

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

SAMSUNG ELECTRONICS



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

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



Draft
2006. 12. 26

SCH-W339

User's Guide



Important safety precautions



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

Drive safely at all times

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

Switch off the phone when refuelling

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

Switch off in an aircraft

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

Switch off the phone near all medical equipment

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

Interference

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



Be aware of special regulations

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


Water resistance

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

Sensible use

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

Emergency calls

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

Keep your phone away from small children

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

Accessories and batteries

Use only Samsung-approved batteries and accessories, such as headsets and PC data cables.

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

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



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

Use of authorised software

Use only Samsung-authorised software. The use of any unauthorised 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 59.

About this Guide

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

In this guide, the following instruction icons appear:



Indicates that you need to pay careful attention to the subsequent information regarding safety or phone features.




Indicates that you can get more information on the referenced page.



Indicates that you need to press the Navigation keys to scroll to the specified option and then select it.



Indicates a key on the phone.
For example, []



Indicates a soft key, whose function is displayed on the phone screen. For example, <**Menu**>



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

Special features of your phone



- **Touch screen**
Your phone has a touch-sensitive display. You can access a desired function with a touch on the screen.



- **Camera and camcorder**
Use the camera module on your phone to take a photo or record a video.



- **MP3 player**

Play music files using your phone as an MP3 player.



- **Voice recognition**

Just say a command to dial a phone number or access a menu function.



- **Audiobook**

Listen to available fairy tales.



- **Flight mode**

Switch your phone to offline to use its non-wireless functions in an airplane.



- **Bluetooth**

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



- **SOS message**

Send SOS messages to your family or friends for help in emergency.



- **Memory disk**

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

- **Translator**

Translate Chinese sentences into Korean or English.

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Overview of menu functions

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

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Unpack

Make sure you have each item

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

You can obtain various accessories from your local Samsung dealer.



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

Your phone

Keys, features, and locations

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

- 1 Remove the battery cover.

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

- 2 Insert a card.

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

- 3 Install the battery.

4 Reattach the cover.

5 Plug the travel adapter into the phone.


6 Plug the adapter into a standard AC power outlet.

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

8 Remove the adapter from the phone.



Low battery indicator

When the battery is low:

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

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

Power on or off

Switch on	1. Press and hold [ .
	2. Select a default network.
	3. If necessary, enter the PIN and select <Done> .
Do not turn on the phone when mobile phone use is prohibited.	
Switch off	Press and hold [ .

Keypad lock

You can lock the keypad to prevent any unwanted phone operations, from accidentally pressing any of the keys.

Press down the hold key. To unlock the keypad, press up the hold key.

Flight mode

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

To switch to Flight mode, select **<Menu>** → **Settings** → **Call Settings** → **Flight mode** → **Mode on/off** → **On**.

In Flight mode, you can use non-wireless functions, such as games, scheduler, and camera.

Keys and display

Keys



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



In Idle mode, access the following menus directly:

- Up: My Menu mode
- Down: **Mobile browser**
- Left: **Calendar**
- Right: **Message; New message** in **Text message** when held down

In Menu mode, scroll through menu options.



In Idle mode, launch the web browser.

In Menu mode, perform the function indicated on the bottom line of the display.



Make or answer a call.

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



Delete characters from the display.

In Idle mode, initiate the voice recognition feature. Start voice dialling when held down.

In Menu mode, return to the previous menu level.



Press and hold to switch the phone on or off.

End a call.

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



Lock or unlock the keypad.



Adjust the phone volume.

In Idle mode, adjust the key tone volume.

During a call, adjust the earpiece volume.



In Idle mode, access the **Camera** menu. Press and hold to turn on the camera.

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










During a call, press and hold to record your conversation.













Display

Layout

- **Icons**
display various icons.
- **Text and graphics**
display messages, instructions, and information you enter.
- **Soft key function indicators**
show the current functions assigned to the soft keys.

Icons¹

-  Received signal strength in a CDMA network
-  Received signal strength in a GSM network
-  Roaming network
-  Call in progress
-  Out of your service area; you cannot make or receive calls
-  SOS message feature active
▶ p. 66
-  Transferring data in 1X network.
-  Lock mode ▶ p. 54
-  Connected to a secured web page

-  Bluetooth status ▶ p. 46
-  New text message
-  New voicemail
-  Urgent text message
-  Messenger invitation
-  Alarm set ▶ p. 49
-  Ringer type ▶ p. 41
-  : Ringer only
 -  : Vibration
 -  : Silent
 -  : Ring after vibration
 -  : Increasing



Silent mode ► p. 16



Answering machine feature
active ► p. 93



Battery power level



Current time

1. You can select some icons by tapping. Tap an icon to open a message or change settings.

Use the stylus pen

A stylus pen is supplied with your phone to let you tap and write on the touch screen.

1. Remove the stylus pen cover.

2. Expend the stylus pen.

3. Use the stylus pen, holding it as you would with a pen or pencil.



Always use a Samsung authorised stylus pen for tapping or for making strokes on the phone screen. Never use an actual pen, pencil, or other sharp object to write on the phone screen as this will scratch the screen.

Access menu functions

Use the soft keys

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


Press the left soft key to access Menu mode.

Press the right soft key to access **Search** in the **Contacts** menu.



