* Some of the contents of this manual may differ from your phone, depending on the software installed or your service provider.

SAMSUNG

**SPH-A900
User's Manual
for Draft Version**

**SAMSUNG
ELECTRONICS**

SAMSUNG

Please read this manual before operating your phone, and keep it for future reference.

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Table of contents

Important safety precautions

Read these guidelines before using your wireless phone. Failure to comply with them may be dangerous or illegal.

Road safety at all times

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

Switching off when refuelling

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

Switching off in an aircraft

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

Switching off near all medical equipment

Switch off your phone near medical equipment. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy. Follow any regulations or rules in force.

Interference

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

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 (in a hospital for example).

Water resistance

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

Sensible use

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

Emergency call

Key in the emergency number for your present location, then press the ✆ key. Give all the necessary information as accurately as possible. Do not end the call until given permission to do so.

Keeping small children away from your phone

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

Accessories and batteries

Use only Samsung-approved accessories. Use of any unauthorized accessories could damage your phone and may be dangerous.

Use only Samsung-approved batteries and recharge your battery only with Samsung-approved chargers.

Qualified service

Only qualified service personnel may repair your phone.

For more detailed safety information, see "Health and safety information" on page 65.

CAUTION

RISK OF EXPLOSION IF A BATTERY IS REPLACED BY AN INCORRECT TYPE.

DISPOSE USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

Unpacking

Your package contains the following items.

Handset	Battery
Desktop Charger	Start Here Guide
CD	

In addition, you can obtain the following accessories for your phone from your local Samsung dealer:

• Headset	• Car charger/ adapter
• Standard and Extended batteries	• Cigarette lighter adapter
• Hands-free car kit	• Data cable
• Bluetooth headset kit	• Bluetooth full hands-free kit

Your phone

Key Description

Key(s)	Description
soft keys	Performs the functions indicated by the screen text on the bottom line of the display.
Navigation keys	In Standby mode, quickly enters your favorite menus.In Menu mode, scrolls through menu options.
OK key	In Standby mode, enters the Pics. video menu. In Menu mode, selects the currently highlighted menu or option, or confirms your input.
TALK key	Makes or answers a call. In Standby mode, retrieves the most recent numbers dialed, received, or missed. Redials the last number when pressed and held.
END key	Ends a call. Also switches the phone on and off when pressed and held. In Menu mode, cancels your input and returns to Standby mode.
BACK key	Deletes characters from the display. In Menu mode, returns to the previous menu level.
Numeric keys	Enters numbers, letters, and some special characters.

Key(s)	Description (continued)
* key	In Standby mode, initiates the voice command feature when pressed and held. In the text entry mode, changes case of letters.
# key	In Standby mode, quickly enters or exits Silent mode when pressed and held. In the text entry mode, inserts a space.
Camera key	In Standby mode, allows you to quickly access the **Camera** menu. Also turn on the camera when pressed and held. In Capture mode, takes a photo or starts recording a video.
Volume keys	(on the left side of the phone) During a call, adjust the earpiece volume. In Standby mode, adjusts the key tone volume. In Menu mode, scrolls through menus.

Display

Layout

The display has 3 areas; the top line of icons, the text and graphics area, and the bottom line of soft key indicators.

Icons

Icon	Description
▔▁ᵢₗₗ	**Signal strength**: Shows the received signal strength. The greater the number of bars, the better the signal.
☎	**Service**: Appears when a call is in progress.
☎	**No service**: Appears when you are outside a service area. When it displays, you cannot make or receive calls. Wait a little while for a better signal or move into an open area to regain service.
⏰	**Alarm mode**: Appears when you set an alarm to ring at a specified time.
♪	**Ringer on**: Appears when you set the ringer volume for calls to one from **Level 1~8**, **1-Beep** or **Vib+Ring**.
♪	**Ringer off**: Appears when you set the volume of the call ringer to **Silent**.
📳	**Vibration mode**: Appears when the ringer volume for calls is set to **Vibrate**, or when your phone is in Silent mode.
🔇	**Silent mode**: Appears when the phone is Silent mode.
🔋	**Battery status**: Shows the level of your battery. The more bars you see, the more power you have remaining.

Backlight

The backlight illuminates the display and the keypad. When you press any key or open the phone, the backlight illuminates. It turns off if no key has been pressed within a given period of time, depending on the setting in the **Backlight** menu

The backlight remains on at all times when the phone is connected to an optional car kit.

Service light

The service light on the bottom tip of the phone flashes to indicate an incoming call, a message, or an alarm and flashes for a few seconds when you turn on or off the phone.

It flashes while the battery is charging with the travel adapter; it turns green when the battery is fully charged.

Camera

The camera embedded in your phone allows you to take a photo or record a video while on the move.

Getting started

Using the battery

Your phone is powered by a rechargeable Li-ion battery. Use only approved batteries and chargers. Ask your local Samsung dealer for further details.

Note: You must fully charge the battery before using your phone for the first time.

Installing the battery

1. Place the battery so that the tabs on the end align with the slots at the bottom of the phone.

2. Press the battery until it clicks into place. Make sure that the battery is properly installed before switching the phone on.

Removing the battery

1. If necessary, switch off the phone by pressing and holding the END key until the power-off image displays.

2. Slide the battery lock towards the top of the phone and lift away the battery, as shown.

1. With the battery in position on the phone, plug the connector of the travel adapter into the jack at the bottom of the phone.

Low battery indicator

When the battery is weak and only a few minutes of talk time remain, a warning tone sounds and a message repeats at regular intervals on the display. In this case, your phone turns off the backlight to conserve the remaining battery power.

When the battery level becomes too low, the phone automatically turns off.

Switching on or off the phone

1. Open the phone.

2. Press and hold the END key until the power-on image displays to switch on the phone.

   The service light on the phone flashes and an alert sounds. When the system locates services, the greeting message displays along with the time and date. You can now place and receive calls.

   If the phone is out of service, the No Service icon ( ) appears on the display. In this case, you cannot place and receive calls. You can try again later when service is available.

3. When you wish to switch off the phone, press and hold the END key until the power-off image displays.

WARNING!

