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

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SCH-L310
User’s Guide

Important safety precautions

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

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 call

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

Keep your phone away from small children

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

Accessories and batteries

Use only Samsung-approved accessories and batteries. Use of any unauthorized accessories could damage 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.

Qualified service

Only qualified service personnel may repair your phone.

For more detailed safety information, see "Health and safety information" on page 57.

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, [**OK**]
< >	Indicates a soft key, whose function is displayed on the phone screen. For example, <**ao VIVO**>

- **WAP browser**
  Access the wireless web and access various services and current information.

Special features of your phone

- **Simple, sleek design with Intenna**
  Samsung's powerful intenna technology allows the best call quality without an annoying external antenna.

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

- **Voice recognition**
  Dial a number or access features with voice commands.

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

- **Calendar**
  Keep track of your daily, weekly, and monthly schedule.

- **Phonebook**
  Store up to 500 home, work, or mobile phone numbers for your phonebook.

- **Alarm**
  Use your phone as an alarm clock to wake you up in the morning or notify you to an event.

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

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

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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 at your Samsung dealer may vary, depending on your country or service provider.

Your phone

Buttons, features, and locations

Get started

First steps to operate your phone

Install and charge the phone

1 To install the battery.

2 Replace the battery case.

☑ To remove the battery.

3 Plug the travel adapter into the phone.

4 Plug the adapter into a standard AC wall outlet.

5 When the phone is completely charged (the battery icon stops blinking), unplug the adapter from the power outlet.

Low battery indicator

When the battery is low:

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

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

Power on or off

Switch on Do not turn on the phone when mobile phone use is prohibited.	1. Open the phone.
	2. Press [ ] to turn on the phone.
Switch off	1. Open the phone.
	2. Press and hold [ ].

Keys and display

Keys

Key(s)	Description
	Perform the function indicated on the bottom line of the display.
	In Idle mode, access your favorite menus directly. ▶ p. 31 In Menu mode, scroll through the menu options.
OK	In Menu mode, selects the highlighted menu option.
CLR	Delete characters from the display. In Menu mode, returns the display to the previous menu level.
	Send or answer a call. In Idle mode, retrieve the recent numbers dialled, missed, or received.

Key(s)	Description
	End a call. Hold down to switch the phone on and off. In Menu mode, cancel input and return the phone to Idle mode.
	Enter numbers, letters, and some special characters.
	Enter special characters. Hold [*] down to begin voice dialing. Hold [#] down to activate or deactivate silent mode.
(on the left)	During a call, adjust the voice volume. In Idle mode, adjust the keypad tone volume.
(on the right)	In idle mode, access the Camera menu: hold down to turn the camera on. In camera mode, take a photo.

Display

Layout

Icons
display various icons.

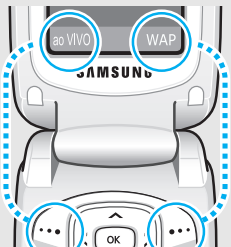
Text and graphics
display messages, instructions, and information you enter.

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

Icons		Received signal strength
		Call in progress
		Out of your service area; you cannot send or receive calls
		New SMS message
		New MMS message
		New voicemail message
		New WAP message
		Alarm set
		Ringer/1-Beep on
		Ringer off
		Vibration mode is active
		Lev.1~8+Vib mode is active
		Silent mode
		Auto answer mode is active
		Location is active

Icons (continued)		Roaming network
		Digital mode is active
		1x RTT mode is active
		Battery power level

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 **ao VIVO** mode. Press the right soft key to access **WAP** menu.

Select an option	1. Press the appropriate soft key. 2. Press the Navigation keys to move to the next or previous option. 3. Press [**OK**] to confirm the function displayed or option highlighted. 4. To exit, choose either of the following methods. • Press <**Back**> or [**CLR**] to move up one level. • Press [ ] to return to Idle mode.
Use shortcuts	Press the number key corresponding to the option you want.

Customize your phone

Display language

1. In Idle mode, press <**ao VIVO**> and select **My Vivo** → **Idioma/ Language**.
2. Select a language.

Call ringer melody

1. In Idle mode, press <**ao VIVO**> and select **My Vivo** → **Sounds** → **Ringer type** → **Call**.
2. Select a ringer category.
3. Select a ringer melody.
4. Press <**Save**>.

Idle mode wallpaper

You can set a wallpaper for the display.

1. In Idle mode, press <**ao VIVO**> and select **My Vivo** → **Display** → **Wallpaper**.
2. Select an image category.
3. Select an image.
4. Press [**OK**] or <**Save**>.

Display Banner

You can change the banner on the display.

1. In Idle mode, press <**ao VIVO**> and select **My Vivo** → **Display** → **Banner**.
2. Enter your banner.
3. Press [**OK**] or <**Save**>.

Silent mode

You can switch to silent mode to avoid disturbing other people with your phone sound.

Press and hold [#] in Idle mode.

Phone lock

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

1. In Idle mode, press <**ao VIVO**> and select **More** → **Settings** → **Security**.
2. Enter the default password, "0000".
3. Select **Change lock**.
4. Enter a new password and press [**OK**].
5. Enter the new password again and press [**OK**].
6. Select **Lock phone**.
7. Select **On power-up** or **Lock now**.

Make/answer calls

Make a call

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

Answer a call

1. When the phone is ringing, press [ ].
2. To end the call, press [ ].

Adjust the volume during a call

Press [▲/▼].

Step outside the phone

Use camera

Take a photo

1. Open the phone.
2. In Idle mode, press and hold [📷] to turn on the camera.
3. Aim the lens at the subject and adjust the image.
4. Press [**OK**] or [📷] to take a photo.
5. Press [**OK**] or [📷] to save the photo.

View a photo

1. In Idle mode, press [📷] and select **Photo album**.
2. Scroll to a photo you want and press [**OK**].

Use Phonebook

Add an entry

As a new entry

1. In Idle mode, enter a phone number and press <**Save**> or [**OK**] .
2. Select **New Entry** → a category type.
3. Specify the contact information: Name, Mobile, Work, Home, Pager, Fax, E-mail, URL, Group, Caller Ringer, Birthday, and Image.
4. Press [**OK**].
5. Press <**Save**> to save the entry.

Add an entry

To an existing entry

1. In Idle mode, enter a phone number and press <**Save**> or [**OK**].
2. Press [Down].
3. Enter the first few letters of the name you want.
4. Select a contact a number type.
5. Press [**OK**] and select Yes to save the contact.

Find an entry

1. In Idle mode, press [Down] and select **Find**.
2. Select an entry.
3. Select a number and press [ ] to dial, or press [**OK**] to access options.
4.

Browse the wap

Using a built-in WAP (Wireless Application Protocol) browser, you can get easy access to the wireless web to get a variety of up-to-date services and information and to enjoy download of web content.

Launch the browser

In Idle mode, press <**WAP**> or press <**ao VIVO**> and select **WAP**.

Navigate with the WAP browser

- To access browser options, press and hold <**WAP**>.
- To scroll through browser items, press the Navigation keys.
- To select an item, press <**OK**>.
- To return to the previous page, press [**CLR**].
- To return to the home page, press and hold [**CLR**].

Send messages

Send a text message (SMS)

1. In Idle mode, press <**ao VIVO**> and select **Messages** → **New Msg** → **SMS Message**.
2. Enter destination numbers and press <**Next**>.
3. Enter the message text and press <**Next**>.
4. Press <**Send**>.

