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

SAMSUNG ELECTRONICS



World Wide Web http://www.samsungmobile.com Printed in Korea Code No.:GH68-xxxxA English. 08/2006. Rev. 1.0



SCH-U510 User's Guide

Important safety precautions

 $\overline{\mathbf{V}}$

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

Drive safely at all times

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

Switch off the phone when refuelling

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

Switch off in an aircraft

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

Switch off the phone near all medical equipment

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

Interference

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

Be aware of special regulations

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

Water resistance

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

Sensible use

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

Emergency calls

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 82.

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, < Menu>



30

Your phone is capable of operating in a 3G environment, allowing much greater data transfer speed and video streaming.

Special features of your phone



Camera and camcorder

Lies the same medule of

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



MP3 player

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



Web browser

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



Memory disk

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



Bluetooth

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



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

Touch keypad

Your phone has a touch-sensitive keypad. You can access a desired function with a touch on the keypad.



Name card

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



Multimedia Message Service (MMS)

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



Planner

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



• Voice recorder

Record memos or sounds.



Translator

Translate words into the language you want.

Contents

Unpack	6
Make sure you have each item	
Your phone	6
Buttons, features, and locations	
Get started	7
First steps to operating your phone	
Install and charge the phone Power on or off. Keys and display Access menu functions Customize your phone. Make/Answer calls	
Step outside the phone	16
Begin with your camera, the MP3 player, the special features	web, and other
Use the camera	16

Play MP3s. Browse the web. Use Phonebook Send messages View messages Use Bluetooth	18 20 21 22
Use a memory card	
Enter text	25
T9 English, Alphabet, 123, and Symbol modes	
Call functions	27
Advanced calling features	
Menu functions	31
All menu options listed	
Solve problems	81
Health and safety information	83

Overview of menu functions

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

1 Calls	▶ p. 38	4 Play 3G	▶ p. 44
1 All Calls 2 Received 3 Sent 4 Missed 5 Calls Time 6 Data time 7 Data volume	 p. 38 p. 38 p. 38 p. 38 p. 38 p. 39 p. 39 	1 Player 3G 2 MP3 Player 3 Photos/Images 4 Videos 5 Musics 6 Tones 7 Memory info 8 Key cleanup	 p. 44 p. 44 p. 46 p. 46 p. 46 p. 47 p. 48 p. 48
3 My Vivo	▶ p. 41	5 Phonebook 1 Find 2 Voice Mail	▶ p. 49 ▶ p. 49 ▶ p. 50
1 Main Menu 2 Main Keys 3 Sounds 4 Display 5 Idioma/Language	 p. 41 p. 41 p. 41 p. 43 p. 44 	3 Vivo Agenda 4 Add new entry 5 Speed dial 6 Group edit 7 My info 8 vCard 9 Memory info	 p. 50 p. 50 p. 50 p. 51 p. 51 p. 52 p. 52 p. 52
		6 Messages	▶ p. 53

1 New message 2 Received 3 Sent 4 Voice Mail 5 Messenger 6 Vivo Chat 7 E-mail 8 Templates 9 Saved 10 Drafts 11 WAP alert 12 Settings 13 Memory info	 p. 53 p. 54 p. 55 p. 56 p. 57 p. 57 p. 57 p. 58 p. 61 	
7 Entertainment	▶ p. 61	
1 Games 2 Voice Portal 3 Vivo Informa	▶ p. 61 ▶ p. 61 ▶ p. 61	
8 WAP	▶ p. 61	

3 4	9 Tools	▶ p. 64
5 6	1 Planner 2 Translator	▶ p. 64 ▶ p. 70
7 7	* Voice Mail	▶ p. 71
7 7		
8	0 Settings	▶ p. 71
8 8 1 1 1 1	1 Call settings 2 Msg. settings 3 Vivo Encontra 4 WAP settings 5 Security 6 System 7 Bluetooth 8 External memory	▶ p. 71 ▶ p. 72 ▶ p. 72 ▶ p. 72 ▶ p. 73 ▶ p. 75 ▶ p. 76 ▶ p. 79
1	# Help	▶ p. 80
	 Customer Care Center International roaming Phone info Icons glossary 	p. 80p. 80p. 80p. 80p. 80

Unpack

Make sure you have each item



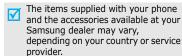
Phone Travel Adapter





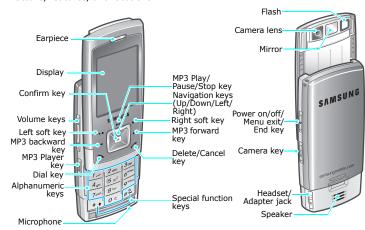
Battery Memory card User's Guide

You can obtain various accessories from your local Samsung dealer.



Your phone

Buttons, features, and locations



Get started

First steps to operating your phone

Install and charge the phone

Install the battery.



Reattach the battery cover.



To remove the battery cover.



If the phone is already on, first turn it off by pressing and holding

Plug the travel adapter into the phone.



- 4 Plug the adapter into a standard AC wallet.
- When the phone is completely charged (the battery icon becomes still), unplug the adapter from the power outlet.
- 6 Remove the adapter from the phone.



Low battery indicator

When the battery is low:

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

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

Power on or off

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

Keypad lock

When you close the phone, the keypad lock feature locks the exposed keys to avoid accidental key presses.

Press and hold $[\blacktriangle/\blacktriangledown]$.

Airplane mode

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

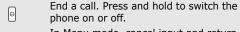
To switch to Airplane mode, press **<ao VIVO>** and select **Settings** \rightarrow **Call settings** \rightarrow **Airplane mode** \rightarrow **On**.

In Airplane mode, you can use non-wireless functions, such as games, camera, and MP3 player.

Keys and display

Key(s)	Description
	Perform the function indicated on the bottom line of the display.
(ox	In Idle mode, access your favorite menus directly. ▶ p. 41 In Menu mode, scroll through menu options.
OK	In Menu mode, select the highlighted menu option or confirm input. In Camera mode, take a photo or record a video.
H	In MP3 player, play or pause music.
144	Return to the previous file during music playback.
PPI	Skip to the next file during music playback.

5	Make or answer a call. In Idle mode, retrieve numbers recently dialed, missed, or received.
C	Delete characters from the display. Display missed calls and events, if you have.
1 : :	Enter numbers, letters, and some special characters.
* • • # • ·	Enter special characters. In Idle mode, press and hold [#] to activate or deactivate Silent mode.
•	Adjust the phone volume. In Idle mode, with the phone open, adjust the keypad tone volume. With the phone closed, press and hold to turn on the external display.



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

In Idle mode, enter the Multimedia menu. Press and hold to turn on the camera.

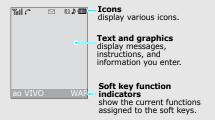
> In Camera mode, take a photo or record a video.

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

In Idle mode, enter the MP3 menu. Press and hold to launch the MP3 player.

Display

Layout



[cons	Tall	Received signal strength
	0	Call in progress
	To	Out of your service area; you cannot send or receive calls
	Rull	Roaming network
	D	Digital mode active
	18	1x RTT mode active
	36	EVDO mode active
	T	Alarm set ▶ p. 67



New MMS message

New SMS & MMS message

New voicemail

New push message

New push message & voicemail

Bluetooth active ▶ p. 76

Blue: Active

Red: Connected to another device

Ringer volume setting ▶ p. 41

♪ 1 Beep or Level 1~8

Silent

Will Vibration

Vib + Ring

₩<mark>-</mark>|| Silent mode

Auto answer mode

Remaining power level

Location is active

Browser SSL active

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

1. Press the appropriate soft key. 2. Press the Navigation keys to move to the next or previous option. 3. Press < Select > or [OK] to confirm the function displayed or option highlighted. 4. To exit, choose either of the following methods: Press < Back > or [] to move up one level. Press [n] to return to Idle mode. Press the number key corresponding to the option you want. For the index numbers 10, 11 and 12, press [*], [0], and [#],

respectively.

Customize your phone

Display language

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

Call ringer melody

- In Idle mode, press <ao VIVO> and select My Vivo → Sounds → Ringer type → Call.
- 2. Select a ringtone category.
- 3. Select a ringtone.
- 4. Press **Select** or **[OK]**.

