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

SAMSUNG ELECTRONICS

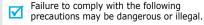


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SCH-W399 User's Manual

Important safety precautions



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



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

Use of authorised software

Use only Samsung-authoriesed software. The use of any unauthoriesed software could damage your phone.

Qualified service

Only qualified service personnel may repair your phone.

For more detailed safety information, see "Health and safety information" on page 89.



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, [\searrow].
- Indicates a soft key, whose function is displayed on the phone screen. For example, <Menu>.



GSM and CDMA network

Switch back and forth between GSM and CDMA networks, anytime anywhere.

Special features of your phone



Camera and camcorder

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



MP3 player

Play MP3 music files using your phone as an MP3 player.



Bluetooth

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



Get Personal with photo caller ID

See who's calling you when the phone displays her or his very own photo.



Name card

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



Organiser
 Keep track of your daily and monthly schedule.



Voice recognition

Just say a contact's name to dial her/his phone number.



Contacts

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



Dictionary

Search for words using your phone.



Messenger

Have a conversation with other people by sending and receiving instant messages.



Connect your phone to a computer to copy files directly to and from it.



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Overview of menu functions

To access Menu mode, press < Menu> in Idle mode. Some menus may not be available, depending on the network you select.

1 Calls	▶ p.42	4 Display	▶ p.56	7 Enter
1 Missed 2 Incoming 3 Outgoing 4 Air time 5 GSM call costs 6 Area code 7 Call reject 2 Phonebook	 p.42 p.42 p.42 p.42 p.43 p.43 p.44 	1 Image box 2 Banner 3 Backlight 4 Menu style 5 Set time 6 External clock 7 Service LED 8 语言 /Language	 p.56 p.56 p.56 p.56 p.56 p.57 p.57 p.57 	1 Game 2 MP3 3 Karaol 4 Fun bo 5 Samso 6 VOD 8 Utiliti
1 Find	▶ p.44	9 Dialing font	▶ p.57	1 Calend 2 Alarm
2 Add 3 Group settings 4 Speed dial 5 Name card 6 My phone # 7 Memory info 8 Copy & Erase	 p.45 p.46 p.46 p.47 p.48 p.48 p.48 	5 Message 1 New message 2 Inbox 3 Outbox 4 Msg setup 5 Msg wallpaper 6 Memory info	 p.57 p.57 p.58 p.59 p.60 p.61 p.61 	3 User n 4 Mini d 5 Calcul 6 Today 7 To do 8 Voice 9 World
1 Take photo 2 My album 3 Photo studio 4 Settings	 p.49 p.49 p.52 p.54 p.55 	6 Sounds 1 Ringer 2 Ringer vol./Type 3 Key tone 4 Alert	 p.62 p.62 p.62 p.62 p.62 p.62 	0 Counto * Memo # Blueto

DE	available, depending c	iii tile lietv	voik you select.
7	Entertainment	▶ p.63	9 Settings
4 5 6	Games MP3 Karaoke Fun box Samsung messenger VOD	 p.64 p.64 p.67 p.67 p.68 p.70 	1 CDMA net services 2 GSM net services 3 Security 4 Network selection 5 Answer mode 6 Entry method 7 Domain preset
1 2 3	Utilities Calendar Alarm User memory Mini dictionary	 ▶ p.70 ▶ p.71 ▶ p.72 ▶ p.73 ▶ p.74 	8 Contents status Press <menu> and then <favorites> in Idle mode.</favorites></menu>
6 7 8 9	Calculator Today To do list Voice tools World time Countdown Memo pad Bluetooth	 p.74 p.75 p.75 p.75 p.78 p.78 p.79 p.79 	Uni 1 Mail 2 Magic 3 MAP 4 Info 5 Channel 6 Music Street 7 Bookmarks

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Unpack

Make sure you have each item

Phone Travel Adapter
Batteries User's Manual



- The items supplied with your phone and the accessories available at your Samsung dealer may vary, depending on your country or service provider.
- Use the purchased acces'sories with only Samsung-authorised devices.
- The use of these accessories with other devices could cause problem and any repair costs would not be covered by the warranty.

■ Get started

First steps to operating your phone

SIM/UIM card information

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

Install and charge the phone

- Remove the battery.
- 2 Insert the card.
- If the phone is already on, first turn it off by holding [6].
- Make sure that the goldcoloured contacts on the card face down into the phone.
- 3 Install the battery.
- 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 stops blinking), 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 battery low message displays, and
- the empty battery icon blinks.

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

Power on or off

Power on	1. Open the phone.
	2. Press and hold [💰] to turn on the phone.
	Select a GSM or CDMA network.
Do not turn on the	
phone when mobile phone use is prohibited.	 If necessary, enter the PIN and press < OK>.
Power off	1. Open the phone.
	2. Press and hold [?].

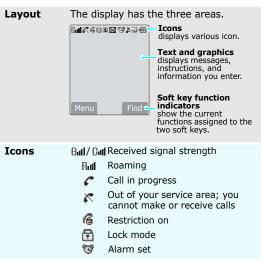
Keys and display

Key(s)	Description
Soft key	Perform the functions indicated on the bottom line of the display.
Navigation key	In Idle mode, access the following menus directly. • [Up]: MP3 • [Down]: U-Magic • [Left]: Mail; Message when held down • [Right]: Calendar In Menu mode, scroll through menu options.
uni key	In Idle mode, accesses the Uni menu.
Send key	Makes or answers a call. In Idle mode, retrieves the recent numbers dialled, missed, or received.
Clear key	Deletes characters from the display. In Menu mode, returns to the previous menu level.

Key(s)	Description
End key	Ends a call. Hold down to switch the phone on and off. In Menu mode, cancels input and returns the phone to Idle mode.
Numeric key	Enter numbers, letters, and some special characters.
Special key	Enter special characters. In Idle mode, hold [#] down to activate or deactivate Silent mode. Hold [*] down to start voice dialling.
Volume key (on the left)	Adjust the phone volume. In Idle mode, with the phone open, adjust the keypad and alert tone volume. With the phone closed, hold down to turn on the backlight. In Menu mode, scroll through menu options.

Key(s)	Description
Camera key (on the right)	In Idle mode, accesses the Camera menu. Hold down to turn on the camera. In Camera mode, takes a photo or starts recording a video. During a call, hold down to record your call conversation.
Network key	Switch the network between GSM and CDMA.

Display



Icons (continued)



Bluetooth status

- · Black: Active
- · Blue: Connected to another device.



New e-mail in server

New e-mail in inbox



New Web alert



New message



New voice mail



Urgent message



Ringer type setting ▶ p. 62

: Ringer only

: Silent : 1 beep

: Vibration

: Vib. & Ringer : Vib. then ringer

• Jii : Ringer then vib.



Silent mode ▶ p. 13 Messenger invitation



Battery power level

Access menu functions

The roles of the soft keys vary depending on the function you have selected. 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 the appropriate soft key.
	Press the Navigation keys to move to the next or previous option.
	 Press Select>, OK>, or Save> to confirm the function displayed or option highlighted.
	 4. To exit, choose either of the following methods: Press <back> or [C] to move up one level.</back> Press [6] to return to Idle mode.

Customise your phone

Display language

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

Call ringer melody

- In Idle mode, press <Menu> and select Sounds → Ringer.
- Press [Down] and press [Left] or [Right] to scroll to a ringer category.
- 3. Press [Up] or [Down] to scroll to a ringer melody.
- Press < Play> to listen to a melody.
- 5. When you find the melody you want, press **Save**>.

Idle mode Wallpaper

You can set a wallpaper for the idle screen.

- In Idle mode, press <Menu> and select Display → Image box → Wallpaper.
- 2. Select an image category.
- 3. Select an image.

Idle mode Banner

- In Idle mode, press < Menu> and select Display → Banner.
- 2. Press and hold [**C**] to clear the default banner.
- Enter your own banner message and press < OK>.

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 lock code.

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

Switch networks

Select a network

You can easily and quickly switch back and forth between GSM and CDMA networks.

- 1. Press [6] in Idle mode.
- 2. Select a network.

Step outside the phone

Make/Answer calls

Make a call

- 1. Enter an area code and phone number.
- 2. Press [~].
- 3. To end the call, press [6].

Answer a call

- When the phone is ringing, press [↑].
- 2. To end the call, press [\checkmark 6].

Adjust the volume during a call

Press [▲/▼].

Step outside the phone

Begin with your camera, music, WAP, and other special features

Use camera

Take a photo

- 1. Open the phone.
- 2. In Idle mode, press and hold $[\ \ \ \ \ \ \]$ to turn on the camera.
- Rotate the camera module and aim the lens at the subject to adjust the image.
- Press < Capture > to take a photo.
- Press < Save >.

View a photo

- 1. In Idle mode, press [७/∞] and select **My album**.
- 2. Select **Single** or **Multi**.
- 3. Scroll to a photo and press < **Expand**>.

Record a video

- 1. In Idle mode, press and hold [む/の] to turn on the camera.
- 2. Press [1] to select the video cam icon (♠).
- 3. Press < >> to start recording.
- 4. Press $\langle \square \rangle$ to stop recording.
- 5. Press **<Save>**.

Play a video

- 1. In Idle mode, press [७/∞] and select **My album**.
- Select Video cam.
- 3. Scroll to a video and press <**Play**>.

Play MP3s

Copy MP3 files to the phone

Use these methods:

Copy directly from a computer.
 p. 73

Create the play list

- In Idle mode, press <Menu> and select Entertainment → MP3 → MP3 files.
- Press **Options**> and select **Add to play list**.
- Press < Check > to check the files you want to add.
- Press < Add >.
- 5. Press **Play** to play music.

- Play MP3 music 1. In Idle mode, press [Down]and select MP3 player.
 - 2. Press[>>].
 - 3. During playback, use the following keys:
 - [№]: pauses or resumes playback.
 - [Up]: changes the repeat mode.
 - [Down]: opens the play list.
 - [Left]: moves backward.
 - [Right]: moves forward.
 - [A/Y]: adjusts the volume.
 - <Options>: opens the option list.
 - <A-B>: sets a section in a file to play the section repeatedly.

Browse the web

Using a built-in WAP (Wireless Access Protocol) browser, you can get easy access to the wireless web to receive a variety of up-to-the-minute information and services and to enjoy downloads of web contents.

Launch the browser

- 1. In Idle mode, press [⊌].
- 2. Select Wap.

Navigate the web

- To scroll through browser items. press [Up] or [Down].
- To select an item, press<**OK**> <**/**>.
- To return to the previous page, press [C].
- To return to the homepage, hold down [C].
- To access browser options. press [№]or < Menu> and select Menu.

Use Phonebook

Add an entry

To the phone's memory:

- In Idle mode, enter a phone number and press < Save>.
- 2. Enter a name and press < **OK**>.
- 3. Press [Up] or [Down] and select a number type.
- Specify the contact information: Name, Storage, Mobile, Home, Office, Pager, Fax, Image, E-Mail1, E-Mail2, URL, Group, Ringer, and ETC.
- 5. Press **<Save>** to save the entry.

To a cards:

- In Idle mode, enter a phone number and press < Save>.
- 2. Enter a name and press **<OK>**.
- Scroll to a card.
- 4. Press **Save** to save the entry.

Find an entry

- 1. In Idle mode, press < Find >.
- 2. Select an entry.
- Select a number and press [\(\)]
 to dial, or < **Options**> to access
 options.

Create your name card

- In Idle mode, press < Menu> and select Phonebook → Name card → Name card book → My name card.vcf.
- Press **Options**> and select **Edit**.
- 3. Specify your contact information.
- Press < Save > to save the name card.