Select an option

By tapping on the touch screen:

Your phone's display is a touch screen which can recognise when you touch items displayed on it.

1. Tap a desired soft key indicator.
2. To scroll up or down, or side to side:
 - Tap the left or right arrow to scroll left or right.
 - Tap and drag the scroll bar to scroll up or down.
3. Tap a displayed option or function.
4. To exit, tap  on the upper right of the display.

By pressing the soft keys and Navigation keys:

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

Use My Menu

You can set up a menu of your own using your favorite menu items, which can then be accessed by specific number keys. ► p. 27

Customise your phone

Display language

1. In Idle mode, select **<Menu>** → **Settings** → **Language setup**
2. Select a language.

Call ringer melody

1. In Idle mode, select **<Menu>** → **Sounds** → **Ringtone**.
2. Select a ringtone category.
3. Select a ringtone.


Idle mode wallpaper

You can set wallpaper for the idle screen.

1. In Idle mode, select
<Menu> → Display → Wallpaper → Stand-by → Background image.
2. Select an image category.
3. Select an image.

Silent mode

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

In Idle mode, tap .

Phone lock

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

1. In Idle mode, select
<Menu> → Settings → Password/Lock settings.
2. Set up a 4- to 8-digit password, and re-enter it for confirmation and press **<Done>**.
You will need to enter the password the next time you enter the **Password/Lock settings** menu.
3. Choose **Select lock method** → **On** or **Once**.



Switch networks

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

1. In Idle mode, press [Up].
2. Select a network.

Make/Answer calls

Make a call

1. In Idle mode, tap .
2. Enter an area code and phone number.
3. Tap  or press [↵].
4. To end the call, press [⏏].

Answer a call

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

Adjust the volume during a call

Press [▲/▼].

Step outside the phone

Begin with your camera, MP3 player, web browser, and other special features

Use the camera

Take a photo

1. In Idle mode, press and hold [/⏻] to turn on the camera.
2. Aim the lens at the subject and make any desired adjustments.
3. Press [] or [/⏻] to take a photo.
4. Select <**Save**>. The phone returns to Capture mode automatically.

View a photo

1. In Idle mode, press [/⏻] and select **My album** → **Gallery**.
2. Scroll to the photo you want and select <**Expand**>.

Record a video

1. In Idle mode, press and hold [/⏻] to turn on the camera.
2. Tap .
3. Tap and select **Video cam**.
4. Select <> or press [/⏻] to start recording.
5. Select <> or press [/⏻] to stop recording.
6. Select <**Save**>. The phone returns to Camcorder mode automatically.

Play a video

1. In Idle mode, press [/☺] and select **My album** → **Gallery**.
2. Scroll to the video you want and select <**Expand**>.
3. Select <**Play**>.

Play music

Copy MP3 files to the phone

Use these methods:

- Copy MP3 files directly from a computer. ► p. 47
- Copy to a memory card and insert the card into the phone. ► p. 28
- Receive via Bluetooth ► p. 90








Create the play list

1. In Idle mode, select <**Menu**> → **Exciting Samsung** → **MP3** → **MP3 files**.
2. Press <**Options**> and select **Add to play list**.
3. Select the files you want.
4. Select <**Add**>.
5. Select <**Play**> to begin playback.

Play music

1. In Idle mode, select <**Menu**> → **Exciting Samsung** → **MP3** → **MP3 player**.
2. Tap ► or press [].


Play music (continued)

3. During playback, use the following keys or icons:
- [OK]/: pauses playback.
 - [OK]/: resumes playback.
 - [Up]//SFL: changes the repeat mode.
 - [Down]/**LIST**: opens the play list.
 - [Left]/: restarts the file or returns to the previous file. Moves backward in a file when held down.
 - [Right]/: skips to the next file. Moves forward in a file when held down.
 - [/]: adjusts the volume.
 - <**A-B**>: sets a section in a file to play the section repeatedly.



Browse the web

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

Launch the web browser

In Idle mode, press [].


Navigate the web

- To scroll through browser items, press [Up] or [Down].
- To select an item, select <**OK**>.
- To return to the previous page, press [C/].
- To return to the homepage, press and hold [C/].


Use Contacts

Add a contact


To the phone's memory:

1. In Idle mode, tap .
2. Enter a phone number and select **<Save>**.
3. Select **New entry** → **Edit**.
4. Enter a name and select **<Save>**.
5. Select **Phone**.
6. Select a number type.
7. Specify contact information: Type (numbers), Group, Ringer, Birthday, E-mail, Homepage, Memo, and Image.
8. Select **<Save>** to save the contact.

To a card:

1. In Idle mode, tap .
2. Enter a phone number and select **<Save>**.
3. Select **New entry** → **Edit**.
4. Enter a name and select **<Save>**.
5. Select **<Save>** to save the contact.

Find a contact

1. In Idle mode, select **<Search>**.
2. Select the initial letter of the contact you want from the screen.
3. Select a contact.
4. Scroll to a number and press [] to dial, or select **<Edit>** to edit contact information.

Create your name card

1. In Idle mode, select **<Menu>** → **Contacts** → **Business card** → **Business card book** → **My Name Card.vcf**.
2. Select **<Edit>**.
3. Specify your contact information.
4. Select **<Save>** to save the name card.
5. To send the name card, select **<Send>**.

