enter a name for the photo and press <**OK**>.

Decoration (Menu 3.3.3)

You can add a decorative frame, clip, or photo cut-out to a photo. You can also add text to the photo.

1. Select a photo from the **Gallery** folder.
2. Press <**Options**> to access one of the following editing options:
 - **Fun frame**: select a decorative frame using [Left] or [Right].
 - **Clip**: select an image. You can move it to the position you want by pressing the Navigation keys.
 - **Photo sticker**: select a photo cut-out.
▶ p. 45.
 - **Text**: enter text. After entering text, you can change the font size and color, and the

brightness of the font color. You can move text to the position you want by pressing the Navigation keys.

3. After adding decorations, press <**Save**>.
4. Enter a name for the photo and press <**OK**>.

Photo sticker (Menu 3.3.4)

You can make a photo cut-out using a photo.

1. Select a photo from the **Gallery** folder.
2. Select a photo cut-out type using [Left] or [Right] and press <**Select**>.
3. Press [Left] or [Right] to adjust the photo cut-out size and press <**Next**>.
4. Move the photo cut-out to the position you want using the Navigation keys and press <**Save**>.

The part of the photo is saved as a photo cut-out.

Video capture (Menu 3.3.5)

You can save a single video clip frame as a photo.

1. Select a video clip from the **Gallery** folder.
The selected video clip plays.

2. When the part of the video clip you want to capture appears, press **<Capture>**.
The video clip frame displays.
3. Press **<Save>**.
You can return to Capture mode by pressing **<Cancel>**.
4. Enter a name for the video clip frame and press **<OK>**.

Composition (Menu 3.3.6)

You can make a new image by combining two photos.

1. Press **<Import>** when the **Main Image** field highlights.
2. Select a photo from the **Gallery** folder.
3. Press [Down] to highlight the **BG Image** field.
4. Press **<Import>**.
5. Select a photo from the **Gallery** folder.
6. Press **<Next >**.
7. Press [Left] or [Right] to adjust the image brightness and press **<Save>**.
8. Enter a name for the composition and press **<OK>**.

Revision (Menu 3.3.7)

You can change the image properties of a photo, such as the sharpness, brightness, saturation, or blur.

1. Select a photo from the **Gallery** folder.
2. Press **<Options>** to access the following options:
 - **Sharpness:** adjust the image contrast.
 - **Brightness:** adjust the brightness of the image.
 - **Saturation:** adjust the degree of the grey of the image colour.
 - **Blur:** adjust the clarity of the image.
3. After changing the properties, press **<Ok>**.
You can compare the changed photo with the original by pressing **<Compare>** and pressing **<OK>**.
4. Press **<Save>** to save the photo.
5. Enter a name for the photo and press **<OK>**.

Resize (Menu 3.3.8)

You can change the photo size. You cannot resize the 176x144 image.

1. Select a photo from the **Gallery** folder.

2. Press **<Change>** and select the image size you want.
3. Press **<Save>**.
4. Enter a name for the resized photo and press **<OK>**.

Flip (Menu 3.3.9)

You can change the orientation of a photo.

1. Select a photo from the **Gallery** folder.
2. Select a direction icon, , , or , by pressing [Left] or [Right].
3. Select an orientation for the photo using [Up] or [Down] and press **<Save>**.
4. Enter a name for the adjusted photo and press **<OK>**.

Text Composition (Menu 3.3.0)

You can extract text from a photo and add it to another photo.

- ☒ It may not be possible to extract text from a non-mono colour background photo.

1. Press **<Import>** when the **Main Image** field highlights.
2. Select a photo from the **Gallery** folder.
3. Press [Down] to highlight the **Char Image** field.
4. Press **<Import>** and select a photo from the **Gallery** folder.
5. Press **<Next>** and then **<Save>**.
6. Enter a name for the photo and press **<OK>**.

Send MMS (Menu 3.4)

Use this menu to send new or saved photos and video clips via MMS.

1. Select the option you want.
2. For **Send new photo** or **Send new video**, take a new photo or record a new video.

For **Send from album**, select a photo or video clip.

The MMS creating mode appears with the selected photo or video clip attached.

3. Create the message as you would when creating an MMS message.

Settings (Menu 3.5)

Use this menu to change the default settings for the options when using the camera.

- **Sound:** Use this menu to change the sound settings for taking photos or recording videos.
Photo: change the sound effect for taking photos.
 - **Shutter sound:** select the sound that you hear when you press the shutter release.
 - **Camera ready:** select a phrase that you hear before the shutter is released, for example, "Say Cheese."**Camcorder:** change the sound effect for recording videos.
 - **Camcorder start:** select the sound that you hear when the phone starts recording.
 - **Camcorder end:** select the sound that you hear when the phone finishes recording.
- **Interruption:** set whether to accept the call, message, or alarm alert while in Camera mode or Camcorder mode.
- **Reset:** restore settings for the camera.

- **Auto saving:** turn the auto saving feature on or off.
- **Album lock:** lock the **My album** folder so that other people cannot access it without your lock code.

Display (Menu 4)

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

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

Set backgrounds (Menu 4.1)

Use this menu to change the background image to be displayed on the screen.

- **Wallpaper:** select an image or video clip to be displayed in Idle mode.
- **Incoming call:** select an image to be displayed when a call comes in.

- **Opening:** select an image to be displayed when the phone turns on.
- **Closing:** select an image to be displayed when the phone turns off.
- **Browser:** select an image to be displayed when the web browser is being launched.
- **Decoration:** use a screen effect, such as snowing or falling leaves.
- **Clock:** display the current date and time with a clock.

Banner (Menu 4.2)

Use this menu to enter a banner message to be displayed at the bottom of the display in Idle mode.

Backlight (Menu 4.3)

Use this menu to change the backlight settings.

- **Main LCD:** select the length of time the backlight of the main display stays on.
- **LCD brightness:** adjust the main LCD brightness.

- **Keypad:** select the length of time the keypad backlight stays on.

Set time (Menu 4.4)

Use this menu to set the current time and date or set up the time zones for the Dual clock wallpaper.

- **Main clock:** set the current time and date. Enter the time in 24-hour format and the date in the order of year, month, and day. While in a service area, you are not allowed to change the time and date setting since the phone receives time information from the network. If your phone do not receive time information from the network when you turn it on, you can use this menu.
- **Dual clock:** choose two time zones to be displayed when you select **Dual clock** for the wallpaper image.

Language/ שפה (Menu 4.5)

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

Dialing font (Menu 4.6)

Use this menu to select a font style for digits to be displayed when you enter a phone number for dialling.