Send/View messages

Send a text message

- In Idle mode, press <Menu> and select Message → New message.
- Enter the message text and press < **OK**>.
- 3. Press <Save>.
- 4. Enter destination numbers.
- Press < OK> to send the message.

View a text message

When a notification appears:

Press **Select**. The message displays.

From the Inbox:

- In Idle mode, press <Menu>
 and select Message → Inbox→
 Text→ the message storage.
- 2. Select a message.

Access voice

When a notification appears:

- 1. Press [➤]. The phone dials the voicemail center.
- 2. Follow the instructions from the system.

From the Inbox:

- In Idle mode, press <Menu> and select Message → Inbox → Voice.
- 2. Follow the instructions from the system.

Chat on Messenger

Create the buddy list

To add a contact:

- In Idle mode, press <Menu> and select Entertainment → Samsung messenger → Messenger.
- 2. Select 无组群 and press < Add>.
- Press < Yes> to open Phonebook and select an entry. Alternatively, press < No> and enter a new name and number.
- 4. Press < Save > .

To add a group:

- From the Messenger screen, press < Add>.
- 2. Enter a group name and press <**OK**>.

Start a conversation

To send an invitation:

- 1. From the Messenger screen, select a group.
- 2. Press < Invite >.
- 3. Check the contacts you want.
- 4. Press < Invite >.
- Enter an invitation message and press < Send>.
- 6. Repeat step 5 to chat with the contacts.

To accept an invitation:

- When you receive an invitation, press < Accept>.
- 2. Enter and send a message.

Use Bluetooth wireless

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

Turn on Bluetooth

In Idle mode, press <Menu> and select Utilities → Bluetooth → Activation → On.

Search for and connect to a Bluetooth device

- In Idle mode, press < Menu> and select Utilities → Bluetooth → My devices → New search dev.
- 2. Select a device.
- Enter a Bluetooth PIN code or the other device's Bluetooth PIN code, if it has one, and press < Connect>.

Use favourite features

Set up favourite item access

- 1. In Idle mode, press and hold <**Menu**>.
- Select a location and press < Options > .
- 3. Select Assign.
- 4. Select the menu you want and press **Assign**>.
- 5. Select an icon for the item.
- 6. Press < Save > .

Access a favourite item

- In Idle mode, press and hold <Menu>.
- Press the number key corresponding to the item you want.

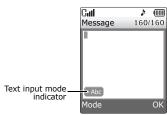
Enter text

Pinyin, Stroke, ABC, T9 Word, 123, and Symbol mode You can enter text for some features such as messaging, Phonebook, or Organiser, using Pinyin and Stroke modes for Chinese, and T9 Word and ABC mode for English. You can also use 123 mode and Symbol mode.

Changing the text input mode

Example: Writing a text message

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



Using Chinese pinyin mode

Pinyin is a system to enter Chinese words by spelling them phonetically (how they sound) using the Latin alphabet. With the Pinyin input method, you can enter Chinese characters by keying in the Pinyin string using the phone's keypad.

Entering characters in Pinyin mode

 Press the keys corresponding to the phonetic spelling, referring to the letters printed on the keys.

Example: To enter " 你," press [**6**] and [**4**] to enter "ni."

- 2. press [Left] or [Right] to select alternative pinyins for the keys you have pressed.
- If you cannot find the character you want from the display, press [Up] or [Down] to scroll through the word choices.
- 4. Press [1] to activate the character selection field. A number, from 1 to 6, is added to each character.
- 5. Press the number key corresponding to the character you want.

Using the tones

You can enter another character by assigning a tone for the selected pinyin. Entering a tone for a character is optional, but it is especially useful if the pinyin spelling is similar for several characters.

- 1. Press the keys corresponding to the pinyin of the letter you need.
- 2. If necessary, press [Left] or [Right] to select the pinyin.
- 3. Press [*] for tones.
- If you cannot find the character you want from the display, press [Up] or [Down] to scroll through word choices.
- 5. Press a key, [1] to [6], corresponding to the character.

Rapid character entry

To enter the word "zhong guo (+ \mathbb{E})", enter the first character using the following keystrokes; [9], [4], [6], [6], [1], and [1]. You do not have to complete the Pinyin spelling to include "guo (\mathbb{E})." The character displays automatically.

Tips for using Pinyin mode

- Press [#] to insert a space between characters.
- Press [Left] or [Right] to move the cursor.
- Press [C] to clear letters one by one press and hold
 [C] to clear the entire display.

Using Chinese Stroke mode

This mode allows you to enter individual Chinese strokes, in written order, from top to bottom, and from left to right.

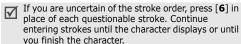
The Chinese strokes are classified into five basic categories; heng, shu, pie, dian, and zhe. The basic strokes are printed on keys [1] to [5] on the keypad. Refer to the following table:

Category	Keys	Strokes represented in each category
_	1	
	2	1]
1	3	1-1
•	4	
→	5	7 - J - L - L - L - J - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5

Entering strokes and characters in Stroke mode

 Press the keys that correspond to a character's component strokes. Press keys in the order that you would write the strokes, using one press per stroke.

2. Press [Up] or [Down] to scroll through the choices.



3. To select a character and add it to your message, press the corresponding key, [7] to [#].

Rapid character entry

Try entering the characters "zhong guo $(+\mathbf{z})$ " using the following keystrokes: [2], [8], and [7]. Even though "guo (\mathbf{z}) " is a twelve stroke character, your phone allows you to enter the complete pair in only three key presses.

Tips for using Stroke mode

- Press [Left] or [Right] to move the cursor.
- Press [C] to clear letters one by one. Press and hold [C] to clear the entire display.

Using 123 mode

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

Using Symbol mode

Symbol mode enables you to enter symbols.

- Press [Left] or [Right] to display more symbol sets.
- 2. Press the key corresponding to the symbol you want.

Using ABC mode

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

				Ch	ara	cte	rs	in c	orde	er di	ispla	ive	d		
Key	Upper case								order displayed Lower case						
1	*	@ <	- >	/	′ : =	~	?	' {	1 }	; ′ \$	() []	!	#	%	&
2	Α	В	С	2					а	b	С	2			
3	D	Е	F	3					d	е	f	3			
4	G	Н	I	4					g	h	i	4			
5	J	K	L	5					j	k	I	5			
6	М	N	0	6					m	n	0	6			
7	Р	Q	R	S	7				p	q	r	s	7		
8	Т	U	٧	8					t	u	٧	8			
9	W	Χ	Υ	Z	9				W	Х	У	z	9		
0	0														

Tips for using ABC mode

- To enter the same letter twice or to enter a different letter on the same key, wait for the cursor to move to the right automatically, or press [Right]. Then, enter the next letter.
- Press [#] to insert a space.
- Press [*] to change case. Lower case (abc), Initial capital (Abc), and Capital lock (ABC) are available.
- Press [Left] or [Right] to move the cursor.
- Press [C] to delete characters one by one. Press and hold [C] to clear the entire display.

Using T9 word 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.

Example: Press [4], [3], [5], [5], and [6] to enter *Hello*.

- 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 the characters.
- 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].
- Press [#] to insert a space and enter the next word.

Tips for using T9 mode

- Press [1] to enter periods or apostrophes automatically.
- Press [*] to change case. Lower case (T9word), Initial capital (T9Word), and Capital lock (T9WORD) are available.
- Press [Left] or [Right] to move the cursor.
- Press [C] to delete characters one by one. Press and hold [C] to clear the entire display.

Call functions

Advanced calling features

Making a call

- In Idle mode, enter the area code and phone number.
- 2. Press [>].



- Press [**C**] to clear the last digit or press and hold [**C**] to clear the whole display.
 - Press <Pause> to enter a pause between numbers.

Making an international call (in GSM network)

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

Redialling recent numbers

- In Idle mode, press [↑] to display the list of recent numbers.
- 2. Scroll to the number you want and press [\scroll].

Making a call from Phonebook

Once you have stored a number in Phonebook, you can dial the number by selecting it from Phonebook. ▶ p. 44

You can also use the speed dial feature to assign number keys to your most frequently called numbers. ▶ p. 46

Voice dialling

Once you have stored numbers with Chinese names in Phonebook, you can dial them by saying the associated names.

You can customise the voice dial settings to set the phone to recognise your commands better. ▶ p. 76

- In Idle mode, press and hold [*].
- 2. At a voice prompt, say a name into the microphone.
- If the phone finds and confirms a wrong name, say 'No."

When you hear what you said, say "Yes."

4. Say a number type, if the name has more than one number.

Ending a call

Close the phone or press [\checkmark].

Answering a call

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

Press [\sqrt{ }] to answer the call.

Tips for answering a call

- Press < Reject > or [♂], or hold down [*/*] to reject a call.
- Press <Silence> or [A/v], or close the phone to mute the ringer.

Viewing missed calls

If you have missed calls, the screen displays the number of the calls and the phone number of the last call.

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 left side of the phone. The buttons on the headset work as listed below:

То	Press
redial the last call	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 [A/Y] to adjust the earpiece volume during a call.

Press $[{\tt A}]$ to increase the volume and $[{\tt Y}]$ to decrease the volume.

Recording a conversation

You can record your call conversation to access it from the Voice memo list. ▶ p. 77

- 2. Press **Stop**> to end recording.

Answering a second call

If you have subscribed to call waiting, you can answer another call during a call.

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

Making a three-way call

If you have activated three-way calling service, you can have a conversation with two people simultaneously.

- During a call, press [] and make another call.
 The first caller is placed on hold.
- 2. Press [\scale] to begin the three-way call.

Using a Bluetooth headset or hands-free kit

Use an optional Bluetooth headset or hands-free kit to talk on the phone without holding the phone your ear. To use this feature, you first need to connect the phone and the headset. ▶ p. 79

Press [\bigcirc] to switch a call between the phone and the headset.

Using In-call options

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

 Mute/Quit: switch off your phone's microphone, so that the other person on the phone cannot hear you.

- Calls: access the Calls menu. ▶ p. 42
- Phonebook: access the Phonebook menu.
 p. 44
- Silent/Quit: mute the DTMF (Dual-Tone Multi-Frequency) tones of the keys. This allows you to press keys without hearing annoying key tones during a call.
- **Send my #**: send your phone number to the calling person or to automated services.
- **DTMF length**: manipulate the audible DTMF (Dual-Tone Multi-Frequency) tones.
- Noise cancellation: activate the noise cancellation feature, which masks noise from your surroundings so that the other person on the phone can hear you more clearly. You can also press [Up].

Menu functions

Uni

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 <Menu> and then <Favorites> in Idle mode.

U-Mail

Use this menu to access the Mail service, which allows you to send or receive e-mails containing various media items, such as images, sounds, name cards, and captured pictures and video files.

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

New Mail

Use this menu to create a new e-mail and send it to other people.

- 1. Press < Edit > to access the Recipient List.
- Press < Edit >.
- Enter a destination address and press < OK>.
 To send your e-mail to more than one person, repeat steps 2 and 3.
- 4. On the Recipient List screen, press < Menu> to access the following options:
 - Addr Book: retrieve an e-mail address from Contacts.
 - **Sent History**: retrieve an e-mail address from the list of the e-mails you have sent.
 - Addr Group: select a caller group to access the e-mail addresses of members of that group.
 - **Profiles**: enter your e-mail address automatically.