Send/View messages

Send a text message

1. In Idle mode, press [Left] and select **Write new message**.
2. Enter the message text and select <**Next**>.
3. Select <**Next**>.
4. Tap a destination field.
5. Enter a destination number and select <**Next**>.
6. Select <**Send**> to send the message.

View a text message

When a notification appears:

Choose <**Select**>. The message displays.

From the Inbox:

1. In Idle mode, press [Left] and select **Inbox** → **Text messages**.
2. Select a message.

Send SOS messages

Set up the SOS message options

1. In Idle mode, press [Left] and select **SOS message** → **SOS On/Off**.
2. Select **On** to activate the SOS message feature.
3. Tap a destination field.
4. Enter the phone number to which you want to send SOS messages and select **<Next>**.
5. Select **<Save>**.
6. Select **<Yes>** to send the notification to the registered numbers.

Send SOS message

In Idle mode, with the keypad locked, press [**▲/▼**] 4 times.
The phone sends the message.

Chat on Messenger

Create the buddy list

To add a contact:

1. In Idle mode, select **<Menu>** → **Exciting Samsung** → **Samsung messenger** → **Messenger**.
2. Select 无组群 → **<Add>**.
3. Select **<Yes>** to open Contacts and select a contact.
Alternatively, select **<No>** and enter a new name and number.

-
4. Select <**Save**>.

To add a group:

1. From the Messenger screen, select <**Add**>.
2. Enter a group name and select <**Save**>.
3. Add contacts to the group.

Start a conversation

To send a invitation:

1. From the Messenger screen, select a group.
2. Select <**Invite**>.
3. Select the contacts you want.
4. Select <**Invite**>.

-
5. Enter a message and select <**Send**>.

6. Repeat step 5 to chat with the contacts.

To accept an invitation:

1. When you receive an invitation, select <**Join**>.
2. Enter and send a message.

Use Bluetooth

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

Turn on Bluetooth

In Idle mode, select **<Menu>** → **Exciting Samsung** → **Bluetooth** → **Bluetooth Mode** → **On**.

Search for and pair with a Bluetooth device

1. In Idle mode, select **<Menu>** → **Exciting Samsung** → **Bluetooth** → **Search New Devices**.
2. Select **Headset**, **Handsfree**, or **Stereo Headset**.
3. Scroll to a headset or hands-free car kit device and select **<Connect>**.

4. Enter a Bluetooth PIN or the other device's Bluetooth PIN, if it has one, and select **<Done>**.

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

Send data

1. From the **Bluetooth** menu, select **Data Transfer** → **Send Files, My business card, Contacts**, or **Photos**.
2. Select the files you want → **<Send>**. The phone automatically searches for available devices.
3. Scroll to a device and select **<Connect>**.

-
4. Enter a Bluetooth PIN and select **<Done>**.

When the owner of the other device enters the same code, the pairing is complete and your phone send data to the device.

Receive data

1. From the **Bluetooth** menu, select **Data transfer** → **Get Files**.
2. Scroll to a device and select **<Connect>**.
3. Enter a Bluetooth PIN and select **<Done>**.
4. Select the files you want → **<Get>**.

Use My Menu

Set up My Menu item access

1. In Idle mode, press [Right].
2. Scroll to a location to be used as a shortcut.
3. Select **<Options>** → **Assign**.
4. Scroll to the menu you want and select **<Assign>**.
5. Select an icon for the item.

Access a My Menu item

1. In Idle mode, press [Right].
2. Select the appropriate location number.

Use a memory card

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

Important memory card information

- Frequent erasing and writing will shorten a card's lifespan.
- Do not remove a card from the phone or turn off the phone while data is being accessed or transferred. This could result in loss of data and/or damage to the card or phone.
- Do not subject cards to strong shocks.

- Do not touch card terminals with your fingers or metal objects. If dirty, wipe the card with a soft cloth.
- Keep cards away from small children or pets.
- Do not expose cards in a place subject to electrostatic discharge and/or electrical noise.

Insert a memory card

1. Insert the card into the card slot, with the label side face up.
2. Press the card until it locks into place.

Remove the memory card

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

Use a card adapter

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

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

Enter text

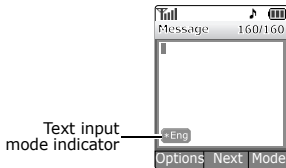
T9 English, ABC, T9 Hindi, Hindi, Hinglish, Symbol, 123 modes

You can enter text for some features such as Messages, Contacts, or Calendar, using T9 English mode, ABC mode, T9 Hindi mode, Hindi mode, Hinglish mode, Symbol mode, and 123 mode.

Changing the text input mode

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

Example: Writing a text message



Using T9 English mode

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

Entering a word in T9 English 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.
3. When the word displays correctly, go to step 4. Otherwise, press [0] to display alternative word choices for the keys that you have pressed.

For example, *Of* and *Me* use [6] and [3].

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

Other T9 English mode operations

- Press [1] to enter periods or apostrophes automatically.
- Press [*] to change case. Initial capital (***Eng**), Lower case (***eng**), and Capital lock (***ENG**) are available.

- Press the Navigation keys to move the cursor.
- Press [↶] to delete characters one by one. Press and hold [↶] to clear the characters on the left side of the cursor.