Send a picture message

1. In Idle mode, press <**ao VIVO**> and select **Messages** → **New Msg** → **MMS Message**.
2. Select **Subject** and enter the subject.
3. Select **Picture**, press [**OK**], and add a picture/image.
4. Select **Sound**, press [**OK**], and add a sound.
5. Select **Message**, press [**OK**] and enter the message text.
6. Select **vCard** and attach your name card or a Phonebook entry as a name card.
7. Press <**Send**> and enter destination numbers or addresses
8. Press [**OK**] and <**Send**> to send the message.

View messages

View a text message

When a notification appears:

Press [**OK**]. The message displays.

From the Inbox:

1. In Idle mode, press <**ao VIVO**> and select **Messages** → **Receiv.**.
2. Select a message.

View a picture message

When a notification appears:

1. Press [**OK**]. The message will be downloaded from the server and display.

From the Inbox:

1. In Idle mode, press <**ao VIVO**> and select **Messages** → **Receiv.**.
2. Select a message.

Use voice recognition

Your phone can recognize specific voice commands in order to dial a number or access features.

Voice dialing

1. In Idle mode, press and hold [*].
2. Say “Voice dial.”
3. Say a name or phone number.
4. If the name you hear is not what you want, say “No.”
5. Say “Yes” when you hear what you want.

   If the name has more than one number, select the number type you want.

Access features

1. In Idle mode, press and hold [*].
2. Say one of the following commands.
   - **Voice Dial**: begin voice dialing.
   - **Contacts**: open the Phonebook list.
   - **Voice Notes**: record a voice memo.
   - **Voice Mail**: access the Voice Mail number.
   - **Voice Portal**: access the Voice Portal number.

Enter text

T9 English, Alphabet, Number, and Symbols mode

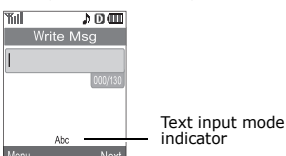
You can enter text for some features such as messages, Phonebook, or Tools, using T9 English mode, Alphabet mode, Number mode, and Symbols mode.

Changing the text input mode

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

- Press <**Menu**> to change to T9 English, Alphabet, Number, and Symbol modes.
- Press [⁎] to change case.

Example: Writing a text message



Using Alphabet mode

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

Keys	Characters in order displayed								
1	.	@	?	!	-	,	&	:	’ 1
2	A	B	C	2					
3	D	E	F	3					
4	G	H	I	4					
5	J	K	L	5					
6	M	N	O	6					
7	P	Q	R	S	7				
8	T	U	V	8					
9	W	X	Y	Z	9				
0	0								

Tips for using Alphabet 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 [**CLR**] to delete characters one by one. Press and hold [**CLR**] to clear the display.

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.

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

   T9 predicts the word that you are typing, and it may change with each key that you press.
2. Enter the whole word before editing or deleting characters.
3. When the word displays correctly, go to step 4. Otherwise, press [**0**] to display alternative word choices for the keys that you have pressed.

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

Tips for using T9 English mode

- Press [**1**] to enter periods or apostrophes automatically.
- Press [#] to insert a space.
- Press [*] to change case. Lower case (T9 word), Initial capital (T9 Word), and Capital lock (T9 WORD) are available.
- Press [Left] or [Right] to move the cursor.
- Press [**CLR**] to delete characters one by one. Press and hold [**CLR**] to clear the display.
- To type words not found in T9 English mode, change the text input mode to Alpha mode.

Using Number mode

Number mode enables you to enter numbers.

Press the keys corresponding to the digits you want.

Using Symbol mode

Symbol mode enables you to insert symbols.

To	Press
display more symbols	[Left] or [Right].
select a symbol	the corresponding number key.
clear the symbol(s)	[**CLR**].

Call functions

Advanced calling features

Making a call

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

☑ Do not turn on the phone when mobile phone use is prohibited. Press [**CLR**] to clear the last digit or press and hold [**CLR**] to clear the whole display.

Using the dialing options

While entering a number, press <**Menu**> to access the following options:

- **4-digit Dial**: use the four digit dialing feature. This option is only available when you enter four digit.
- **Speed Dial**: use the speed dialing feature. This option is only available when you enter a number corresponding to a Phonebook location.
- **Talk**: place a call to the number.

- **Save**: save the number to Phonebook.
- **Find**: find the number from Phonebook.
- **Hard Pause**: insert a hard pause. Numbers after the pause will be sent when you press [ ].
- **2sec Pause**: insert a 2-second pause. Numbers after the pause will be sent automatically.

Redialing recent numbers

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

Making a call from Phonebook

Once you have stored a number in Phonebook, you can dial the number by selecting it from Phonebook. ▶ p. 34

You can also use the speed dial feature to assign your most frequently called phone numbers to specific numbers. You can quickly dial them by pressing the associated number keys. ▶ p. 36

Making an emergency call

You can make calls to standard emergency numbers, such as 190, 192, or 193 on the Emergency # list, even if your phone is locked or all outgoing calls are restricted. ▶ p. 55

Speed dialing

When you store a number in Phonebook, a location number is assigned to the number so that you can dial it by entering its location number.

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

Ending a call

Press [ ].

Answering a call

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

Press [ ] to answer the call.

Tips for answering a call

- When **Any key** in the **Call answer** menu is selected, you can press any key except for [ ], [▲/▼], and <**Ignore**>. ▶ p. 52
- When **Send key** in the **Call answer** menu is selected, you can press [ ] or <**Answer**>. ▶ p. 52
- When **Folder open** in the **Call Answer** menu is selected, you can simply open the phone. ▶ p. 52
- Press [ ] or [▲/▼] to silence a call.

Viewing missed calls

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

Press [ ] to dial the last number.

Using the headset

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

Connect the headset to the jack on the right side of the phone.

The buttons on the headset work as listed below:

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

You can answer an incoming call while already on the phone, if your network supports it.

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

Making a three-way call

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

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

Using the In-call menu options

During a call, press <**Menu**> to access the following options:

- **Phonebook**: access the **Phonebook** menu to locate or store entries. ▶ p. 34
- **Mute**/**Quit**: switch off your phone's microphone, so that the other person cannot hear you.
- **Silent**/**Quit**: mute the DTMF (Dual-Tone Multi-Frequency) tones of the keys.

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

- **Send Tel#**: send your phone number as DTMF tones.
- **Calls**: access the **Calls** menu. ▶ p. 28
- **Messages**: access the **Messages** menu. ▶ p. 37
- **Tools**: access the **Tools** menu. ▶ p. 46
- **Voice privacy**: access the **Voice privacy** menu. ▶ p. 54
- **Voice Notes**: access the **Voice Notes** menu. ▶ p. 50

Menu functions

All menu options listed

Multimedia

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

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

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

Take picture

You can take photos in various modes. The camera produces JPEG photos.

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

1. Access the **Take picture** menu to turn on the camera and switch the display to Capture mode. You can also press and hold [📷] in Idle mode.
2. Make any desired adjustments.
   - Press <**Options**> to access camera options. ▶ next section
   - Use the keypad to change camera settings. ▶ p. 26
   - Press <**Album**> to access the **Photo album** folder.
3. Press [📷] or [**OK**] to take a photo.
4.

To	Press
use photo options	<**Options**>. ▶ p. 26
send the photo via MMS	<**Send**>.
save the photo	[**OK**].