- Delete: delete the selected recipient. This
 option is available only when an e-mail address
 is selected.
- Move to To: change the selected address to a To address. This option displays when you have selected a Cc or Bcc address.
- Move to Cc: change the selected address to a Cc address. This option displays when you have selected a To or Bcc address.
- Move to Bcc: change the selected address to a Bcc address. This option displays when you have selected a To or Cc address.
- 5. Press < **OK**> to return to the New Mail screen.
- 6. Move to the subject line and press **Edit**.
- 7. Enter the subject of your mail and press **<OK>**.
- 8. Move to the attachment line and press < Edit >.
- 9. Add files using the following options:
 - Select Attach: add various types of files.
 - Select SMIL Attach: add SMIL files.
 - **Edit SMIL**: create or edit an SMIL file. ▶ p. 35

- Move to the body of your e-mail and press < Edit >.
- 11. Write your mail text and press **<Ok>**.
 - When you attach an SIML file, you are unable to write a message.
- 12. Press < Send > to send the e-mail.
 - You can save the e-mail you have created by pressing **<Menu>** and selecting **Save as New**.

Inbox

This mail box stores e-mails you have received.

Received e-mails are saved in the **Folder0** folder by default. If you have set filters, a new e-mail will be saved in the folder containing the filter that corresponds to the sender's address.

Viewing a received e-mail

- Select a folder.
- Scroll to the e-mail you want and press < Disp>. Items attached to the message will display.

3.	То	Press
	scroll through the items	<pre> or <next>.</next></pre>
	view the body of the message	< 0K >.

Using e-mail options

While viewing an e-mail, press < Menu> to access the following options:

- Upload: upload the e-mail to the web server for backup.
- Reply: send a reply to the sender.
- Reply All: send a reply to the sender and all other recipients of the e-mail.
- Forward: forward the e-mail to other destinations.
- Protect: lock the e-mail to keep it from being deleted.
- Delete: delete the e-mail.

- Move To Folder: move the e-mail to another folder.
- Show Full Address: display the sender's full address(es).
- Copy Mail Body: copy the mail text. You can paste the text when composing a new e-mail.

Managing a mail folder

Your phone provides you with the potential for up to 10 mail folders to manage your e-mails.

Scroll to the folder you want and press **<Menu>** to access the following options:

- Add Filter: set a filter, which arranges incoming e-mails by senders' addresses. This option is not available for Folder0.
- Edit Folder Name: change the folder name.
- **Re-Filter**: rearrange received e-mails, according to the filter set for the current folder.
- Delete All: delete all e-mails.
- Reset Folder: restore the default settings of the selected folder.

Send Box

This mail box stores e-mails you have sent or tried to send, or you have saved to send at later time.

Viewing a sent or saved e-mail

Scroll to the e-mail you want and press **<Disp>** to open the e-mail.

Using e-mail options

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

- Upload: upload the e-mail to the web server for backup.
- Edit: edit the selected e-mail. This option displays when you select the messages you didn't send.
- Copy To Edit: edit the selected message and save as a new message. This option displays when you select the messages you have sent.
- Protect ON/OFF: prevent the selected e-mail from being deleted.
- **Delete**: delete the selected e-mail.

- **Sort**: change the sort order of the e-mail list.
- Show Full Addr: display the senders' full address(es).
- Copy Mail Body: copy the mail text. You can paste the text when composing a new e-mail. This option displays while you are viewing the e-mail.
- 1-In/3-In View: change the e-mail list mode.
 3-line View mode displays the time and date, the recipient's e-mail address, and the mail subject on the mail list all at once.
 - 1-line View mode displays only one of those items. You can change the item to be displayed on the mail list by pressing **<Chg>**.

Check New Mail

Use this menu to check the Mail server for new incoming e-mails, and then retrieve new e-mails from the server.

Data Folder

Use this menu to access and manage media files stored both on the phone and on the web server. You can also share your files on the server with other people, or vice versa.

- Handset: view and manage the media files in your phone's memory.
- Network: access your media files on the server and share them with other people.
- Shared: view shared files made accessible by other people.
- Trash: display deleted files.

Uploading or downloading files

You can upload files stored in the phone's memory to the web server or download ones from the web server.

- Select Handset or Network.
- 2. Select the folder you want.
- 3. Scroll to the file you want.
- For a Handset file, press < Upload>.
 For a Network file, press < Download>.

Viewing shared files

You can view media files made accessibly by other people.

- 1. Select **Shared** on the My multimedia screen.
- Press < Options> and select New links.
- Enter a phone number, an e-mail address, or a user name and press < Save>.
- When the new link has been created, select the file you want to view.

Using options

While viewing a folder in **Handset** or **Network**, press <**Options**> to access the following options:

- Create folder: create a new folder.
- Share: enable sharing of the folder with other people.
- **Unshare**: prevent sharing of the folder.
- Folder info: access the folder properties.

While viewing the file list in a folder, press **Options**> to access the following options:

- Mail: send the file via e-mail.
- Copy: copy the file to another folder.
- Share: enable sharing of the file with other people.
- **Unshare**: prevent sharing of the file.
- Rename: change the file name.
- Assign: assign an image or sound file to act as a display image or function sound.
- **Erase**: erase the file.
- File info: access the file properties.

SMIL Editor

Use this menu to create a new SMIL file, which is a combination of an image, a sound clip, and text.

Creating a new SMIL file

- 1. Select **New SMIL**.
- 2. Highlight **Add New SLIDE**, and press **<Edit>**.
- 3. When the image line is selected, press **Edit**>.
- 4. Select the source image category you want.

- 5. Select the image you want.
- 6. Move to the text line and press **Edit**>.
- 7. Enter a message and press **Ok**>.
- 8. Move to the audio line and press **Edit**>.
- 9. Select the source sound category you want.
- 10. Select a sound clip.
- 11. Press < **OK**>.
- To add more slides, repeat steps 2 to 11.You can add up to 5 slides for an SMIL file.
- 13. When you have finished, press **<OK>** to save the SMIL file.

Using SMIL slide options

You can access the following options by pressing <**Menu>** on the image, text, or audio line on a slide:

- **Set Start**: set the time delay before the currently selected item displays when you open the slide.
- **Set End**: set the length of time the currently selected item will be displayed before the next item automatically displays.
- Layout: show the layout for your SMIL slide.

- **Preview**: show the SMIL file you have created.
- Delete Image/Delete Text/Delete Audio: delete the added image, text, or sound.

While you are viewing a slide list, press <**Menu**> to access the following options:

- SLIDE During: set how long one slide displays on the message presentation screen. After a specified time, the display automatically scrolls to the next slide.
- SLIDE Move: move the selected slide to the position you want.
- SLIDE Delete: delete the selected slide.

Editing SMIL files stored in your phone

- 1. From the SMIL Editor screen, select **Open SMIL**.
- 2. Select the SMIL file folder you want.
- 3. Select the SMIL file you want to edit.
- 4. Move to the slide you want and press **Edit**>.
- 5. Change the items on the slide as you would when creating a slide.

Online Box

Use this menu to manage the messages you have backed up from the phone to the web server.

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

- **Erase**: erase the message.
- Sort: change the sort order of the messages.
- Move: move the message to another folder.

Mail Settings

Use this menu to configure various e-mail settings that are required when you send or receive e-mails.

 Receiving & View: change the settings that control how e-mails are received and viewed.

Auto-Reving: set whether or not your phone retrieves new incoming e-mails from the Mail server without notification.

Rcving Type: select which parts of e-mails you want to retrieve, such as all e-mails, sender's e-mail address(es), or title of e-mail, from the Mail server when you receive the e-mails.

Receive Atchmnt: select whether or not the phone retrieve an e-mail with attachments from the Mail server.

Play Atchmnt: set whether or not the phone first displays attached files in an e-mail and then shows you the body of the e-mail.

Show Folders: set whether or not the phone displays e-mail folders.

Font Size: change the font size of e-mails.

 Send & New Mail: change the settings that control how e-mails are created and sent.

Quote Original: set whether or not the phone includes the original e-mail text in a reply.

Addr Group: manage caller groups.

Encoding Type: select an encoding type.

Del Sent History: delete e-mails you have sent.

- Register Account: register your e-mail account to the Mail server or delete your account from the server.
- Others: access the website preset by your service provider to manage the Mail service.

- View Mail Settings: check the current e-mail settings.
- About: check the software version and copyright information of the Mail service.

U-Magic

se this menu to download and use various Brew applications.

Downloading an application

- When the **MobileShop** icon is highlighted, press [*].
 - Catalog: browse and purchase items.
 - Search: search for an application by entering a keyword.
 - Help: get help information for using the MobileShop menu.
- Press [] when the Catalog option is highlighted.
 You are sent to the associated website preset by
 your service provider and you can browse the
 available applications.

3. Select the application you want and follow the onscreen instructions to download it.

Changing the browser settings

- 1. Select the **Settings** icon.
- 2. Select a setting 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 memory used for downloaded applications.
 - Main Menu View: change the view mode of the main menu screen.
 - Screen Savers: activate the Screen Saver application, if downloaded.
 - View Log: access the records of your browsing.

Viewing help information

- Select the **Help** icon.
- 2. Select a help item.

- 3. Scroll through help information.
- 4. Press [] to go back to the main help screen.

U-MAP

Use this menu to access a location service based on GPS positioning technology. With this service, you can easily find friends, gas stations, restaurants, and other locations.

For further details, contact your service provider.

U-Info

Your phone comes equipped with the web browser which makes it possible for you to access the wireless web. Using the web browser, you can access up-to-date information and a wide variety of media content, such as wallpapers, ringtones, and music files.

Use the **Info** menu to launch the web browser and access the homepage of your service provider.



To quickly access this menu, press $[\begin{array}{c} \geqslant \end{array}]$ in Idle mode.

Navigating websites

То	Press
scroll through browser items	the Navigation keys.
scroll page by page	[▲/▼]
select an item	<√>.
return to the previous screen	[C].
return to the homepage	and hold [C].

Using browser menu options

While navigating websites, press <Menu> and select Menu to access the following options:

- Home: send you back at any time to your startup homepage.
- History: display the records of your connection to the wireless web.
- Bookmarks: display the Bookmarks list.
- PUSH Message: display the web push messages received from the server.

- Reload: refresh the current web page with updated information.
- Go To URL: manually enter the URL address of a web page.
- Snapshots: take a snapshot of the current web page.
- Save Items: save the image on the current web page.
- Show URL: display the URL address of the site where you are currently connected.
- Exit: exit the web browser.
- Advanced...: customise the following options: Restart Browser: restart the web browser without exiting it.

Delete Cookies: delete all cookies and files. A cookie is a record of a user's information that is stored on the phone when you visit a website.

Homepage: change the startup homepage. If you clears the URL, the default homepage is restored.

Multimedia: enable or disable auto download of media objects, such as images or background sounds on a web page.

Scroll Mode: select a scroll mode, and/or set the scroll speed.

Send Referrer: set the browser to send HTTP referrer information to the web server each time the browser is launched.

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.

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.

Security: set up all security information. **Restore default value**: restore the default settings for the Advanced feature.

 Send Link: send the URL of the current page in an electronic message.

- Clear Memory: clear information stored in the History list, the cache, and the Auto Fill form. Also delete cookies.
- **About ...**: view information about Openwave and your version of the web browser.

Channel

The Channel menu gives you access to the VOD(Video on demand) service preset by your service provider to enjoy various streaming video content or download video files to your phone.

Music Street

Use this menu to access the various audio services supported by your service provider. For details, contact your service provider.

- Send Music: send a music file with a short voice message through an ARS service (Automatic response service).
- **Listen MSG**: check messages you have received.

- Mini Music: access the music files you have listened to.
- Help: access the help screen for using the Music street feature.

Bookmarks

You can add and manage the URLs of the web pages you access frequently. You can also manage URLs you have bookmarked while navigating the Internet.