Do not switch on the phone when mobile phone use is prohibited or when it may cause interference or danger.

Using the soft keys

Your phone offers a set of functions that allows you to customize and use it. These functions are arranged in menus and submenus, accessed using the two soft keys. Each menu and submenu allows you to view and alter the settings of a particular function.

The roles of the soft keys vary depending on the current function you are using; the labels on the bottom line of the display just above each key indicate their current role.

Your phone's modes

Standby mode

Standby is the most basic state of your phone. The phone goes into Standby mode after you turn it on or whenever you briefly press the END key. When your phone is in Standby mode, you will typically see the greeting message and the current time and date.

Press the END key at any time to return to Standby mode. Be careful; if you are on a call when you press the END key, the call disconnects and the phone returns to Standby mode.

Talk mode

You can place and answer calls only when your phone is turned on. During a call, the phone is in Talk mode.

Lock mode

When you lock your phone using the **Lock Phone** menu, you cannot use the phone. In Lock mode, you can receive messages and calls, but you cannot place an outgoing call until you unlock the phone.

Using the Keypad Lock feature

You can open the phone to use the number keypad and close so that it takes up less space.

When you close the phone, the display turns off and the phone automatically locks the exposed function keys so that even if they are pressed accidentally, nothing will happen.

To unlock the keypad, press and hold one of the Volume keys, press the **Unlock** soft key, and then press the **OK** soft key.

The keypad is activated and you can use the phone's functions.

Call functions

Making a call

In Standby mode, enter the area code and phone number and press the SEND key.

Send: sends a message to the number.

Save: saves the number in Contacts.

P Pause: enters a hard pause.

T Pause: enters a 2-second pause.

Ending a call

When you want to end your call, press the END key.

The call time, the length of the call, displays along with the phone number of the called person. If the number is stored in your Contacts, the name displays. If there is no match, you can store the number in Contacts.

Alternatively, simply close the phone to end a call.

Emergency dialing

You can place calls to standard emergency numbers, even if your phone is locked or all of the outgoing calls are restricted.

Making a call from the recent call logs

The phone stores up the calls you have dialed, received, or missed chronologically. The last call is saved in the first position.

To recall any of these numbers:

1. In Standby mode, press the SEND key to access call logs. The list of recent calls displays.

2. Press the Navigation keys, or the Volume keys on the left side of the phone until you find the number you want.

3. Press the SEND key to dial the highlighted number.

Making a call from Contacts

You can store the phone numbers you called regularly in the phone's memory, which is called "Contacts". You then simply recall the number by pressing the OK key and selecting from the Contacts list.

Speed dialing

Once you have stored phone numbers from your Phonebook list, you can set up speed dial entries and then dial them easily whenever you want, simply by pressing the associated numeric key.

To speed dial, in Standby mode, enter a speed dialing number you have set and press the SEND key to dial the number. You can also press the first digit briefly, then hold down the second digit of the speed dialing number.

Pause dialing

When you call an automated system, like a banking service, you are often required to enter a password or account number. Instead of manually entering the numbers each time, you can store the numbers in your Contacts, separated by pauses.

There are 2 kinds of pauses that can be entered on your phone:

• **P pause**: A hard pause stops the dialing sequence until you press the SEND key.

• **T pause**: A 2-second pause stops the dialing sequence for two seconds and then automatically sends the remaining digits.

Storing pauses in a Contacts entry

To store a number in your Contacts that contains pauses:

1. In Standby mode, enter a phone number you want to store, such as the bank's teleservice phone number.

2. Press the **Options** soft key.

3. Select the required pause type and press the **OK** soft key.

    • **P Pause**. The letter "P" displays, meaning that a hard pause will occur at that point in the dialing sequence.

    • **T Pause**. The letter "T" displays, meaning that a "2-second" pause will occur at that point in the dialing sequence.

4. Enter the digits that need to follow the pause, such as your account number.

5. Repeat steps 2 through 4 to add more pauses and numbers, if necessary.

6. Press the OK key to store the number in your Contacts as you normally would when storing a number.

Pause dialing from a Contacts entry

1. Dial the number of the service from Contacts.

   For further details about finding a number, see page 53.

2. For a hard pause(s), wait for the appropriate prompt from the number you are calling. When prompted, press the SEND key to send the DTMF (Dual tone multi-frequency) number that follows the pause.

   For a 2-second pause(s), your phone transmits the number that follows the "T" pause two seconds after the connection.

   "Sending DTMF" flashes on the display and the transmitted tone sounds.

3. Repeat from step 2, if necessary.

Voice dialing

Once you have stored a phone number in Contacts, you can dial it simply by saying the associated name or the number.

Before using the voice dial feature, you first need to programme your phone to recognize your voice and pronunciation in the **Adapt Digits** menu

Adjusting the volume during a call

During a call, if you want to adjust the earpiece volume, use the Volume keys on the left side of the phone.

The image on the display shows all 8 levels; the more bars, the higher level.

In Standby mode, you can also adjust the keypad tone volume using these keys.

Answering a call

When somebody calls you, the phone alerts you by ringing and blinking the service light.

If the caller can be identified, the caller's phone number, or name if stored in your Contacts, displays.

There are 2 ways to answer a call depending on your setting in the **Call Answer** menu

If you select	To answer the call,
TALK Key	press the TALK key.
Flip Open	open the phone. If the phone is already open, press the SEND key.
Any Key	press the Any key except the END key.

To end the call, close the phone or press the END key.

Viewing missed calls

If you fail to answer a call for any reason, the phone indicates the missed call by displaying a text notification on the screen. Additionally, if caller information is available, the screen displays the phone number of the last missed call along with the time and date the call was made.

When the display informs you of the missed call, press the SEND key to dial the missed number, or the END key to clear the message and return to Standby mode.

To view missed calls, access the **Missed** menu.

Options during a call

Your phone provides a number of functions that you can use during a call.

Press the **Options** soft key during a call to access the options.

Using caller ID

This feature tells you who is calling you by displaying the caller's number when the phone rings. If the name and number are stored in your Contacts, the corresponding name is also displayed. If you call someone who has this feature, your phone number displays on her/his phone.