Service LED (Menu 4.7)

The service light on the front of the phone, blinks to indicate the service status. Use this menu to activate or deactivate the feature of the service light.

External clock (Menu 4.8)

Use this menu to select a clock type to be displayed on the external display.

Message (Menu 5)

Use the **Message** menu to send and receive text messages and multimedia messages. You can also use the voicemail feature.

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

Text MSG (Menu 5.1)

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

New messages (Menu 5.1.1)

Use this menu to create and send SMS messages.

1. Enter the message text and press <**OK**>.
2. Change the following options:
 - **Ack:** activate or deactivate the delivery acknowledgement feature. When this feature is activated, the network informs you whether your message is delivered to the recipient or not.
 - **Save:** select one of the following saving options:
 - Save & Send:** save a copy of the message and then send the message.
 - Send only:** send the message. The message will be deleted after sending.
 - Save only:** save the message so that it can be sent later.

3. When you have finished, press **<OK>**.
4. Enter a phone number.
To send the message to more than one recipient, fill in additional destination fields.
5. Press **<OK>** to send or/and save the message.

Inbox (Menu 5.1.2)

Use this menu to access SMS messages you have received.

Viewing a message

Select a message from the list.

Using message options

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

- **Reply**: reply to the sender.
- **Forward**: forward the message to other people.
- **Call/Save**: dial the sender's number or save the number in Phonebook.
- **Erase**: delete the message.

- **(Un)Lock**: lock the message to protect it from being deleted, or unlock the message.
- **Go to URL**: connect to the selected URL in the message.

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

- **Erase**: delete the message.
- **Erase multi**: delete the messages you select.
- **Erase all**: delete all messages.

Outbox (Menu 5.1.3)

Use this menu to access SMS messages that the phone is attempting to send, has sent, or has failed to send.

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

- **Resend**: resend the message.
- **Edit**: edit the message.
- **Erase**: delete the message.

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

Menu functions

- **Erase:** delete the message.
- **Erase multi:** delete the messages you select.
- **Erase all:** delete all messages.

Draft *(Menu 5.1.4)*

Use this menu to access SMS messages you have saved to send at a later time.

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

- **Edit:** edit the message.
- **Erase:** delete the message.

From the message list, press <**Option**> to access the following options:

- **Erase:** delete the message.
- **Erase multi:** delete the messages you select.
- **Erase all:** delete all messages.

Memory info *(Menu 5.1.5)*

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

MMS *(Menu 5.2)*

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

New message *(Menu 5.2.1)*

Use this menu to create and send MMS messages.

Creating and sending an MMS message

1. Enter a destination number or address in the **Send To** field and press <**OK**>.

To send the message to more than one recipient, press [Left] or [Right] to select another address type (Cc or Bcc) and then enter a number or address.

2. Move to the **Subject** field.
3. Enter the message subject and press <**OK**>.
4. Move to the **Slide** field.
5. If necessary, press <**Menu**> and select **Add** to add a slide.
6. Move to the **Picture** field.
7. Press <**Menu**> and select **My Album** or **Saved Img** → a picture.

8. If you want to add a video, in the **Picture** field, press [Left] or [Right] to move to the **Video** field.
9. Press <**Menu**> and select **Saved Video** → a video clip.
10. Move to the **Message** field.
11. Enter the message text and press <**OK**>.
12. Move to the **Sound** field.
13. Press <**Menu**> and select **Voice Rec.**, **Voice Memo**, **Melody**, or **Saved Sound** → a voice memo or sound.
14. Press <**OK**> to access the following options:
 - **Preview**: view the message as it will be shown on the recipient's phone.
 - **MMS edit**: edit the message.
 - **Options**: change the message settings. Press [Up] or [Down] to scroll through the setting options.
 - Priority**: select a priority level.
 - Expiry**: set the length of time messages are stored in the MMS server.

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

Sender visibility: set whether or not your number or address is hidden from the recipient's phone.

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

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

- **Save in draft**: save the message in the **Draft** folder.

15. When you have finished, press <**Send**> to send the message.

Sending an MMS template

1. Select **New message** and press [Up] to move to the message title bar.
2. Press [Left] or [Right] to select a message title, **Birthday** or **Travel**.
3. Move to the **Send to** field.
4. Follow the procedure from step 1 in "Creating and sending an MMS message" on page 52.

Inbox (Menu 5.2.2)

Use this menu to access MMS messages you have received.

Viewing a message

Select a message from the list.

Using message options

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

- **Reply**: reply to the sender.
- **Reply all**: reply to all recipients.
- **Forward**: forward the message to other people.
- **Erase**: delete the message.
- **Info**: view the message information.
- **Save image**: save image files from the message to your phone's memory.
- **Save sound**: save sound files from the message to your phone's memory.
- **Save video**: save video clips from the message to your phone's memory.

- **Protect**: lock the message to protect it from being deleted, or unlock the message.
- **Wallpaper**: set the attached file as wallpaper for the idle screen.

While viewing the message list, press <**Menu**> to access the following options:

- **Erase**: delete the selected message.
- **Erase all**: delete all messages.

Outbox (Menu 5.2.3)

Use this menu to access MMS messages that the phone is attempting to send, has sent, or has failed to send.

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

- **Resend**: send the message.
- **Erase**: delete the message.
- **Info**: view the message information.
- **Protect**: lock the message to protect it from being deleted, or unlock the message.

While viewing the message list, press <**Menu**> to access the following options:

- **Erase**: delete the selected message.
- **Erase all**: delete all messages.

Draft (Menu 5.2.4)

Use this menu to access MMS messages you have saved to send at a later time.

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

While viewing the message list, press <**Menu**> to access the following options:

- **Erase**: delete the selected message.
- **Erase all**: delete all messages.

Alertbox (Menu 5.2.5)

Use this menu to access MMS notifications you have received from the MMS server.

While viewing a message:

- Press <**Down**> to retrieve a new message.
- Press <**Erase**> to delete the notification.

From the notification list, press <**Menu**> to access the following options:

- **Erase**: delete the selected message.
- **Erase all**: delete all messages.

Browser alerts (Menu 5.3)

This folder stores and access web messages you have received from the web server.

When a message has been received, you can:

- Press <**View**> to view the message immediately.
The phone retrieve the message from the web server and display it.
- Press <**Skip**> to check it later.

***151 Voice mail** (Menu 5.4)

Use this menu to connect to the voicemail server and access your voicemails.