Adding a new bookmark

- 1. Press < Menu> and select New Bookmark.
- 2. Enter a name for a URL and press [y].
- 3. Enter the URL address.
- 4. Press [ψ] to move to highlight the **Save** line.
- 5. To save the bookmark, press $< \sqrt{\ }>$.
- 6. To return to the bookmark list, press **<OK>**.

Accessing a bookmarked page

Scroll to a bookmark and press <Go>.

Using bookmark options

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

- **Details**: access the properties of the bookmark.
- **Delete**: delete the selected bookmark.
- New Bookmark: add a new bookmark.
- New folder: add a new bookmark folder.
- Move: move the selected bookmark to the position you want.
- Move to folder: move the bookmark to another folder.
- **Delete all**: delete all bookmarks.
- Hotkeys: assign a hot key (1 to 9) for nine of your most frequently accessed bookmarks.
- Cancel: exit the bookmark.

Calls (Menu 1)

Use the **Calls** menu to access call logs, view the duration of calls, and set options for call functions.

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

Missed (Menu 1-1)

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

Accessing a call record

- 1. Select a call.
- Press [↑] to dial the number, or < Options > to access the call record options.

Using call record options

Press < Menu> on the call list or < Options> on the detail view 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: erase the call record.
- Erase all: erase all call records.
- Send Msg.: send a message to the selected number.
- Mail: send an e-mail to the selected number via Mail service.

Incoming (Menu 1-2)

This menu displays the most recent calls you have received.

Outgoing (Menu 1-3)

This menu displays the most recent calls you have dialled.

Air time (Menu 1-4)

This menu displays the time log for calls you have made or received. Actual time invoiced by your service provider will vary.



This feature is not intended to be used for billing purposes.

- Last call: check the air time of the last call.
- **Total**: check the number of all voice calls and data calls and the total duration of the calls.
- Erase total: erase the air time measurement and reset the air time counter.
- Life time: check the number and total duration of all calls since the phone was shipped from the factory.

GSM call costs (Menu 1-5)

This GSM network feature lets you view the cost of calls.

- Last call cost: check the cost of the last call you made.
- Total cost: check the total cost of all calls you have made. If the total cost exceeds the maximum cost set in Set max cost, you can no longer make any calls until you reset the counter.
- Max cost: check the maximum cost set in Set Max cost.

- Reset counters: reset the cost counter.
- **Set max cost**: enter the maximum cost limit that you authorise for your calls.
- Price/Unit: set the cost of one unit; this price per unit is applied when calculating the cost of your calls.

Area code (Menu 1-6)

Use this menu to find and retrieve area and country codes to quickly and easily dial phone numbers.

- Select a call type, **Domestic** or **International**.
- Press [Left] or [Right] to select a search method.
- 3. Select a city, country, or province.
- If you selected a province or country, select one of the cities that belong to the selected area and press < Dial>.
- 5. When the area code of the selected city appears on the Dialling mode screen, enter the rest of the phone number you want.

 Press <Save> to save the number to Phonebook, or [↑] to dial it.

Call reject (Menu 1-7)

Use this menu to make a list of the phone numbers from which you don't want to accept calls.

Phonebook (Menu 2)

You can store phone numbers and their corresponding names in your card and the phone's memory. The card and phone's memory, although physically separate, are used as if they were a single entity, called Phonebook.

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

Find (Menu 2-1)

Use this menu to find an entry using a person's name, group name, or memory location.



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

Finding an entry

- 1. Press [Left] or [Right] to select a search method.
- 2. Enter the first few letters of the name you want or select a caller group or memory.
- 3. Scroll to the name you want.
- Press [↑] to place a call to the entry's default number, which is the mobile number or the first saved one.

Alternatively, press < **OK**> to access the entry.

Using Phonebook options

While viewing the Phonebook list, press **Options**> to access the following options:

- Edit: edit the contact information for the entry.
- Erase: erase the entry.
- Add new: add a new entry to Phonebook.
- **To vCard**: save the entry as a name card so that you can send it using the Mail service.

While viewing details of an entry, press **Options**> to use one of the following options:

• **Send msg.**: send a text message.

- Talk: dial the selected number.
- Edit: change the selected item.
- Copy: copy the selected number to another memory location.
- Speed dial: assign a speed-dial location number to the currently selected number.
- Erase: erase the entry. If you select a number, only the number is erased.

Add (Menu 2-2)

Use this menu to add a new entry to Phonebook.

In the phone's memory, a name can contain up to 5 numbers in different categories: Mobile, Home, Office, Pager, and Fax. You can save only one number with a name in the card's memory.

- 1. Enter a name and press <**OK**>.
- 2. Press [Left] or [Right] to select a memory.
- 3. Move to the next field(s).
- If you have selected Card 1/2, enter a phone number.

If you have selected **Phone**, change the settings or enter more information.

- Mobile/Home/Office/Pager/Fax: add a number for each category.
- Image: press <Edit> and assign one of the photos you took using the camera or the default icons as a caller ID image.
- E-mail1/2: press <Edit> and enter an e-mail address.
- URL: press <Edit> and enter an URL address.
- Group: select one of the default relationship groups, where the entry is to be added.
- Ringer: press <Edit> and select a unique ringer melody for the entry.
- ETC: press <Edit> and add a memo about the entry.
- When you have finished, press <Save> to save the entry.

Group settings (Menu 2-3)

Use this menu to set up a caller group list.

Adding a new group

- 1. When 无组群 highlights, press < Add >.
- 2. Enter a name for the group and press < Next>.
- Press [Left] or [Right] to scroll to a ringer category.
- 4. Select a ringer melody.

Managing a group

Press < Menu > to access the following options:

- New: add a new group.
- **Edit**: change the properties of the selected group.
- Erase: erase the selected group(s).

Speed dial (Menu 2-4)

Once you have stored phone numbers in Phonebook, you can set up to 98 (2 \sim 99) speed-dial entries and then dial them easily by pressing the associated one or two number keys.

Setting up speed-dial entries

- Press [Left] or [Right] to select All or Empty.
- 2. Enter the location number you want or scroll to the desired number.
 - Entering a number lists all of the location numbers containing the entered number.
- Press <Add>.
- 4. Select a phone number from the Phonebook list.
- 5. Select a number from the entry, if it has more than one number.

Editing speed-dial entries

- Press [Left] or [Right] to select Stored.
- 2. Enter the location number you want or scroll to the number.
- 3. Press **Options**> to access the following options:
 - Replace number: assign a different number to the location.
 - Delete: clear the speed dial setting for the location.
 - **Delete all**: clear the settings for all keys.

Dialling speed dial entries

Press and hold the appropriate number key in Idle mode.

Name card (Menu 2-5)

Use this menu to create your name card and send it to other phones using the Mail service. You can also send a Phonebook entry in name card format.

Send card (Menu 2-5-1)

You can send a name card from the Name card book, which stores your name card (▶ p. 47) and the name cards you have saved, or an entry from Phonebook as a name card.

- 1. Select Name card book or Phonebook.
- 2. Select the name card or Phonebook entry you want to send.
- 3. Press < Send >.

The phone switches to the New Mail screen, allowing you to create a new e-mail.

4. Follow the procedure in "New Mail."

Name card book (Menu 2-5-2)

Use this menu to create and edit your name card. You can also access the name cards you have saved and the last name card you sent.

Creating your name card

- Select My name card.vcf.
- 2. Press < Options > and select Edit.
- Create your name card as you would store a phone number.
- 4. Press **Save** to save your name card.

Viewing a name card

Select the name card you want to view from the Name card book list.

Using name card options

While viewing a name card, press **Options**> to access the following options:

- **Edit**: edit the currently selected name card.
- Send: send the currently selected name card as part of an e-mail.

- Add to phonebook: save the name card as a Phonebook entry.
- Erase: erase the name card. This option is not available for the default name card.

My phone # (Menu 2-6)

Use this menu to view and change your phone number.

To change the phone number, press **Edit** and enter your phone number.

Memory info (Menu 2-7)

Use this menu to check how many entries are stored in Phonebook, in both the card(s) and the phone's memory.

Copy & Erase (Menu 2-8)

Use this menu to copy Phonebook entries from the phone's memory to a card or vice versa. You can also erase your Phonebook entries.

Copying Phonebook entries

- Press [Left] or [Right] to scroll to the memory you want.
- Press < Check > to check the entries you want to copy.
- 3. Press < Options > and select Copy.
- 4. Select the memory to which you want to copy the entries.
- 5. Press **Yes**> to confirm the copy.

Erasing Phonebook entries

- Press [Left] or [Right] to scroll to the memory you want.
- Press < Check> to check the entries you want to erase.
- 3. Press **Options**> and select **Erase**.
- 4. Press **Yes**> to confirm the deletion.

Camera (Menu 3)

Using the camera module built into your phone, you can take photos of people or events while on the move. You can also record videos by using your phone as a camcorder.

Via the **Camera** menu, you can take photos, record videos, and access your photos and video clips.



- 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 MPEG4 video clips.



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

Taking a Photo

The camera turns on and the image to be captured displays.

- 2. Press [1] to select the camera mode until the mode icon you want appears:

 - Serial (
): take a serial of action stills.
 - Divided (H): take several stills and saves them in one frame. Multiple stills will be saved as a single image.
 - Video cam (♠1): record a video clip. ▶ p. 51
 - Mail((a)): take a photo for adding to an e-mail.
 After taking a photo, press < Send > to send the photo as part of an e-mail. ▶ p. 30
- 3. Adjust the image by aiming the camera at the subject.

- When you press < Option>, you can use the camera options. ▶ p. 50
- You can change the image settings by using the keypad. ▶ p. 51
- 4. Press **<Capture>** or [⑤/の] to take the photo. When you are taking serial or divided shot images, the camera takes photos successively.
- Press <Save> to save the photo.
 The phone saves the photo(s) in the My album folder and returns to Capture mode.

Using options in Capture mode

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



Some camera options vary, depending on the camera mode you have selected.

- **Capture mode**: change the camera mode.
- Resolution: select an image resolution.
- Quality: select an image quality setting.
- · Flash: turn the flash on or off.

- White balance: adjust the colour balance of the photo. You can make your photo appear warmer or cooler.
- **Fun frames**: add a decorated frame to the photo.
- Photo effect: change the colour tone or apply a special effect to the photo.
- No. of shots: select the number of shots for Serial or Divided mode.
- Shutter mode: set whether the phone takes shots automatically or you must press the shutter, [⑤/∞], for each shot in Serial or Divided mode.
- **Self timer**: set a time delay before the phone takes a photo.
- My album: display the photos and videos saved in the My album folder.
- Preview mode: select the default preview mode.
 Crop view: the phone shows the image on the full screen. The left and right parts of the image to be captured is cropped.

Actual ratio: the phone shows the image in actual ratio.

Using the keys in Capture mode

You can use the keys to customise your camera settings when you are in Capture mode.

Key	(ey Function	
Left/Right	zooms in or out. (unavailable for 1280*960,1024*768 resolution)	
Up/Down	changes the image brightness.	
1	changes the camera mode.	
2	changes an image resolution.	
3	changes an image quality.	
4	turns the flash on or off.	
5	changes the white balance.	

Taking a photo with the phone closed

- 1. Close the phone and press and hold $[\ \ \ \ \ \]$.
- Press [*] to select an option and press [*] to change the setting.

- T: flips the image vertically and horizontally.
- (): changes the image brightness.
- \mathbb{H}: zooms In/Out.
- 3. Press $[\ \ \ \ \ \ \ \ \ \ \ \ \]$ to take a photo.