Note: Contact your service provider to set up the Caller line identification service.

Call forwarding

This network feature allows you to forward incoming calls to another phone number, even while your phone is turned off. Activating Call forwarding does not affect outgoing calls made from your phone.

Note: Contact your service provider to activate Call forwarding.

Call waiting

Call waiting lets you receive a second call during a conversation. Your phone notifies you of a waiting call by beeping and displaying "Call waiting."

Your network provides you with the option of turning the Call waiting feature on and off, if you have subscribed to the service. Call waiting is on by default in the phone. If you choose to have a undisturbed conversation, simply turn off the feature for the current call.

Note: If you do not respond to a Call waiting notification, the phone will forward the call to voice mail server or another number that you have specified. Contact your service provider for more information.

Three-way calling

This feature enables you to conduct conference calls with 2 separate people at the same time. The phone records both of them into the Outgoing calls log and you are billed air time for each of outgoing calls separately. Contact your service provider to activate Three-way calling.

To place a Three-way call:

1. During a conversation, press the SEND key. The phone places the other person on hold.

2. Enter the phone number for the third person, and then press the SEND key. The phone dials the third person.

3. When you are connected to the person, press the SEND key again to begin your three-way call.

If one of the callers (not you) hangs up, you and remaining caller stay connected. If you initiated the call and you hang up first, all 3 participants are disconnected.

Entering text

At many times when using your phone, you will need to enter text, such as when storing a name in Contacts, creating your personal greeting, or scheduling events on your calendar. You can enter alphanumeric characters into your phone using your phone's keypad.

Your phone has the following text input modes:

- **T9 English mode**: This mode allows you to enter words with only one keystroke per letter. Each key on the keypad has more than one letter; for example, pressing 5 can enter J, K, or L. However, T9 English mode automatically compares the series of keystrokes you make with an internal linguistic dictionary to determine the most likely word, thus requiring far fewer keystrokes than the traditional Alphabet mode.

- **Alpha mode**: This mode allows you to enter letters by pressing the key labeled with the letter you want. Press the key once, twice, three or four times until it displays.

- **123 mode**: This mode allows you to enter numbers.

- **Symbol mode**: This mode allows you to enter various symbols and special characters.

Changing the text input mode

When you are in a field that allows characters to be entered, you will notice the text input mode indicator on the display.

Using T9 English mode

T9 is a predictive text input mode that allows you to key in any character using single keystrokes. This text input mode is based on a built-in dictionary.

To enter a word in T9 English mode:

1. Press the keys on the phone just once per desired letter. For example, to enter "hello", press 4,3 5,5 and 6 key.

2. The word that you are typing appears on the display. It may change with each key that you press.

3. Type to the end of the word before editing or deleting any keystrokes.

4. Insert a space between each word by pressing the # key.

   If the word doesn't display correctly, press the 0 key repeatedly to display alternative word choices for the keys that you have pressed.

   Example: Both "of" and "me" use 6 and 3 key. The phone displays the most commonly used choice first.

5. Continue entering the next word.

Note: To type words not found in T9 English mode, you need to change the text input mode to Alpha mode.

Smart punctuation

Periods, hyphens, and apostrophes are available by pressing the 1 key. T9 English mode applies rules of grammar to insert the correct punctuation.

Changing the letter case

To shift the case of the next letter(s) that you type, press the * key . There are 3 cases:

• Lower Case (**T9abc**)

• Initial Capital (**T9Abc**)

• Capitals Lock (**T9ABC**)

Inserting a space

Press the # key to insert a space between words.

Inserting a number

You can insert a number between letters without exiting T9 English mode. Press and hold the corresponding number key.

Scrolling

To move the cursor to the left or right through your text, press the Navigation keys.

Clearing letters and words

Press the BACK key once or repeatedly to clear letters one by one to the left. Press and hold the BACK key to erase all of the letters on the display.

Using Alpha mode

When typing in Alpha mode, you need to press the keys labeled with the required letter:

- once for the first letter
- twice for the second letter
- and so on

This method is called multi-tap typing.

For example, you press the 2 key 3 times to display the letter "C" and the 3 key 2 times to display the letter "K."

The cursor moves to the right when you press a different key. When entering the same letter twice or a different letter on the same key, just wait for a few seconds for the cursor to move to the right automatically, and then enter the next letter.

Changing the letter case

To shift the case of the next letter(s) that you type, press the * key. There are 3 cases:

• Initial Capital (**Abc**)

• Capitals Lock (**ABC**)

• Lower Case (**abc**)

Inserting a space

Press the # key to insert a space between words.

Inserting a number

You can quickly insert a number between letters. Press and hold the corresponding number key.

Scrolling

To move the cursor through your text message, press the Navigation keys.

Clearing letters and words

Press the BACK key once or repeatedly to clear letters one by one to the left. Press and hold the BACK key to erase all of the letters on the display.

Using 123 mode

Number mode enables you to enter numbers.

Press the keys corresponding to the digits you want to enter and manually switch back to the text entry mode of choice.

Using Symbol mode

Symbol mode enables you to enter symbols.

Press the Navigation keys to display more symbol sets.

Press the keys corresponding to the symbols you want, then the phone automatically switches back to the text entry mode used just prior to selecting Symbol mode.

Using the menus

This phone offers a range of functions that allow you to tailor the phone to your needs. These functions are arranged in menus and submenus. They can be accessed by scrolling or by using the shortcuts.

Accessing a menu function by scrolling

1. In Standby mode, press the Menu/OK key to access Menu mode.

2. Scroll using the Navigation keys to reach the main menu, for example, **Settings**. Press the OK key to enter the menu.

3. If the menu contains any submenus, for example,**Others**, find the one you want by scrolling using the Navigation keys. Press the OK key to enter the submenu.

   If the menu you have selected contains submenus, repeat this step.

4. Scroll using Up or Down key to find the setting of your choice.

5. Press the OK key to confirm the chosen setting.

Notes:
• You can return to the previous menu level by pressing the BACK key.
• You can exit the menu without changing the menu settings by pressing the END key.