- ☒ Your service provider can give the voicemail server number.

Internal VM (Menu 5.5)

Use this menu to check voice messages the caller have left when the answering machine feature is activated.

► p. 65

MSG setting (Menu 5.6)

Use this menu to customise settings of various options for receiving or sending messages.

SMS messages (Menu 5.6.1)

You can customise settings for SMS messages.

- **MSG wallpaper:** select a background image to be displayed on the Message view screen.
- **Entry method:** select a default text input mode when creating a new message.
- **MSG reminder:** set how often the phone reminds you of new messages.
- **Alert on call:** set whether or not the phone informs you when you receive a new message during a call.
- **Delivery ACK:** activate or deactivate the delivery acknowledgement feature. When this is activated,

the network informs you whether your message is delivered to the recipient or not.

- **Scroll timer:** set the time interval in which the phone scrolls to the following screen. When this option is set to **Off**, you can manually scroll to the next screen using [Up] or [Down].
- **Canned MSG:** make and use canned messages you frequently use. You can store 20 canned messages and edit them.

MMS messages (Menu 5.6.2)

You can customise settings for MMS messages.

- **Priority:** select a priority level of messages.
- **Expiry:** set the length of time messages are stored in the MMS server.
- **Delivery time:** set a time delay before messages are sent.
- **Sender visibility:** hide or display the sender's number or address of messages.
- **Delivery report:** set the network to inform you when your messages have been delivered.

- **Read reply:** send a read-reply request along with your messages.
- **Retrieval mode:** set whether or not your phone retrieves new messages automatically from the server.

Sounds *(Menu 6)*

Use this menu to customise various sound settings.

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

Ringer *(Menu 6.1)*

Use this menu to set the ringer for calls, messages, alarms, and scheduler alarm separately.

Ringer Vol./Type *(Menu 6.2)*

Use this menu to adjust the ringer volume for voice calls, messages, alarms, and scheduler alarms. You can also set the ringer type for voice calls.

- **Level 1~5:** select one of the volume levels.
- **Ringer only:** the phone sounds the ringer melody selected in the **Ringer** menu.
- **Silent:** the phone neither vibrates nor rings.
- **1 Beep:** the phone sounds a beep.
- **Vibration:** the phone vibrates.
- **Vib. & ringer:** the phone vibrates and rings at the same time.
- **Vib. then ringer:** the phone vibrates and then rings.
- **Ringer then vib.:** the phone rings and then vibrates.

Key tone (Menu 6.3)

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

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

Function alert (Menu 6.4)

Use this menu to set up audible alerts at a specified time to inform you that certain things have happened.

- **Themes:** select an alert tone.
- **Alert on/off:** turn each alert on or off.
 - Select/Saving:** set the phone to sound an alert when you save your selection or change a menu function.
 - Cancel/Warning:** set the phone to sound an alert when you cancel your selection or change when a confirmation message appears.
 - Folder:** set the phone to sound an alert when you open or close it.
 - Connect:** set the phone to sound a connect tone when an outgoing call is connected to the system.

Disconnect: set the phone to sound a disconnect tone when a call is disconnected from the system.

Power on/off: set the phone to sound an alert when you turn it on or off.

Exit silent mode: set the phone to sound an alert when you exit Silent mode.

Hour alert (Menu 6.5)

Use this menu to set your phone to sound an alert every hour on the hour.

1. Scroll to **On** to turn the alert on and press [Down].
2. Enter the time period for the phone to sound the hour alert and press [Down].
3. Press [Left] or [Right] to select an alert tone.
4. Press <**Save**>.

Advanced tools *(Menu 7)*

Use this menu to play music files or use the Bluetooth feature. You can also use convenient features, such as a voice recorder, an answering machine, and a calculator.

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

MP3 *(Menu 7.1)*

You can play music files on your phone. First, you need to save music files into your phone's memory.

Downloading MP3 files

To download MP3 files to the phone, use the following methods:

- Download from the wireless web ► p. 27
- Connect the phone to a computer and copy to the phone. ► p. 66

MP3 player *(Menu 7.1.1)*

Use this menu to play music on your phone.

Creating a play list

You need to create a play list to play music. ► p. 61

Playing music files

During playback, use the following keys:

Keys	Function
OK 3G TV	Pauses or resumes playback.
Up	Changes the repeat mode. (No icon : Play the selected files, A : Repeat all, 1 : Repeat one, SFL : Shuffle mode)
Left	Returns to the previous file. Moves backward in a file when held down.
Right	Skips to the next file. Skips forward in a file when held down.
▲/▼	Adjusts the volume.
Down	Moves to the playlist.

Repeating a section of a track

You can select a section of the playing file and repeat the section indefinitely.

1. During playback, press the right soft key to mark the beginning of the section you want to repeat. The marked section is coloured in the playback progress bar.
2. Press the right soft key again to mark the end of the section you wish to repeat. The player repeats the marked section.
3. To stop repeating, press the right soft key.

Using MP3 player options

While playing a file, press <Menu> to access the following options:

- **Go to file list:** access the files in the **MP3 files** folder.
- **Timer:** set the length of time the MP3 player stays on. The timer appears to show you the time remaining.

- **Set to ringer:** set the music file as a ringer melody for incoming calls, alarm sets, or scheduler alarms.
- **Visual effect:** select a playback animation.
- **File info:** access the file properties.
- **Send message:** compose and send a new message.
- **Read message:** read received messages.
- **Memo pad:** make memos.

MP3 play list *(Menu 7.1.2)*

From the MP3 player screen, press [Down].

Press <Menu> to access the following options:

- **Add to play list:** add files to the play list.
- **Remove:** remove the selected file or all files from the play list.
- **Visual effect:** select a playback animation.
- **Go to file list:** access the files in the **MP3 files** folder.
- **File info:** access the file properties.

Playing MP3 files with the phone closed

Press and hold [▶||] to launch the MP3 player and start playback. Use the following keys to control the MP3 player:

Key	Function
▶	Pauses or resumes playback.
◀◀	Returns to the previous file. Moves backward in a file when held down.
▶▶	Skips to the next file. Skips forward in a file when held down.
▲/▼	Adjusts the volume.

MP3 files (Menu 7.1.3)

Use this menu to access music files in your phone's memory. You can also create a play list for the MP3 player.