Recording a video

- 1. Access the Take photo menu.
- 3. Adjust the image by aiming the camera at the subject.
 - When you press < Option>, you can use the camera options. In next section
 - You can change the image settings by using the keypad. ▶ p. 52
- Press < →> or [⑤/σο] to start recording.
 To pause recording, press< ĵ∫> and then press
 > to resume.
- When you are finished, press <□> or [⑤]/∞].
 Otherwise, the phone will automatically stop when the recording time expires.

Press <Save> to save the video clip.
 The phone saves the video clips in the My album folder and returns to Record mode.

Using the options in Record mode

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

- Capture mode: change the camera mode.
- **Resolution**: select an image resolution.
- Quality: select an image quality setting.
- Flash: turn the flash on or off.
- Voice recording: record audio with a video.
- White balance: adjust the colour balance of the video. You can make your video clip appear warmer or cooler.
- Self timer: set a time delay before the phone starts recording.
- Video effect: change the colour tone or apply a special effect to the video clip.
- My album: display the video clips and photos saved in the My album folder.

Using the keys in Record mode

You can use the keys to customise your camera settings when you are in Record mode.

Key	Function
Left/Right	zooms in or out.
Up/Down	changes the image brightness.
1	changes the camera mode.
2	changes the image resolution.
3	changes the image quality.
4	turns the flash on or off.
5	changes the white balance.

My album (Menu 3-2)

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

Viewing a photo

- 1. Select Single or Multi.
- 2. Scroll to the photo you want.
- Press < Expand > to view the image on the full screen.
- 4. Press <9X> to return to the thumbnail images.

Using photo options

When you press **Option**>, you can access the following options:

- Send photo mail: send the photo as part of an e-mail.
- Assign: set the photo as your wallpaper for the idle screen, the opening or closing image, or caller ID image for an Phonebook entry.
- Photo studio: access the Photo studio menu.
- Rename: change the file name.

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

• **Lock**: lock the photo so that other people cannot access it without your lock code.

- Uncheck all: remove all check marks on the photos, if you have placed.
- File info: display information about the photo.
- Erase: erase the photo.
- Erase all: erase all photos.

Viewing a video clip

- 1. Select Video cam.
- Select the video clip you want.
- 3. Press < Play> to play the video clip.

During playback, use the following keys:

Key	Function
	Pauses or resumes.
Right	Skips forward.
Left	Skips backward.
Up	Changes the repeat mode.
Down	Opens the file list.
A/Y	Adjusts the volume.

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Even if the phone is in Silent mode, it will play the sound when playing a video clip.

Using video options

When you press **Option**> on the file list, you can access the following options:

- Set wallpaper: set the video clip as your wallpaper.
- Rename: change the video name.

 $\boxed{\prime}$ Do not use special characters, such as /, :, *, ?, ", <, >, or \.

- Lock: lock the video clip so that other people cannot access it without your lock code.
- Uncheck all: remove all check marks on the photos, if you have placed.
- File info: display information about the video clip.
- **Erase**: erase the video clip.
- Erase all: erase all video clips.

Photo studio (Menu 3-3)

Use this menu to edit new or saved photos by adding a frame or using a special colour effect.

Add frame (Menu 3-3-1)

You can add a decorated frame to a photo.

Using a frame with a new photo

- Select New photo.
- 2. Select the frame you want.
- 3. Press **Capture**> to take a photo.
- 4. Press **<Save**>. The photo is saved.

Using a frame with a saved photo

- 1. Select Saved Photo.
- Press < Multi> or < Single> to change the folder and select the photo you want.
- 3. Select the frame you want.
- 4. Select a clip.
- 5. Move a clip to the position you want.
- Press < OK> to save the photo. Enter a picture name and press < OK>.

Alternatively, press **<Wall>** to set the photo as your wallpaper, opening or closing image.

Photo effect (Menu 3-3-2)

You can apply a special effect to a photo.

Applying a special effect to a new photo

- 1. Select **New Photo**.
- 2. Select the effect you want.
- 3. Press **Capture**> to take a photo.
- 4. Press **Save**. The photo is saved.

Applying a special effect to a saved photo

- 1. Select **Saved Photo**.
- Press < Multi> or < Single> to change the folder and select the photo you want.
- 3. Scroll to the effect you want.
- 4. Press **OK**> to save the photo. Enter a picture name and press **OK**>.

Alternatively, press **<Wall>** to set the photo as your wallpaper, opening or closing image.

Settings (Menu 3-4)

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

- Shutter sound: select a sound for the shutter, [७/ळ].
- Reset: reset your camera settings to their default status.
- Album lock: lock the photo album so that no one can view your photos without your permission.
- Preview mode: select the default preview mode:
 Crop view: the phone shows the image on the full screen. The left and right parts of the image to be captured is cropped.

Actual ratio: the phone shows the image in actual ratio.

Display (Menu 4)

The **Display** menu enables you to change various settings for the display and the lights.

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

Image box (Menu 4-1)

Use this menu to change the background image to be displayed in Idle mode or when the phone is turned on or off.

- Select the item for which you want to change the image.
 - Opening: select an image to be displayed when the phone turns on.
 - Closing: select an image to be displayed when the phone turns off.
 - Wallpaper: select an image to be displayed in Idle mode.
- 2. Select the image category you want.
- 3. Select the image you want.

Banner (Menu 4-2)

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

Backlight (Menu 4-3)

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

Menu style (Menu 4-4)

Use this menu to select the menu display style.

Set time (Menu 4-5)

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

Main clock (Menu 4-5-1)

You can set the current time and date.

Enter the time in 24-hour format and the date in the following order: day, month, and year.

Dual clock (Menu 4-5-2)

You can choose two time zones to be displayed when you select **Dual clock** for the wallpaper image.

- 1. Press [Left] or [Right] to select the time zone for the upper clock and press [Down].
- 2. Press [Left] or [Right] to select the time zone for the lower clock.
- 3. Press < Save >.

You can apply daylight savings time for each clock. When a clock highlights, press < **DST on**>.

External clock (Menu 4-6)

Use this menu to change the type of clock to be displayed on the external display in Idle mode.

Service LED (Menu 4-7)

The service LED on the phone blinks to indicate service status. In this menu, you can activate or deactivate this feature.

语言 /Language (Menu 4-8)

Use this menu to change the language of the display.

Dialing font (Menu 4-9)

Use this menu to select a colour type for the digits to be displayed when you enter a phone number for dialling.

Message (Menu 5)

Use the **Message** menu to send or receive text messages. You can also use the voicemail and web alert features.

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

New message (Menu 5-1)

Use this menu to create text messages and send them to multiple mobile phones.

- Enter the message text and press <OK>.
- Press [Down] to change the following options:

- **Priority**: set the priority level of the message.
- 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.

- Press < Save >.
- 4. Enter a phone number.

To send the message to multiple destinations, press [Down] and enter additional numbers.

When you have finished, press <OK> to send or save the message.

Inbox (Menu 5-2)

Use this menu to access messages you have received.

Viewing a message at the time of its receipt

When the phone receives a text message, the phone sounds a message alert and displays a text notification. Press **Select**> to view the message immediately.

Viewing a message in Inbox

 Select **Text** from **Inbox**. A list of the received messages displays.

Icons displayed on the list indicate the message's status:

- E: Messages received from a GSM network
- Messages received from a CDMA network



- A red icon with ! means that the message is urgent.
- <u>Mill</u> and <u>Mill</u> mean that the message is saved on the cards.
 <u>Mill</u> means that the message is saved in the phone's memory.

- 2. Select the message storage you want by pressing [Left] or [Right].
- 3. Select the message you want.

Using message options

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

- Erase: erase the currently selected message from your Inbox.
- **Reply**: send a reply to the sender.
- **Forward**: send the message to other people.
- **Call/Save**: make a call to the sender's phone number or save the number to Phonebook.
- Copy: copy the message to a card or phone's memory.
- Move: move the message to a card or phone's memory.

Accessing voicemail messages

When you receive a voice mail message, a text notification displays. Press <**Select**>, and the phone

dials the voicemail centre. Then follow the voice prompts from the system to listen to the message.

You can also check your voicemail messages by accessing **Voice** in the **Inbox** menu.



In a GSM network, you can press and hold [1] in Idle mode to access the voicemail centre.

Accessing Web alerts

When you select **Web alert** in the **Inbox** menu, the phone accesses your Alert Inbox on the wireless web, so that you can view a message from your WAP server.

Outbox (Menu 5-3)

Use this menu to access messages you have sent or tried to send.

Viewing sent text messages

When you access the **Outbox** menu, a list of sent or saved messages appears. Icons displayed on the list indicate the messages' status:

 m: Messages that have been successfully delivered in a CDMA network.

- Messages that have been successfully delivered in a GSM network.
- Messages that the phone has failed to send in a CDMA network.
- Messages that the phone has failed to send in a GSM network.



- A red icon means that the message is urgent.
- 1. Press [Left] or [Right] to select the message storage you want.
- 2. Select the message you want.

Using message options

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

- Erase: erase the currently selected message.
- Resend: send the message to the recipient again.
- **Forward**: forward the message to other people.

- **Call/Save**: make a call to the recipient's numbers or save the recipient's numbers in Phonebook.
- Copy: copy the message to a card or phone's memory.
- Move: move the message to a card or phone's memory.

Msg setup (Menu 5-4)

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

- Scroll timer: set the time interval in which the phone scrolls to a following screen, 1 through 5 seconds. When this option is set to Off, you can manually scroll to the next screen using [Up] or [Down].
- 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.

- Canned msg.: preset sentences to use when composing a new message.
- CDMA settings: customise the settings for your outgoing messages in a CDMA network.

Priority: set the priority level of messages.

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.

 GSM settings: customise the settings for your outgoing messages in a GSM network.

Service centre: set the number of your message centre.

Validity period: set the length of time your messages are stored in the message centre.

Message type: set the default message type. **Reply path**: allow the recipient to reply to you through your message centre.

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

Voice mail center: set the number of your voicemail centre. Please contact your service provider for further details.

Msg wallpaper (Menu 5-5)

Use this menu to set a background image of your outgoing messages.

Memory info (Menu 5-6)

This menu displays how many messages are stored in the cards and the phone's memory.

Sounds (Menu 6)

The **Sounds** menu allows you to customise various sound settings.

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



You can play a sound by pressing **Play** in Silent mode.

Ringer (Menu 6-1)

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

Ringer vol./type (Menu 6-2)

Use this menu to adjust the ringer volume for voice calls, messages, alarms, and schedule 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 type of tones that the phone sounds each time you press a key.



If You can adjust the key tone volume using [A/Y] in Idle mode.

Alert (Menu 6-4)

Use this menu to set up various alert sounds on your phone.

Function alert (Menu 6-4-1)

Use this menu to set up audible alerts (beeps) 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 the phone.

Connect: set the phone to sound a connect tone when your call is connected to the system.

Disconnect: set the phone to sound a disconnect tone when a call is disconnected by the other person.

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

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

Call time alert: set the phone to sound an alert every minute during an outgoing call.

Hour alert (Menu 6-4-2)

You can set your phone to sound an alert every hour on the hour.

- 1. Select **On** and press [Down].
- Enter the time period for the phone to sound the hour alert and press [Down].
- 3. Select an alert type and press **Save**.

Entertainment (Menu 7)

Using the **Entertainment** menu, you can play games using your phone, enjoy karaoke video files and MP3 files, and chat with your friends or family using the Samsung messenger. You can also access media content downloaded from the Internet.

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

Games (Menu 7-1)

You can enjoy fun games on your phone.

Starting a game

- 1. Select the game you want.
- 2. Press any key except for [<a>[<a>[<a>[<a>[<a>] <a>].
- 3. If necessary, select a game mode.