Adding words to the T9 dictionary

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

Using ABC mode

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

Key	Characters in order displayed	
	Upper case	Lower case
1	. @ - _ / : ~ ? , 1 ; ' () ! # % & * < > + = " \ { } \$ []	
2	A B C 2	a b c 2
3	D E F 3	d e f 3
4	G H I 4	g h i 4
5	J K L 5	j k l 5
6	M N O 6	m n o 6
7	P Q R S 7	p q r s 7
8	T U V 8	t u v 8
9	W X Y Z 9	w x y z 9
0	0	

Other ABC mode operations

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

Using T9 Hindi mode

You can enter text using T9 Hindi mode the same as you would use T9 English mode.

Using Hindi mode

You can enter text using Hindi mode the same as you would use ABC mode.

Using Hinglish mode

You can enter Hinglish words, which is made by a combination of Hindi and English according to Hindi grammar.

Using Symbol mode

Symbol mode enables you to enter symbols.

1. Press [Up] or [Down] to display more symbol sets.
2. Press the key corresponding to the symbol you want.


Using 123 mode






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




Call functions

Advanced calling features

Making a call




1. In Idle mode, tap .
2. Enter the area code and phone number.

- ✓ Tap  or press [C / ] to clear the last digit. Tap and hold  or press and hold [C / ] to clear the whole display.
- Select **<Options>** → **Pause** to enter a pause between numbers.
- Tap and hold  to dial the speed dial number.




3. Tap  or press [].
4. When you want to end the call, press [].

Making an international call



In a GSM network:

1. In Idle mode, tap .
2. Tap and hold **0**. The + character appears.
3. Enter the county code, area code, and phone number, then tap  or press [].

In a CDMA network:

1. In Idle mode, tap .
2. Tap and hold **0**. The international call prefix you have set appears. ► p. 52
3. Enter the country code, area code, and phone number, then tap  or press [].

Redialling recent numbers

1. In Idle mode, press [] to display the list of recent numbers.
2. Scroll to the number you want, and select **<Call>** or press [].

Making a call from Contacts

Once you have stored a number in Contacts, you can dial the number by selecting it from Contacts. ► p. 48

You can also use the speed dial feature to assign your most frequently dialled numbers to specific number keys. ► p. 48

Voice dialling

You can dial a number stored in Contacts by speaking the associated name into the microphone.

☒ Your phone can recognise only Chinese names of less than 6 characters.

You can configure the voice recognition settings in the **Configure** menu. ► p. 91

1. In Idle mode, press and hold [C/☎].

2. At the voice prompt, say a name or number into the microphone.
3. If you set the phone to display one best result for your voice command, skip to step 4.
If you set the phone to display 3 best results, say "No" until you hear the name or number you want, following the voice prompt.
4. Say "Yes" when the prompt confirms the name or number you said. The phone dials the corresponding number.

Answering a call

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

Press [↶] to answer the call.

Tips for answering a call

- Depending on the setting in the **Call Receive** menu, you can press any key, except for [▲/▼], the soft keys, and [📞].
 - ▶ p. 52
- Press <**Silent**> or [▲/▼] to mute the ringer.
- Press <**Reject**> or [📞], or press and hold [▲/▼] to reject a call.

Viewing missed calls

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

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 bottom of the phone. The button on the headset works as follows:

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

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


Answering a second call



If you activated the call waiting feature, you can answer another call during a call.

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



Making a three-way call

If you subscribed to the three-way calling service, you can have a conversation with two other people simultaneously.

 You are able to make a three-way call only when you initiate the calls.

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

Recording your conversation

You can record your conversation during a call. Press and hold [ / ] to start recording. You can review your recordings in the **Recorded conversation** menu. ► p. 92

Using In-call options

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

- **Transfer audio/Switch to headset:** switch the call to the phone or to an optional Bluetooth headset or hands-free car kit. To use this feature, you first need to connect the phone and the headset or car kit.
► p. 46
- **Key mute:** mute key tones that the keypad generates each time you press a key.
- **Voice mute:** switch off your phone's microphone, so that the other person cannot hear you.

- **Voice memo:** record your conversation.
- **Call history:** access the recent call records.
- **Contacts:** access the **Contacts** menu.
▶ p. 47
- **Messages:** access the **Messages** menu.
▶ p. 42
- **Organizer:** access the **Organizer** menu.
▶ p. 49
- **Noise cancellation:** activate the noise cancellation feature, which removes noise from your surroundings so that the other person on the phone can hear you more clearly.
- **Whisper mode:** switch to Whisper mode. Whisper mode automatically increases the microphone's sensitivity to allow the other person to hear your voice even though you may be whispering. When you activate Whisper mode while using a Bluetooth headset, the phone automatically switches the call to the phone.

Menu functions

All menu options listed



Some menus may not be available depending on network you select.



do mOre*(Menu 1)*

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**> in Idle mode and select **do mOre**.

TATA Zone (Menu 1.1)

Use this menu to download and use various Brew applications.

 You can quickly access this menu by pressing and holding [] in Idle mode.

Mobile browser (Menu 1.2)

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

VOD (Menu 1.3)

In the **VOD** (Video On Demand) menu, you can download video or sound clips from the wireless web and play them.