Idle mode wallpaper

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

For the main display:

- In Idle mode, press <ao VIVO> and select My Vivo → Display → Main screen → Wallpaper.
- 2. Press [Left] or [Right] to select an image category.
- 3. Scroll to an image or video.
- 4. Press < Preview >.
- 5. Press < Select > or [OK].

Menu mode appearance

You can customize the appearance of Menu mode.

For Menu Style:

- In Idle mode, press <ao VIVO>.
- 2. Press < Options > and select Menu Style.
- 3. Select a menu style.

For Focus Effect:

- 1. In Idle mode, press <ao VIVO>.
- 2. Press **Options** and select **Focus effect**.
- 3. Select an effect.

For Background:

- 1. In Idle mode, press <ao VIVO>.
- Press **Options** and select **Background**.
- 3. Select an image.

Display Banner

You can change the banner on the main display.

- In Idle mode, press <ao VIVO> and select My Vivo → Display → Main screen → Banner.
- 2. Select **Visible** and press [Down].
- 3. Enter your banner message and press [Down].
- 4. Select a text color.
- Press < Preview > to preview your banner.
- 6. Press **<Select>** or **[OK]**.

Menu shortcuts

You can set the Navigation keys to function as shortcuts to access your favorite menus.

- In Idle mode, press <ao VIVO> and select My Vivo → Main keys.
- 2. Select a key.
- 3. Select a menu to be assigned to the key.
- 4. Press [**OK**].

Silent mode

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

Press and hold [#] in Idle mode.

Phone lock

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

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

Make/Answer calls

Make a call

- 1. In Idle mode, enter an area code and phone number.
- 2. Press [,].
- 3. To end the call, press [$_{\scriptsize 0}$].

Answer a call

- When the phone is ringing, press [↑] or <Answer>.
- 2. To end the call, press [$_{\odot}$].

Adjust the volume during a call

Press [▲/▼].

Step outside the phone

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

Use the camera

Take a photo

- Open the phone.
- 2. In Idle mode, press and hold [🖾].
- 3. Aim the lens at the subject and make any desired adjustments.
- 4. Press [1621] or [1625] to take a photo.
- 5. Press [1821] or [**OK**] to save the photo.

View a photo

- 1. In Idle mode, press [18] and select **My photos**.
- 2. Press [Down].
- 3. Scroll to the photo you want and press <**View**>.

Record a video

- In Idle mode, press [3] and select Camcorder to turn on the camcorder.
- 2. Press [18] or [**OK**] to start recording.
- 3. Press [18] or [**OK**] to stop recording.
- 4. Press [15] or [**OK**] to save the video.

Play a video

- 1. In Idle mode, press [☎] and select **My videos**.
- 2. Press [Down].
- Scroll to the video you want and press <**Play**>.

Play MP3s

Copy MP3 files to the phone

Use these methods:

- Download from the wireless web ▶ p. 44
- Copy to a memory card and insert the card into the phone.
 p. 23

Create a play list

- In Idle mode, press [MP3] and select MP3 files.
- 2. From the MP3 player screen, press [Up].
- Press < Add > and select a folder.
- Press [OK] to select the files to be added and then press <Add>.

Play MP3 files

- 1. In Idle mode, press [MP3].
- During playback, use the following keys:
 - [▶II]: pauses or resumes playback.
 [I◄◄]: moves to the previous
 - [I◄]: moves to the previous file or the beginning of the file. Moves backward in a file when held down.
 - [▶►I]: skips to the next file. Moves forward in a file when held down.
 - [*]: changes the play time.
 - <OK>: opens the option list.
 - **<Up>**: opens the play list.
 - [▲/▼]: adjusts the volume.
 - <Left>: sets a section in a file to play the section repeatedly.
 - < Right>: mutes the sound.

Browse the web

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

Launch the web browser

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

Navigate the web

- To access browser options, press <ao VIVO> and select WAP.
- press the Navigation keys.

To scroll through browser items,

- To select an item, press [OK].
- To return to the previous page, press [←].
- To return to the home page, press and hold [?].

Use Phonebook

Add an entry

As a new entry:

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

To an existing entry:

- In Idle mode, enter a phone number and press [OK].
- 2. Select **Existing Entry**.
- 3. Select a search method.

- Enter the first few letters of the name you want, enter a speed dial number, or select a caller group.
- 5. Select an entry.
- 6. Select a number type.
- Press < Save > to save the entry.

Find an entry

- In Idle mode, press <ao VIVO> and select Phonehook → Find.
- 2. Select a search method.
- Enter the first few letters of the name you want, enter a speed dial number, or select a caller group.
- 4. Scroll to an entry.
- Press [Left] or [Right] to display the number you want and press \(\) to dial.

Create and send a name card

- In Idle mode, press <ao VIVO> and select Phonehook → vCard.
- Press < Options > and select Edit.
- 3. Specify your contact information.
- Press < Save > to save the name card.
- To send the name card via MMS or Bluetooth, press < Options> and select Send vCard.

Send messages

Send a text message (SMS)

- In Idle mode, press <ao VIVO> and select Messages → New Message → SMS message.
- Enter destination numbers and press < Next>.
- Enter the message text and press < Next>.
- Press < Send > to send the message.

Send a multimedia message (MMS)

- In Idle mode, press <ao VIVO> and select Messages → New Message → MMS Message.
- Enter destination numbers or addresses and press < Next>.
- 3. Select Add Photo/Video.
- 4. Add an image or video clip.

- Select Add sound.
- 6. Add a music file, sound clip, voice memo.
- 7. Select **Add message**.
- 8. Enter the message text and press [**OK**].
- 9. Select **Add subject**.
- Enter the message subject and press [OK].
- 11. Select Add vCard.
- Attach your name card or a Contacts entry as a name card.
- 13. Press **<Send>** to send the message.

View messages

View a text message

When a notification appears:

Press **<View>**. The message displays.

From the Inbox:

- In Idle mode, press <ao VIVO> and select Messages → Received.
- 2. Select an SMS message.

View a multimedia message

When a notification appears:

Press **<Down>**. The message will be downloaded from the server and displays.

From the Inbox:

- In Idle mode, press <ao VIVO> and select Messages → Received.
- Press < Down>. The message will be downloaded from the server and displays.

Access voicemails

When a notification appears:

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

From the Messages menu:

- In Idle mode, press [1]. The phone dials the voicemail center.
- 2. Follow the instructions from the system.

Use Bluetooth

Your phone is equipped with Bluetooth technology enabling you to connect the phone wirelessly to other Bluetooth devices.

Turn on Bluetooth

- In Idle mode, press <ao VIVO> and select Settings → Bluetooth → Activation → On.
- Select Visibility → On to allow other devices to find your phone.

Search for and pair with a Bluetooth device

- In Idle mode, press <ao VIVO> and select Settings → Bluetooth → Trusted devices.
- 2. Press <Add>.
- Scroll to a device and press <**Add**>.
- Enter a Bluetooth PIN or the other device's Bluetooth PIN, if it has one, and press [OK].
 When the owner of the other device enters the same code, paring is complete.
- 5. Scroll to the device you want and press **<Connect>**.
- Your phone enables an Internet connection when the phone is connected to a PC via Bluetooth dongle.

Use a memory card

Using the supplied microSD memory card, you can enlarge your phone's memory capacity so that you can store more photos, video clips, and music files.

Important memory card information

- Frequent erasing and writing will shorten a card's lifespan.
- Do not remove a card from the phone or turn off the phone while data is being accessed or transferred. This could result in loss of data and/or damage to the card or phone.
- Do not subject cards to strong shocks.
- Do not touch card terminals with your fingers or metal objects. If dirty, wipe the card with a soft cloth.

- Keep cards away from small children or pets.
- Do not expose cards in a place subject to electro static discharge and/or electrical noise.

Insert a memory card

- 1. Remove the battery.
- Unlock the memory card cover by sliding the card cover left, as shown, and open the cover.



Insert a memory card (continued)

Slide a memory card into the card slot, with the label side face up.



 Close the card cover and lock the cover by sliding the card cover right, as shown.