The phone displays the following options; options vary depending on the selected game:

- Continue: restart the game you last played.
- New Game: start a new game.
- Score Board/high score: check the high score table.
- **Help/instruction**: give you the information about how to play the game.
- key info: display information about the keys you can use in a game.
- 4. Select New Game.

For further information about games, refer to the help option.

MP3 (Menu 7-2)

Use this menu to enjoy music.

MP3 player (Menu 7-2-1)

You can play MP3 music files. First you need to save MP3 files in your phone's memory.

Downloading MP3 files

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

- Download from the wireless web. ▶ p. 30
- Connect the phone to a computer and copy to the phone. ▶ p. 73

Creating the play list

Before playing MP3 music files, you need to add them to the play list.

- 1. Access the MP3 files menu.
- 2. Press <Options> and select Add to play list.
- 3. Press < Check> to select the files you want.
- 4. Press <**Add**>.
- To play the music files, press <Play>.

Playing MP3 music files

To play MP3 music files from the MP3 Player screen, press [] from the MP3 player screen.

Press and hold [Down] in Idle mode to quickly open the MP3 play list.

During playback, use the following keys:

Key	Function
	Plays or pauses a music file.
Up	Changes the repeat mode. No icon: plays all files once in order. GAS: repeats all of the files. GIS: repeats the current file. SFL: plays the files at random.
Down	Opens the play list.

Key	Function
Left	 Skips to the previous file if pressed within 3 seconds after playback has started. Restarts playback if pressed 3 seconds after playback has started. Moves backward in a file when held down.
Right	Skips to the next file.Moves forward in a file when held down.
A/¥	Adjusts the volume.
А-В	Repeats a section of your choice. Pressing this key begins a search for the starting point. To search for the end point, press <a→b>.</a→b>
	To stop repeating, press $\langle \mathbf{A} \leftrightarrow \mathbf{B} \rangle$.

You can close the phone without interrupting playback, so you can enjoy your music with the phone closed.

Using MP3 player options

Press **<Options>** on the MP3 Player screen to access the following options.

- Go to file list: open the MP3 file list.
- 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**: change the equalizer setting.
- File info: display information about the MP3 file.

Playing MP3 files with the phone closed

- 1. With the phone closed, press and hold [▶II].
- 2. Press [▶II] to launch the MP3 player.

During playback, use the following keys:

Key	Functions
►II	Pauses/resumes.
С	Stops playback.

Key	Functions
I€€	 Skips to the previous file if pressed within 3 seconds after playback has started. Restarts playback if pressed 3 seconds after playback has started. Moves backward in a file when held down.
>> I	Skips to the next file.Moves forward in a file when held down.

MP3 files (Menu 7-2-2)

In this menu, you can access the MP3 files stored in the phone's memory.

When you press **Options**>, you can access the following options:

- Open files: open the selected MP3 file.
- Add to play list: add the MP3 files in the selected folder or selected MP3 file to the play list.
- Move: move the file to another folder.
- Copy: copy the file to another folder.

- **Rename**: change the name of the selected file.
 - \square Do not use special characters, such as /, :, *, ?, ", <, >, or \.
- Sort: change the order in which the files are sorted.
- File info: show you information about the selected MP3 file.
- Set to ringer: set the music file as a ringer melody for incoming calls, alarm sets, or scheduler alarms.
- Erase: erase the selected MP3 file or folder, if you have created ones in the File manager menu.
- Erase all: erase all MP3 files.

MP3 settings (Menu 7-2-3)

In this menu, you can adjust the backlight and keypad settings active during MP3 file playback.

 Backlight: select the length of time the backlight stays on while playing an MP3 file.

Default: the backlight turns off after the period of time set in the **Backlight** menu.

Always on: the backlight of the main display does not turn off.

 Key lock: lock the keys except for [A/Y] so that you can prevent an accidental press of the keys from affecting playback when the phone is closed.

Karaoke (Menu 7-3)

Use this menu to enjoy karaoke video files you have downloaded as you would in any karaoke situation.

Scroll to the karaoke file you want and press **Play**>.

While viewing a karaoke list, press **Options**> to access the following options:

- Erase: erase the selected karaoke file.
- Erase all: erase all karaoke files.

Fun box (Menu 7-4)

Use this menu to access Samsung Fun Club, the preset web site providing Samsung mobile phone users with attractive download services, such as ring tones and wallpapers.

You can download:

- colour images.
- 64-polyphonic melodies.

Samsung messenger (Menu 7-5)

This feature allows you to have a conversation with your friends, family, or co-workers by sending and receiving instant messages.



- You can use Samsung messenger between Samsung mobile phones equipped with the feature.
- When you send and receive packet data, you will be charged by your service provider.

Messenger (Menu 7-5-1)

Use this menu to start a conversation with a person or with a group of people.

Before starting a conversation, you need to create a buddy list of your messenger contacts.

Creating the buddy list

You can add contacts to your buddy list by entering a name and number manually or by retrieving an entry from Phonebook. You can also group your contacts.

To add a contact to the buddy list:

- 1. On the Messenger screen, select 无组群.
- 2. Press < Add>.
- Press < Yes> to open Phonebook and select a contact.

Alternatively, press **No** and skip to step 5.

- To enter a new name and number, press < Edit>.
 To use the current name and number, skip to step 6.
- 5. Enter a new name and number.
- Press < Save >.

To add a group to the buddy list:

- 1. On the Messenger screen, press **Add>**.
- 2. Enter a group name and press **<Ok>**.
- When the created group highlights, press <**Select**>.
- 4. To add contacts to the group you want, follow from step 2 of the procedure for adding a contact.

On the Messenger screen, select one of the groups you have created and press < Menu> to access the following options:

- Add: add a new messenger group.
- Edit: edit the messenger group.
- **Erase**: erase the selected messenger group.
- **Erase all**: erase all messenger groups you have created. The default groups are not deleted.

Starting a conversation

Once you have created your buddy list, you can start a conversation by sending an invitation to the contacts with whom you want to talk. You can also start a conversation by accepting an invitation from another person.

To start a conversation by sending an invitation:

- On the Messenger screen, select a group and press <**Select**>.
- Press < Invite >.
- Check the contacts you want.
- 4. When you have finished, press < Invite>.

- Enter an invitation message and press <Send>.
 While entering a message, you can access the following options by pressing <Option>:
 - Invite: send an invitation to an entry.
 - Extract: extract phone numbers from the message.
 - Canned msg.: retrieve one of several canned messages.
 - View members: show the entries currently selected.
- Write and send a message.
 When the other person accepts your message, you can converse with the person by instant message.

To start a conversation by accepting an invitation:

When another person sends you an invitation, a text notification displays. Press **Accept**>. Now, you can converse with the person by instant message.

Managing the messenger contacts

On the Messenger screen, select a group. The list of members of the group displays.

Menu functions

While you are viewing a contact list, press < **Menu**> to access the following options:

- View: display information about the selected contact.
- Edit: edit the contact information.
- Add: add a new contact.
- Erase: erase the selected contact.
- Move: move the member to one of the groups stored in the buddy list.
- **Reject**: add the contact to 拒绝 so that you can reject messages from that person.

To receive messages from the person, go to the contact in 拒绝 and press < **Restore**>.

 Erase All: erase all of the members of the group to which the contact belongs.

History (Menu 7-5-2)

Use this menu to view the records of your conversations.

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

- Erase: erase the selected record.
- Erase all: erase all records.

Settings (Menu 7-5-3)

In this menu, you can change the setting options for using the messenger feature.

- Canned msg.: add a new canned message to use when creating an instant message to converse with other people.
- **Font size**: select the message font size to be displayed on the messenger screen.
- My nickname: enter your nickname to be displayed on the messenger screen.

VOD (Menu 7-6)

Utilities (Menu 8)

The **Utilities** menu enables you to keep track of your schedule and tasks, set alarms, or use convenient features, such as a dictionary, calculator, voice recorder, and counter.

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

Calendar (Menu 8-1)

Use this menu to view the current month, as well as the past or future months in the calendar format. You can be alerted by the Calendar function before an event commences.



Press [Right] in Idle mode to quickly access this menu.

When you access this menu, today's date is automatically selected and the date in lunar calendar reckoning displays at the bottom.

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

- View: access the events stored for the selected day.
- Add new: add a new event to the selected day.
- Erase events: erase scheduled events individually.
- Erase all: erase all of the events in the calendar.

- **Jump to date**: enter the date you want to access.
- View festivals: set up the list of national or personal anniversaries and festivals.

Scheduling an event

You can schedule up to 9 events for one day and 20 events total.

- 1. Select a day from the calendar.
 - To move to the next or previous month, press [A/Y].
- 2. Enter your event information and press <**OK**>.
- 3. Enter the time.
- 4. Enter the date, if necessary.
- 5. Select an alarm option.
- 6. Press **<Save>** to save your event.

Viewing your schedule

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

 Select one of days with scheduled events. The list of events for that day displays.

Menu functions

2. Select an event.

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

- Add new: add a new event.
- · Edit: edit the selected event.
- Erase: erase the selected event.
- Erase all: erase all events.

Alarm (Menu 8-2)

Use this menu to set the alarms to ring at a specific time.

Setting an alarm

- 1. Select Alarm 1 or Alarm 2.
- Scroll to an alarm frequency option and press [Down].
- 3. Enter the time for the alarm to ring and press [Down].
- 4. Scroll to an alarm interval option for repeating the alarm and press [Down].
- 5. Press < Edit >.

- 6. Press [Left] or [Right] and select a melody category.
- 7. Select an alarm melody.
- 8. Press < Save > to save the alarm.

Stopping an alarm

To stop an alarm when it rings, press any key. Pressing <**End**> or [<] will cancel the alarm repetition, if a repeating option has been set.

Deactivating an alarm

- On the Alarm list, select the alarm you want to deactivate.
- 2. Select **Off** from the **Set** line.

User memory (Menu 8-3)

Use this menu to connect the phone to a PC, as you would use an external memory disk drive and access the file directory of your phone's memory.

Connect to PC (Menu 8-3-1)

Use this menu to connect your phone to a computer.

- 1. Connect a USB cable to the jack at the bottom of the phone and the USB port of the computer.
- Access the Connect to PC menu.
- 3. Enter the lock code and press **<OK>**. 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 directory.
- 5. Copy files from the phone to the computer and 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 play or function properly.
 - If you change a folder name, all data in the folder may be deleted or the corresponding feature may not work properly.

File manager (Menu 8-3-2)

You can access the folders of your phone's memory and manage media files.

To view information about the selected folder, press <Info>.

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

- **Send**: send the file as part of an e-mail.
- Erase: erase the file.
- **Move**: move the file to another folder.
- **Copy**: copy the file to another folder.

Menu functions

- Rename: change the file name.
 - $\begin{tabular}{c} \end{tabular}$ Do not use special characters for a file or folder name, such as /, :, *, ?, ", <, >, or \.
- Create folder: create a new folder. This option is not shown for the main folder.
- **Erase all**: erase all files. This option is not shown for the main folder.
- File info: display information about the file.
- Copy to Pbook: copy the selected name card to Phonebook.
- Set to ringer: set the MP3 file as your call ringer.
- Assign: set the selected photo as your wallpaper, opening or closing image, or Phonebook caller image.
- Set wallpaper: set the selected video as your wallpaper.

Memory info (Menu 8-3-3)

This menu shows the memory status of each folder in the phone.

Format (Menu 8-3-4)

Use this menu to erase files stored in the **File** manager folder.

Mini dictionary (Menu 8-4)

Your phone provides you with an English-Chinese and Chinese-English dictionary.

- Press < Mode> and enter the Chinese or English word you want.
- 2. Press < OK/Select > .

