



VX3100 Cellular Phone





⚠ WARNING! To reduce the possibility of electric shock, do not expose your phone to high humidity areas, such as a bathroom, swimming area, etc.



Caution: Use only LG-approved batteries and desktop chargers to avoid the damage to the phone. Using other batteries or chargers voids your warranty and may cause an explosion.



Caution: Do not use batteries and desktop chargers for purposes other than their intended use.



Never store your phone in temperatures less than 32 °F or greater than 104 °F, such as outside during a snowstorm or in your car on a hot day. Exposure to excessive cold or heat may result in phone malfunction, damage and/or failure.



Use caution when using your phone near other electronic devices. RF emissions from your mobile phone may affect nearby inadequately shielded electronic equipment. Consult manufacturers of any personal medical devices such as pacemakers and hearing aides to determine if they are susceptible to interference from your mobile phone. Turn off your phone in a medical facility or at a gas station.

IMPORTANT! Please read the TIA safety information in chapter 5 before using your phone.



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Congratulations on your purchase of the advanced and compact VX3100 cellular phone, designed to operate with the latest digital mobile communication technology, Code Division Multiple Access (CDMA). Along with the many advanced features of the CDMAsystem such as greatly enhanced voice clarity this phone offers:

- Large, easy-to-read, 6-line backlit LCD with status icons.
- Paging, messaging, voice mail, and caller ID.
- 18-key keypad.
- Long battery stand-by and talk time.
- Menu-driven interface with prompts for easy operation and configuration.
- Any key answer, auto answer, auto retry, one-touch dialing and speed dialing with 199 memory locations.
- Bilingual (English and Spanish available).

Important Information

This user's manual provides important information on the use and operation of your phone. Please read all the information carefully prior to using the phone for the best performance and to prevent any damage to or misuse of the phone. Any unapproved changes or modifications may void your warranty.

Check Accessories

Your mobile phone comes with a one-slot desktop charger and a rechargeable battery. Please verify that these accessories are included.



FCC RF Exposure Information

WARNING! Read this information before operating the phone.

In August 1996, the Federal Communications (FCC) of the United States, with its action in Report and Order FCC 96-326, adopted an updated safety standard for human exposure to radio frequency (RF) electromagnetic energy emitted by FCC regulated transmitters. Those guidelines are consistent with the safety standard previously set by both U.S. and international standards bodies.

The design of this phone complies with the FCC guidelines and these international standards.



A CAUTION

Use only the supplied and approved antenna. Use of unauthorized antennas or modifications could impair call quality, damage the phone, void your warranty and/or result in violation of FCC regulations.

Do not use the phone with a damaged antenna. If a damaged antenna comes into contact with the skin a minor burn may result. Contact your local dealer for a replacement antenna.

Bodily Contact During Operation

This device was tested for typical usage with the back of the phone kept 3/4 in (2 cm) from the body. To comply with FCC RF exposure requirements, a minimum separation distance of 3/4 inches (2 cm) must be maintained between the user's body and the back of the phone, including the antenna whether extended or retracted. Third-party belt-clips, holsters, and similar accessories containing metallic components should not be used. Avoid the use of accessories that cannot maintain 3/4 in (2 cm) distance between the user's body and the back of the phone and have not been tested for compliance with FCC RF exposure limits.

Vehicle-Mounted External Antenna

(Optional, if available.)

Aminimum distance of 8 in (20 cm) must be maintained between the user / bystander and the vehicle-mounted external antenna to satisfy FCC RF exposure requirements. For more information about RF exposure, visit the FCC website at www.fcc.gov.

FCC Part 15 Class B Compliance

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

Battery Safety

- Do not disassemble.
- Do not short-circuit.
- Do not expose to high temperatures: 60 °C (140 °F)
- Do not incinerate.

Battery Disposal

- Please dispose of your battery properly or take it to your local wireless carrier for recycling.
- Do not dispose of your battery in a fire or with hazardous or flammable materials.