Use a card adapter

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

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

Enter text

T9 English, Alphabet, 123, and Symbol modes
You can enter text for some features, such as
Messaging, Phonebook, or Planner, using T9 English
mode, Alphabet mode, 123 mode, and Symbol mode.

Changing the text input mode

- Press and hold [*] to switch to T9 English mode, Alphabet mode, and Number mode.
- Press < Options > and select Symbols to switch to Symbol mode.

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

Other T9 English mode operations

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

Using Alphabet mode

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

Key	Characters in order displayed		
Rey	Upper case	Lower case	
1	. @ ? ! - , & :	' carrige return 1	
2	A B C 2	a b c 2	
3	DEF3	d e f 3	
4	GHI4	9 h i 4	
5	JKL5	j k 5	
6	M N O 6	m n o 6	
7	PQRS7	pqrs7	
8	T U V 8	tuv8	
9	W X Y Z 9	w x y z 9	
0	0		

Other Alphabet mode operations

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

- Press [*] to change case.
- Press [#] to insert a space.
- Press the Navigation keys to move the cursor.
- Press [←] to delete characters one by one. Press and hold [←] to clear the display.

Using 123 mode

123 mode enables you to enter numbers.

Press the keys corresponding to the digits you want.

Using Symbol mode

Symbol mode enables you to insert symbols.

- To display more symbols, press the Navigation keys.
- To select a symbol, press the corresponding number key.

Call functions

Advanced calling features

Making a call

- In Idle mode, enter the area code and phone number.
 - Press [] to clear the last digit or press and hold [] to clear the whole display. You can move the cursor to edit an incorrect digit.
- 2. Press [**↑**].

The phone locks the keypad to avoid accidental key presses during a call. To use a key, first unlock the keypad by pressing [MP3].

3. When you want to end the call, press [$_{\odot}$] or close the phone.

Redealing recent numbers

- 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. 49

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. 51

Making an emergency call

You can make calls to standard emergency numbers, such as 190, 192, and 193 on the Emergency # list, even if your phone is locked or all outgoing calls are restricted. ▶ p. 74

Pause dialing

When you call an automated system, like a banking service, you are required to enter a password or account number. Instead of manually entering the numbers each time, you can enter the necessary DTMF tones separated by pauses before dialing.

Call functions

- ☑ DTMF tones are the tones you hear when you press the number keys. DTMF tones allow you to communicate with computerized telephone systems, for example, voicemail servers or telebanking systems.
- In Idle mode, enter the phone number you want to dial, such as a bank's teleservice number.
- Press < Options> and select Hard Pause or 2 sec. Pause to insert a pause.
 - Hard Pause: insert a hard pause. Numbers after the "P" pause will be sent when you press [].
 - 2 sec. Pause: insert a 2-second pause. Numbers after the "T" pause will be sent automatically.
- 3. Enter a number to be sent after the pause, such as your account number, PIN, etc.
- 4. Repeat steps 2 and 3 to add more pauses and numbers, if necessary.
- 5. Press [>] to make a call.

 After connecting, wait for a prompt from the system, and then press [>] at each prompt, if applicable.

The DTMF tones are sent.

Ending a call

Close the phone or press [$_{\odot}$].

Answering a call

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

Press **<Answer>** or [**↑**] to answer the call.

Tips for answering a call

- When Send key is active, you can press
 <Answer> or [¬]. ▶ p. 71
- When Slider-Up is active, you can simply open the phone. ▶ p. 72
- When Any key is active, you can press any key, except for <Ignore> and [o]. ▶ p. 72
- Press < **Ignore**> to reject a call.

Press and hold [▲/▼] to mute the ringer.

Viewing missed calls

If you have missed calls, the screen displays how many calls you have missed and the phone number you have last missed.

Press [\scales] to dial the number displayed.

Using the headset

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

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

То	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 $[\blacktriangle/\blacktriangledown]$ to adjust the earpiece volume during a call. Press $[\blacktriangle]$ to increase the volume level and $[\blacktriangledown]$ to decrease the volume level.

Answering a second call

You can answer an incoming call while already on the phone, if your network supports this function and activates the call waiting feature.

- Press [\] to answer the call. The first call is automatically put on hold.
- 2. Press [\scales] 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.

Call functions

- During a call, make another call or answer a second call. The first caller is placed on hold.
- 2. Press [3] + [] to begin with the three-way call.

Using the speakerphone option

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

Press $[\mathbf{OK}]$ and then select \mathbf{Yes} to activate the speakerphone feature. Press $[\mathbf{OK}]$ again to switch back to the earpiece.

Using In-call options

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

- Phonebook: access the contact list.
- Messages: access the Messages menu.
- Key tone on/off: switch the key tones on or off.
 - To communicate with answering machines or computerized telephone systems, key tones must be turned on.
- Voice note: record your conversation.

- Planner: access the Planner menu.
- Voice privacy: encrypt the voice channel so that people cannot eavesdrop on your conversation.
- **Send tel#**: send your phone number as the DTMF (Dual tone multi-frequency) tones.
- **Phone info**: view your phone information.

Switching off the microphone (Mute mode)

You can temporarily switch off your phone's microphone so that the person on the phone cannot hear you.

During a call, press < **Mute**>.

Menu functions

All menu options listed

Multimedia

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

To access this menu, press [181] 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.

Camera

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.

- Access the **Camera** menu to turn on the camera and switch the display to Capture mode. You can also press and hold [8] in Idle mode.
- 2. Make any desired adjustments.
 - Press < Options > to access camera options.
 next section
 - Use the keypad to change camera settings.
 p. 32
 - Press < Mode> to access the My Photos folder or switch to Record mode.
- 3. Press [8] or **[OK**] to take a photo.

То	Press
use photo options	< Options >. ▶ p. 32
send the photo via MMS	<send>.</send>
save the photo	[🖎] or [OK].

Using camera options in Capture mode

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

Menu functions

- **Flash**: determine the use of the flash.
- **Self timer**: set a time delay before the camera takes a photo.
- Tools: take a photo using the following methods.

Fun frames: add a decorative frame. **Color effect**: change the color tone.

White balance: adjust the color balance of the

image.

Series shot: take a series of action stills.

Divided shot: take several stills and save them in one frame.

- Screen view: select a preview screen.
- Settings: change the default settings for taking a photo.

Resolution: select an image resolution.

Storage: select the memory location to store photos, if a memory card is inserted.

Quality: select an image quality setting.

Shutter sound: select the sound that you hear when you press the shutter release.

Hide icon: hide or display the camera icons on the screen.

Histogram: hide or display a histogram showing the brightness and color of the image. Checking the histogram enables precise exposure control.

Using the keypad in Capture mode

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

Key	Function	
Up/Down	Adjusts the brightness.	
Left/Right	Zooms in or out.	
0	Changes the preview mode.	

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 photos: access the My photos folder.

Camcorder

You can record a video of what is displayed on the camcorder screen and save it.

- Access the Camcorder menu to turn on the camcorder and switch the display to Record mode.
- 2. Make any desired adjustments.
 - Press < Options> to access camcorder options. ▶ next section
 - Use the keypad to change camcorder settings.
 ▶ p. 34
 - Press < Mode> to access the My videos folder or switch to Capture mode.
- 3. Press [18] or [**OK**] to start recording.
- 4. Press [18] or [**OK**] to stop recording.

5.	То	Press <options>. ▶ p. 34</options>	
	use video options		
	send the video clip via MMS	<send>.</send>	
	save the video clip	[🖄] or [OK].	

Using camcorder options in Record mode

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

- **Movie light**: determine the use of the flash.
- Self timer: set a time delay before the camcorder records a video.
- **Tools**: change the color tone.

Color effect: change the color tone.

White balance: adjust the color balance of the image. You can make your image appear warmer or cooler.

• **Video length**: select a video recording mode.

MMS Mode: record a video clip of up to 15 seconds for adding to an MMS message. The video clip is saved in H.263 format.

Normal Mode: record a video of up to 1 hour. The video clip is saved in MPEG4 format.

 Settings: change the default settings for recording a video clip.

Storage: select the memory location to store video clips, if a memory card is inserted. **Quality**: select an image quality setting.

Hide Icon: hide or display the camcorder icons on

the screen.

Using the keypad in Record mode

You can use the keypad to customize your camcorder settings in Record mode.