The displays shows the pronunciation of the word you entered and the corresponding English or Chinese words.

Calculator (Menu 8-5)

Use this menu to use the phone as a calculator. The calculator provides basic arithmetic functions: addition, subtraction, multiplication, and division.

- 1. Enter the first number.
 - Use [*] to enter a decimal point and [#] to change the sign of a number to a negative (-).

- Select the operation for your calculation by pressing the Navigation keys according to the illustration on the display.
- 3. Enter the second number.
- To get the result, press <=>.
- $\sqrt{}$

You can reset the calculator by pressing **<C>**.

Today (Menu 8-6)

Use this menu to schedule new events for the current day. Events scheduled for future dates automatically appear on your Today display for that particular day. Schedule and access events as you would in the calendar. ▶ p. 71

To do list (Menu 8-7)

Use this menu to enter up a list of tasks you need to do.

Creating a task

Enter the task content and press <OK>.

- Enter the time by which your task needs to be done.
- Enter the date by which your task needs to be done.
- 4. Select **!High** or **Low** priority.
- 5. Press **Save** to save the task.

Viewing a task

Select the task you want to view from the task list.

While viewing a task, press **Options** to use the following options:

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

Voice tools (Menu 8-8)

Use this menu to configure the voice dial settings and record voice memos.

Voice dialing (Menu 8-8-1)

The voice dialling feature allows you to make phone calls by saying the name of an entry in Phonebook.

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The phone uses an independent voice recognition system. This system is able to recognise the speech of any speaker.

Use this menu to change the settings for voice dialling so that your phone recognises commands better.

Configuring voice dial settings

In the **Configure** menu, you can customise various settings for using the voice dialling feature.

 Set active: set how you want to initiate voice dialling.

Auto: the phone automatically switches to voice dialling mode when you open the phone.

Manual: you need to press and hold [*] to dial a number by your voice command.

 Select sex: programme a gender for the user to make recognition easier.

- Result display: set how many entries the phone displays as a result of the recognition after searching for the best match for your voice command.
- Earmic setup: set the phone to activate Voice dialling mode when you press the button on the headset.
 - When using the headset, the voice dialling feature may not work properly in noisy environments.
- Message vol: adjust the volume of the voice prompts that guide you through the procedure for voice dialling.
- Storage: select the default memory for voice dialling. When you initiate the mode, the phone recognises only the entries in the selected memory.
- Dialect: You can set the phone to recognize Mandarin or Cantonese.

Editing voice dial names

Once you have stored Chinese names with numbers in Phonebook, they are automatically registered as voice dial entries.

In the **Edit name** menu, you can cancel or set the voice dial setting for each name.

- Press [Up] or [Down] to scroll to the name you want.
 - You can change the list format by pressing [#]. Each time you press the key, the list shows registered names, unregistered names, and then all of the selectable entries.
- 2. Press [*] to check the names.
- 3. Repeat steps 1 and 2 for other entries.
- 4. To save the setting, press the right soft key.

Voice memo (Menu 8-8-2)

You can record and review voice memos.

Recording a voice memo

When there is no voice memo recorded, selecting the **Voice memo** menu initiates recording.

- Record a memo by speaking into the microphone.
 While you are recording, a timer displays to show you the elapsed time.
 - Press **Pause** to pause recording and then press **Continue** to resume.
- 2. Press **<Stop>** to end recording. The screen provides you with the following choices:
 - Save: save the voice memo.
 - Re-record: discard the current memo and record another one.
 - Review: play the voice memo. The screen displays the length of the memo along with the time and date.
- 3. When you are satisfied, select **Save**.
- 4. Enter a title for the memo and press **<OK>**.

Playing a voice memo

Once you have recorded voice memos, the latest memo displays when you access the **Voice memo** menu. Scroll to the voice memo you want and press <**Play**> to play the memo.

Menu functions

Using voice memo options

On the Voice memo screen, press **Options**> to access the following options:

- New record: record a new voice memo.
- Play: play the selected voice memo.
- **Erase**: erase the selected voice memo.
- Erase all: erase all voice memos.
- **Send**: send the voice memo as part of an e-mail.
- **Rename**: change the file name.

World time (Menu 8-9)

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

Viewing world time

Press the Navigation keys to scroll to the time zone you want to check.

Applying Daylight Savings Time (DST)

- Scroll to the time zone to which you want to apply DST and press < DST>.
- 2. Press <**Yes**>.

Countdown (Menu 8-0)

In this menu, you can set a time and date for a future event and then check to see how many days, hours, and minutes remain before that event.

Creating a countdown timer

- Enter the event for your countdown timer and press < OK>.
- 2. Enter the time from which you want to count down.
- 3. Enter the date from which you want to count down.
- 4. Press **Save** to save the timer.

Viewing a countdown timer

Select a timer from the countdown timer list. The timer displays the specified date and time, and how many days remain until the event.

While viewing a timer, press **Options** to access the following options:

- Add new: create a new timer.
- Edit: edit the selected timer.
- **Erase**: erase the selected timer.

Erase all: erase all timers.

Memo pad (Menu 8- ★)

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

Writing a new memo

- 1. Enter your information.
- 2. Press **<OK>** to save the memo.

Viewing a memo

Select the memo you want to view from the memo list. While viewing a memo, press <**Options**> to access the following options:

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

Bluetooth (Menu 8-#)

Using Bluetooth wireless, you can connect the phone wirelessly to a Bluetooth headset or hand-free kit to talk hands-free.

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 phone and the headset, the maximum operating distance may be reduced.

Setting up the Bluetooth feature

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

- **Activation**: activate or deactivate the Bluetooth feature.
- My devices: search for connectable Bluetooth devices. ▶ p. 80
- Visibility: allow other Bluetooth devices to connect to your phone.

Menu functions

- Disconnect: break the connection between your phone and the other device.
- My phone info.: check your phone information and assign a Bluetooth device name to your phone, which is then displayed on other devices.

Searching for and connecting to a Bluetooth device

- From the Bluetooth setting options, select My devices.
- 2. Select New search dev.

If you have searched for devices before, you can access **Direct connect dev** to select one of the devices you have searched for previously.

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

- Radset/Hands-free kit
- Others
- 3. Scroll to a device and press **Connect**>.
- Enter a Bluetooth PIN code and press < Connect>.
 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 finished. Now, you can use the heaset or hands-free kit for calls. ▶ p. 29



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.

Using device options

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

- Detail info: access detailed information about the selected device.
- Register: pair your phone with the device.

Settings (Menu 9)

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

CDMA net services (Menu 9-1)

Use this menu to access network services.

Call forward (Menu 9-1-1)

This CDMA network service allows incoming calls to be forwarded to another number. Contact your service provider to check this service's availability.

To set forwarding options:

- 1. Select a type of call forwarding.
 - **Busy**: calls are forwarded if your line is busy.
 - No answer: calls are forwarded if you do not answer the phone.
 - **Busy/NoAnswer**: calls are forwarded if your line is busy or you do not answer.
 - Unconditional: all incoming calls are forwarded.
- 2. Select **Enable**. To deactivate, select **Disable**.

Enter the phone number to which calls are forwarded and press < Send>.

Call waiting (Menu 9-1-2)

This CDMA network feature alerts you of incoming calls while you are on the phone.

When this feature is enabled, you can respond to an incoming call by pressing [\(\)] while you are on the phone. This puts the first caller on hold and answers the second call.

GSM net services (Menu 9-2)

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

Call diverting (Menu 9-2-1)

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

- Select a call diverting option:
 - Divert always: divert all calls.
 - Busy: divert calls when you are on another call.

Menu functions

- No reply: divert calls when you do not answer the phone.
- Unreachable: divert calls when you are not in an area covered by your service provider or when your phone is switched off.
- Cancel all: cancel all call diverting options.
- 2. Select the type of calls to be diverted.
- Press < Activate >. To deactivate call barring, press < Deactivate >.
- Enter the number to which calls are to be diverted and press <OK>.
- If you selected **No reply**, select the length of time the network delays before diverting a call.

Call barring (Menu 9-2-2)

This network service allows you to restrict your calls.

- 1. Select a call barring option:
 - All outgoing: prohibit all outgoing calls.
 - International: prohibit international calls.
 - International except to home: only allow calls to numbers within the current country when you are abroad, and to your home country.

- All incoming: prohibit incoming calls.
- Incoming while abroad: prohibit incoming calls when you use your phone outside of your home country.
- Cancel all: cancel all call barring settings, allowing to be sent and received normally.
- Change barring password: change the call barring password obtained from your service provider.
- 2. Select the type of calls to be barred.
- Press < Activate >. To deactivate call barring, press < Deactivate >.
- Enter the call barring password supplied by your service provider and press < OK>.

Call waiting (Menu 9-2-3)

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

- Select the type of calls to which the call waiting option will apply.
- Press < Activate >. To deactivate call waiting, press < Deactivate >.

Network selection (Menu 9-2-4)

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

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

- automatic: connect to the first available network when roaming.
- manual: select the network you want.

Caller ID (Menu 9-2-5)

This network service allows you to prevent your phone number from being displayed on the phone of the person being called. However, some networks do not allow the user to change this setting.

- Default: use the default setting provided by the network.
- **Hide number**: ensure your number does not display on the other person's phone.
- Send number: send your number each time you make a call.

Security (Menu 9-3)

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

To access the **Security** menu, you must enter the 4-to 8-digit lock code and press **<OK>**. It is preset to **00000000** at the factory.

Phone lock (Menu 9-3-1)

Use this menu to lock your phone.

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

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

To unlock the phone, press **<Unlock**>, enter the lock code, and press **<OK**>.

Change lock (Menu 9-3-2)

Use this menu to change your current lock code to a new one. The lock code is preset to **00000000** at the factory.

- Enter a new 4- to 8-digit lock code and press < OK>.
- 2. Enter the code once again and press **OK**>.

Emergency # (Menu 9-3-3)

Your phone provides the option of storing three emergency numbers. All of these numbers can be manually dialled at any time, even if your phone is locked or all outgoing calls are restricted.

Storing an emergency number

- 1. Select a location.
- 2. Press [C] to clear the existing number.
- Enter a number and press **Save** to save the number.
 - 119, 110, and 120 will remain as emergency numbers, even if you change them on the emergency number list.

Making an emergency call in Lock mode

Enter one of the programmed emergency numbers and press [\searrow].

Voice privacy (Menu 9-3-4)

Used only in digital networks, Voice Privacy encrypts the voice channel so that people cannot eavesdrop on your conversation. Use this menu to enable or disable Voice privacy.

- Standard: the phone uses a standard line for calls.
- Enhanced: the phone makes and receives calls on an encrypted high security line.
- This feature may not be available in all areas. Contact your service provider for details and availability.

Restriction (Menu 9-3-5)

Use this menu to restrict the use of your phone.

- Outgoing: restrict outgoing calls from your phone, except emergency calls on standard emergency numbers, such as 119, 110 and 120, or the 3 programmed numbers in Emergency #.
- **Incoming**: restrict incoming calls.
- **Phonebook**: restrict use of Phonebook.

GPS settings (Menu 9-3-6)

Your phone supports the GPS function which allows other people to locate your position. Use this menu to change the settings for GPS.

- GPS lock: lock GPS so other people cannot locate your position.
- Privacy alert: set the phone to alert you when other people attempt to locate your position.

Clear memory (Menu 9-3-7)

Use this menu to erase Phonebook entries or messages stored on the card or in the phone's memory.

- Select Phonebook or Messages.
- 2. Select the memory location you want to clear.
- 3. Press **Yes** to confirm the clearing.

Reset phone (Menu 9-3-8)

Use this menu to restore the default settings of all user-selectable options and/or clear information in the phone's memory.