Creating a play list

1. From the file list, press <Menu> and select **Add to play list**.

2. Press <Check> to select the files you want and press <Add>.
3. Press [CLR/00] to return to the file list.

Using MP3 file options

While viewing the file list, press <Menu> to access the following options:

- **Open files:** play the music file.
- **Add to play list:** add files to the play list.
- **Rename:** change the file name.
- **Sort:** change the sort order of files.
- **File info:** access the file properties.
- **Set to ringer:** set the music file as a ringer melody for incoming calls, alarm sets, or scheduler alarms.
- **Move:** move the file to another folder.
- **Copy:** copy the file to another folder.
- **Erase:** delete the selected file.
- **Erase all:** delete all files.
- **Create folder:** add a new folder.

MP3 Settings (Menu 7.1.4)

Use this menu to change settings for MP3.

- **Backlight:** set whether or not the display backlight stays on during playback.
Default: the phone turns off the backlight after the length of time you have specified in the **Backlight** menu has elapsed.
Always on: the phone turns on the backlight during playback.
- **Skip length:** select the interval by which the phone skips forward or backward through a music file when you press [Left] or [Right].
- **MP3 Memory:** select a memory location to be used for MP3s.
- **Load default:** restore the default settings for the MP3 player.

Bluetooth (Menu 7.2)

Use this menu to connect your phone to other compatible devices wirelessly using Bluetooth technology.

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

- ☒ • If there are obstacles between the devices, the operating distance may be reduced.
- It is recommended that you do not use the Bluetooth feature while using multimedia features, such as voice recorder, camera, and MP3 player, or vice versa, for better performance.
- 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.
- **Devices:** search for connectable Bluetooth devices.
- **Settings:** change the Bluetooth visibility setting or access your phone information.

Discovery mode: allow other Bluetooth devices to locate your phone, or not.

My phone info: check your phone information and assign a Bluetooth device name to your phone, which is then displayed on other devices. You can also change your device name by pressing **<Rename>**.

Searching for and connecting to a Bluetooth device

1. From the **Bluetooth** menu, select **Devices** → **Search**.

After searching, a list of devices to which you can connect displays.

2. Scroll to a device and press **<Pair>**.
3. Enter a Bluetooth PIN 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.
4. If necessary, change the paired device name.
5. When you have finished, press **<Connect>** to add the device to the paired device list.

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

Accessing the paired device list

1. From the **Bluetooth** menu, select **Devices** → **List bond**. The list of devices to which you have connected displays.
2. From the device list, press **<Options>** to access the following options:
 - **Add New:** search for Bluetooth devices.
 - **Connect/Disconnect:** connect/disconnect to the selected device.

- **Edit Name:** change the selected device name.
- **Erase:** remove the selected device from the list.
- **Erase All:** remove all devices from the list.
- **Info:** access the selected device information.

Voice memo (Menu 7.3)

Use this menu to record voice memos.

Record (Menu 7.3.1)

You can record voice memos and save them.

1. Speak into the microphone after a beep sounds.
 - Press **<Pause>** to pause recording.
 - Press **<Resume>** to resume recording.
2. When you have finished, press **<Stop>**. The screen provides you with the following choices:
 - **Review:** review the voice memo.
 - **Rerecord:** discard the current memo and record another one.
 - **Save:** save the voice memo.
 - **Quit:** exit this menu.

3. When you are satisfied, select **Save**.
4. Enter a name for the voice memo and press **<OK>**.

Review (Menu 7.3.2)

You can review voice memos you have recorded.

Playing a voice memo

Select a voice memo from the list.

Using voice memo options

From the voice memo list, press **<Menu>** to access the following options:

- **Play:** play the voice memo.
- **Info:** access the voice memo information.
- **Erase:** delete the selected voice memo.
- **Erase all:** delete all voice memos.

Erase all (Menu 7.3.3)

You can delete all of the voice memos.

Voice answer *(Menu 7.4)*

Use this menu to use your phone as an answering machine. When you are unable to answer incoming calls, your phone will answer for you and record the caller's message.

Activating the answering machine feature

From the Voice answer screen, select **On/Off** → **On**.

Checking a voice message

1. From the Voice answer screen, select **Inbox**.
2. Select a message.

From the message list, press <**Menu**> to access the following options:

- **Play**: play the message.
- **Info**: access the message information.
- **Talk**: dial the number, if identified.
- **Erase**: delete the selected message.
- **Erase all**: delete all messages.

Changing the settings

From the Voice answer screen, select **Setting**.

The following options are available:

- **Greeting**: select a default greeting message to be used, either your message or pre-recorded message.
- **Screening**: enable or disable the screening feature, which enables you to listen to a message while a caller is leaving it.
- **Wait time**: set how long the phone waits before answering a call with the greeting message. If you select **Immediate**, the phone plays back the greeting message as soon as a call comes in.

Calculator *(Menu 7.5)*

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

1. Enter the first number.
 - Press [*****] to insert a decimal point.
 - To change the sign of a number to a negative (-), press <**Options**> and select +-.

Menu functions

2. Press one of the Navigation keys to access the math function you want.
3. Enter the second number.
4. Press [OK
3GTV] to view the result.
5. If necessary, repeat from step 2 to continue the calculation.

- ☒ • You can save a value into the calculator memory by pressing <**Options**> and selecting **MS**. To clear the saved value, select **MC**.
- You can reset the calculator by pressing <**CE**>.

User memory (Menu 7.6)

Use this menu to check the amount of your phone's memory.

Connect PC (Menu 7.6.1)

Use this menu to connect your phone to a computer.

1. Connect a USB cable to the jack on the left side of the phone and the USB port of the phone.
2. Access the **Connect PC** menu.

3. Enter the lock code and press <**Done**>.
Your phone switches to Memory Disk mode.
4. Open **My computer** on your Windows desktop and double-click the corresponding removable disk to open the phone's file folder.
5. Copy files from the phone to the computer or vice versa.
6. When you have finished, close the disk.
7. Press <**Disconnect**> to exit Memory Disk mode.
8. Press <**Yes**> to confirm the exiting.

- ☒ • When the phone is in Memory Disk mode, all calls and messages are blocked.
- Use the Safely Remove Hardware programme from the Windows task bar for removing the USB cable from the computer; otherwise, the files may be corrupted and, thus, may not be played properly.

File manager (Menu 7.6.2)

Use this menu to manage files stored on the phone's memory. You can access the folders of your phone's memory and manage media files.

You can also use each file option when you press **<Options>** with a file highlighted in a folder.

- **Erase:** erase the file.
- **Move:** move the file to another folder.
- **Copy:** copy the file to another folder.
- **Rename:** change the file name.

☒ Do not use special characters for a file or folder name, such as /, :, *, ?, ", <, >, or \.