Using camera options in Capture mode

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

- **Self Timer**: set a time delay before the camera takes a photo.
- **Multishot**: take a series of action stills. Select the number of photos the camera will take.
- **Color Tones**: change the color tone of the image.
- **Brightness**: adjust the brightness of the photo.
- **White Balance**: adjust the color balance of the image. You can make your photo appear warmer or cooler.
- **Resolution**: select an image resolution.
- **Quality**: select an image quality setting.
- **Shutter Sound**: select the sound that you hear when you press the shutter release, [📷].
- **Capture Area/Full Screen**: change the preview screen mode.
- **Fun Frames**: apply a decorative frame to photos.

Using the keypad in Capture mode

You can use the keypad to customize your camera settings in Capture mode.

Key	Function
▼	Shows the mirror image.
0	Changes the preview mode.
Left/Right	Zooms in or out. (Unavailable for 640*480 resolution)

Using photo options

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

- **Assign**: set the photo as wallpaper for the main display or as a caller ID image for a Phonebook entry.
- **My Pictures**: save the photo and access the **Photo album** folder.

Photo album

Use this menu to access the photos you have taken and images saved on your phone.

Viewing a photo

1. From the My Pictures screen, select a folder by pressing [Left] or [Right].
2. Press [Down].
3. Scroll to the photo you want to view and press <**View**>.

Using photo options

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

- **Assign**: set the photo as wallpaper for the main display or as a caller ID image for a Phonebook entry.
- **Rename**: change the file name.
- **Move**: move the file to another folder.
- **Lock**/**Unlock**: lock the file to protect it from being deleted, or unlock the file.
- **Erase**: delete the selected file.
- **Information**: access the file properties.

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

- **New Folder**: add a new album
- **Send**: send the file via MMS.
- **Assign**: set the photo as wallpaper for the main display or as a caller ID image for a Phonebook entry.
- **Rename**: change the file name.
- **Edit**: edit the photo as a slide show.
- **List View/Thumbnail View**: change the display mode.
- **Sort**: change the sort order.
- **Slide Show**: view all photos as a slide show.
- **Move**: move the file to another folder.
- **Lock**/**Unlock**: lock the file to protect it from being deleted, or unlock the file.
- **Rename Folder**: rename folder name.
- **Erase Folder**: delete folder name.
- **Erase**: delete the selected file.
- **Erase All**: delete all file in the current folder.
- **Information**: access the file properties.

Settings

Use this menu to change the default settings for the camera.

- **Picture quality**: select an image quality setting.
- **Shutter sound**: select the sound that you hear when you press the shutter release, [**OK**].
- **View finder**: select the preview screen mode.

  Full Screen: display the image on the full screen.

  Capture Area: display the image in actual ratio.
- **Default name**: set the default name prefix for file names.

Calls *(Menu 1)*

Use this menu to view the calls you have missed, received, or dialled, and the length of your calls.

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

All *(Menu 1-1)*

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

Outgoing *(Menu 1-2)*

This menu displays the 20 most recent calls you have dialled.

Accessing a call record

1. Press the Navigation keys to scroll through the call list.
2. Press [**OK**] to view the details of a call, or [ ] to dial a number.

Using call record options

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

- **Talk**: dials the number.
- **Save**: (for not saved numbers in Phonebook) save the number in Phonebook.
- **Prepend**: add an additional number, such as area code or feature code, to the phone number.
- **Erase**: erase the selected number.
- **Send SMS**: send the message to the phone number.
- **Send MMS**: send the MMS to the phone number.

Incoming *(Menu 1-3)*

This menu displays the 20 most recent calls you have received.

Missed *(Menu 1-4)*

This menu displays the 20 most recent calls that you did not answer.

Erase history *(Menu 1-5)*

Use this menu to erase the entries stored in each of three call logs. You can also erase all of your call log entries at one time by selecting **All**.

Calls time *(Menu 1-6)*

Use this menu to display the time log for calls made and received. The actual time invoiced by your service provider will vary.

- **Last call**: check the length of your last call.
- **Total**: check the total length of all the calls you have dialed and received.
- **Life time**: check the number and total duration of all the calls you have dialed and received since the phone was shipped from the factory.
- **Erase total**: erase the total call timers, except for Lift Time.

Downloads *(Menu 2)*

You can download various Brew applications and multimedia files, such as melodies and images from the wireless web. You can also store and manage them.

Use this menu to connect your phone to the preset Brew server and download a variety of Brew applications.

Downloading applications

1. Select the **Download Center** icon.

   The following menu is available:

   - **Catalog**: browse the server and purchase applications.
   - **Search**: enter a keyword to search for a specific application.
   - **About Download**: display help information about using the **Download Center** menu.
2. Select **Catalog**.

   ☑ When **Airtime Warnings** is set to **All Enabled**, you are prompted to connect to the server.

3. Select an application you want to download and follow the instructions on the screen.

Managing Brew applications

1. Select the **Settings** icon.

   The following options are available:

   - **Order Apps**: change the order of the downloaded applications.
   - **Move Apps**: move an application to another folder.
   - **Manage Apps**: display the amount of memory currently in use and remaining.
   - **Main Menu View**: change the view mode of the main menu screen.
   - **Airtime Warnings**: set the phone to alert you each time you access the Brew server.
   - **View Log**: display the record of your browsing.

Viewing help information

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

My Vivo *(Menu 3)*

The **My Vivo** menu enables you to change Menu mode settings, shortcut assignment settings, sound settings, display settings, and language settings to suit your preferences.

To access this menu, press <**ao VIVO**> in Idle mode and select **My Vivo**.

Main menu *(Menu 3-1)*

Use this menu to customize the properties for Menu mode.

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

- **Initialize**: cancel your settings.
- **Change order**: change the position of the selected menu.
- **Change icon**: assign a different icon for the selected menu.
- **Help**: view the help information.

To view brief information about a menu, scroll to the icon of the menu you want and press <**Info**>.

Main keys *(Menu 3-2)*

You can use the Navigation keys as shortcuts to access specific menus directly from Idle mode. Use this menu to assign a shortcut to a key.

Assigning a shortcut menu

1. Select a key to be used as a shortcut key.
2. Press [Up] or [Down] to select the menu to be assigned to the key.

Sounds *(Menu 3-3)*

Use this menu to customize various sound settings.

Ringer volume *(Menu 3-3-1)*

Use this menu to select a ringer volume for incoming calls, message alert, alarm settings,Calendar alarm, depending on the place where you are.

- **Silent**: the phone does not ring.
- **Vibrate**: the phone vibrates but not rings.
- **1-Beep**: the phone sound a beep.
- **Level 1~8**: select a volume for the call ringer. The more bars, the louder the volume.
- **Lev. 1~8+Vib**: the phone vibrates and then rings.

☑ The volume options may vary depending on the item you select.

Ringer type *(Menu 3-3-2)*

Use this menu to select the ringer type for incoming calls, message alert, calendar alarm, or data calls.

Alerts *(Menu 3-3-3)*

Use this menu to have the phone alert (beep) you to inform you that certain things have happened.

- **Service**: set the phone to beep when you exit a service area or return to a service area.
- **Call connect**: set the phone to beep when your call is connected to the system.
- **Call disconnect**: set the phone to beep when your call is disconnected from the system.
- **Signal fade**: set the phone to beep when a dropped call occurs during conversation in response to fading signal strength.

- **Minute beep**: set the phone to beep every minute during an outgoing and incoming calls to keep you informed of the length of your call.
- **Roam alerts**: set the phone to beep when your phone starts roaming.

Key tone *(Menu 3-3-4)*

Use this menu to set up the keypad tone that the phone sounds when you press a key.