SMS Services (Menu 1.4)

This menu is available only when you use a UTK UIM card that provides additional services. For further details, see your UTK UIM card instructions.

Display (Menu 2)

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

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

Wallpaper *(Menu 2.1)*

Use this menu to set up the idle screen and select an image to be displayed for incoming or outgoing calls, and when the phone is switched on or off.

Main menu style *(Menu 2.2)*

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

Font color *(Menu 2.3)*

Use this menu to select a font colour for Menu mode.

Dial number color *(Menu 2.4)*

Use this menu to select a font colour for the numbers while dialling.

Backlight *(Menu 2.5)*

Use this menu to customise settings for the backlight.

Stylus adjust *(Menu 2.6)*

You can calibrate your phone's touch screen. When you turn on the phone for the first time or if the screen does not recognise your touches or reacts incorrectly to your touches, you need to recalibrate the phone. Tap the cross hair object firmly and precisely.

Sounds *(Menu 3)*

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

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

Ringtone *(Menu 3.1)*

Use this menu to select a ringtone and ringer type for incoming calls.

Alert tones *(Menu 3.2)*

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

Key tones/Others *(Menu 3.3)*

Use this menu to select a key tone or set additional alert tones.

Volume (Menu 3.4)

Use this menu to adjust the volume for the various sounds on the phone, such as ringtones, message tone, menu tone, and power on/off tone.

Hourly chime (Menu 3.5)

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

Messages (Menu 4)

Use the **Messages** menu to send or receive text messages. You can also access voicemails and web alert messages.

To access this menu, select <**Menu**> in Idle mode → **Messages**, or press [Left].

Multimedia message (Menu 4.1)

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

New Message (Menu 4.1.1)

Use this menu to create and send multimedia messages.

Inbox (Menu 4.1.2)

This folder stores messages you have received.

Outbox (Menu 4.1.3)

This folder stores messages you have sent or failed to send.

Draft (Menu 4.1.4)

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

File Manager (Menu 4.1.5)

This folder stores media items you have received in messages.

Settings (Menu 4.1.6)

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

Text message (Menu 4.2)

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

New message (Menu 4.2.1)

Use this menu to create and send text messages.

Inbox (Menu 4.2.2)

This folder stores messages you have received.

Outbox (Menu 4.2.3)

This folder stores messages you have sent or failed to send.

Draft (Menu 4.2.4)

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

Settings (Menu 4.2.5)

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

SOS message (Menu 4.2.6)

In an emergency, you can send SOS messages to your family or friends for help. Use this menu to specify options for sending SOS messages.

Msg wallpaper (Menu 4.2.7)

Use this menu to select a background image to be displayed on the Message screen so that you can view messages with the image.

Memory info (Menu 4.2.8)

Use this menu to check the number of messages you have stored in the phone's memory and on the UIM card.

Exciting Samsung (Menu 5)

Using the **Exciting Samsung** menu, you can use the camera, play games or MP3 music and VOD files, chat with your friends, or use the Bluetooth, Audiobook, and Translator feature. This menu also provides you with the link to the Samsung Fun Club website.

To access this menu, select <**Menu**> in Idle mode → **Exciting Samsung**.

Camera (Menu 5.1)

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.

- ☑ • 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.

Capture *(Menu 5.1.1)*

Use this menu to take a single photo or a series of photos, or record a video. The camera produces jpeg photos and mp4 video clips.

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

My album *(Menu 5.1.2)*

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

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

External album *(Menu 5.1.3)*

Use this menu to access photos or video clips stored on a memory card.

Photo studio *(Menu 5.1.4)*

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

MP3 *(Menu 5.2)*

Use this menu to enjoy music.

MP3 player (Menu 5.2.1)

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

3. Select **<Add>**.

4. To play a music file, select **<Play>**.

MP3 play list (Menu 5.2.2)

Use this menu to access the play list you have created.

MP3 files (Menu 5.2.3)

Use this menu to access MP3 files stored in the phone's memory or on a memory card.

MP3 settings (Menu 5.2.4)

Use this menu to customise settings for using the MP3 player feature.

Bluetooth (Menu 5.3)

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

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



- If there are obstacles between the devices, the maximum operating distance may be reduced.
- It is recommended that you do not use the Bluetooth feature while using multimedia features such as voice recorder, camera, and MP3 player, or vice versa, for better performance.
- Some devices, especially those that are not tested or approved by Bluetooth SIG, may be incompatible with your phone.

Games *(Menu 5.4)*

You can play fun games on your phone.

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

Voice functions *(Menu 5.5)*

Use this menu to configure the voice dial settings and record voice memos. You can also use the answering machine feature.

Connect to PC *(Menu 5.6)*

Use this menu to connect the phone to a PC, as you would use an external memory disk drive.

Samsung messenger *(Menu 5.7)*

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.

Criket scorer *(Menu 5.8)*

Mobile prayer *(Menu 5.9)*

Contacts *(Menu 6)*

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 Contacts.

To access this menu, select <**Menu**> in Idle mode → **Contacts**.

Search (Menu 6.1)

Use this menu to find a contact using a person's name.



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

Add to phonebook (Menu 6.2)

Use this menu to add a new contact to Contacts.

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 a single number with a name on the card.