- **Lock/Unlock:** lock the file so that other people cannot access it without your lock code, or unlock the file.
- **Create folder:** create a new folder.
- **List view:** change the view mode to List view.
- **File info:** access the file properties.
- **Set to ringer:** set the MP3 file as a ringer melody for incoming calls, alarm sets, or scheduler alarms.
- **Assign:** set the image as your wallpaper for the idle screen, or the opening or closing image.

Memory info (Menu 7.6.3)

Use this menu to view the memory status of each folder in the phone.

Format (Menu 7.6.4)

Use this menu to format files saved in the **File manager** folder.

File viewer (Menu 7.6.5)

Use this menu to view various document files and images files stored in the **Others** folder in the phone's memory.

Viewing a file

The following file formats are available:

- Documents: Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Adobe PDF, Plain text, HTML
 - Images: BMP, GIF, JPEG, PNG, WMF, EMF
1. Select a location from which you want to read files.
 2. Select the file you want.

☒ Depending on the file size, you may not be able to view some files.

3. Use the following keys to view the document:

Key	Function
Left/Right/ Up/Down	Pans around the page.
▲/▼	Zooms in or out.
1	Goes to the previous page. Goes to the first page when pressed and held.
2	Rotates the page.
3	Moves to the next page. Moves to the last page when pressed and held.
4	Changes the view mode to the screen width.
5	Changes the view mode to the screen height.
6	Hides or Displays a map of the current page.
8	Hides or displays the shortcut tool bar.

Using file options

From the file list, you can access the following options by pressing <Options>.

- **Erase:** erase the selected file.
- **Rename:** change a file name.



Do not use special characters for a file or folder name, such as /, :, *, ?, ", <, >, or \.

- **File info:** access the file properties.
- **Help:** view the key information you can use.

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

- **Word search:** search for word in the document.
- **Screen capture:** capture the current screen.
- **Go to page:** move to another page of the document.

Planner (Menu 8)

The **Planner** feature enables you to keep track of your schedule, to set alarms, or to create a task and memo.

You can also use convenient features, such as world clock and countdown timer.

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

- ☒ If the phone is in Quiet mode when it is time for the event alarm, or countdown alarm to sound, the alarm sounds and the phone vibrates.

Scheduler *(Menu 8.1)*

Use this menu to view the current month, as well as the past or future months in the calendar format.

Selecting a day on the calendar

When you enter this menu, the calendar in Month view appears with today's date indicated by an orange box.

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

Creating an item

1. Select a date on the calendar.
2. Press **<Options>** and select **Add new**.

3. Enter details and press **<OK>**.

4. Enter information or change the settings:

- **Time:** enter the time for the item.
- **Date:** enter the date for the item.
- **Alarm:** set how long before the item the alarm is to alert you. If you don't want an alarm to ring, select **No alarm**.

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

Consulting the calendar

Days with scheduled items are indicated with the squares at the corners of the date cell.

Viewing an item

1. Select a date on the calendar to display the items for the day.
2. Select an item to view its details.

While viewing item details, press **<Menu>** to access the following options:

- **Add new:** add a new item.
- **Edit:** edit the item.
- **Erase:** delete the selected item.

- **Erase all:** delete all items.

Using calendar options

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

- **View:** access the items stored for the selected day.
- **Add new:** add a new item.
- **Erase:** delete the item.
- **Erase all:** delete all items.
- **Jump to date:** enter the specific date you want to access.

Today (Menu 8.2)

Use this menu to display items stored for the current day on the Today view.

Task list (Menu 8.3)

Use this menu to create a list of tasks that need to be done.

Creating a task

1. Enter the task content. If there are any tasks already stored, press <**Menu**> and select **Add new**.
2. Press <**OK**>.
3. Enter information or change the settings:
 - **Time:** enter the time for the task.
 - **Date:** enter the date for the task.
 - **Priority:** select a priority level.
4. Press <**Save**> to save the task.

Viewing a task

From the task list, select a task.

Using task options

While viewing task details or on the task list, press <**Menu**> to access the following options:

- **Add new:** add a new task.
- **Edit:** edit task information.
- **Erase:** delete the selected task.
- **Erase all:** delete all tasks.

Memo pad *(Menu 8.4)*

Use this menu to make memos of important things you need to remember.

Creating a memo

1. Enter a memo. If there is any memo already stored, press <**Menu**> and select **Add new**.
2. Press <**OK**> to save the memo.

Viewing a memo

From the memo list, select a memo.

Using memo options

While viewing memo details or on the memo list, press <**Menu**> to access the following options:

- **Add new**: add a new memo.
- **Edit**: edit the memo.
- **Erase**: delete the selected memo.
- **Erase all**: delete all memos.

Alarm *(Menu 8.5)*

Use this menu to set alarms to sound at the specific time.

Setting an alarm

1. Select **Wake up call**, **Alarm 1** or **Alarm 2**.
2. Select the alarm frequency option on the Set field by pressing [Left] or [Right].
 - **Once**: the alarm rings just once.
 - **Daily**: the alarm rings every day at the same time.
 - **Sun-Fri**: the alarm rings from Sunday to Friday.
 - **Sun-Thu**: the alarm rings from Sunday to Thursday.
3. Press [Down] to move to the Time field.
4. Enter the alarm time and press [Down].
5. If you select **Wake up call** in step 1, select the alarm interval you want and press [Down].
6. Press <**Edit**> to specify an alarm ringer.
7. Select a ringtone category.
8. Press <**Save**> to select the ringtone melody you want.
9. Press [Down] and press <**Check**> to ring the alarm in Silent mode.

10. Press **<Save>** to save the alarm set.

Stopping an alarm

- To stop an alarm when it rings, press any key.
- To use the snooze function, press **<Snooze>**. The alarm repeats at specified intervals. Press **<End>** to stop an alarm.

Deactivating an alarm

1. On the Alarm list, select the alarm you want to deactivate.
2. Select **Off** on the **Set** field.

World time *(Menu 8.6)*

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

Viewing world time

From a world map, press [Left] or [Right] to scroll to the time zone you want to check.

Applying daylight saving time

From a world map, press **<DST>** and select **Yes**.

Countdown *(Menu 8.7)*

Use this menu to set a time and date for a future event and then check to see how many days, hours, and minutes remain before that event. You can also check how much time has passed since a past event.

Creating a countdown timer

1. Enter event details for the countdown timer. If there is any timer already stored, press **<Menu>** and select **Add new**.
2. Press **<OK>**.
3. Enter information.
 - **Time:** enter the time.
 - **Date:** enter the date to/from which you want to count down.
4. Press **<Save>**.