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

- **Volume**: adjust the volume of the keypad.
- **Type**: select a tone that the phone sounds when you press a key.
- **Tone length**: set short or long DTMF (dual-tone multi-frequency) tones to be sent to access teleservices, such as a bank account. If the service is digital, as most are, short DTMF tones will almost always work.

Power On/Off *(Menu 3-3-5)*

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

Display *(Menu 3-4)*

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

Menu style *(Menu 3-4-1)*

Use this menu to change the menu style. You can select either **List** or **Grid**.

Wallpaper *(Menu 3-4-2)*

Use this menu to change the background image to be displayed in Idle mode. Select an image from the following image categorize:

- **Functional images**: select one of default images.

  > ☑ When you select **Dual clock**, the phone displays the analog clocks for the two time zones selected in the **Dual clock** menu. ▶ p. 33

- **Photos/Images**: allows you to select one of the photos stored in the Photo Album menu.

Backlight *(Menu 3-4-3)*

Use this menu to customize settings for backlight.

- **Main display**: change the display backlight settings.

Duration: specify the length of time the display backlight stays on.

Brightness: change the backlight brightness.

- **Keypad**: change the keypad backlight mode.

  Normal mode: flash the backlight when you press any key.

  Save mode: use the backlight only between 8:00 AM and 4:50 PM. Doing this saves the battery power.
- **Pwr save mode**: set the phone to turn the backlight off when you don't use the phone.

Banner *(Menu 3-4-4)*

Use this menu to enter a banner message to be displayed at the bottom of the display in Idle mode. Enter a new banner message and press [**OK**] or <**Save**>.

Dual clock *(Menu 3-4-5)*

Use this menu to select two time zones to be displayed when you select **Dual clock** for the wallpaper image. ▶ p. 32

1. Scroll to **Location** by pressing [Left] or [Right].
2. Scroll to the **P1** field and press [Left] or [Right] to select the time zone for the left clock.
3. Scroll to the **P2** field and press [Left] or [Right] to select the time zone for the right clock.
4. Press [**OK**].

☑ You can apply the daylight savings time for each clock. Scroll to **DST** by pressing [Left] or [Right] and scroll to the **P1** or **P2** field. Select **On** and press [**OK**].

Contrast *(Menu 3-4-6)*

Use this menu to adjust the brightness of the main display.

Service LED *(Menu 3-4-7)*

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

Dial design *(Menu 3-4-8)*

Use this menu to select a color for the digits when entering a number for dialing.

Idioma/Language *(Menu 3-5)*

Use this menu to select one of several languages for the display text.

Tones and Images *(Menu 4)*

Use this menu to download images and tones from the website preset by your service provider.

You can also save images and tones in the phone's memory.

To access this menu, press <**ao VIVO**> in Idle mode and select **Tones and Images**.

Photos/Images *(Menu 4-1)*

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

Tones *(Menu 4-2)*

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

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

- **Send**: send the file via MMS.
- **Assign**: set the sound file as your call ringtone, a ringtone for a Phonebook entry or a group, alarm tone.
- **Rename**: change the file name.
- **Erase**: delete the selected file.
- **Erase All**: delete all files.
- **Information**: access the file properties.

Memory info *(Menu 4-3)*

Use this menu to view memory information for media items in the phone's memory.

Phonebook *(Menu 5)*

You can store phone numbers in your phone's memory. The phone's memory are physically separate, but they are used as a single entity called Phonebook.

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

Find *(Menu 5-1)*

Use this menu to search for numbers in Phonebook.

> ☑ Press [Down] and select **Find** in Idle mode to quickly access this menu.

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 a caller group.
3. Select the name you want.
4. Press [ ] to dial the number, or ,<**Menu**> to access Phonebook options.

Using Phonebook options

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

- **Edit**: edit the selected contact.
- **Erase**: erase the selected contact.

Voice Mail *(Menu 5-2)*

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

> ☑ Your service provider can give the voicemail server number.

Vivo Agenda *(Menu 5-3)*

Use this menu to synchronize your Phonebook list in Phonebook with one on a remote server. It is a useful safeguard for your Phonebook list, in the case your phone is lost or damaged.

Add new entry *(Menu 5-4)*

Use this menu to add a new entry to Phonebook.

1. Enter a phone number and press [**OK**].
2. Select a category type of the number.
3. Enter a name and press [**OK**].
4. Change the settings or enter information about the Phonebook.

   Name: assign a name, if one has not already been entered.

   Mobile/**Work**/**Home**/**Pager**/**Fax**: add a number in any category.

Main number: assign the number to a main number.

E-mail: assign an e-mail address.

URL: enter an URL address of the person.

Group: assign the number to a caller group.

Caller ringer: assign a ringer melody to alert you to a call from the number.

Birthday: enter the birthday of the person.

Image: assign an image as a caller ID image to alert you to a call from the number.

5. Press [**OK**]
6. Select **Yes** to save the entry.

Speed dial *(Menu 5-5)*

Use this menu to assign a speed dial number for entries in Phonebook, if you have stored phone numbers.

Assigning speed dial numbers

1. Scroll to **All** or **Unassigned** on the top line.

   All locations or locations available for the speed dial number are listed.
2. Enter a location number you want or select an empty location from the list.
3. Press <**Assign**>.
4. Find the entry you want to assign to the number.
5. Select the entry you want from the Phonebook list and press <**Assign**>.
6. If the contact has more than one number, select the number you want.

Managing speed dial entries

From the Speed dial screen, scroll to **Assigned** on the top line and press <**Options**> to access the following options:

- **Map**: display the assigned key location on a map.
- **Edit**: edit the number assigned to the key.
- **Erase**: clear the selected speed dial setting.
- **Erase All**: clear all speed dial settings.

Dialing speed dial entries

Press and hold the appropriate key in Idle mode.

Group settings *(Menu 5-6)*

Use this menu to change the settings for the caller groups.

Changing the caller group name

1. Scroll to the group you want.
2. Press <**Menu**> and select **Rename**.
3. Clear the old name and enter a new name you want.
4. Press [**OK**].

Changing the ringer melody

1. Scroll to the group you want.
2. Press <**Menu**> and select **Ringer**.
3. Select the ringer category and press [Down].
4. Select the ringer melody.
5. Press [**OK**].

My phone# *(Menu 5-7)*

Display your phone number.

vCard *(Menu 5-8)*

Use this menu to access name cards you have saved using the **Save to vCard** option.

Memory info *(Menu 5-9)*

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

Messages *(Menu 6)*

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

New Msg *(Menu 6-1)*

Use this menu to create and send text message or multimedia messages.

Creating and sending a text message

1. Select **SMS Message**.
2. Enter a destination number and press <**Next**>.

   To send the message to more than one recipient, press [**Right**] and add additional numbers.
3. Enter your message and press <**Next**>.

You can retrieve a canned message by pressing <**Menu**> and selecting **Canned MSG**.

4. Select an option. The following options are available:
   - **Send To**: change the destination number or add more destination numbers.
   - **Msg**: change the message contents you've already entered.
   - **Callback #**: change the callback number.
   - **Options**: change the SMS settings for sending the message.

     Priority: select a priority level.

     Delivery ack: set the network to inform you when your message is delivered.

     Save Message: set how the phone acts for sent messages.

     . Auto Save: the phone immediately saves a copy of the message.

     . Do Not Save: the phone does not save the message in the Sent.

     . Prompt Save: the phone prompts you to save the message.
   - **Drafts**: saves the message in Draft folder.
5. If you are satisfied with the message you have entered, press <**Send**>.