Using shortcuts

The menu items, such as menus, submenus, and setting options, are numbered and can be accessed quickly by using their shortcut numbers.

Note: The numbers assigned to each menu function are indicated on the list. See the next page.

1. In Standby mode, press the Menu/OK key to access Menu mode.

2. Enter the first digit of the shortcut number. Repeat this for each digit of the shortcut number.

3. Scroll using the Navigation keys to select the setting of your choice.

4. Press the OK key to confirm the chosen setting.

List of menu functions

The following list shows the menu structure and indicates the number assigned to each option.

1. Web

2. Call History

    2.1 Outgoing Calls
    2.2 Incoming Calls
    2.3 Missed Calls
    2.4 Recent Calls

3. Media Player

4. On Demand

5. Missed Alerts

6. Music

7. Downloads

    7.1 Games
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    9.6 Memo Pad
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    9.9 Claculator

*. Pictures

    *.1 Camera
    *.2 Camcorder
    *.3 My Pictures
    *.4 My Videos
    *.5 Online Albums
    *.6 Setting and Info
    *.7 Pictbridge Print

0. Contacts

    0.1 Find
    0.2 Add New Entry
    0.3 Speed Dial #
    0.4 Group
    0.5 My Name Card
    0.6 Services

#. Settings

    #.1 Display
    #.2 Sounds
    #.3 PCS Vision
    #.4 Voice Service
    #.5 Security
    #.6 Roaming
    #.7 Launch Pad
    #.8 Others
    #.9 Phone Info
    #.0 Bluetooth

Web

With Web access on your Sprint PCS Vision Phone, you can browse full-color graphic versions of your favorite Web sites, making it easier than ever to stay informed while on the go. Follow sports scores and breaking news and weather and shop on your Sprint PCS Vision Phone anywhere on the Sprint Nationwide PCS Network.

In addition to the features already covered in this section, the Sprint PCS Vision home page offers access to these colorful, graphically rich Web categories, including News, Weather, Entertainment, Sports, Finance, Travel, Shopping, Tools, and Business Links, as well as useful management options including My Account and Search. Many sites are available under more than one menu . choose the one that's most convenient for you.

Call History

You can use the Call History menu to:

• .View and dial the missed, outgoing or incoming numbers.

• Erase the numbers in the Call Log memory.

Outgoing Calls   *(Menu 2-1)*

The phone stores up to 10 outgoing calls you dialed. When you access this menu, the list of outgoing calls is displayed.

Incoming Calls   *(Menu 2-2)*

This option lets you view the last 10 calls received. (if you are subscribed to the caller ID service). When you access this menu, the last incoming calls are displayed.

Missed Calls   *(Menu 2-3)*

This option lets you view the last 10 calls missed. (if you are subscribed to the caller ID service). When you access this menu, the last missed calls are displayed.

Recent Calls   *(Menu 2-4)*

Use All recent to view received, dialed, and missed calls for your phone. You can also use All recent to erase your call history and view Call Timers.

While viewing All recent, you have options such as saving recent call numbers to your Phonebook, sending messages to recent call numbers, and prepending (editing) numbers before saving.

Media Player

Your Sprint PCS Vision Multimedia Phone's built-in media player gives you the ability to listen to audio clips and view video clips right from your phone's display. It's a great way to stay up-todate with news, weather, and sports information while also enjoying the latest blockbuster movie trailers or music videos . anywhere, anytime on the Sprint Nationwide PCS Network. Just access your media player from your phone's main menu, scroll to your choice of channel, and select one of the video or audio clips to play. It's like having a TV in the palm of your hand. This section explains the features and options of your phone's built-in media player.

On Demand

This service currently provides media on demand with video and audio clips that are refreshed throughout the day, but that are not "live."

Missed Alerts

Missed events is a simple way of viewing all missed calls, missed tasks, scheduler events, etc. A list is displayed onscreen that allows you to scroll through all the events using the navigation key.

To view missed events:
 From the standby by screen, press the navigation key up to view the Missed Events screen.

Music

You can connect to a preset website and search for a music file and follow the on screen instructions to download it.

Downloads

With Sprint PCS Vision and your new Sprint PCS Vision Phone, you have access to a dynamic variety of Premium Service content, such as downloadable Games, Ringers, Screen Savers, and other applications. (Additional charges may apply.)

Messaging

Send Message *(Menu 8-1)*

1. Enter the number or e-mail address of the recipient and press OK.

2. Enter your message using the keypad. Press the Option soft key. A pop-up menu appears in the display.

3. Use the navigation key to select the input mode (ABC, T9Word, Symbol, or 123). Also use the navigation key to choose the text format, or if you wish to Add Media such as a picture, animation, melody, or a canned message.

4. Once you're finished entering your message, press OK.

5. Press the Send soft key. Your message is sent to the intended recipient.

Text Message *(Menu 8-2)*

You can use following options in this menu :

Inbox

New messages are stored in your inbox.

1. Use the navigation key to highlight the message you wish to view.

2. Press OK to view the contents of the message.

Outbox

Your phone stores messages in Outbox, regardless of whether the message was successfully transmitted.

Drafts

Draft messages are those that have been composed but never sent. You can return to the Draft folder at any time to view, edit, or send a draft message.

Send Message

You can send message from Inbox.

Picture Mail *(Menu 8-3)*

You can send or receive picture mail in this menu.

VoiceSMS *(Menu 8-4)*

IM & Email *(Menu 8-5)*

With Sprint PCS Vision, you can use popular email services such as AOL Mail, Yahoo! Mail, MSN Hotmail and EarthLink to keep in touch, even while you're on the go.

Sprint PCS Vision also provides you with access to popular instant messaging (IM) clients, including AOL Instant MessengerTM, MSN Messenger, and Yahoo! Messenger.

Voicemail *(Menu 8-6)*

All unanswered calls to your Sprint PCS Phone are automatically transferred to your voicemail, even if your phone is in use or turned off. Therefore, you will want to set up your Sprint PCS Voicemail and personal greeting as soon as your phone is activated.