Key	Function	
Up/Down	Adjusts the brightness.	
Left/Right	Zooms in or out.	

Using video options

After recording a video clip, press **Options**> to access the following options:

- Assign: set the video clip as wallpaper for the main display.
- My videos: access the My videos folder.

My Photos

Use this menu to access the photos you have taken and images saved on a memory card.

Viewing a photo

- From the My Pictures screen, select a folder by pressing [Left] or [Right].
- 2. Press [Down].
- Scroll to the photo you want to view and press <View>. If it is a JPEG file format, press [OK] to view it on a full screen.

Viewing a slide show

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

- From the file list, press < Options> and select Slide show.
- Press [OK] to select photos to be viewed as a slide show.
- 3. Press < Slide>.
- 4. Press < Next>. The slide show begins.
- Press < Options> and select Delay time to select an interval option.
- Press < Save>. The slide show is saved as one file in the Slide Show folder.

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.
- Copy: copy the file to another folder.

- Move: move the file to another folder.
- Zoom: zoom in or out.
- **Resize**: change the image size.
- Crop: select a variously sized and shaped section of the photo.
- Lock/Unlock: lock the file to protect it from being deleted, or unlock the file.
- Print via: print the photo by connecting the phone to a printer via USB or Bluetooth. Some Pictbridge-enabled or Bluetooth-enabled printers may not be compatible with the phone.
- Erase: delete the selected file.
- Histogram: check the histogram showing the brightness and color of the image.
- Information: access the file properties.

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

- **Send via**: send the file via MMS or Bluetooth.
- Assign: set the photo as wallpaper for the main display or as a caller ID image for a Phonebook entry.

- List view/Thumbnail view: change the file view mode.
- Rename: change the file name.
- **Sort**: change the sort order of files.
- Slide show: view all photos as a slide show.
- Copy: copy the file to another folder.
- Move: move the file to another folder.
- Lock/Unlocked: lock the file to protect it from being deleted, or unlock the file.
- Print via: print the photo by connecting the phone to a printer via USB or Bluetooth. Some Pictbridge-enabled or Bluetooth-enabled printers may not be compatible with the phone.
- Erase: delete the selected file.
- Information: access the file properties.
- More images: access the web page preset by your service provider to download the file you want.

My videos

Use this menu to access the video clips you have recorded or saved on a memory card.

Playing a video clip

- 1. From the My Videos screen, Press [Down].
- Scroll to the video clip you want and press < Play>.

During playback, use the following keys:

Key	Function	
▲/ ▼	Adjusts the volume.	
►II	Pauses or resumes playback.	
►►I	Moves forward in a file.	
l≪	Moves backward in a file.	
ОК	Switches to Landscape mode.	
Mute	Mutes the audio.	
Left	Switches to Play mode.	

Key	Function	
Up	Returns to the file list.	
Down	Stops playback.	

Using video options

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

- **Send via**: send the file via MMS or Bluetooth.
- Assign: set the file as wallpaper for the main display.
- **Rename**: change the file name
- List view/Thumbnail view: change the file view mode.
- **Sort**: change the sort order of files.
- Copy: copy the file to another folder.
- Move: move the file to another folder.
- Lock/Unlocked: lock the file to protect it from being deleted, or unlock the file.
- Erase: delete the selected file.

- Information: access the file properties.
- More videos: access the web page preset by your service provider to download the file you want.

Settings

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

- **Shutter sound:** select the sound that you hear when you press the shutter release.
- Self timer sound: turn on the sound that you hear when the timer counts down.
 - **File prefix**: set the default name prefix for file names.
- Storage: select the memory location to store photos, if a memory card is inserted.

Memory info

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

Calls (Menu 1)

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

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

All calls (Menu 1.1)

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

Received (Menu 1.2)

This menu displays the most recent calls you have received.

Sent (Menu 1.3)

This menu displays the most recent calls you have dialed.

Missed (Menu 1.4)

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

Accessing a call record

- Press [Left] or [Right] to move to another call type.
- 2. Press [Up] or [Down] to scroll through the call list.
- Press [OK] to view the details of a call, or press [→] to dial a number.

Using call record options

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

- Save: save the number to Phonebook.
- Phonebook: access the contact details.
- Prepend: add an area code or service number before dialing the selected number.
- Erase: delete the selected call record.
- Erase all: delete all call records on the list.

Calls time (Menu 1.5)

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



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

- Last call: check the length of your last call.
- Sent call: check the total length of all the calls you have dialled.
- Received call: check the total length of all the calls you have received.
- Life time: check the total duration of all calls since the phone was shipped from the factory.

To reset a call timer, press < **Reset**>.

Data time (Menu 1.6)

This menu displays the total time of call connection. To reset a data time counter, press **Reset**>.

Data volume (Menu 1.7)

This menu displays the total amount of sent or received data.

To reset a data counter, press < **Reset**>.

Downloads (Menu 2)

Use this menu to download a variety of Brew applications from the preset Brew server and change the brew settings. You can also play the downloaded media files, as well as view help information.

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

Downloading an application

You can access the Brew server and download applications.

1. Select Download Center.

The following menus are available:

- **Catalog**: browse and purchase items.
- **Search**: search for an application by entering a keyword.
- About Download: get help information for using the Download Center menu.

- Select Catalog. You are connected to the associated brew server by your service provider and you can browse the available applications.
 - When **Airtime Warnings** is set to **All Enabled**, you are prompted to connect to the server.
- 3. Select the application you want and follow the onscreen instructions to download it.

Changing brew settings

You can change the settings for using the Brew server and downloaded applications.

- Select Settings.
- 2. Select a setting option.
 - Manage Apps: check the properties of downloaded applications. Press < Options > to move or delete the selected application.
 - Screen Savers: activate the screen saver application, if downloaded.
 - Airtime Warnings: set the phone to alert you each time you access the Brew server.

• **View Log**: show the records of your downloading.

Viewing help information

You can view help information for using the Brew server.

- Select Help.
- 2. Select a help item.
- Press [Up] or [Down] to scroll through help information.

Press [**OK**] to go back to the main help screen.

My Vivo (Menu 3)

The **My Vivo** menu enables you to change Menu mode settings, shortcut 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 menu for the selected menu. The selected menu will be added to the **Tools** menu list.

• **Help**: access the information for changing the properties for Menu mode.

To view brief information about a menu, scroll to 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.

- 1. Select a key to be used as a shortcut key.
- 2. Press [Left] or [Right] to select the menu to be assigned to the key.
- 3. Press [**OK**] to save the settings.

To preview the shortcut assignment in Idle mode, press < Preview >.

To cancel the shortcut settings, press **Option**> and select Initialize.

Sounds (Menu 3.3)

Use this menu to customize various sound settings.

Volume (Menu 3.3.1)

Use this menu to adjust the ringtone volume for incoming calls, message alerts, alarms, or keypad tones.

- **Ringtone**: select a volume for the call ringer.
- Vibrate: the phone vibrates.
- Vib+ring: the phone vibrates and rings at the same time.

Ringer type (Menu 3.3.2)

Use this menu to select the ringer type for incoming calls, roaming alerts, message alerts, keypad tones, or data calls.

Alerts (Menu 3.3.3)

Use this menu to set up audible alerts 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.
- Connect: set the phone to beep when an outgoing call is connected to the system.

- **Disconnect**: set the phone to beep when a 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 call to keep you informed of the length of your call.

Key tone (Menu 3.3.4)

Use this menu to select a tone which sounds when you press a key and its length.

Slider sound (Menu 3.3.5)

Use this menu to set the phone to sound when you slider up or down it.

Power On/Off (Menu 3.3.6)

Use this menu to set the phone to sound when you turn it on or off.

Display (Menu 3.4)

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

Phone design (Menu 3.4.1)

Use this menu to change the display properties for Menu mode and Dial mode.

- Screen color: select the color of the screen.
- Font color: select the color of the screen font.
- Dial color: select a font style for the digits when entering a number for dialing.

Main screen (Menu 3.4.2)

Use this menu to change display properties for Idle mode.

- Wallpaper: set the wallpaper image to be displayed in Idle mode.
- Func. screen: set the phone to display one of the following function screen in Idle mode:

None: display the image you have set as wallpaper.