Creating and sending a multimedia message

Use this menu to use the Picture Mail Service, which allows you to store all of messages containing images or sounds.

1. Select **MMS Message**.
2. Select **Subject** and enter a subject for your message.
3. Select **Picture** and add an image.
4. Select **Sound** and add an sound clip.
5. Select **Message**.
6. Enter your message and press [**OK**].
7. Select **vCard**
8. Attach your name card or a Phonebook entry as a name card.
9. Press <**Menu**> to access the following options:
   - **Add Page**: add pages. Move to each page by pressing [Left] or [Right].

- **Erase Page**: erase pages.
- **Add MOBLOG**
- **Set Duration**: set how long one slide in your outgoing messages displays. After a specified time, the display automatically scrolls to the next slide.
- **Preview**: view the message as it will be shown on the recipient's phone.
- **Edit Recipient**: edit a destination number.
- **Save to draft**: save the message in the **Drafts**.
- **Settings**: change the settings for sending messages. ▶ p. 42

10. Press <**Send**> to send the message. Enter a phone number or e-mail address.

    To add multiple destinations, insert a space between phone numbers or e-mail addresses.

    If you want to send copies of the message to other people, press <**Menu**> and select **Move to Cc** or **Move to Bcc**.

11. Press [**OK**] and select <**Send**> to send the message.

Receiv. *(Menu 6-2)*

Use this menu to access all of the messages you have received.

Viewing a message

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

- : Text messages
- : Multimedia messages

An ! icon next to a message means the message is urgent.

From the message list, scroll to a message and:

To	Press
reply to the sender	<**Reply**>.
view the message	[**OK**].
access message options	<**Options**>.

Using message options

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

- **Reply**: reply to the sender.
- **Forward**: forward the message.
- **Erase**: erase the message.
- **Talk**: call the sender.
- **Save**: save the sender's number to Phonebooks.
- **Move**: move the message from the Inbox to the Saved box.
- **Extract#'s**: extract phone numbers from the message text.
- **Extract E-mail**: extract e-mail addresses from the message text.
- **Extract URL**: extract URL addresses.

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

- **Erase**: delete the message.
- **Erase all**: delete all the messages in the **Receiv..**

Sent *(Menu 6-3)*

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

From the message list, select the message you want to view.

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

- **Resend**: send the message.
- **Edit**: edit the message.
- **Erase**: delete the message.
- **Delivery Report**: check whether or not the recipient has download the message from the server.

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

- **Erase**: delete the message.
- **Erase all**: delete all the messages in the **Sent**.

Voice Mail *(Menu 6-4)*

When you access this menu, the display shows the latest voice mail notification. Scroll to the notification you want by pressing the Navigation keys.

Press <**Call**> to access the voice mail server to listen to the message.

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

- **Listen**: access the voice mail server to listen to the message.
- **Clear Icon**: clear the selected notification.

Messenger *(Menu 6-5)*

Use this menu to access the WAP browser Instant Messenger (IM) service.

For further details about this service, contact your service provider.

Vivo Chat *(Menu 6-6)*

Use this menu to use the WAP browser chatting service.

For further details about this service, contact your service provider.

E-mail *(Menu 6-7)*

Use this menu to use the WAP browser e-mail service.

For further details about this service, contact your service provider.

Templates *(Menu 6-8)*

You can make and use canned messages you frequently use. You can store 20 canned messages and edit them. Press <**Edit**> to edit the message.

Saved *(Menu 6-9)*

This folder stores messages you have sent from the Receiv. to this folder.

From the message list, select a message and press <**Resend**> to send the message.

For details about message options, refer to the **Sent**.

Drafts *(Menu 6-10)*

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

From the message list, select a message and press <**Resend**> to send the message.

For details about message options, refer to the **Sent** box.

WAP Alert *(Menu 6-11)*

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

When a message has been received, you can:

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

Erase Msg *(Menu 6-12)*

Use this menu to erase all of the messages in each message folder. You can also erase all of the messages at one time by selecting **All Messages**.

When a confirmation message appears, select **Yes**.

Message settings *(Menu 6-13)*

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

Send settings *(Menu 6-13-1)*

You can configure default SMS/MMS settings for sending messages.

Setting a text message

Priority: select a priority level.

Delivery ack: set the network to inform you when your message is delivered.

Save message: set how the phone acts for sent messages.

- **Prompt Save**: the phone prompts you to save the message.
- **Do Not Save**: the phone does not save the message in the Outbox.
- **Auto Save**: the phone immediately saves a copy of the message.

Setting a multimedia message

Priority: select a priority level.

Delivery Report: set the network to inform you when your message is delivered.

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

Save Message: set how the phone acts for sent messages.

- **Prompt**: the phone prompts you to save the message.
- **Not Save**: the phone does not save the message in the Outbox.
- **Auto Save**: the phone immediately saves a copy of the message.

Receive settings *(Menu 6-13-2)*

You can configure default SMS/MMS settings for receiving messages.

Setting a text message

Scroll timer: select the scrolling time. When you select **Off**, you need to manually scroll the screen.

Notification: set how the phone informs you of new messages.

Auto erase: set what happens if new messages arrive when the Inbox is full.

- **Off**: The phone displays a warning message. You need to erase old messages to receive new messages.
- **On**: the phone automatically erases old messages in order to receive new messages.

Msg reminder: set how often the phone reminds you of new messages.

Setting a multimedia message

Notification: set the phone to automatically or manually retrieve messages.

- **Prompt**: the phone prompts you to retrieve new messages.
- **Automatic**: the phone automatically retrieves new messages without any notification and save them in the Inbox.

Auto Delete: set what happens if new messages arrive when the Inbox is full.

- **Off**: the phone prompts you to erase old messages in order to receive new messages.
- **On**: the phone automatically erases old messages in order to receive new messages.

Auto signature *(Menu 6-13-3)*

set your signature to be added to the end of messages and enter the signature.

Entry mode *(Menu 6-12-4)*

You can select a default text input mode when creating a new message.

Memory info *(Menu 6-14*

Use this menu to view the total amount of memory for SMS messages and MMS messages. You can also check the amount of memory currently in use and remaining.

Entertainment *(Menu 7)*

Games *(Menu 7-1)*

Use this menu to access online games provided with your service provider.

Voice Portal *(Menu 7-2)*

Use this menu to access this voice-activated service and get audio content, such as headline news, information on movies, the weather, finance, and traffic, supplied by your service provider.

For further details, contact your service provider.

Vivo Informa *(Menu 7-3)*

Use this menu to dial the Vivo service center for more information.

WAP *(Menu 8)*

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

To access this menu, press <**ao VIVO**> in Idle mode and select **WAP**.

Home

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

Favorites

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

Quiz

You can access the preset web page and play a quiz game.

Cupido

You can access the matchmaker service to find someone special for you.

Tones and Images

You can download ringtones and images from the web page preset by your service provider.

Guides and Leisure

You can access the guide and leisure web page and get information about cultural activities.

Portal

You can access a portal web site provided by your service provider.

Sports

You can read latest sports news and access live scores and match reports.

Games

You can access the preset web page and play your favorite games.

Vivo em Ação

You can access the preset web page and play an online Q&A game.

Cabum

You can access the preset web page and play an online war game.

Banks

You can access the list of online mobile banking web sites.

Vivo Chat

You can use the web browser chatting service. For further details about this service, contact your service provider.

Messenger

You can access the web browser Instant Messenger (IM) service. For further details about this service, contact your service provider.