Settings *(Menu 8-7)*

Staying connected to your friends and family has never been easier. With your phone°Øs advanced messaging capabilities, you can send and receive many different kinds of text messages without placing a voice call. Your phone,s messaging settings make text messaging even faster and easier by letting you decide how you would like to be notified of new messages, create a signature with each sent message, and create your own canned messages, to name just a few.

Tools

Voice Service *(Menu 9-1)*

Your Sprint PCS Phone's Voice Services let you place calls using your voice. This section includes easy-to-follow instructions on using voice-activated dialing.

Voice Memo *(Menu 9-2)*

You can use your phone's Voice Services to record brief memos to remind you of important events, phone numbers, or grocery list items.

Bluetooth *(Menu 9-3)*

Bluetooth technology enables cost-free wirelessconnections between electronic devices within a maximum range of 10 meters. A Bluetooth connection can be used to send photos, images, videos, phonebook, scheduled items, and to connect wirelessly to devices using Bluetooth technology, such as computers. Since Bluetooth devices communicate using radio waves, your phone and the other Bluetooth device do not need to be in line of sight to each other. The 2 devices only need to be within a maximum of 10 meters of each other, although the connection can be subjected to interference from obstructions, such as walls or other electronic devices. In some countries, there may be restrictions on using Bluetooth devices.Please contact your service provider.

Enable/Disable

This feature allows you to activate the Bluetooth feature. When this option is set to On, the Bluetooth icon appears.

Search Device

This feature allows you to search for connectable Bluetooth devices.

File Viewer *(Menu 9-4)*

In this option, can view the files of your phone and memory card.

Planner *(Menu 9-5)*

Today

You can schedule for the current day indicating each event's start and end time. You can even have your phone's calendar alert you before an event is to start. Events scheduled for future dates automatically appear on your Today events schedule on that day.

Scheduler

This option allows you to view in calendar format the current month, or a past of future month. In this option, the current date is highlighted on the calendar. Days with the scheduled events are underlined.with the scheduled events are underlined.

Task List

This feature allows you to draw up a list of tasks to be done and assign a priority and deadline to each task.

Countdown

This menu help you know how much time it takes you to do something, or how many months, days, hours and minutes until a specific day. You can create up to 20 Count down timers using this menu.

Memo Pad *(Menu 9-6)*

This feature allows you to write down memos. You can enter up to 60 characters for each memo. If memos are already saved, scroll to the desired item by pressing up or down navigation key.

The following options available; .

Erase: allows you to erase a selected memo.

Erase All: allows you to erase memos.

World Time *(Menu 9-7)*

This menu allows you to check the current time for Greenwich Mean Time (GMT) and 24 major cities around the world: Select the city corresponding to your time zone by pressing the navigation keys one or more times. The local date and time are displayed.

Alarm Clock *(Menu 9-8)*

Your phone has an alarm clock function with three separate alarms.Each alarm can be set to go off once, or daily at a set programmed time. Once you set an alarm, it is easy to change it's time or to turn it off.

Calculator *(Menu 9-9)*

Using this feature, you can use the phone as a calculator. The calculator provides the basic arithmetic functions: addition, subtraction, multiplication and division.

Pictures

Camera *(Menu *-1)*

In this menu, you can take a picture. The camera produces JPEG pictures.

Camcorder *(Menu *-2)*

Your phone is capable of recording short videos (and audio) of up to a few seconds in length. Saved videos are stored in the My Videos.

My Pictures *(Menu *-3)*

In this menu option, you can review the pictures you have taken.

My Videos *(Menu *-4)*

In this menu option, you can review the videos you have taken.

Online Albums *(Menu *-5)*

Using this menu option, you can manage the pictures uploaded to the wireless web page assigned to you from the server when you are subscribed to the associated service.

Settings and Info *(Menu *-6)*

Using this menu option, you can change information about your web page account.

Accessing the Online Albums menu option connects your phone to the wireless web. Once you are connected to the web, the setting options displays.

Pictbridge Print *(Menu *-7)*

Using this menu option, you can select pictures, adjust print setting and execute print function.

Contacts

Contacts allows you to store frequently used phone numbers and the associated names in your personal directory to make it easy for you to make a call without having to remember or enter the phone number. You can store up to 500 entries including E-mail and URL addresses.

Find *(Menu 0-1)*

This menu allows you to find an entry using a person's name, entry number, or group name in your Contacts.

To change the finding method, press the navigation keys until the option you want displays; **By Name**, **By Speed Dial**, or **By Group**.

Add New Entry *(Menu 0-2)*

This menu allows you to store a number with a name in your Phone Book. You can save a person's various numbers, such as workplace number, mobile number and fax number, into one entry. Using this feature, you can keep someone's information together. It also helps you to find numbers easily in the Phone Book.

Speed Dial #s *(Menu 0-3)*

Speed dialing allows you to press and hold a key (or keys) to dial the number associated with those key(s).

There are three types of speed dialing; 1-touch, 2-touch, and 3-touch dialing.

Group *(Menu 0-4)*

This menu allows you to change the settings for the caller groups. You can create groups and edit the groups. You can also send a message to an entry(ies) you selected from a group.

My Name Card *(Menu 0-5)*

My Name Card allows you to create a virtual business card. Once completed, you can send the card to recipients as a V-card attachment..

Services *(Menu 0-6)*

Your Contacts are preprogrammed with phone numbers for various Sprint PCS Services.

Settings

Display *(Menu #-1)*

Screen saver

You can select an image to be displayed in idle mode.

Set foreground

A foreground image can be used to display a calendar, clock, or other images on top of the background image.

Incomig Call

To display the picture for all incoming calls. You can select either With Caller ID or No Caller ID

Greeting

The banner option allows you to edit the greeting displayed on the standby screen. Enter your greeting using the alphanumeric keys.

Backlight

You have several options for setting how the LCD, keypad backlight operates. Remember that backlight use drains your battery faster.

Service Light

This menu allows you to select whether or not the service light on.

Sounds *(Menu #-2)*

Ringer Volume

This menu option allows you to adjust the ringer volume.