Clock style: select a clock style and display the clock.

Dual clock: display a dual clock.

PIMS: display your personal information, such as your schedule.

Launch Pad: display the shortcut assignments for the Navigation keys.

- Screen effect: select a screen effect for Idle mode.
- **Banner**: set a banner message to be displayed at the bottom of the display in Idle mode.

Backlight (Menu 3.4.3)

Use this menu to customize settings for backlight.

- **Main LCD**: 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 display off when you do not use the phone.

Idioma/Language (Menu 3.5)

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

Play 3G (Menu 4)

Use this menu to download MP3 files from the website preset by your service provider and play the MP3 files. You can also access images, videos, music files, and sound clips in the phone's memory and on a memory card.

To access this menu, press <ao VIVO> in Idle mode and select Play 3G.

Player 3G (Menu 4.1)

Use this menu to access the website preset by your service provider and download media files. You can also access video and music streaming files.

MP3 player (Menu 4.2)

Use this menu to enjoy music. First, you need to save music files into your phone's memory or on a memory card.

Downloading or receiving music files

- Download from the wireless web ▶ p. 44
- Copy to a memory card and insert the card into the phone. ▶ p. 23

The downloaded or received files are stored in the **Musics** folder.

Creating a play list

- 1. From the MP3 player screen, press [Up].
- 2. Press < Add > and select a folder.

You can also press **<Add>** to add all files in the selected folder to the play list.

Using MP3 player options

From the MP3 player screen, press **Options**> to access the following options:

Device change: use a Bluetooth stereo headset.

 Open: access the files in the phone's memory or on a memory card.

• **Play Mode**: select a Play mode.

Normal: play files in order.

Shuffle: play files in Shuffle mode.

Normal Rpt.: play files in order repeatedly. **Single Rpt.**: play the selected file repeatedly.

- Visualization: select a playback animation.
- **Playtime**: select the length of time for which the MP3 player plays files. After the specified period of time has elapsed, the MP3 player closes.
- **Send SMS Message**: send a new SMS message.

Accessing the play list

From the MP3 player screen, press [Up].

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

- Add: add files to the play list.
- **Erase**: remove the selected file from the play list.
- Erase All: remove all files from the play list.

Playing MP3 files with the phone closed

Press and hold [**MP3**] to launch the MP3 player. Use the following keys to control the MP3 player:

Keys	Function	
►II	Pauses or resumes playback.	
▶▶ I	Skips to the next file.	
I 44	Moves back to the previous file.	
▲/ ▼	Adjusts the volume.	

Playing MP3 files using the headset

You can control the MP3 player using the button on the headset with the phone closed.

During playback, the button works as follows:

То	Press
pause or resume playback.	the button.
skip to the next file	the button twice.
stop playback	and hold the button.

Photos/Images (Menu 4.3)

This menu displays photos you have taken and images you have downloaded, received in messages, or imported from your computer. ▶ p. 35

Videos (Menu 4.4)

This menu displays video clips you have recorded, downloaded, received in messages, or imported from your computer.



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

Musics (Menu 4.5)

This menu displays MP3 files you have downloaded or imported from your computer.

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

Using file list options

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

- **Send**: send the file via MMS or Bluetooth.
- Assign: set the music file as your call ringtone, a ringtone for a Phonebook entry or a group, alarm tone.
- Get Key: get a new licence key when the key for the selected DRM file expires.
- Rename: change the file name.
- **Sort**: change the sort order of files.
- **Copy**: copy the file to another folder.
- 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.
- Erase All: delete all files.
- **Information**: access the file properties.
- Key Manager: manage the licence keys you have acquired.

Downloading music files

- On the Musics screen, scroll to the More music option.
- Press < Connect>. You are connected to the website preset by your service provider.
- 3. Search for the file you want and follow the onscreen instructions to download it.

Tones (Menu 4.6)

This menu displays voice memos you have recorded and sound files you have downloaded, received in messages.

Using file list options

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.
- Get Key: get a new licence key when the key for the selected DRM file expires.
- **Sort**: change the sort order of files.
- **Rename**: change the file name.
- Lock/Unlock: lock the file to protect it from being deleted, or unlock the file.
- **Erase**: delete the selected file.
- **Erase All**: delete all files.
- Information: access the file properties.
- Key Manager: manage the licence keys you have acquired.

Downloading tone files

- On the Tones screen, scroll to the More tone option.
- Press < Connect>. You are connected to the website preset by your service provider.
- 3. Search for the file you want and follow the onscreen instructions to download it.

Memory info (Menu 4.7)

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

Key cleanup (Menu 4.8)

Use this menu to manage the licence keys.

Key list (Menu 4.8.1)

Although the media contents have been deleted, the licence keys you have acquired to activate media contents locked by DRM systems will remain. Use this menu to access the licence keys.

Press < Options > to access the following options:

- View: open the corresponding item.
- **Delete**: delete the selected licence key.
- Information: access the properties of the licence key.

Help (Menu 4.8.2)

Use this menu to view the information for using this menu.

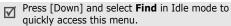
Phonebook (Menu 5)

You can store phone numbers with associated names in your phone's memory called Phonebook to make it easy for you to make a call without having to remember the phone number.

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.



Finding an entry

- 1. Press [Left] or [Right] to select a search method.
- Enter the first few letters of the name you want, or a caller group.
- 3. Select the name you want.
- Press [
] to dial the number, or < Options > to access Phonebook options.

Using Phonebook options

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

- Set speed #: assign a speed dial number to the selected number.
- Send Phonebook: send the selected contact in name card format via MMS or Bluetooth.
- Save to vCard: save the contact in the vCard folder.
- Edit: edit contact information.
- Prepend: add an area code or service number before dialing the selected number.
- Erase: delete the selected contact.

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

- **Add New**: add a new contact to Phonebook.
- Send phonebook: send the selected contact in name card format via MMS or Bluetooth.
- **Edit**: edit contact information.

- Set speed #: assign a speed dial number to the selected number.
- Set group: assign a speed dial number to the selected group.
- Save to vCard: save the contact in the vCard folder.
- Erase: delete the selected contact.
- Erase all: delete all contacts.

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.

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 person's birthday.

Memo: add a memo about the person.

Picture: assign an image to alert you to a call from the person.

- 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

- 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.
- 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 edit (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.
- Press **Options**> and select **Rename**.
- 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 **Options**> and select **Ringer**.
- 3. Select the ringer category and press [Down].
- 4. Select the ringer melody.
- 5. Press [**OK**].

My info (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.

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

- Send: send the selected name card via MMS or Bluetooth.
- Save to Phonebook: save the selected name card to Phonebook.
- Rename: rename the selected name card.

- **Copy**: copy the file to another folder.
- Move: move the file to another folder.
- Lock/Unlocked: lock the file to protect it from being deleted, or unlock the file.
- Erase: delete the selected file.
- Erase all: delete all files.

Memory info (Menu 5.9)

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

Messages (Menu 6)

Use the **Messages** menu to send and receive text messages and multimedia messages. You can also use voicemail and web alert message features.

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

New message (Menu 6.1)

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

Creating and sending a text message

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

- 1. Select **SMS message**.
- Enter a destination number and press < Next>.
 To send the message to more than one recipient, fill in additional destination fields.
- 3. Enter your message and press < **Next**>.
 - To insert an emoticon to text, press
 Options> and select Emoticon.

- To insert a text template to text, press
 Options> and select Canned text.
- 4. Press **<Send>** to send the message.

Creating and sending a multimedia message

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

- Select MMS 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 change a TO address to a CC or BCC address, press < Options > and select Edit Cc or Edit Bcc.
- Press < Next>.
- 4. Select Add photo/video or Add sound.
- 5. Add an image, video clip, or sound clip.
- 6. Select **Add message**.
- 7. Enter your message and press [**OK**].
- 8. Select **Add subject**.

- 9. Enter the message subject and press [**OK**].
- 10. Select Add vCard.
- 11. Attach your name card or a Phonebook entry as a name card.
- 12. Press **Options**> to access the following options:
 - Add page: add pages. Move to each page by pressing [Left] or [Right].
 - Templates: send a template instead of the message you have created.
 - Preview: view the message as it will be shown on the recipient's phone.
 - Save to draft: save the message in the Drafts folder.
 - Edit recipient: edit a destination number.
 - Set duration: set how long one page in your outgoing messages displays. After a specified time, the display automatically scrolls to the next slide.
 - **Send setting**: change the settings for sending messages.
- 13. Press **<Send>** to send the message.