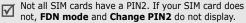
- 1. Select a reset option.
 - Functions only: restore the default settings of all user-selectable options.
 - All: restores the default settings for all options and clears all information, except for data stored in the User memory and UIM card.
- 2. Press <**Yes**> to confirm the reset. The phone reboots, turning itself off and then back on.

Card slot 1/2 setup (*Menu 9-3-9/0*)

Use this menu to access the security options for the currently used card.

Menu functions

- PIN check: activate the PIN check feature. You must enter the PIN assigned to your card each time you switch on the phone.
- Change PIN: change the PIN of your card to a new one, provided that the PIN check feature is enabled.
- FDN mode: activate FDN (Fixed Dialling Number) mode, in which you can dial only the numbers stored on the card.
- Change PIN2: Change the PIN2 of your card to a new one.



Network selection (Menu 9-4)

In this menu, you can quickly switch between GSM and CDMA networks.

- You can quickly switch the network by pressing [] in Idle mode.
- Card1: switch to the network corresponding to the card inserted in the slot 1.

- **Card2**: switch to the network corresponding to the card inserted in the slot 2.
- Setting: set how to select a network type the next time the phone turns on. The following options are available:

Default: the phone automatically selects a network in the order of the card slots.

Menu type: the phone displays a menu window to allow you to select a network manually.

Answer mode (Menu 9-5)

Use this menu to select how to answer an incoming call.

- By send key: the phone answers 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 [♠], [▲/▼], and the soft keys.

Entry method (Menu 9-6)

Use this menu to select the default text input mode.

Domain preset (Menu 9-7)

You phone has domain name extensions that you can retrieve when composing a message. Use this menu to change default domain name extensions and add new domain name extensions, if necessary.

Contents status (Menu 9-8)

Use this menu to check the amount of the memory currently being used or memory remaining for media content, such as applications, melodies, and images.

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:

"Card is empty insert card"

Be sure that the card is correctly installed.

"Enter PIN"

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

"Enter PUK"

 The PIN code was entered incorrectly three times in succession, and the phone is now blocked. Enter the PUK supplied by your service provider.

"No service," "Network failure," or "Not done" displays

- The network connection 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 you have accessed the right cellular network.
- Be sure that you have not restricted outgoing calls.

Your correspondent cannot reach you

- Be sure your phone is switched on. ([] pressed for more than one second.)
- Be sure you are accessing the correct cellular network.
- Be sure that you have not restricted outgoing calls.

Your correspondent cannot hear you speaking

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

The phone starts beeping and "Battery low" flashes on the display

Your battery is insufficiently charged. Recharge the battery.

The audio quality of the call is poor

- Check the signal strength indicator on the display (Gull or Gull). 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

- Use the Phonebook Search feature to ensure the number has been stored correctly.
- Re-store the number, if necessary.

The battery doesn't charge properly or the phone sometimes turns itself off

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

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

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

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

Health and safety information

Exposure to Radio Frequency (RF) Signals

Certification Information (SAR)

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

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

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

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

The highest SAR values for this model phone as reported to the FCC are Head: 1.01W/Kg, Bodyworn: 0.721W/Kg.

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

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

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

Consumer Information on Wireless Phones

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

What kinds of phones are the subject of this update?

The term wireless phone refers here to hand-held wireless phones with built-in antennas, often called "cell," "mobile," or "PCS" phones. These types of wireless phones can expose the user to measurable radio frequency energy (RF) because of the short distance between the phone and the user's head. These RF exposures are limited by Federal

Communications Commission safety guidelines that were developed with the advice of FDA and other federal health and safety agencies. When the phone is located at greater distances from the user, the exposure to RF is drastically lower because a person's RF exposure decreases rapidly with increasing distance from the source. The so-called "cordless phones," which have a base unit connected to the telephone wiring in a house, typically operate at far lower power levels, and thus produce RF exposures well within the FCC's compliance limits.

Do wireless phones pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless phones. There is no proof, however, that wireless phones are absolutely safe. Wireless phones emit low levels of radio frequency energy (RF) in the microwave range while being used. They also emit very low levels of RF when in the stand-by mode. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low level RF that does not produce heating effects causes no known adverse health effects. Many studies of low level RF exposures

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have not found any biological effects. Some studies have suggested that some biological effects may occur, but such findings have not been confirmed by additional research. In some cases, other researchers have had difficulty in reproducing those studies, or in determining the reasons for inconsistent results.

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

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

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

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

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

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

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

FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply with FCC safety guidelines that limit RF exposure. FCC relies on FDA and other health agencies for safety questions about wireless phones.

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

What are the results of the research done already?

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

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

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

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about long-term exposures, since the average period of phone use in these studies was around three years.

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

A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the data that are needed. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer promoting effect if one exists. Epidemiological studies can provide data that is directly applicable to human populations, but ten or more years' follow-up may be needed to provide answers about some health effects, such as cancer. This is because the interval between the time of exposure to a cancer-causing agent and the time tumors develop - if they do - may be many, many years. The interpretation of epidemiological studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones.

Many factors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

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

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

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

FDA and Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative Research and Development Agreement (CRADA) to do research on wireless phone safety. FDA provides the scientific oversight, obtaining input from experts in government, industry, and academic organizations. CTIA-funded research is conducted through contracts

to independent investigators. The initial research will include both laboratory studies and studies of wireless phone users. The CRADA will also include a broad assessment of additional research needs in the context of the latest research developments around the world.

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

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

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

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

What about children using wireless phones?

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

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between the user and the RF source will reduce RF exposure.

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

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

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that hands-free kits reduce risks. Hands-free kits can be used with wireless phones for convenience and comfort. These systems reduce the absorption of RF energy in the head because the phone, which is the

source of the RF emissions, will not be placed against the head. On the other hand, if the phone is mounted against the waist or other part of the body during use, then that part of the body will absorb more RF energy. Wireless phones marketed in the U.S. are required to meet safety requirements regardless of whether they are used against the head or against the body. Either configuration should result in compliance with the safety limit.

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

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that accessories that claim to shield the head from those emissions reduce risks. Some products that claim to shield the user from RF absorption use special phone cases, while others involve nothing more than a metallic accessory attached to the phone. Studies have shown that these products generally do not work as advertised. Unlike "hand-free" kits, these so-called "shields" may interfere with proper operation of the phone. The phone may be forced to boost its

power to compensate, leading to an increase in RF absorption. In February 2002, the Federal trade Commission (FTC) charged two companies that sold devices that claimed to protect wireless phone users from radiation with making false and unsubstantiated claims. According to FTC, these defendants lacked a reasonable basis to substantiate their claim.

What about wireless phone interference with medical equipment?

Radio frequency energy (RF) from wireless phones can interact with some electronic devices. For this reason, FDA helped develop a detailed test method to measure electromagnetic interference (EMI) of implanted cardiac pacemakers and defibrillators from wireless telephones. This test method is now part of a standard sponsored by the Association for the Advancement of Medical instrumentation (AAMI). The final draft, a joint effort by FDA, medical device manufacturers, and many other groups, was completed in late 2000. This standard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from

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

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

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

- FCC RF Safety Program: http://www.fcc.gov/oet/rfsafety/
- Environmental Protection Agency (EPA): http://www.epa.gov/radiation/

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 Occupational Safety and Health Administration's (OSHA):

http://www.osha.gov/SLTC/ radiofrequencyradiation/index.html

 National institute for Occupational Safety and Health (NIOSH):

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

- World health Organization (WHO): http://www.who.int/peh-emf/
- International Commission on Non-Ionizing Radiation Protection: http://www.icnirp.de
- National Radiation Protection Board (UK): http://www.nrpb.org.uk
- Updated 4/3/2002: US food and Drug Administration http://www.fda.gov/cellphones

Road Safety

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

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

- 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 additional 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 attention away from your primary responsibility, driving safely.
- 6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan calls when your car will be stationary. If you need to make a call while moving, dial only a few numbers, check the road and your mirrors, then continue.

- 7. Do not engage in stressful or emotional conversations that may be distracting. Make people you are talking with aware you are driving and suspend conversations that have the potential to divert your attention from the road.
- Use your wireless phone to call for help. Dial 9-1-1
 or other local emergency number in the case of
 fire, traffic accident or medical emergencies.
 Remember, it is a free call on your wireless phone!
- Use your wireless phone to help others in emergencies. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.
- 10. Call roadside assistance or a special nonemergency wireless assistance number when necessary. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured, or a vehicle you know to be stolen, call roadside assistance or other special nonemergency number.

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

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

Provided by the Cellular Telecommunications & Internet Association

Operating Environment

Remember to follow any special regulations in force in any area and always switch your phone off whenever it is forbidden to use it, or when it may cause interference or danger. When connecting the phone or any accessory to another device, read its user's guide for detailed safety instructions. Do not connect incompatible products.

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

Using Your Phone Near Other Electronic Devices

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

Pacemakers

Pacemaker manufacturers recommend that a minimum distance of 15 cm (6 inches) be maintained between a wireless phone and a pacemaker to avoid potential interference with the pacemaker.

These recommendations are consistent with the independent research and recommendations of Wireless Technology Research.

Persons with pacemakers:

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

 should use the ear opposite the pacemaker to minimize potential interference.

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

Hearing Aids

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

Other Medical Devices

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

Vehicles

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

Posted Facilities

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

Potentially Explosive Environments

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

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

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

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

Emergency Calls

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

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

To make an emergency call:

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

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

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

Restricting Children's access to your Phone

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

FCC Notice and Cautions

FCC Notice



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

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

Cautions

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

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

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

Other Important Safety Information

- Only qualified personnel should service the phone or install the phone in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty applicable to the device.
- Check regularly that all wireless phone equipment in your vehicle is mounted and operating properly.
- Do not store or carry flammable liquids, gases or explosive materials in the same compartment as the phone, its parts or accessories.
- For vehicles equipped with an air bag, remember that an air bag inflates with great force. Do not place objects, including both installed or portable wireless equipment in the area over the air bag or in the air bag deployment area. If wireless equipment is improperly installed and the air bag inflates, serious injury could result.
- Switch your phone off before boarding an aircraft.
 The use of wireless phone in aircraft is illegal and may be dangerous to the aircraft's operation.

• Failure to observe these instructions may lead to the suspension or denial of telephone services to the offender, or legal action, or both.

Product Performance

Getting the Most Out of Your Signal Reception

The quality of each call you make or receive depends on the signal strength in your area. Your phone informs you of the current signal strength by displaying a number of bars next to the signal strength icon. The more bars displayed, the stronger the signal. If you're inside a building, being near a window may

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

Understanding the Power Save Feature

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

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

Understanding How Your Phone Operates

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

Maintaining Your Phone's Peak Performance

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

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

- Hold the phone with the antenna raised, fullyextended and over your shoulder.
- Try not to hold, bend or twist the phone's antenna.

- Don't use the phone if the antenna is damaged.
- Speak directly into the phone's receiver.
- Avoid exposing your phone and accessories to rain or liquid spills. If your phone does get wet, immediately turn the power off and remove the battery. If it is inoperable, call Customer Care for service.

Availability of Various Features/Ring Tones

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

Battery Standby and Talk Time

Standby and talk times will vary depending on phone usage patterns and conditions. Battery power

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consumption depends on factors such as network configuration, signal strength, operating temperature, features selected, frequency of calls, and voice, data, and other application usage patterns.

Battery Precautions

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

- If left unused, a fully charged battery will discharge itself over time.
- Use only Samsung-approved batteries and recharge your battery only with Samsungapproved 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 shortcircuiting can occur when a metallic object (coin, clip or pen) causes a direct connection between the