E-mail

You can access the web browser e-mail service. For further details about this service, contact your service provider.

Go To...

Use this menu to manually enter a URL address and access the associated web page.

Options

Use this menu to set how your phone reacts to a certain situation while browsing the web.

Prompt

You can set the phone to alert you of your browsing status.

- **None**: the phone does not prompt you.
- **To Start**: the phone alerts you when you launch the browser.
- **To End**: the phone alerts you when you exit the browser.
- **Both**: the phone alerts you when you both launch and exit the browser.

Message option

You can set what happens if you receive a new web alert message from the web server.

- **Permit**: the phone automatically accepts new push messages.
- **Ask**: the phone prompt you to accept or reject new push messages.
- **Deny**: the phone rejects new push messages.

More *(Menu 9)*

You can use various phone functions.

Tools *(Menu 9-1)*

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

It also enables you to use the phone as a calculator, to count down to a specified day, and to set the current time and date.

To access this menu, press <**ao VIVO**> in Idle mode and select **More** → **Tools**.

Today *(Menu 9-1-1)*

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

For further details about storing items, see the appropriate section.

While viewing the Today view or an event, press <**Menu**> to access the following options:

- **Add New**: add a new event.
- **Erase**: erase the event.
- **Erase All**: erase all of the events for the selected date.

Calendar *(Menu 9-1-2)*

When you enter the **Calendar** menu, the calendar in Month view appears with today's date indicated by a blue box. The selected day is underlined and days with scheduled events are indicated by a red box.

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

- **View**: access the stored memo(s) for that date.
- **Add New**: add a new event on the day.
- **Erase All**: erase all of the selected events.
- **Jump to date**: go to a specific date you entered.

Entering a new scheduled event

1. Scroll to a date on the calendar.
2. Press <**Menu**> and select **Add New**.
3. Enter the event information and press [**OK**].
4. Enter the starting/ending time and date for the event.

   ☑ You can change between AM and PM in 12-hour time format. Press [**2**] for **A**(AM) or [**7**] for **P**(PM).

5. Select when an alarm alerts you to your event.
6. Press [**OK**] or <**Save**> to save the event.

Viewing an event

Square brackets on a calendar date indicate events scheduled for that day:

1. Select a date on the calendar to display the events for the day.
2. Select an event to view its details.
3. Press <**Menu**> to access the following options:
   - **Edit**: edit the event information.
   - **Erase**: erase the selected event.

- **Add New**: add a new event.

Task list *(Menu 9-1-3)*

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

Creating a new task

1. Enter the task content and press [**OK**].
2. Enter a deadline time and date.
3. Scroll to the **Priority** field and select a priority.
4. Press <**Save**>.

Viewing a task

1. Scroll to a task.
2. Press [**OK**] to view the task details.
3. Press <**Menu**> to access the following options:
   - **Edit**: edit the selected task.
   - **Erase**: erase the selected task.
   - **Add New**: add a new task.

Memo pad *(Menu 9-1-4)*

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

Creating a new memo

1. Enter a memo.
2. Press [**OK**].

Viewing a memo

1. Scroll to a memo.
2. Press [**OK**] to view the memo details.
3. Press <**Menu**> to access the following options:
   - **Edit**: edit the memo.
   - **Erase**: erase the selected memo.
   - **Add New**: add a new memo.

Alarm *(Menu 9-1-5)*

Use this menu to set alarms to sound at specific times.

Setting an alarm

1. Select the type of alarm.
2. Press [Left] or [Right] to select **On** and press [Down].
3. Enter a specific time for the alarm to sound and select an alarm tone. Press [Down].
4. Select a repeat option and press <**Save**>.

Stopping an alarm

- Press the any key to stop the alarm.
- To deactivate an alarm setting, select an alarm you have set and select **Off** and press <**Save**>.

Calculator *(Menu 9-1-6)*

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

1. Enter the first number.

   Press [*] to insert a decimal point.

   Press [#] to change the sign of a number to a negative (-).
2. Press one of the Navigation keys to access the math function you want.
3. Enter the second number.
4. Press <**Cal.**> to view the result.
5. To reset the calculator, press [**CLR**].

World time *(Menu 9-1-7)*

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

Scroll through the map by pressing the Navigation keys.

To apply the DST (Daylight Savings Time) setting, press <**Set DST**>.

To cancel the setting, select <**Unset DST**>.

Count down *(Menu 9-1-8)*

Use this menu to count how many days are left until a specific day comes.

1. Enter information for the count down timer and press [**OK**].
2. Enter the date you want to count down from and press <**Save**>.

Viewing a countdown timer

1. Scroll to a timer.
2. Press [**OK**] to view the timer details.
3. Press <**Menu**> to access the following options:
   - **Edit**: edit the selected timer.
   - **Erase**: erase the selected timer.
   - **Add New**: add a new timer.

Help *(Menu 9-2)*

Use this menu to view information about your phone.

Customer Care Center *(Menu 9-2-1)*

calls the call center.

International roaming *(Menu 9-2-2)*

dial the roaming service center, depending on your current location, or access more information about your service provider.

Phone info *(Menu 9-2-3)*

Use this menu to view information about your phone.

Version *(Menu 9-2-3-1)*

display the phone information.

My phone# *(Menu 9-2-3-2)*

display your phone number.

Icon glossary *(Menu 9-2-4)*

display icons shown on the screen when you use the phone.

Voice tools *(Menu 9-3)*

Use this menu to access voice-related features.

Voice command *(Menu 9-3-1)*

Your phone can perform functions or access specific menus via your voice commands.

1. Access the **Voice command** menu to activate voice recognition. You can also press and hold [∗] in Idle mode.

   The following features are available:

   - **Voice Dial**: dial a number by saying an entry name or phone number.
   - **Phonebook**: open the Phonebook list.
   - **Voice Notes**: record a voice memo.
   - **Voice Mail** : access the **Voice Mail** menu.
   - **Voice Portal**: access the **Voice Portal** menu.
2. State the name of the desired feature.
3. Follow the corresponding menu procedure.

Settings *(Menu 9-3-2)*

Use this menu to customize settings for voice tools.

Digit Dialing *(Menu 9-3-2-1)*

Use this menu to set the phone to better recognize your voice for voice dialing, and also to reset settings.

- **Adapt Digits**: adapt your phone to recognize your vocal style and pronunciation for each digit. Follow the voice prompts to adapt the phone.
- **Reset Digits**: return to default settings.

Sensitivity *(Menu 9-3-2-2)*

Use this menu to adjust the sensitivity level of your phone to better recognize your voice.

Choice Lists *(Menu 9-3-2-3)*

Use this menu to set the phone to require confirmation of your voice commands when using Name dialing, Digit dialing or accessing Phonebook.

The following options are available for each item:

- **Automatic**: the phone ask for confirmation when results are not clear.
- **Always On**: the phone ask for confirmation at all times.
- **Always Off**: the phone does not require confirmation.

For further information about this feature, press <**Help**> on each item screen.

Sound *(Menu 9-3-2-4)*

Use this menu to configure sound settings for voice dialing.

- **Prompts**: turn on or off audio prompts.
- **Digits**: turn on or off audio playback for digit dialing.
- **Names**: turn on or off audio playback for name dialing.
- **Name Settings**: adjust settings for the speed and volume for name dialing.

Voice Launch *(Menu 9-3-2-5)*

Use this menu to set how voice dialing is initiated.