Received (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:

То	Press
reply to the sender	<reply>.</reply>
view the message	[OK].
access message options	<options>.</options>

Using message options

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

- **Call**: dial the sender's phone number.
- **Forward**: forward the message to other people.
- Recipient: view the sender's phone number or e-mail address.
- Save to phonebook: save the sender's phone number to Phonebook or extract URLs, e-mail addresses, or phone numbers from the message.
- Save address: save the sender's phone number or e-mail address to Phonebook.
- Save files: save media content from the message to your phone's memory.
- Add spam: add the sender's phone number or e-mail address to the Spam list.
- Recipient: view the sender's phone number or e-mail address.
- Lock/Unlock: lock the message to protect it from being deleted, or unlock the message.
- **Erase**: delete the selected message.

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

- Forward: forward the message to other people.
- Move: move the message to the Saved foler.
- Reply: reply to the sender.
- Lock/Unlock: lock the message to protect it from being deleted, or unlock the message.
- **Erase**: delete the selected message.
- Erase all: delete all messages.

Sent (Menu 6.3)

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

The following icons are available to show the message status:

- **d**: Messages that have been sent
- X: Messages that have failed to send

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

- Call: dial the recipient's phone number.
- Forward: forward the message to other people.
- **Resend**: resend the message.
- **Sent detail**: check whether or not the message has been sent successfully.
- Move: move the message to the **Saved** folder.
- Delivery report: check whether or not the recipient has download the message from the server.
- Lock/Unlock: lock the message to protect it from being deleted, or unlock the message.
- Erase: delete the message.

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

- Forward: forward the message to other people.
- Move: move the message to the Saved folder.
- Resend: resend the message.

- Recipient: view the recipient's phone number or e-mail address.
- Lock/Unlock: lock the message to protect it from being deleted, or unlock the message.
- **Erase**: delete the selected message.
- Erase all: delete all messages.

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 browserchatting service.

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

E-mail (Menu 6.7)

Use this menu to use the WAP browsere-mail service. For further details about this service, contact your service provider.

Templates (Menu 6.8)

Use this menu to use templates of frequently used messages or passages.

Canned text

You can access embedded text templates or create ones with the sentences you use frequently so that you can use in composing an SMS message.

Press **Send** to create and send a new message using the selected template.

Using template options

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

Edit: edit the selected template.

• Add new: add a new template.

• **Erase**: delete the selected template.

Erase all: delete all templates.

Multimedia

You can access embedded MMS templates.

Press [**OK**] to open the selected template.

Press **<Send>** to send the templates via MMS.

Saved (Menu 6.9)

This folder stores messages you have moved from the **Receive** or **Sent** folder.

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

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

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

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

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.

Settings (Menu 6.12)

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

Send settings (Menu 6.12.1)

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

Setting a SMS 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: the phone prompts you to save the message.
- Not save: the phone does not save the message in the Sent folder.
- Auto save: the phone immediately saves a copy of the message.

Callback #: enter the callback number.

Setting a MMS 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: 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 6.12.2)

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

Setting a SMS 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.

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

Anti-Spam: set the phone to automatically delete messages received from phone numbers specified in **Anti-Spam** as soon as they arrive.

Message alert: You can set how the phone alerts you to new messages during a call.

- **On**: the phone alerts you with a beep and displays the corresponding icon.
- **Off**: the phone does not actively alert you to new messages, but displays the correspoding icon.

Setting a MMS 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 erase: 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 download: set whether or not your phone automatically downloads new messages from the MMS server.

- Off: the phone downloads new messages only when you press <Down>.
- On: the phone automatically downloads new messages, if the display is still for 1 minute, after checking a newly received message in Idle mode. There will be additional charges for downloading messages.

Auto signature (Menu 6.12.3)

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.

Buddy list (Menu 6.12.5)

Use this menu to set up a group of your contacts to which you frequently send a message.

Anti-Spam (Menu 6.12.6)

Use this menu to specify phone numbers so that messages received from the numbers are deleted from the phone automatically.

Decoration (Menu 6.12.7)

Use this menu to set the default page properties for messages, such as background image and font color.

Memory info (Menu 6-13)

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.

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.

Portals

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 $\ensuremath{\mathsf{Q\&A}}$ 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.

Tools (Menu 9)

You can keep track of your schedule and translate words into the language you want.

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

Planner (Menu 9.1)

Use this menu to keep track of your schedule, make a memo, and set alarms. You can also use convenient features, such as a calculator, countdown timer, world clock, converter, and stopwatch.

Today (Menu 9.1.1)

Use this menu to access Planner items stored for the current day.

For further details about storing items, see the **Calendar** menu.

Calendar (Menu 9.1.2)

Use this menu to manage your monthly, weekly, or daily schedule.

When you enter the **Calendar** menu, the calendar in Month view appears with today's date indicated by a red box.

Selecting a day

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

Using calendar options

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

 View type: change the view mode of the calendar.

- Jump to date: enter the specific date you want to access.
- Erase: erase items for the selected date or passed items.
- Erase all: erase all items.

Creating an item

- Select a date on the calendar.
- Press < New >.
- 3. Enter information or change the settings:
 - Type: press [Left] or [Right] to select the item type.
 - **Start** date and time: enter the starting date and time for the item.
 - **End** date and time: enter the ending date and time for the item.
 - Content: enter the item information.
 - Alarm: select how long before the item the alarm is to alert you. If you don't want an alarm for the item, select Off.
 - Melody: select an alarm tone.

- Repeat: select to set the item to recur and a repeat unit.
- Close: if the item will recur, set the ending date.
- **Phonebook**: enter the phonebook number.
- 4. Press [**OK**] to save the item.

Viewing an item

Once you have scheduled items, the following icons and the number of items for a specific day appear at the bottom of the calendar.

Personal

- Business
- AppointmentVacation
- Anniverary
- Select a date on the calendar to display the items for the day.
- 2. Select an item to view its details.

Using options

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

Call: dial the contacts number.

New: add a new item.

Erase: erase the selected item.

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

Calendar: add a new item.

Jump to date: enter the specific date you want to access.

• **Assign to idle**: set the Planner items for the current day to be displayed in Idle mode.

• Erase: erase the selected item.

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. Press < New>.

2. Enter the task content and press [Down].

3. Select a priority and press [Down].

4. Select a due date option.

5. Press [**OK**] to save the task.

Viewing a task

1. Scroll to a task.

2. Press [**OK**] to view the task details.

Using task options

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

Edit: edit the selected task

 Completed/Uncompleted: change the task status.

Erase: erase the selected task.

Erase all: erase all tasks.

Countdown (Menu 9.1.4)

Use this menu to set a timer to count down how many days are left until a target date and to sound an alarm at a specified date and time to alert you to a specific event.

1. Press < New>.

2. Specify the following timer settings:

- Content: enter information for the countdown timer.
- **Date**: enter the date to which you want to count down.
- **Before**: set how long before the event the alarm is to alert you.
- **Time**: set when the phone sounds the alarm.
- Melody: press <Change> and select an alarm tone.
- 3. Press [**OK**].

Memo pad (Menu 9.1.6)

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

Creating a new memo

- 1. Press < New>.
- 2. Enter a memo and press [**OK**] to save the memo.

Viewing a memo

- 1. Scroll to a memo.
- 2. Press [**OK**] to view the memo details.

Using memo options

While viewing memo details, press **Options**> to access the following options:

- Decoration: change the background image, font color, or alignment position for the memo text.
- Erase: erase the selected memo.

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

- **Edit**: edit the memo.
- Send: send the memo via SMS or MMS.
- Erase: erase the selected memo.

Alarm (Menu 9.1.5)

Use this menu to set alarms to sound at specific times. A wake-up alarm is not affected by your sound setting.

Setting an alarm

- Select the type of alarm and press < New >.
- 2. Set each alarm option:
 - Wakeup (or Alarm): activate an alarm.