Adapter (Charger) Safety

- Using the wrong battery charger could damage your phone and void your warranty.
- The charger and adapter are intended for indoor use only.
- Do not expose the battery charger or adapter to direct sunlight or use it in places with high humidity, such as a bathroom.



Phone Components

The following shows key components of your mobile phone.



Phone Overview

- 1. Earpiece
- 2. **Flip Design** Flip open the case to answer an incoming call and close to end the call.
- Message Key Use to retrieve or send voice and text messages.
- 4. **SEND** Use to place or answer calls.
- Side Keys Use to adjust the key beep volume in standby mode and the earpiece volume during a call.
- 6. Headset Jack
- 7. Manner Mode/Silence All Mode Key Use to set the Manner Mode by pressing and holding the key for about 3 seconds while in standby mode. Note: The manner mode you select remains in effect even when you turn the phone off and back on.
- LCD Screen Displays messages and indicator icons.
- 9. Soft Keys

Soft Key 1 **T**Use to display the function setting menu.

Soft Key 2 D Use to select an action within a menu.

 Lamp The red light illuminates when you turn the power on and when you have an incoming call or message.

11.	Navigation Ke	Use for	quick	access to	phone
	functions:				

Text and voice mail notification messages.

Schedule

(Sounds

Mobile Web.

- END/PWR Use to turn the power on/off and to end a call. Using this key, you can return to the main menu display screen.
- Clear Key Press to delete a single space or character. Press and hold to delete entire words. Press this key once in a menu to go back one level.
- 14. **Alphanumeric Keypad** Use to enter numbers and characters and choose menu items.
- Lock Mode Key Use in standby mode to set the lock function by pressing and holding the key for about 3 seconds.
- 16. Microphone

Using the Battery Pack

Note: It is important to charge the battery fully before the initial use of the phone.

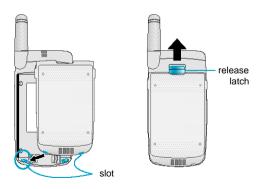
The phone comes with a rechargeable battery. Keep the battery charged while not in use in order to maximize talk and standby time when using the phone.

Installing the Battery

To install the battery, insert the bottom of the battery into the opening on the back of the phone. Then push the top of the battery down until the latch clicks.

Removing the Battery

Turn the power off. Lift the release latch to detach the battery.



Battery Charge Level

The battery charge level is shown at the top right of the LCD screen.



When the battery charge level becomes low, the low battery sensor alerts you in three ways: sounding an audible tone, blinking the battery icon, and displaying **LOW BATTERY WARNING!** If the battery charge level becomes exceedingly low, the phone automatically switches off and any function in progress is not saved.

Using the Desktop Charger

The desktop charger has a slot for recharging batteries that accommodates the phone and battery for charging.



Warning! Use only the desktop charger provided with the phone. Using an unauthorized charger may damage your phone or battery.

- 1. Plug the charger into a wall outlet. The phone must be charged from a 120 Vac power source.
- Insert the phone with an installed battery or the battery by itself into the slot of the charger. The red light indicates the battery is charging and the green light indicates the battery is fully charged.
 The charge time varies depending upon the battery level. The maximum charge time for a fully

discharged battery is 3 hours.



WARNING! The desktop charger and the travel charger cannot be used at the same time because the battery may be altered or damaged.

Battery Information and Care

- Never use an unauthorized battery since this could 1 damage the phone and / or battery and could cause the battery to explode.
- You do not need to wait until the battery is empty before recharging the battery.
- Use only LG chargers specific to your phone model 3. since they are designed to maximize battery life.
- Do not disassemble or short-circuit the battery. 4
- 5. Keep the battery's metal contacts clean.
- 6. Replace the battery when it no longer provides acceptable performance. The battery can be recharged several hundred times before requiring replacement.
- 7. Recharge the battery after long periods of non-use to maximize battery life.
- Do not expose the battery charger to direct sunlight 8. or use it in areas of high humidity such as a bathroom.
- Do not leave the battery in hot or cold places as it 9. may deteriorate battery performance.
- 10. Battery life varies due to factors such as location, usage patterns, etc.
- 11. Using features such as backlight settings, searching for service, the MiniBrowser, data connectivity, and synchronization affects the battery life and talk / standby times.