Using timer options

While viewing timer details or on the timer list, press **<Menu>** to access the following options:

- **Add new:** add a new timer.
- **Edit:** edit the timer details.

- **Erase:** delete the selected timer.
- **Erase all:** delete all timers.

Settings *(Menu 9)*

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

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

Auto answer *(Menu 9.1)*

Use this menu to set the phone to automatically answer calls after a specified time when you use the headset, Bluetooth headset or Bluetooth hands-free kit.

Answer mode *(Menu 9.2)*

Use this menu to set how to answer incoming calls.

- **By send key:** the phone answers calls only when you press [↵].

- **By folder open:** the phone answers when you open the phone. If the phone is already open, press [↵].
- **By any key:** the phone answers when you press any key, except for except for <**Reject**>, <**Silent**>, [📞], and [▲/▼].

Airplane mode *(Menu 9.3)*

Use this menu to switch the phone to Airplane mode, in which the phone functions requiring network connections are deactivated. You can use non-wireless functions, such as, scheduler, games, contacts, and voice recorder on an airplane during flight.

If you select **On**, the phone will automatically switch to Airplane mode each time you turn it on.

Security *(Menu 9.4)*

Use this menu to protect the phone against unauthorised use.

To access the **Security** menu, you must enter the phone password and press <**Done**>. The password is preset to **0000**.

Phone lock (Menu 9.4.1)

Use this menu to lock the phone.

- **Off:** deactivate Lock mode.
- **Once:** lock the phone just one time. Once the phone password is entered, the phone unlocks.
- **On:** lock the phone. Each time turning on the phone, you need to enter the phone password to use the phone.

In Lock mode, you cannot use the phone's menu function and dial numbers, except for making an emergency call.

Change lock (Menu 9.4.2)

Use this menu to change your phone password.

Emergency # (Menu 9.4.3)

Use this menu to store emergency numbers, which can be manually dialed at any time even if all call functions are restricted or your phone is in Lock mode.

Storing an emergency number

1. Select an empty location.
2. Enter a number and press **<Save>**.

Making an emergency call in Lock mode

In Idle mode, enter a programmed number and then press [**↵**].

Clear memory (Menu 9.4.4)

Use this menu to erase all contacts in Phonebook, or SMS or MMS messages stored in the phone's memory.

1. Select a data type to be cleared.
2. Select **Yes** to confirm the deletion.

Reset phone (Menu 9.4.5)

Use this menu to reset the phone's settings you have changed and clear all data you have added.

Press **<Yes>**. The phone automatically turns itself off and then back on.

Data/Fax (Menu 9.5)

Your phone can be used as a standard modem on a computer for sending and receiving digital data and fax calls when connected to a Windows computer.

Using your phone as a modem, you can wirelessly access data from Windows software applications.

- ☒ Your phone must be on a digital network to receive or send data and fax calls.
- ☒ Some features may not be available while in Fax mode.

Use this menu to select a phone mode for sending and receiving data and fax calls.

- **Data/Fax off:** receive voice calls only.
- **Fax for next call:** receive a fax call once after this mode is activated.
- **Fax until powered off:** receive fax calls only until you turn off the phone.
- **Data for next call:** receive a data call once after the mode is activated.
- **Data until powered off:** receive data calls only until you turn off the phone.

GPS settings (Menu 9.6)

You can set the phone to enable the Location feature so that other GPS devices access your phone's position information. Use this menu to enable or disable the Location feature.

Version (Menu 9.7)

Use this menu to check the software and hardware versions of your phone.

DUN settings (Menu 9.8)

Use this menu to use your phone as an external modem for a computer.

- **NONE:** you cannot use your phone as a modem.
- **USB:** you can use your phone as a modem by connecting the phone to a computer via a USB connection.
- **Bluetooth:** you can use your phone as a modem by connecting the phone to a computer via Bluetooth dongle.

Solve problems

Help and personal needs

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

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

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

Your correspondent cannot reach you

- Be sure that your phone is switched on. ([, pressed for more than one second.])
- Be sure that you 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 "Low battery" flashes on the display

- Your battery is insufficiently charged. Recharge the battery.

The audio quality of the call is poor

- Check the signal strength indicator on the display (). The number of bars indicates the signal strength from strong () to weak ().

- Try moving the phone slightly or moving closer to a window if you are in a building.

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

- Use the **Find** menu 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.

Health and safety information

Exposure to Radio Frequency (RF) Signals

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

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

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

SAR tests are conducted using standard operating positions specified by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands.

Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output of the phone.

Before a new model phone is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government adopted requirement for safe exposure.

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

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

* In the U.S. and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

For body operation

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

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

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

Federal Communications Commission (FCC)
<http://www.fcc.gov>

Cellular Telecommunications Industry Association (CTIA):
<http://www.wow-com.com>

U.S.Food and Drug Administration (FDA)
<http://www.fda.gov/cdrh/consumer>

World Health Organization (WHO)
<http://www.who.int/peh-emf/en>

Precautions when using batteries

- Never use any charger or battery that is damaged in any way.
- Use the battery only for its intended purpose.
- If you use the phone near the network's base station, it uses less power; talk and standby time are greatly affected by the signal strength on the cellular network and the parameters set by the network operator.
- Battery charging time depends on the remaining battery charge, the type of battery and the charger used. The battery can be charged and discharged hundreds of times, but it will gradually wear out. When the operation time (talk time and standby time) is noticeably shorter than normal, it is time to buy a new battery.
- If left unused, a fully charged battery will discharge itself over time.
- Use only Samsung-approved batteries and recharge your battery only with Samsung-approved chargers. When a charger is not in use, disconnect it from the power source. Do not leave

the battery connected to a charger for more than a week, since overcharging may shorten its life.

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

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

Road safety

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

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

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

- Position your wireless phone within easy reach. Be able to access your wireless phone without removing your eyes from the road. If you get an incoming call at an inconvenient time, let your voice mail answer it for you.
- Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow, ice, and even heavy traffic can be hazardous.
- Do not take notes or look up phone numbers while driving. Jotting down a To Do list or flipping through your Address Book takes your attention away from your primary responsibility, driving safely.
- Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan calls when your car will be stationary. If you need to make a call while moving, dial only a few numbers, check the road and your mirrors, then continue.
- Do not engage in stressful or emotional conversations that may be distracting. Make the

people with whom you are talking aware that you are driving and suspend conversations that have the potential to divert your attention from the road.