- Time (or After): enter the time for the alarm to sound. For Alarm 1~3, select Manual and enter the time, or select a preset length of time after which the alarm sounds.
- **Interval**: select a repeat option.
- Melody: press <Change> and select an alarm tone.
- 3. Press <Save>.

Using alarm options

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

- **Set on/Set off**: activate or deactivate the alarm.
- Clear: erase the alarm setting.
- Clear all: erase all alarm settings.

To edit the alarm setting, press < Edit>.

Stopping an alarm

- Press **<Stop>** to stop the alarm.
- Press < Snooze > to stop the alarm and cause it to sound again after 5 minutes.

To deactivate an alarm setting, select an alarm you $_{68}\,\text{have}$ set and press $<\!\textbf{Set}$ $\,\textbf{off}\!>$.

Calculator (Menu 9.1.7)

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

Performing a calculation

- Enter the first number.
 - Press [*] to insert a decimal point.
 - Press [#] to insert brackets.
- 2. Press one of the Navigation keys to access the math function you want.
- 3. Enter the second number.
- 4. Press [**OK**] to view the result.
- If necessary, repeat from step 2 to continue the calculation.
- 6. To reset the calculator, press **<Clear>**.

Using calculator options

While using the calculator, press **Options**> to access the following options:

 +/-: toggle the current number between a negative and positive value.

- **MS**: save the current value in the calculator's memory.
- **MR**: retrieve the saved value from the memory.
- **MC**: clear any value saved in the memory.

World Time (Menu 9.1.8)

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

From the world map, press [Left] or [Right] to scroll to the city you want. As the time line moves, the time and date of the given zone display.

To apply daylight savings time to the selected time zone, press **Set DST**>. To cancel the setting, press <Unset DST>.

Unit conversion (Menu 9.1.9)

Use this menu to perform unit conversion, such as length and area.

- 1. Press **Options**> and select a converter.
- 2. Enter the value to be converted and press [Down]. Press [*] to insert a decimal point.

- 3. Press [Left] or [Right] to select the original unit and press [Down].
- 4. Press [Left] or [Right] to select the unit to which you want to convert.

The equivalent value for the amount you entered is displayed.

5. To reset the converter, press **<Clear>**.

Chronometer (Menu 9.1.0)

Use this menu to measure elapsed time. The maximum measurement time is 100 minutes.

- 1. Press [**OK**] to start the timer.
- 2. Press < Lap > to check an interval. You can repeat this step for a total of 10 intervals.
- 3. Press [**OK**] to stop timing.

Voice notes (Menu 9.1.*)

Use this menu to record voice memos.

Recording a voice memo

You can record voice memos and save them in the phone's memory.

Menu functions

- Select Record.
- 2. Press [Up].
- 3. Speak into the microphone.
 - Press [Up] to pause recording.
- 4. When you have finished, press [Down].
- Press [OK] to save the voice memo.
 Alternatively, press < Options> to access the following options:
 - Save as: save the voice memo.
 - Review: review the voice memo.
 - Rerecord: discard the current voice memo and record another one.
- 6. Enter the voice memo name and press [**OK**].

Playing a voice memo

You can access the voice memos you have recorded.

- 1. Select Review.
- 2. Select a voice memo.
- 3. Press < Options > to access the following options:
 - **Rename**: change the memo name.

- Erase: delete the selected memo.
- Erase all: delete the all memos.
- 4. Select [**OK**] to play the voice memo.

Erase all voice memos

1. Select Erase all.

Use this menu to delete all voice memos at one time. When a confirmation message appears, press <**Yes**>.

Translator (Menu 9.2)

Your phone provides you with a Portuguese-English/ English-Portuguese/Portuguese-Spanish/Spanish-Portuguese translator.

Use this menu to translate words into the language you want.

- Select Translate.
- Enter the English, Portuguese, Spanish word you want and press < Translate>.

The display shows the corresponding English, Portuguese, or Spanish word.

Select **History** to view the list of words you have translated.

Select **Language Setup** to switch to the target language you want.

Voice Mail (Menu *)

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

Your service provider can give the voicemail server number.

Settings (Menu 0)

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

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

Call settings (Menu 0.1)

Use this menu to customize the phone for making and receiving calls.

Auto answer (Menu 0.1.1)

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 0.1.2)

Use this menu to set how to answer incoming calls.

 Send key: the phone answers calls only when you press [] or <Answer>.

Menu functions

- Slider-Up: the phone answers when you open the phone. If the phone is already open, press [↑] or <Answer>.
- Any key: the phone answers when you press any key, except for [∘], [▲ / ▼], and < Ignore>.

Auto retry (Menu 0.1.3)

Use this menu to set the phone to automatically redial calls after a specified length of time when a connection fails.

Auto CSP (Menu 0.1.4)

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.



The code is added only when the phone number has 6,7,10, or 11 digits and starts with 0xx, for example, 012 or 015.

Airplane mode (Menu 0.1.5)

Use this menu to switch the phone to Airplane mode, or back to Normal mode.

Letter search (Menu 0.1.6)

Use this menu to find numbers in Idle mode, by the spelling of a Phonebook name. The phone searches for the names starting with the letters labelled on any of the keys you pressed.

In Idle mode, press the number keys containing the letters you want.

Msg. settings (Menu 0.2)

Use this menu to set up various options for sending or receiving SMS/MMS messages. ▶ p. 58

Vivo Encontra (Menu 0.3)

Use this menu to set the phone to allow or deny other GPS devices to access your phone's position information.

WAP settings (Menu 0.4)

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

Prompt (Menu 0.4.1)

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 (Menu 0.4.2)

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.

Security (Menu 0.5)

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 0.5.1)

Use this menu to lock your phone.

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

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

Change pwd (Menu 0.5.2)

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

Restriction (Menu 0.5.3)

Use this menu to restrict outgoing calls, incoming calls, or access to the contact list.

Voice privacy (Menu 0.5.4)

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 0.5.5)

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 0.5.6)

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 [\sim].

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 memory (Menu 0.5.7)

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

- 1. Press [**OK**] to select the data type to be deleted.
- 2. Press **Del**>.
- 3. Press **Yes**> to confirm the deletion.

Reset phone (Menu 0.5.8)

Use this menu to reset the phone to its default settings.

- 1. Enter the password.
 - The password is preset to **0000**. You can change this password ▶ p. 73

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

System (Menu 0.6)

This menu provides you with options for selecting a network.

Set system (Menu 0.6.1)

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 (Rull) appears.

- Home only: you cannot roam. When your home system is not available, and the No service icon (\(\mathfrak{T}\sigma\)) appears and you cannot make or receive calls.
- Standard: your phone automatically searches for the first available service.

Menu functions

Set time (Menu 0.6.2)

Use this menu to set the current time and date.

Set NAM (Menu 0.6.3)

Your phone can have two NAMs (Numberical 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 0.6.4)

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. Use this menu to activate or deactivate the use of the PRL.

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

Pref mode (Menu 0.6.5)

Use this menu to select the network to be used when roaming.

- Hybrid: the phone uses both the 1XRTT and EVDO network.
- **CDMA only**: the phone uses the 1XRTT network.
- EVDO only: the phone uses the EVDO network, if your phone cannot find any preferred systems.

Bluetooth (Menu 0.7)

Using the Bluetooth feature, you can connect the phone wirelessly to other Bluetooth devices.

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



- If there are obstacles between the devices, the operating distance may be reduced.
- It is recommended that you do not use the Bluetooth feature while using multimedia features, such as voice recorder, camera, and MP3 player, or vice versa, for better performance.
- You cannot activate the Bluetooth feature on the phone while connected with a PC via USB.
- Some devices may not be compatible with your phone.
- You can use your phone as a modem to access the Internet after connecting the phone to a PC by using an optional Bluetooth dongle.

Setting up the Bluetooth feature

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

- Activation: activate or deactivate the Bluetooth feature.
- Trusted devices: search for connectable Bluetooth devices.
- **Settings**: set up the options for using Bluetooth.

My device name: assign a Bluetooth device name to your phone, which is then displayed on other devices.

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

Dial-Up network: activate the dial-up profile to use your phone as a modem for dial-up networking.

My information: access your phone's information.