- [⁎] **Only**: launch voice dialing by pressing and holding [⁎] in Idle mode.
- [⁎] **/ Folder**: launch voice dialing by pressing and holding [⁎] or by opening the phone.

About *(Menu 9-3-2-6)*

Use this menu to display information about the voice command programme.

Voice Notes *(Menu 9-3-3)*

Use this menu to record voice memos.

Record *(Menu 9-3-3-1)*

You can record up to 10 voice memos of up to 1 minute each.

1. Speak into the microphone.

Press <**Pause**> to pause recording.

Press <**Resume**> to resume.

2. When you have finished, press <**Finish**>.

Review *(Menu 9-3-3-2)*

You can access and play the memos you have recorded.

1. Scroll to a voice memo.
2. Press [**OK**] to view details, or press <**Options**> to access the following options:
   - **Erase**: delete the selected memo.
   - **Erase All**: delete all memos.
   - **Rename**: change the memo name.
   - **Information**: display the memo information.
3. Press [**OK**] .

Erase all *(Menu 9-3-3-3)*

You can delete all recorded voice memos at one time.

When a confirmation message appears, press <**Yes**>.

Settings *(Menu 9-4)*

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

Call settings *(Menu 9-4-1)*

Auto answer *(Menu 9-4-1-1)*

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

Call answer *(Menu 9-4-1-2)*

Use this menu to set how to answer incoming calls.

- **Any key**: answer calls when you press any key except for [ ], [▲/▼], and <**Ignore**>.
- **Send key**: answer calls only when you press [ ] and <**Answer**>.
- **Folder open**: the phone answers when you open the phone. If the phone is already open, press [ ].

Auto retry *(Menu 9-4-1-3)*

Use this menu to set the phone to automatically redial calls when a connection fails.

Auto CSP *(Menu 9-4-1-4)*

Use this menu to set the phone to automatically add the CSP (Carrier Selection Code) of your long distance call service to the entered number when making a call

Message settings *(Menu 9-4-2)*

Use this menu to set up various options for sending or receiving SMS messages. ▶ p. 42

Vivo Encontra *(Menu 9-4-3)*

Use this menu to activate LBS (Location Based Services) to find current position information or to let other devices locate you.

WAP settings *(Menu 9-4-4)*

Prompt *(Menu 9-4-4-1)*

Use this menu to set the phone to alert you of your browsing status.

- **None**: the phone does not prompt you.
- **To Start**: the phone alerts you when you launch the browser.
- **To End**: the phone alerts you when you exit the browser.
- **Both**: the phone alerts you when you both launch and exit the browser.

Message option *(Menu 9-4-4-2)*

Use this menu to set what happens if you receive a new web alert message from the WAP server.

- **Permit**: the phone automatically accepts new WAP push messages.
- **Ask**: the phone prompt you to accept or reject new WAP push messages.
- **Deny**: the phone rejects new WAP push messages.

Security *(Menu 9-4-5)*

Use this menu to protect the phone against unauthorized use.

To access the **Security** menu, you must enter the phone password. The password is preset to **0000**.

Lock phone *(Menu 9-4-5-1)*

Use this menu to lock the phone.

- **Unlocked**: the phone remains unlocked.
- **On power-up**: the phone is locked automatically each time you turn it on.
- **Lock now**: the phone is lock immediately.

When the phone is locked, you must enter your phone password each time you access menu functions.

Change lock *(Menu 9-4-5-2)*

Use this menu to change your phone password. The password is preset to **0000**.

Call restriction *(Menu 9-4-5-3)*

Use this menu to restrict all outgoing call functions on the phone and access to your Phonebook.

When this feature is enabled, you must enter the phone password to access restricted functions. The password is preset to **0000**.

Voice privacy *(Menu 9-4-5-4)*

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.

Modem *(Menu 9-4-5-5)*

Your phone can be used as a standard modem on a PC for sending and receiving digital data when connected to a Windows computer. Using your phone as a modem, you can wirelessly access data from Windows software applications.

> ☑ The phone must be on a digital network to receive or send data.

Use this menu to change the phone mode for being used as a modem.

- **Voice call only**: receive voice calls only.
- **Data in only**: receive data calls only.

Emergency # *(Menu 9-4-5-6)*

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

To make a emergency call in Lock mode, enter a programmed number and then press [ ].

IMPORTANT NOTICE

Emergency calling may not be available on all wireless networks at all times. A connection cannot always be guaranteed, due to various transmission methods, network parameters, and user settings used to complete a call from your wireless phone.

DO NOT depend on this phone as a primary method of dialing 190,192,193 or for any other essential or emergency communications.

Remember to always turn your phone on and check for adequate signal strength before placing a call.

Erase phonebook *(Menu 9-4-5-7)*

Use this menu to erase all data stored in the phone's memory.

When a confirmation message displays, select **Yes**.

Reset phone *(Menu 9-4-5-8)*

Use this menu to reset the original phone settings, display settings, and sound settings individually. You can also reset all the settings in your phone at the same time.

System *(Menu 9-4-6)*

This menu provides you with options for selecting a network.

Set system *(Menu 9-4-6-1)*

Roaming allows you to register your phone on other networks and use the facilities, if your own network is not available. Roaming is only relevant in areas where there are at least two cellular service providers having valid roaming agreements.

When you are using another network, the Roaming icon ( ) appears.

- **Home Only**: you cannot roam. When your home system is not available, and the No service icon ( ) appears and you cannot make or receive calls.
- **Standard**: your phone automatically searches for the first available service.

Set time *(Menu 9-4-6-2)*

When you need to manually enter the current time and date in specific areas where call service reception is weak, use this menu to set the time and date on the idle screen. Only then you can use the Planner features when outside a call service area.

Enter the time and date using the numeric keys and press <**Save**>.

Select NAM *(Menu 9-4-6-3)*

Your phone can have two NAMs (Numerical Assignment Module), essentially your phone number. Use this menu to switch your service back and forth between the two.

If you change the NAM, the phone turns off by itself and then back on to acquire service using the new NAM.

PRL enable *(Menu 9-4-6-4)*

Your phone can find a cellular service provider's network on the Preferred Roaming List (PRL), a graded list of bands and channels which the phone uses when it attempts to locate and connect to a network while roaming. In this menu, you can activate or deactivate the use of the PRL.

- **Enable**: the phone searches and lists all of the network providers' networks available for your area.
- **Disable**: the phone searches for the default channel to locate your own network.

Exposure to Radio Frequency (RF) Signals

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

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

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

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

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

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

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

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

For body operation

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

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

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

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

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

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

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

Precautions when using batteries

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

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

Road safety

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

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

- Get to know your wireless phone and its features, such as speed dial and redial. If available, these features help you to place your call without taking your attention off the road.

- When available, use a hands-free device. If possible, add an extra layer of convenience and safety to your wireless phone with one of the many hands-free accessories available today.
- Position your wireless phone within easy reach. Be able to access your wireless phone without removing your eyes from the road. If you get an incoming call at an inconvenient time, let your voice mail answer it for you.
- Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow, ice, and even heavy traffic can be hazardous.
- Do not take notes or look up phone numbers while driving. Jotting down a To Do list or flipping through your Address Book takes your attention away from your primary responsibility, driving safely.
- Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan calls when your car will be stationary. If you need to make a call while moving, dial only a few numbers, check the road and your mirrors, then continue.
- Do not engage in stressful or emotional conversations that may be distracting. Make the people with whom you are talking aware that you are driving and suspend conversations that have the potential to divert your attention from the road.
- Use your wireless phone to call for help. Dial the emergency number in the case of fire, traffic accident or medical emergencies. Remember, it is a free call on your wireless phone!
- Use your wireless phone to help others in emergencies. If you see a car accident, crime in progress or other serious emergency where lives are in danger, call the emergency number, as you would want others to do for you.