Groups (Menu 6.3)

Use this menu to set up a caller group list.

Speed dial (Menu 6.4)

Once you have stored phone numbers in Contacts, you can set up to 99 speed dial entries and then dial them easily by tapping the associated number key(s).

Business card (Menu 6.5)

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

Call log (Menu 6.6)

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

GSM call cost (Menu 6.7)

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

My number (Menu 6.8)

Use this menu to view your phone number.

Organizer (Menu 7)

The **Organizer** menu enables you to keep track of your schedule and tasks, set alarms, or use convenient features, such as a calculator, world clock, stopwatch, and dictionary.

To access this menu, select <Menu> in Idle mode → **Organizer**.

Wake-up call/Alarms (Menu 7.1)

Use this menu to set a wake-up call to wake you up in the morning or an alarm to alert you to an event at a specific time.

Scheduler (Menu 7.2)

Use this menu to keep track of your schedule.

Memo *(Menu 7.3)*

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

Calculator *(Menu 7.4)*

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

Dictionary *(Menu 7.5)*

Use this menu to look up words and to organise your own dictionary.

Unit converter *(Menu 7.6)*

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

World clock *(Menu 7.7)*

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

Stopwatch *(Menu 7.8)*

Use this menu to measure elapsed time. The precision of the stopwatch is one one-hundredth of a second.

Contents box *(Menu 8)*

The **Contents box** menu allows you to access melodies, images, videos, and multimedia files stored in the phone's memory or on a memory card.

To access this menu, select <**Menu**> in Idle mode → **Contents box**.

Melodies *(Menu 8.1)*

This menu displays melodies, MP3 files, and movie files you have downloaded, received in messages, or imported from a computer.

Images *(Menu 8.2)*

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

Photos/Movies *(Menu 8.3)*

This menu displays photos you have taken and video clips you have recorded in the phone's memory. You can also access photos and video clips on a memory card. ► p. 45



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

VOD *(Menu 8.4)*

This menu displays multimedia files you have downloaded. ► p. 84

Memory Info *(Menu 8.5)*

Use this menu to view memory information in the phone's memory or on a memory card. You can also view the amount of available memory for media items, and format the phone's memory or a memory card.

Settings (Menu 9)

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

To access the menu, select <**Menu**> in Idle mode → **Settings**.

Call Settings (Menu 9.1)

Use this menu to customise settings for calls.

Call Receive (Menu 9.1.1)

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

Call reject (Menu 9.1.2)

Use this menu to make a list of phone numbers from which you do not want to accept calls.

Int'l call prefix (Menu 9.1.3)

Use this menu to set international call service numbers.

Flight mode (Menu 9.1.4)

Use this menu to switch to Flight mode and change the time setting.

CDMA network services (Menu 9.1.5)

Use this menu to access network services.

Area code (Menu 9.1.7)

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

Application Settings *(Menu 9.2)*

You can customise the settings for using applications available on the phone.

Camera settings *(Menu 9.2.1)*

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

Message settings *(Menu 9.2.2)*

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

Bluetooth settings *(Menu 9.2.3)*

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

Voice command settings *(Menu 9.2.4)*

Use this menu to customise various settings for using the voice recognition feature. ► p. 91

Password/Lock settings *(Menu 9.3)*

Use this menu to protect the phone against unauthorised use by managing the several access codes on your phone.

To access this menu, you must enter the 4- to 8-digit password and select **<Done>**.

Change password *(Menu 9.3.1)*

Use this menu to change your current password to a new one.

Select lock method *(Menu 9.3.2)*

Use this menu to lock your phone.

Call Lock *(Menu 9.3.3)*

Use this menu to restrict all outgoing or incoming calls.

Outgoing International Lock *(Menu 9.3.4)*

Use this menu to restrict outgoing international calls.

GPS settings (Menu 9.3.5)

Your phone supports the GPS function which allows other people to locate your position. Use this menu to lock or unlock your GPS service lock.

Emergency number (Menu 9.3.6)

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.

Voice privacy (Menu 9.3.7)

Used only in digital networks, Voice Privacy encrypts the voice channel so that people cannot eavesdrop on your conversation.

Card settings (Menu 9.3.8)

Use this menu to access the security options for the UIM/SIM card.

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 [Up] in Idle mode.

Language setup (Menu 9.5)

Use this menu to change the language of the display.

Domains preset *(Menu 9.6)*

Your 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.

Reset *(Menu 9.7)*

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

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 UIM 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, and the phone is now blocked. Enter the PUK supplied by your service provider.

"No service currently available" or "Network down" displays

- The network connection has been lost. You may be in a weak signal area. Move and try again.
- You are trying to access an option for which you have no subscription with your service provider. Contact the service provider for further details.

You have entered a number but it was not dialled

- Be sure that you have pressed [↵].
- Be sure that you have accessed the right cellular network.

- Be sure that you have not restricted outgoing calls.

Your correspondent cannot reach you

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

Your correspondent cannot hear you speaking

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

The phone starts beeping and display “Low battery warning!”

- Your battery is insufficiently charged. Recharge the battery.