Searching for and pairing with a Bluetooth device

- From the Bluetooth menu, select Trusted devices.
- Select Add.

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

Hands-free car kit
 Mobile phone

Menu functions

- M Headset
- Somputer

- Inknown device
- Printer

- PDA
- 3. Select a device.
- Enter a Bluetooth PIN and press [OK]. This code is used just once and you do not need to memorise it.

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



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

Using device options

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

- Add new: search for new Bluetooth devices.
- Send vCard: send your name card or a Phonebook entry.
- Get files: search for data from the device and import data directly to your phone.

- Send files: send media files to the selected device.
- Service list: access the Bluetooth service list of the device.
- **Rename**: rename the paired device.
- Erase: remove the selected device.
- Erase all: remove all devices from the list.
- Info: display the selected device information.

From the device list, press <**Connect**> to connect to the selected headset or hands-free car kit. Press <**Disconnect**> to end the connection with the connected device.

Sending data via Bluetooth

- 1. Activate the Bluetooth feature.
- Select the application in which the item you want to send is stored.
- 3. Scroll to the item you want and press **Options**>.
- 4. Select Send via → Bluetooth.
- 5. Press < Send>.
- 6. Press **Search**> to search for new devices.

The phone searches for devices within range and displays a list of available devices.

- 7. Scroll to the device and press **Send**>.
- If necessary, enter the Bluetooth PIN needed for pairing and press [OK].

Receiving data via Bluetooth

To receive data via Bluetooth, your phone's Bluetooth feature must be active and its visibility must be enabled.

Press < Yes> to receive data.

External memory (Menu 0.8)

Use this menu to use your phone as an external memory disk, if a memory card is inserted into the phone. You can also format a memory card.

PC visualization (Menu 0.8.1)

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

Connecting the phone to a PC

- 1. Insert a memory card into your phone.
- Connect your phone to a PC via a USB cable. Your phone will automatically switch to Memory Disk mode.
 - If you use a memory card for the first time on your phone, you must format the memory card before connecting the phone to a PC.
- Open My computer on your Windows desktop and double-click the corresponding removable disk to open the phone's file folder.
- $\sqrt{}$
- When the phone is in Memory Disk mode, all calls and messages are blocked.
- Use the Safely Remove Hardware programme from the Windows task bar for removing the USB cable from the PC; otherwise, the files may be corrupted and, thus, may not be played properly.

Disconnecting the phone from a PC

 Press < Disconnect > on the phone to end the connection.

Menu functions

2. Remove the USB cable from the phone.

Format (Menu 0.8.2)

Use this menu to format a memory card.

When a confirmation message appears, press **Yes>**. Formatting will erase all programmes and data which exist on a memory card and be sure to confirm that you no longer need data before formatting.



- After formatting, four folders named as IMAGES, MUSICAS, VIDEOS, and VCARD will be automatically created on a memory card. These folders are recreated when formatting, even if you delete them on a PC.
- Only files saved in the corresponding folder will be recognized and displayed on a PC.

Help (Menu #)

Use this menu to view information about your phone.

Customer Care Center (Menu #.1)

Use this menu to call the call center.

International roaming (Menu #.2)

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

Phone info (Menu #.3)

Use this menu to view information about your phone.

Icons glossary (Menu #.4)

display icons shown on the screen when you use the phone. $\;$

Solve problems

Help and personal needs

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

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

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

You have entered a number but it was not dialled

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

Your correspondent cannot reach you

- Be sure that your phone is switched on. ([o] pressed for more than one second.)
- Be sure that you are accessing the correct cellular network.
- Be sure that you have not set an incoming call barring option.

Your correspondent cannot hear you speaking

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

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

Your battery is insufficiently charged. Recharge the battery.

The audio quality of the call is poor

- Check the signal strength indicator on the display (T_{il}). The number of bars indicates the signal strength from strong (T_{il}) to weak (T_i).
- Try moving the phone slightly or moving closer to a window if you are in a building.

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

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

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

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

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

Exposure to radio frequency (RF) signals

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 set by the FCC is x.x W/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

^{*} 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.

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.

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.ctia.org

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 and the type of battery and charger used. The battery can be charged and discharged hundreds of times, but it will gradually wear out. When the operation time (talk time and standby time) is noticeably shorter than normal, it is time to buy a new battery.
- If left unused, a fully charged battery will discharge itself over time.
- Use only Samsung-approved batteries and recharge your battery only with Samsungapproved chargers. When a charger is not in use, disconnect it from the power source. Do not leave the battery connected to a charger for more than a week, since overcharging may shorten its life.
- Extreme temperatures will affect the charging capacity of your battery: it may require cooling or warming first.
- Do not leave the battery in hot or cold places, such as in a car in summer or winter conditions, as you will reduce the capacity and lifetime of the battery. Always try to keep the battery at room temperature. A phone with a hot or cold battery

- may temporarily not work, even when the battery is fully charged. Li-ion batteries are particularly affected by temperatures below 0° C (32° F).
- Do not short-circuit the battery. Accidental short-circuiting can occur when a metallic object (coin, clip or pen) causes a direct connection between the + and -. terminals of the battery (metal strips on the battery), for example when you carry a spare battery in a pocket or bag. Short-circuiting the terminals may damage the battery or the object causing the short-circuiting.
- Dispose of used batteries in accordance with local regulations. Always recycle. Do not dispose of 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 voicemail 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 phonebook takes your attention away from your primary responsibility, driving safely.
- 6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan calls when your car will be stationary. If you need to make a call while moving, dial only a few numbers, check the road and your mirrors, then continue.
- 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.
- 8. 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!
- 9. 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.
- 10. Call roadside assistance or a special nonemergency wireless assistance number when necessary. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured, or a vehicle you know to be stolen, call roadside assistance or any other special nonemergency 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.

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 below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), areas where the air contains chemicals or particles, such as grain, dust or metal powders, and any other area where you would normally be advised to turn off your vehicle engine.

Emergency calls

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

Remember, to make or receive any calls the phone must be switched on and in a service area with

adequate signal strength. Emergency calls may not be possible on all wireless phone networks or when certain network services and/or phone features are in use. Check with local service providers.

To make an emergency call:

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

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

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

FCC Notice and Cautions

FCC Notice

The 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 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.

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 may be
 dangerous to the operation of the aircraft, and is
 illegal.
- 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 your phone and all its parts and accessories out of the reach of small children and pets. They may accidentally damage these things or choke on small parts.
- 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-andwater solution.
- Do not paint the phone. Paint can clog the device's moving parts and prevent proper operation.
- Do not put the phone in or on heating devices, such as a microwave oven, a stove, or a radiator.
 The phone may explode when overheated.
- When the phone or battery gets wet, the label indicating water damage inside the phone changes colour. In this case, phone repairs are no longer guaranteed by the manufacturer's warranty, even if the warranty for your phone has not expired.

- If your phone has a flash or light, do not use it too close to the eyes of people or animals. This may cause damage to their eyes.
- Use only the supplied or an approved replacement antenna. Unauthorized antennas or modified accessories may damage the phone and violate regulations governing radio devices.
- If the phone, battery, charger, or any accessory is not working properly, take it to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

Acknowledging special precautions and the FCC and Industry Canada Notice

Cautions

Modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC compliance information

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

Information to user

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.

Appendix A: CERTIFICATION INFORMATION (SAR)

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

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish

permitted levels of RF energy for the general population. The guidelines are based on safety standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

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

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

The 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 A3LSCHU510.

The highest reported SAR values are:

CDMA Mode(Part 22) Head: 0.853 W/kg, Body-worn: 1.01 W/kg

PCS Mode(Part 24) Head: 0.643 W/kg, Body-worn: 0.746 W/kg

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

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:

- 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.
- 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.
- 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 voicemail answer it for you.
- 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.
- 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.
- 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.

- Do not engage in stressful or emotional conversations that may be distracting. Stressful or emotional conversations and driving do not mixthey 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.
- 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!

- 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.
- 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.ctia.org

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.

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/topics/emf/en

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

International Commission on Non-Ionizing Radiation Protection:

http://www.icnirp.de

Health Protection Agency (UK) http://www.hpa.org.uk/radiation/*

^{*} US Food and Drug Administration http://www.fda.gov/cellphones