- Use your wireless phone to call for help. Dial the emergency number in the case of fire, traffic accident or medical emergencies. Remember, it is a free call on your wireless phone!
- Use your wireless phone to help others in emergencies. If you see a car accident, crime in progress or other serious emergency where lives are in danger, call the emergency number, as you would want others to do for you.
- If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured, or a vehicle you know to be stolen, call roadside assistance or any other special non-emergency wireless number.

Operating environment

Remember to follow any special regulations in force in any area and always switch off your phone whenever it

is forbidden to use it, or when it may cause interference or danger.

When connecting the phone or any accessory to another device, read its user's guide for detailed safety instructions. Do not connect incompatible products.

As with other mobile radio transmitting equipment, users are advised that for the satisfactory operation of the equipment and for the safety of personnel, it is recommended that the equipment should only be used in the normal operating position (held to your ear with the antenna pointing over your shoulder).

Electronic devices

Most modern electronic equipment is shielded from radio frequency (RF) signals. However, certain electronic equipment may not be shielded against the RF signals from your wireless phone. Consult the manufacturer to discuss alternatives.

Pacemakers

Pacemaker manufacturers recommend that a minimum distance of 15 cm (6 inches) be maintained between a wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research and recommendations of Wireless Technology Research.

Persons with pacemakers:

- should always keep the phone more than 15 cm (6 inches) from their pacemaker when the phone is switched on.
- should not carry the phone in a breast pocket.
- should use the ear opposite the pacemaker to minimize potential interference.

If you have any reason to suspect that interference is taking place, switch off your phone immediately.

Hearing aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may wish to consult your hearing aid manufacturer to discuss alternatives.

Other medical devices

If you use any other personal medical devices, consult the manufacturer of your device to determine if it is adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information. Switch off your phone in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

Vehicles

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

Posted facilities

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

Potentially explosive environments

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

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

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

Emergency calls

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

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

To make an emergency call:

If the phone is not on, switch it on.

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

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

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

Other important safety information

- Only qualified personnel should service the phone or install the phone in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty applicable to the device.
- Check regularly that all wireless phone equipment in your vehicle is mounted and operating properly.
- Do not store or carry flammable liquids, gases, or explosive materials in the same compartment as the phone, its parts or accessories.

- For vehicles equipped with an air bag, remember that an air bag inflates with great force. Do not place objects, including both installed or portable wireless equipment in the area over the air bag or in the air bag deployment area. If wireless equipment is improperly installed and the air bag inflates, serious injury could result.
- Switch off your phone before boarding an aircraft. The use of wireless phones in aircraft is illegal and may be dangerous to the aircraft's operation.
- Failure to observe these instructions may lead to the suspension or denial of telephone services to the offender, or legal action, or both.

Care and maintenance

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

- Keep the phone and all its parts and accessories out of the reach of small children's.

- Keep the phone dry. Precipitation, humidity and liquids contain minerals that will corrode electronic circuits.
- Do not use the phone with a wet hand. Doing so may cause an electric shock to you or damage to the phone.
- Do not use or store the phone in dusty, dirty areas, as its moving parts may be damaged.
- Do not store the phone in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not store the phone in cold areas. When the phone warms up to its normal operating temperature, moisture can form inside the phone, which may damage the phone's electronic circuit boards.
- Do not drop, knock or shake the phone. Rough handling can break internal circuit boards.
- Do not use harsh chemicals, cleaning solvents or strong detergents to clean the phone. Wipe it with

a soft cloth slightly dampened in a mild soap-and-water solution.

- Do not paint the phone. Paint can clog the device's moving parts and prevent proper operation.
- Do not put the phone in or on heating devices, such as a microwave oven, a stove or a radiator. The phone may explode when overheated.
- Use only the supplied or an approved replacement antenna. Unauthorized antennas or modified accessories may damage the phone and violate regulations governing radio devices.
- If the phone, battery, charger or any accessory is not working properly, take it to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

Acknowledging Special Precautions and the FCC and Industry Canada Notice

FCC Notice

- This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.
- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a

particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

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

Battery march Park, Quincy, MA 02269, Attn: Publication Sales Division.

Cautions

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

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

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

Appendix A: CERTIFICATION INFORMATION (SAR)

THIS MODEL PHONE MEETS THE GOVERNMENT'S REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

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

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate (SAR). The SAR limit set by the FCC is 1.6 W/kg. SAR Tests are conducted using standard

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

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

The highest SAR values of this model phone

- CDMA Head: 0.687 W/kg, Body-worn: 0.376 W/kg,
- PCS Head: 0.614 W/kg, Body-worn: 0.682W/kg

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

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of <http://www.fcc.gov/oet/fccid> after searching on FCC ID A3LSPHA900G.*

*In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kilogram (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

Appendix B: Guide to Safe and Responsible Wireless Phone Use

Cellular Telecommunications & Internet Association
"Safety is the most important call you will ever make."

A Guide to Safe and Responsible Wireless Phone Use

TENS OF MILLIONS OF PEOPLE IN THE U.S. TODAY TAKE ADVANTAGE OF THE UNIQUE COMBINATION OF CONVENIENCE, SAFETY AND VALUE DELIVERED BY THE WIRELESS TELEPHONE. QUITE SIMPLY, THE WIRELESS PHONE GIVES PEOPLE THE POWERFUL ABILITY TO COMMUNICATE BY VOICE-ALMOST ANYWHERE, ANYTIME-WITH THE BOSS, WITH A CLIENT, WITH THE KIDS, WITH EMERGENCY PERSONNEL OR EVEN WITH THE POLICE. EACH YEAR, AMERICANS MAKE BILLIONS OF CALLS FROM THEIR WIRELESS PHONES, AND THE NUMBERS ARE RAPIDLY GROWING.

But an important responsibility accompanies those benefits, one that every wireless phone user must uphold. When driving a car, driving is your first

responsibility. A wireless phone can be an invaluable tool, but good judgment must be exercised at all times while driving a motor vehicle whether on the phone or not.

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

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

But with wireless phone use, driving safely means a little more. This brochure is a call to wireless phone users everywhere to make safety their first priority when behind the wheel of a car. Wireless telecommunications is keeping us in touch, simplifying our lives, protecting us in emergencies and providing opportunities to help others in need. When it comes to the use of wireless phones, safety is your most important call.