The audio quality of the call is poor

- Check the signal strength indicator on the display (C or G). 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 Contacts entry

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

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

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

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

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

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

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 Council on Radiation Protection and Measurement (NCRP) and the Institute of Electrical and Electronics Engineers (IEEE). In both cases, the recommendations were developed by scientific and engineering experts drawn from industry, government, and academia after extensive reviews of the

scientific literature related to the biological effects of RF energy.

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

SAR tests are conducted using standard operating positions accepted by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is

designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

When approval test is done, no Samsung supplied accessories are available but maybe available later after approval.

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

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

PCS

- Head: 0.976W/Kg.
- Bodyworn: 0.344W/Kg.

CDMA

- Head: 0.985W/Kg.
- Bodyworn: 0.769W/Kg.

For body worn operation, 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 of 1.5 cm from the body.

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

SAR information on this and other model phones can be viewed on-line at www.fcc.gov/oet/fccid. This site uses the phone FCC ID number, A3LSCHW339. Sometimes it may be necessary to remove the battery pack to find the number. Once you have the FCC ID number for a particular phone, follow the instructions on the website and it should provide values for

typical or maximum SAR for a particular phone. Additional product specific SAR information can also be obtained at www.fcc.gov/cgb/sar.

Consumer Information on Wireless Phones

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

What kinds of phones are the subject of this update?

The term wireless phone refers here to hand-held wireless phones with built-in antennas, often called "cell," "mobile," or "PCS" phones. These types of wireless phones can expose the user to measurable radio frequency energy (RF)

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

Do wireless phones pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless phones. There is no proof,

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

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

Under the law, FDA does not review the safety of radiation-emitting consumer products such

as wireless phones before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless phones are shown to emit radio frequency energy (RF) at a level that is hazardous to the user. In such a case, FDA could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace or recall the phones so that the hazard no longer exists.

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

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

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

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

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

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

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

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

What are the results of the research done already?

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

certainty what the results of such studies mean for human health.

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

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

A combination of laboratory studies and epidemiological studies of people actually using

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

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

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

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

FDA and Cellular Telecommunications & Internet Association (CTIA) have a formal

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

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

If there is a risk from these products - and at this point we do not know that there is - it is probably very small. But if you are concerned about avoiding even potential risks, you can

take a few simple steps to minimize your exposure to radio frequency energy (RF). Since time is a key factor in how much exposure a person receives, reducing the amount of time spent using a wireless phone will reduce RF exposure.

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

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

What about children using wireless phones?

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

Some groups sponsored by other national governments have advised that children be discouraged from using wireless phones at all. For example, the government in the United Kingdom distributed leaflets containing such a recommendation in December 2000. They noted that no evidence exists that using a wireless phone causes brain tumors or other ill effects. Their recommendation to limit wireless phone use by children was strictly

precautionary; it was not based on scientific evidence that any health hazard exists.

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

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

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

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that accessories that claim to shield the head from those emissions reduce risks. Some products that claim to shield the user from RF absorption use special phone cases, while others involve nothing more than a metallic accessory attached to the phone. Studies have shown that these products generally do not work as advertised. Unlike "hand-free" kits, these so-called "shields" may interfere with proper operation of the phone. The phone may be forced to boost its power to compensate, leading to an increase in RF absorption. In February 2002, the Federal Trade Commission (FTC) charged two companies that sold devices that claimed to protect wireless phone users from radiation with making false

and unsubstantiated claims. According to FTC, these defendants lacked a reasonable basis to substantiate their claim.

What about wireless phone interference with medical equipment?

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

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

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

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

- FCC RF Safety Program:
<http://www.fcc.gov/oet/rfsafety/>
- Environmental Protection Agency (EPA):
<http://www.epa.gov/radiation/>
- Occupational Safety and Health Administration's (OSHA):
<http://www.osha.gov/SLTC/radiofrequencyradiation/index.html>
- National Institute for Occupational Safety and Health (NIOSH):
<http://www.cdc.gov/niosh/emfpg.html>
- World Health Organization (WHO):
<http://www.who.int/peh-emf/>
- International Commission on Non-Ionizing Radiation Protection:
<http://www.icnirp.de>
- National Radiation Protection Board (UK):
<http://www.nrpb.org.uk>
- Updated 4/3/2002: US Food and Drug Administration
<http://www.fda.gov/cellphones>

Road Safety

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

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

1. Get to know your wireless phone and its features, such as speed dial and redial. If available, these features help you to place your call without taking your attention off the road.
2. When available, use a hands-free device. If possible, add an additional layer of convenience and safety to your wireless phone with one of the many hands free accessories available today.
3. Position your wireless phone within easy reach. Be able to access your wireless phone without removing your eyes from the road. If you get an incoming call at an inconvenient time, let your voice mail answer it for you.
4. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow, ice and even heavy traffic can be hazardous.
5. Do not take notes or look up phone numbers while driving. Jotting down a "to do" list or flipping through your address book takes attention away from your primary responsibility, driving safely.
6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to

plan calls when your car will be stationary. If you need to make a call while moving, dial only a few numbers, check the road and your mirrors, then continue.

7. Do not engage in stressful or emotional conversations that may be distracting. Make people you are talking with aware you are driving and suspend conversations that have the potential to divert your attention from the road.
8. Use your wireless phone to call for help. Dial 9-1-1 or other local emergency number in the case of fire, traffic accident or medical emergencies. Remember, it is a free call on your wireless phone!
9. Use your wireless phone to help others in emergencies. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.