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

Operating environment

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

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

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

Electronic devices

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

Pacemakers

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

Persons with pacemakers:

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

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

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

Hearing aids

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

Other medical devices

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

Vehicles

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

Posted facilities

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

Potentially explosive environments

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

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

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

Emergency calls

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

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

To make an emergency call:

If the phone is not on, switch it on.

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

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

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

Other important safety information

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

Care and maintenance

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

- Keep the phone and all its parts and accessories out of the reach of small children's.
- Keep the phone dry. Precipitation, humidity and liquids contain minerals that will corrode electronic circuits.
- Do not use the phone with a wet hand. Doing so may cause an electric shock to you or damage to the phone.
- Do not use or store the phone in dusty, dirty areas, as its moving parts may be damaged.
- Do not store the phone in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not store the phone in cold areas. When the phone warms up to its normal operating temperature, moisture can form inside the phone, which may damage the phone's electronic circuit boards.
- Do not drop, knock or shake the phone. Rough handling can break internal circuit boards.
- Do not use harsh chemicals, cleaning solvents or strong detergents to clean the phone. Wipe it with a soft cloth slightly dampened in a mild soap-and-water solution.
- Do not paint the phone. Paint can clog the device's moving parts and prevent proper operation.
- Do not put the phone in or on heating devices, such as a microwave oven, a stove or a radiator. The phone may explode when overheated.
- Use only the supplied or an approved replacement antenna. Unauthorized antennas or modified accessories may damage the phone and violate regulations governing radio devices.
- If the phone, battery, charger or any accessory is not working properly, take it to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

Acknowledging Special Precautions and the FCC and Industry Canada Notice

FCC Notice and Caution

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

Cautions

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

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

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

Appendix A: CERTIFICATION INFORMATION (SAR)

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

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

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate (SAR). The SAR limit set by the FCC is 1.6 W/kg. SAR Tests are conducted using standard operating positions accepted by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the

network. In general, the closer you are to a wireless base station antenna, the lower the power output.

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

The highest SAR values of this model phone as reported to FCC are Head:1.23 W/Kg, Body-worn: 0.664W/Kg.

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

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

SAR information on this and other model phones can be viewed on-line at www.fcc.gov/oet/fccid. This site uses the phone FCC ID number, A3LSCHL310 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.

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

Appendix B: Guide to Safe and Responsible Wireless Phone Use

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

A Guide to Safe and Responsible Wireless Phone Use

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

But an important responsibility accompanies those benefits, one that every wireless phone user must uphold. When driving a car, driving is your first responsibility. A wireless phone can be an invaluable tool, but good judgment must be exercised at all times while driving a motor vehicle whether on the phone or not.

The basic lessons are ones we all learned as teenagers. Driving requires alertness, caution and courtesy. It requires a heavy dose of basic common sense-keep your head up, keep your eyes on the road, check your mirrors frequently and watch out for other drivers.
It requires obeying all traffic signs and signals and staying within the speed limit. It means using seat belts and requiring other passengers to do the same.

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

Wireless Phone "Safety Tips"

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

1. Get to know your wireless phone and its features such as speed dial and redial. Carefully read your instruction manual and learn to take advantage of valuable features most phones offer, including automatic redial and memory. Also, work to memorize the phone keypad so you can use the speed dial function without taking your attention off the road.
2. When available, use a hands free device. A number of hands free wireless phone accessories are readily available today. Whether you choose an installed mounted device for your wireless phone or a speaker phone accessory, take advantage of these devices if available to you.
3. Position your wireless phone within easy reach. Make sure you place your wireless phone within easy reach and where you can grab it without removing your eyes from the road. If you get an incoming call at an inconvenient time, if possible, let your voice mail answer it for you.
4. Suspend conversations during hazardous driving conditions or situations. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow and ice can be hazardous, but so is heavy traffic. As a driver, your first responsibility is to pay attention to the road.
5. Do not take notes or look up phone numbers while driving. If you are reading an address book or business card, or writing a "to do" list while driving a car, you are not watching where you are going. It's common sense. Don't get caught in a dangerous situation because you are reading or writing and not paying attention to the road or nearby vehicles.

6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan your calls before you begin your trip or attempt to coincide your calls with times you may be stopped at a stop sign, red light or otherwise stationary. But if you need to dial while driving, follow this simple tip-dial only a few numbers, check the road and your mirrors, then continue.
7. Do not engage in stressful or emotional conversations that may be distracting. Stressful or emotional conversations and driving do not mix-they are distracting and even dangerous when you are behind the wheel of a car. Make people you are talking with aware you are driving and if necessary, suspend conversations which have the potential to divert your attention from the road.
8. Use your wireless phone to call for help. Your wireless phone is one of the greatest tools you can own to protect yourself and your family in dangerous situations-with your phone at your side, help is only three numbers away. Dial 9-1-1 or other local emergency number in the case of fire, traffic accident, road hazard or medical emergency. Remember, it is a free call on your wireless phone!
9. Use your wireless phone to help others in emergencies. Your wireless phone provides you a perfect opportunity to be a “Good Samaritan” in your community. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.
10. Call roadside assistance or a special wireless non emergency assistance number when necessary. Certain situations you encounter while driving may require attention, but are not urgent enough to merit a call for emergency services. But you still can use your wireless phone to lend a hand. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured or a vehicle

you know to be stolen, call roadside assistance or other special non-emergency wireless number.

Careless, distracted individuals and people driving irresponsibly represent a hazard to everyone on the road. Since 1984, the Cellular Telecommunications Industry Association and the wireless industry have conducted educational outreach to inform wireless phone users of their responsibilities as safe drivers and good citizens. As we approach a new century, more and more of us will take advantage of the benefits of wireless telephones.
And, as we take to the roads, we all have a responsibility to drive safely.

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

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

Appendix C: Consumer Update on Wireless Phones

U.S. Food and Drug Administration

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

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

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

2. Do wireless phones pose a health hazard?

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

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

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

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

- Support needed research into possible biological effects of RF of the type emitted by wireless phones;

- Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and
- Cooperate in providing users of wireless phones with the best possible information on possible effects of wireless phone use on human health

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

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

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

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

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

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

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

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

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

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

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

6. What about children using wireless phones?

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

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

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

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

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

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

9. What about wireless phone interference with medical equipment?

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

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

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

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

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

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

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

A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the data that are needed. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer promoting effect if one exists. Epidemiological studies can provide data that is directly applicable to human populations, but 10 or more years follow-up may be needed to provide answers about some health effects, such as cancer. This is because the interval between the time of exposure to a cancer-causing agent and the time tumors develop - if they do - may be many, many years. The interpretation of epidemiological studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones. Many factors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

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

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

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

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

Occupational Safety and Health Administration's (OSHA):
http://www.osha-slc.gov/SLTC/radiofrequencyradiation/index.html

National Institute for Occupational Safety and Health (NIOSH):
http://www.cdc.gov/niosh/emfpg.html

World health Organization (WHO):
http://www.who.int/peh-emf/

International Commission on Non-Ionizing Radiation Protection:
http://www.icnirp.de

National Radiation Protection Board (UK):
http://www.nrpb.org.uk

Updated 4/3/2002: US Food and Drug Administration
http://www.fda.gov/cellphones

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