Calls: allows you to adjust the ringer volume for the incoming calls.

Messages: allows you to adjust the ringer volume for the messages.

Alarms: allows you to adjust the ringer volume for the alarms.

Press up or down navigation key to adjust the volume or select the type.

Volume Level: adjust the volume level (the more bars, the louder).

Vibrate: switches the phone to vibration mode. An incoming call vibrates the phone.

1 Beep: sounds a beep.

Off: does not sound the ring.

Ringer Type

This option allows you to set a unique ring for voice calls, messages, data/fax, alarm, and planner. Select a unique ring tone for each status. As you change it, it sounds for a few seconds.

Note: You can download 5 melodys using PC Link.

Voice Calls: allows you to set a unique ring for an incoming voice call.

Messages: allows you to have a distinctive ring for a voice mail, page, text message or browser message.

Schedule: allows you to have a distinctive ring for a planner alarm.

Alerts

Minute Beep: With this menu option set to ON, the phone sounds an alert 10 seconds before each elapsed minute to remind you of the length of the current call.

Service : With this menu option set to ON, the phone beeps when you exit service area or when you return to a service area.

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

Sig. Fade Tone: When this option is set to On, the phone sounds an alert when a dropped call occurs during conversation in response to a signal fade.

Power On/Off: When this option is set to On, the phone sounds when you turn on or off the phone.

Key tone

Using this menu, you can set up the keypad tone that the phone sounds when you press a key.

Tone Length

The tone length setting enables you to select Short or Long DTMF (dual-tone multi-frequency) tones. When you use a teleservice (such as your bank account) andpress the keys to enter numbers into the teleservice, youare sending DTMF tones. The system used by the bankor other service determines if you need short or longDTMF tones. If the service is digital (which most arethese days) short DTMF will almost always work.

However, some new systems and almost all older(analog) systems require you to use long DTMF tones.Many home answering machines require long DTMFtones.

PCS Vision   *(Menu #-3)*

To access detailed instructions on using PCS Vision services, visit www.sprintpcs.com/manage and download your phone's complete User's Guide.

With PCS Vision, you will have access to applications that let you stay in touch with family and friends, have fun, stay informed on the go, and make your phone unique.

Features such as Web access, graphically-enriched games, and sending/receiving digital pictures will be available on select PCS Phones through the Sprint Nationwide PCS Network.

Voice Service   *(Menu #-4)*

Your Sprint PCS Phone's Voice Services let you place calls using your voice. This section includes easy-to-follow instructions on using voice-activated dialing.

Security   *(Menu #-5)*

Your phone provides many security options, including a user-programmable lock code and call restriction features.

To access the security menu, you must enter a four-digit lock code. The lock code is preset to 0000 at factory.

Lock Phone

When the phone is locked, you cannot operate the phone until you enter the lock code.

The following options are available:

Unlocked: the phone remains unlocked.

On power up: the phone locks automatically at the next time your phone turned on.

Lock Now: the phone locks immediately.

Lock Pic/Video

When the picture/video is locked, you cannot enter the camera mode until you enter the lock code.

Lock Service

This setting allows you to lock voice call functions and Sprint PCS Vision services. When you enable Lock Services, you are unable to make new calls (excluding emergency numbers) or access the Sprint PCS Vision services until the lock has been disabled in the Security menu.

Change Lock

This feature allows you to change your current lock code to a new one. The lock code is preset to 0000 at factory. Enter a new, four-digit lock code, then press OK.

Special

Your phone provides the option of storing emergency numbers. All emergency numbers can be manually dialed at any time even when your phone is locked or all default priority numbers are depending on your service provider.

To store an emergency number, select a location using a numeric keys or up or down navigation key and enter the desired number. Each priority number can be up to 32 digits long. The number already stored in the location is automatically deleted when you enter the new number. To make an emergency call in Lock mode, simply enter the emergency number, then press the TALK key.

Erase Contacts

This menu allows you to erase all the numbers in your Contacts and the voice dial.

When a confirmation message displays, press OK to clear the memory.

Erase Downloads

This menu allows you to erase all the downloads in the memory.

Erase Pic/Video

This menu allows you to erase all the pictures/ videos in my pictures.

Reset Phone

Resetting the phone erases all of your saved options and returns them to the factory default settings. Your Phone Book, Call Logs, and SMS messages remain.

The phone reboots (turns itself off then on), restores the default settings, and then returns to Standby mode.

Reset Pic/Video Account

Resetting the Account Info erases all of your saved options and returns them to the factory default settings.

Roaming *(Menu #-6)*

Set your phone to sound a unique tone when a call is received outside a network service area. This feature is set to Off by default.

Launch Pad *(Menu #-7)*

The Navigation Keys can be used as shortcut keys. In stanby mode, they allow you to access specific menu directly.

Others *(Menu #-8)*

Abbrev. Dial: Sets the abbreviation dialling on or off.

Contacts Match: Contacts Match allows you to enter the last 3-6 digits of a phone number stored in the Contacts and press TALK key to dial without having to enter the remaining digits.

Restriction: Allows you to limit the phone from making outgoing calls to only those listed in the phonebook or programmed in special's.

Call Answer: Allows you to determine what action will answer

Flip up or TALK: You can answer by flipping up or pressing TALK.

Flip up Only: You can answer only when the flip up.

TALK Only: You can answer only when you press TALK.

Auto Answer: With this menu option activated, the phone automatically answers calls after predefined time. This option is useful while driving, for instance.

Language: Sets the language of voice prompts, menus and key input.

Select the desired language by pressing the navigation key.

Airplane Mode: Airplane Mode allows you to use many of your phone's features, such as Games, Memo Pad, Voice Memos, etc.,

when you are in an airplane or in any other area where making or receiving calls or data is

prohibited. When your phone is in Airplane Mode, it cannot send or receive any calls or access online information.

Location: Your PCS Phone is equipped with a Location feature for use in connection with location-based services that may be available in the future.

Plus Code Dialing: When placing calls within the United States you can automatically use Plus Code Dialing to enter 011 for international calls.