10. Call roadside assistance or a special non-emergency wireless assistance number when necessary. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured, or a vehicle you know to be stolen, call roadside assistance or other special non-emergency number.

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

For more information, please call 1-888-901-SAFE, or visit our web-site www.wow-com.com
Provided by the Cellular Telecommunications & Internet Association

Operating Environment

Remember to follow any special regulations in force in any area and always switch your phone off whenever it is forbidden to use it, or when it

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

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

Using Your Phone Near Other Electronic Devices

Most modern electronic equipment is shielded from radio frequency (RF) signals. However, certain electronic equipment may not be shielded against the RF signals from your

wireless phone. Consult the manufacturer to discuss alternatives.

Pacemakers

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

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

Persons with pacemakers:

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

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

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

Hearing Aids

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

Other Medical Devices

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

instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

Vehicles

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

Posted Facilities

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

Potentially Explosive Environments

Switch your phone off when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas

could cause an explosion or fire resulting in bodily injury or even death.

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

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

Emergency Calls

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

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

To make an emergency call:

1. If the phone is not on, switch it on.
2. Key in the emergency number for your present location (for example, 911 or other

official emergency number). Emergency numbers vary by location.

3. Press .

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

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

Restricting Children's access to your Phone

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

FCC Notice and Cautions

FCC Notice



- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and,

- ☑ if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.

The phone may cause TV or radio interference if used in close proximity to receiving equipment. The FCC 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 Batterymarch Park, Quincy, MA 02269, Attn: Publication Sales Division.

Cautions

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

Only use approved batteries, antennas and chargers. The use of any unauthorized accessories may be dangerous and void the

phone warranty if said accessories cause damage or a defect to the phone.

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

Other Important Safety Information

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

Product Performance

Getting the Most Out of Your Signal Reception

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

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

Understanding the Power Save Feature

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

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

Understanding How Your Phone Operates

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

Maintaining Your Phone's Peak Performance

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

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

- Hold the phone with the antenna raised, fully-extended and over your shoulder.
- Try not to hold, bend or twist the phone's antenna.
- Don't use the phone if the antenna is damaged.
- Speak directly into the phone's receiver.
- Avoid exposing your phone and accessories to rain or liquid spills. If your phone does get wet, immediately turn the power off and remove the battery. If it is inoperable, call Customer Care for service.

Availability of Various Features/ Ring Tones

Many services and features are network dependent and may require additional subscription and/or usage charges. Not all

features are available for purchase or use in all areas. Downloadable Ring Tones may be available at an additional cost. Other conditions and restrictions may apply. See your service provider for additional information.

Battery Standby and Talk Time

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

Battery Precautions

- Never use any charger or battery that is damaged in any way.
- Use the battery only for its intended purpose.

- If you use the phone near the network's base station, it uses less power; talk and standby time are greatly affected by the signal strength on the cellular network and the parameters set by the network operator.
- Battery charging time depends on the remaining battery charge and the type of battery and charger used. The battery can be charged and discharged hundreds of times, but it will gradually wear out. When the operation time (talk time and standby time) is noticeably shorter than normal, it is time to buy a new battery.
- If left unused, a fully charged battery will discharge itself over time.
- Use only Samsung-approved batteries and recharge your battery only with Samsung-approved chargers. When a charger is not in use, disconnect it from the power source. Do not leave the battery connected to a charger for more than a week, since overcharging may shorten its life.
- Extreme temperatures will affect the charging capacity of your battery: it may require cooling or warming first.
- Do not leave the battery in hot or cold places, such as in a car in summer or winter conditions, as you will reduce the capacity and lifetime of the battery. Always try to keep the battery at room temperature. A phone with a hot or cold battery may temporarily not work, even when the battery is fully charged. Li-ion batteries are particularly affected by temperatures below 0 °C (32 °F).
- Do not short-circuit the battery. Accidental short-circuiting can occur when a metallic object (coin, clip or pen) causes a direct connection between the + and - terminals of the battery (metal strips on the battery), for example when you carry a spare battery

in a pocket or bag. Short-circuiting the terminals may damage the battery or the object causing the short-circuiting.

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

Care and Maintenance

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

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

- Do not drop, knock or shake the phone. Rough handling can break internal circuit boards.
- Do not use harsh chemicals, cleaning solvents or strong detergents to clean the phone. Wipe it with a soft cloth slightly dampened in a mild soap-and-water solution.
- Do not paint the phone. Paint can clog the device's moving parts and prevent proper operation.
- Do not put the phone in or on heating devices, such as a microwave oven, a stove or a radiator. The phone may explode when overheated.
- When the phone or battery gets wet, the label indicating water damage inside the phone changes color. In this case, phone repairs are no longer guaranteed by the manufacturer's warranty, even if the warranty for your phone has not expired.
- If your phone has a flash or light, do not use it too close to the eyes of people or animals. This may cause damage to their eyes.
- Use only the supplied or an approved replacement antenna. Unauthorized antennas or modified accessories may damage the phone and violate regulations governing radio devices.
- If the phone, battery, charger or any accessory is not working properly, take it to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

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U.S Patent No. 4,901,307 5,056,109
5,099,204 5,101,501
5,103,459 5,107,225
5,109,390