Wireless Phone “Safety Tips”

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

- 1.** Get to know your wireless phone and its features such as speed dial and redial. Carefully read your instruction manual and learn to take advantage of valuable features most phones offer, including automatic redial and memory. Also, work to memorize the phone keypad so you can use the speed dial function without taking your attention off the road.
- 2.** When available, use a hands free device. A number of hands free wireless phone accessories are readily available today. Whether you choose an installed mounted device for your wireless phone or a speaker phone accessory, take advantage of these devices if available to you.
- 3.** Position your wireless phone within easy reach. Make sure you place your wireless phone within easy reach and where you can grab it without removing your eyes from the road. If you get an

incoming call at an inconvenient time, if possible, let your voice mail answer it for you.

4. Suspend conversations during hazardous driving conditions or situations. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow and ice can be hazardous, but so is heavy traffic. As a driver, your first responsibility is to pay attention to the road.
5. Do not take notes or look up phone numbers while driving. If you are reading an address book or business card, or writing a "to do" list while driving a car, you are not watching where you are going. It's common sense. Don't get caught in a dangerous situation because you are reading or writing and not paying attention to the road or nearby vehicles.
6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan your calls before you begin your trip or attempt to coincide your calls

with times you may be stopped at a stop sign, red light or otherwise stationary. But if you need to dial while driving, follow this simple tip-dial only a few numbers, check the road and your mirrors, then continue.

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

- 9.** Use your wireless phone to help others in emergencies. Your wireless phone provides you a perfect opportunity to be a "Good Samaritan" in your community. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.
- 10.** Call roadside assistance or a special wireless non emergency assistance number when necessary. Certain situations you encounter while driving may require attention, but are not urgent enough to merit a call for emergency services. But you still can use your wireless phone to lend a hand. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured or a vehicle you know to be stolen, call roadside assistance or other special non-emergency wireless number.

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

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

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

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

Cellular Telecommunications & Internet Association
For more information, please call 1-888-901-SAFE.
For updates: <http://www.wow-com.com/consumer/issues/driving/articles.cfm?ID=85>

Appendix C: Consumer Update on Wireless Phones

U.S. Food and Drug Administration

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

The term wireless phone refers here to hand-held wireless phones with built-in antennas, often called cell, mobile, or PCS phones. These types of wireless phones can expose the user to measurable radio frequency energy (RF) because of the short distance between the phone and the user's head. These RF exposures are limited by Federal Communications Commission safety guidelines that were developed with the advice of FDA and other federal health and safety agencies. When the phone is located at greater distances from the user, the exposure to RF is drastically lower because a person's RF exposure decreases rapidly with increasing distance from the source. The so-called "cordless phones," which have a base unit connected to the telephone wiring in a house, typically operate at far lower power levels, and

thus produce RF exposures well within the FCC's compliance limits.

2. Do wireless phones pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless phones. There is no proof, however, that wireless phones are absolutely safe. Wireless phones emit low levels of radio frequency energy (RF) in the microwave range while being used. They also emit very low levels of RF when in the stand-by mode. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low level RF that does not produce heating effects causes no known adverse health effects. Many studies of low level RF exposures have not found any biological effects. Some studies have suggested that some biological effects may occur, but such findings have not been confirmed by additional research. In some cases, other researchers have had difficulty in reproducing those studies, or in determining the reasons for inconsistent results.

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

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

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

- Support needed research into possible biological effects of RF of the type emitted by wireless phones;
- Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and

- Cooperate in providing users of wireless phones with the best possible information on possible effects of wireless phone use on human health

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

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

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

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

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

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

FDA has been a leading participant in the World Health Organization International Electromagnetic Fields (EMF) Project since its inception in 1996. An influential

result of this work has been the development of a detailed agenda of research needs that has driven the establishment of new research programs around the world. The Project has also helped develop a series of public information documents on EMF issues.

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

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

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

If you must conduct extended conversations by wireless phone every day, you could place more distance between your body and the source of the RF, since the exposure level drops off dramatically with distance. For example, you could use a headset and carry the wireless phone away from your body or use a wireless phone connected to a remote antenna

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

6. What about children using wireless phones?

The scientific evidence does not show a danger to users of wireless phones, including children and teenagers. If you want to take steps to lower exposure to radio frequency energy (RF), the measures described above would apply to children and teenagers using wireless phones. Reducing the time of wireless phone use and increasing the distance between the user and the RF source will reduce RF exposure.

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

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

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

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

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that accessories that claim to shield the head

from those emissions reduce risks. Some products that claim to shield the user from RF absorption use special phone cases, while others involve nothing more than a metallic accessory attached to the phone. Studies have shown that these products generally do not work as advertised. Unlike “hand-free” kits, these so-called “shields” may interfere with proper operation of the phone. The phone may be forced to boost its power to compensate, leading to an increase in RF absorption. In February 2002, the Federal Trade Commission (FTC) charged two companies that sold devices that claimed to protect wireless phone users from radiation with making false and unsubstantiated claims. According to FTC, these defendants lacked a reasonable basis to substantiate their claim.

9. What about wireless phone interference with medical equipment?

Radio frequency energy (RF) from wireless phones can interact with some electronic devices. For this reason, FDA helped develop a detailed test method to measure electromagnetic interference (EMI) of implanted cardiac pacemakers and defibrillators from wireless

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

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

FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occur, FDA

will conduct testing to assess the interference and work to resolve the problem.

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

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

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

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

A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the data that are needed. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer promoting effect if one exists. Epidemiological studies can provide data that is

directly applicable to human populations, but 10 or more years follow-up may be needed to provide answers about some health effects, such as cancer. This is because the interval between the time of exposure to a cancer-causing agent and the time tumors develop - if they do - may be many, many years. The interpretation of epidemiological studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones. Many factors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

12. Which other federal agencies have responsibilities related to potential RF health effects?

Additional information on the safety of RF exposures from various sources can be obtained from the following organizations.

FCC RF Safety Program:
<http://www.fcc.gov/oet/rfsafety/>

Environmental Protection Agency (EPA):
<http://www.epa.gov/radiation/>

Health and safety information

Occupational Safety and Health Administration's (OSHA):

<http://www.osha-slc.gov/SLTC/radiofrequencyradiation/index.html>

National Institute for Occupational Safety and Health (NIOSH):

<http://www.cdc.gov/niosh/emfpg.html>

World health Organization (WHO):

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

International Commission on Non-Ionizing Radiation Protection:

<http://www.icnirp.de>

National Radiation Protection Board (UK):

<http://www.nrpb.org.uk>

Updated 4/3/2002: US Food and Drug Administration

<http://www.fda.gov/cellphones>