Phone Info *(Menu #-9)*

Allows you to view phone nubmer, icon glossary, s/w and h/w version and advanced information.

Bluetooth *(Menu #-0)*

Bluetooth technology enables cost-free wirelessconnections between electronic devices within a maximum range of 10 meters. A Bluetooth connection can be used to send photos, images, videos, phonebook, scheduled items, and to connect wirelessly to devices using Bluetooth technology, such as computers. Since Bluetooth devices communicate using radio waves, your phone and the other Bluetooth device do not need to be in line of sight to each other. The 2 devices only need to be within a maximum of 10 meters of each other, although the connection can be subjected to interference from obstructions, such as walls or other electronic devices. In some countries, there may be restrictions on using Bluetooth devices. Please contact your service provider.

Enable/Disable

This feature allows you to activate the Bluetooth feature. When this option is set to Enable, the Bluetooth icon appears.

Visibility

This feature allows you to set whether or not your phone is available to other Bluetooth devices.

Device name

This feature allows you to change your phone's Bluetooth device name, which is displayed on other devices.

Security

This feature allows you to select whether or not the phone asks for your confirmation when other devices access your data.

Device Info: allows you to view the information of the selected device.

Health and safety information

Exposure to radio frequency (RF) signals

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

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

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

* 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.

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

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

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

FCC certification information for this model phone is attached separation paper.

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/rfsafety

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

U.S.Food and Drug Administration (FDA)

http://www.fda.gov/cdrh/consumer

World Health Organization (WHO)

http://www.who.int/peh-emf/en

Precautions when using batteries

• Never use any charger or battery that is damaged in any way.

• Use the battery only for its intended purpose.

• If you use the phone near the network's base station, it uses less power; talk and standby time are greatly affected by the signal strength on the cellular network and the parameters set by the network operator.

• Battery charging time depends on the remaining battery charge and the type of battery and charger used. The battery can be charged and discharged hundreds of times, but it will gradually wear out. When the operation time (talk time and standby time) is noticeably shorter than normal, it is time to buy a new battery.

• If left unused, a fully charged battery will discharge itself over time.

• Use only Samsung-approved batteries and recharge your battery only with Samsung-approved chargers. When a charger is not in use, disconnect it from the power source. Do not leave the battery connected to a charger for more than a week, since overcharging may shorten its life.

• Extreme temperatures will affect the charging capacity of your battery: it may require cooling or warming first.

• Do not leave the battery in hot or cold places, such as in a car in summer or winter conditions, as you will reduce the capacity and lifetime of the battery. Always try to keep the battery at room temperature. A phone with a hot or cold battery may temporarily not work, even when the battery is fully charged. Li-ion batteries are particularly affected by temperatures below 0 °C (32 °F).

• Do not short-circuit the battery. Accidental short- circuiting can occur when a metallic object (coin, clip or pen) causes a direct connection between the + and – terminals of the battery (metal strips on the battery), for example when you carry a spare battery in a pocket or bag. Short-circuiting the terminals may damage the battery or the object causing the short-circuiting.

• Dispose of used batteries in accordance with local regulations. 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, make sure that you are following the special regulations in a given area or country.

Operating environment

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

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

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

Electronic devices

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

Pacemakers

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

recommendations of Wireless Technology Research.

Persons with pacemakers:

• Should always keep the phone more than 15 cm (6 inches) from their pacemaker when the phone is switched on

• Should not carry the phone in a breast pocket

• Should use the ear opposite the pacemaker to minimize potential interference

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

Hearing aids

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

Other medical devices

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

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle.

You should also consult the manufacturer of any equipment that has been added to your vehicle.

Posted facilities

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

Potentially explosive environment

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

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

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

Emergency calls

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

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

To make an emergency call:

1. If the phone is not on, switch it on.

2. Key in the emergency number for your present location. Emergency numbers vary by location.

3. Press the TALK key.

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

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

Other important safety information

- Only qualified personnel should service the phone or install the phone in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty applicable to the device.

- Check regularly that all wireless phone equipment in your vehicle is mounted and operating properly.

- Do not store or carry flammable liquids, gases or explosive materials in the same compartment as the phone, its parts or accessories.

- For vehicles equipped with an air bag, remember that an air bag inflates with great force. Do not place objects, including both installed or portable wireless equipment in the area over the air bag or in the air bag deployment area. If wireless equipment is improperly installed and the air bag inflates, serious injury could result.

- Switch your phone off before boarding an aircraft. The use of wireless 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 the phone and all its parts and accessories out of the reach of small children's.

- Keep the phone dry. Precipitation, humidity and liquids contain minerals that will corrode electronic circuits.

- Do not use the phone with a wet hand. Doing so may cause an electric shock to you or damage to the phone.

- Do not use or store the phone in dusty, dirty areas, as its moving parts may be damaged.

- Do not store the phone in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.

- Do not store the phone in cold areas. When the phone warms up to its normal operating temperature, moisture can form inside the phone, which may damage the phone's electronic circuit boards.

- Do not drop, knock or shake the phone. Rough handling can break internal circuit boards.

- Do not use harsh chemicals, cleaning solvents or strong detergents to clean the phone. Wipe it with a soft cloth slightly dampened in a mild soap-and-water solution.

- Do not paint the phone. Paint can clog the device's moving parts and prevent proper operation.

- Do not put the phone in or on heating devices, such as a microwave oven, a stove or a radiator. The phone may explode when overheated.

- Use only the supplied or an approved replacement antenna. Unauthorized antennas or modified accessories may damage the phone and violate regulations governing radio devices.

- If the phone, battery, charger or any accessory is not working properly, take it to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

Acknowledging special precautions and the FCC and industry canada notice

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:

(1) This device may not cause harmful interference.

(2) 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

Appendix A:CERTIFICATION INFORMATION (SAR)

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

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

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

The highest SAR values for this model phone as reported to the FCC are
CDMA Head:0.839W/Kg,
CDMA Body-worn:0.660W/Kg, and
PCS Head: 0.514W/Kg,
PCS Body-worn: 0.962W/Kg.
Body-worn operations are restricted to Samsung-supplied, approved or none Samsung designated accessories that have no metal and must provide at least 1.5cm separation between the device, including its antenna whether extended or retracted, and the user's body. None compliance to the above restrictions may violate FCC RF exposure guidelines.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/oet/fccid after searching on FCC ID A3LSPHA900.

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 seatbelts 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 whenbehind the wheel of a car. Wireless telecommunicationsis keeping us in touch, simplifying our lives, protecting usin emergencies and providing opportunities to help others in need. When it comes to the use of wireless phones, safety is your most important call.

Wireless Phone "Safety Tips"

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

1. Get to know your wireless phone and its features suchas speed dial and redial. Carefully read your instructionmanual and learn to take advantage of valuable featuresmost phones offer, including automatic redial andmemory. Also, work to memorize the phone keypad soyou can use the speed dial function without taking yourattention off the road.

2. When available, use a hands free device. A number of hands free wireless phone accessories are readily available today. Whether you choose an installed mounted device for your wireless phone or a speaker phone accessory, take advantage of these devices if available to you.

3. Position your wireless phone within easy reach. Make sure you place your wireless phone within easy reach and where you can grab it without

removing your eyes from the road. If you get an incoming call at an inconvenient time, if possible, let your voice mail answer it for you.

4. Suspend conversations during hazardous driving conditions or situations. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow and ice can be hazardous, but so is heavy traffic. As a driver, your first responsibility is to pay attention to the road.

5. Do not take notes or look up phone numbers while driving. If you are reading an address book or business card, or writing a °×to do°± list while driving a car, you are not watching where you are going. It's common sense.

Don't get caught in a dangerous situation because you are reading or writing and not paying attention to the road or nearby vehicles.

6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan your calls before you begin your trip or attempt to coincide your calls with times you may be stopped at a stop sign, red light or otherwise stationary.

But if you need to dial while driving, follow this simple tip-dial only a few numbers, check the road and your mirrors, then continue.

7. Do not engage in stressful or emotional conversations that may be distracting. Stressful or emotional conversations and driving do not mix-they are distracting and even dangerous when you

are behind the wheel of a car. Make people you are talking with aware you are driving and if necessary, suspend conversations which have the potential to divert your attention from the road.

8. Use your wireless phone to call for help. Your wireless phone is one of the greatest tools you can own to protect yourself and your family in dangerous situationswith your phone at your side, help is only three numbers away. Dial 9-1-1 or other local emergency number in the case of fire, traffic accident, road hazard or medical emergency. Remember, it is a free call on your wireless phone!

9. Use your wireless phone to help others in emergencies. Your wireless phone provides you a perfect opportunity to be a °×Good Samaritan°± in your community.

If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.

10. Call roadside assistance or a special wireless nonemergency 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.wowcom. com/consumer/issues/driving/articles.cfm?ID=85

Appendix C: Consumer Update on Wireless Phones

U.S. Food and Drug Administration

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

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

2. Do wireless phones pose a health hazard?

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

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.

1. 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:

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

l Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and

l 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:

l National Institute for Occupational Safety and Health

l Environmental Protection Agency Federal Communications Commission

l Occupational Safety and Health Administration

l National Telecommunications and Information Administration

l 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.

1. 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.

1. 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.

1. 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.

1. 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.

2. 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.

1. 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.

1. 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.

1. 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.

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

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

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

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

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

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

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

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

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

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

Glossary

Airtime - Actual time spent talking on the wireless phone. Most carriers bill customers based on how many minutes of airtime they use each month.

Antenna - A device for transmitting or receiving signals. The size and shape of antennas is determined, in part, by the frequency of the signal they receive. Wireless phones and the base station must have antennas.

Base station - The fixed radio transmitter/ receiver that maintains communications with mobile radio telephones within a given area. (Typically called a cell or cell site)

CDMA - (Code Division Multiple Access) A spread-spectrum approach to digital transmission. With CDMA, each conversion is digitized and then tagged with a code. The mobile phone deciphers only a particular code to pick the right conversation off the air. The transmitted signal is just above noise level across the available bandwidth.

Channel - Communications signals transmit along paths called channels.

Codec - Compression & Decompression.

Deactivation - The process of rendering a wireless phone inactive.

DTMF - (Dual-tone Multi-Frequency) You send DTMF signals when you enter numbers by pressing the digit keys.

EVRC - (Enhanced Variable Rate Codec) EVRC is a new global standard for compressing and decompressing voice signals. EVRC uses a lower bit rate (the number of bits sent per second) than existing CDMA vocoders, while providing significant improvements in voice quality. This technology enables your phone to provide superb voice quality while benefiting from the ability to process more cellular voice calls using less bandwidth than the voice codecs in CDMA networks today.

Frequency - A measure based on time, as one or more waves per second, in an electrical or light wave information signal. A signal's frequency is stated in cycles-per-second or Hertz (Hz).

Hands-free - A feature that permits a driver to use a wireless phone without lifting or holding the handset - an important safety feature for automobiles, tractors and most other motorized vehicles.

LCD - (Liquid Crystal Display) Commonly used to refer to the screen display on the wireless phone.

LED - (Light Emitting Diode) Commonly used to refer to a small light on the wireless phone or on the Desktop Charger. The LED lights on the phone to indicate an incoming call. The lights on the charger indicate that battery charging is taking place.

Prepend - The addition of a prefix, such as an area code, to a phone number.

RF - Radio Frequency

Roaming - The ability to use a wireless phone to make and receive calls in places outside of the home service area.

Service charge - The amount paid each month to receive wireless service.

Soft keys

- varies according to the function that you are currently using.

- is indicated on the bottom line of the display just above the corresponding key.

Standby time - The amount of time a fully charged wireless portable or transportable phone can be on and idle without being in use. (See Talk time.)

Talk time - The length of time a person can talk on a portable or transportable wireless phone without recharging the battery.

Vocoder - Voice coder. A device used to convert speech into digital signals.

Wireless - Radio-based Systems that allow transmission of telephone or data signals through the air without a physical connection, such as a metal wire (copper) or fiber optic cable.