Screen Icons

Icons	Descriptions			
Y.1111	Displays the signal strength received by the phone and current signal strength is indicated by the number of bars displayed on the screen.			
X	No service. The phone is not receiving a system signal.			
Ç	In use. Acall is in progress. * No icon indicates the phone is in standby mode.			
D	Digital indicator Digital service is available.			
\triangle	Roaming The phone is outside of the home service area.			
1×	1x service.			
v ⊠	New voicemail.			
, .	New text & voice message.			
'	New text message.			
" P "	Manner (Vibration) mode.			
X	Silence all mode.			
(} »	Location on mode.			
₩	E911 only mode.			
	Charge level: Indicates battery charge level.			

Phone Menu

Press Soft Key 1 Menu. Press to Scroll.

Call History

- Outgoing
 - 2. Incoming
 - 3. Missed
 - 4. Erase History
 - 5. Call Timer
 - 1. Last Call
 - 2. Home Calls
 - 3. Roam Calls
 - 4. All Calls

Phone Book

- 1. List Entries
- 2. List E-mail
- 3. New Entry
- 4. New E-mail

Messages

- 1. Voice Mail
- 2. New Message
- 3. Inbox
- 4. Outbox
- 5. Saved

6. Msa Settinas

- 1. Auto Save
- 2. Auto Delete
- 3. Callback #
- 4. MsqAlert
- 5. Signature
- Direct View
- 7. Msg Entry
- 8. Font Size9. Delivery ACK
- 7. Frase All
 - 7. Erase All
 - 1. Inbox
 - Outbox
 - 3. Saved
 - 4. All
- 8. Mail Groups

Mobile Web

- 1. Start Browser
- Web Messages
- 3. Web Settings
 - 1. Prompt
 - 2. Alert Sound

Utilities

- 1. Games
 - 1. Mobile Hawk
 - 2. Black Jack
 - Setting
- 2. Schedule
 - 1. Add Event
 - 2. View Daily
 - View All
 - 4. Erase All
 - 5. Erase Old
- 3. Alarm

Settings

- 1. Sounds
 - Ring Sound
 - 2. Key Tone
 - 3. Ring Type
 - 4. Ring Volume
 - 5. Ear Volume
 - 6. Key Volume
 - 7. Alerts
 - 8. On/Off Tones
 - 2. Display
 - 1. Banner
 - 2. Backlight
 - 3. Contrast
 - 4. Menu Style

- System
 - 1. Select System
 - 2. Set NAM
 - 3. Auto NAM
 - 4. Serving Sys
 - 5. TTYMode
- 4. Security
 - 1. Lock Mode
 - 2. Restrict
 - 3. Emergency#
 - New Lock CodeFrase Data
 - 5. Erase Da
- Features
 - 1. Auto Retry
 - 2. Answer Call
 - Auto Answer
 One-Touch
 - 5. Voice Privacy
 - 5. Voice Privac
 - 6. Auto Volume
 - 7. Language
 - 8. Status Light
- Data SettingData/Fax
 - i. Dala/Fax
 - Speed
- 7. Location
 - Settings

Phone Info

- 1. My Phone#
- 2. S/W Version
- 3. Shortcut Help

Accessories

There are a variety of accessories available for your mobile phone. You can select these options according to your personal communication requirements. Consult your local dealer for availability.

Travel Charger

This chargerallows you to charge the battery while away from home or your office. It supports standard U.S. AC120 Volt 60 Hz outlets. An orange light indicates that it is charging, a green light indicates charging is complete. It takes 5 hours to charge a completely discharged battery.



Battery

Two batteries are available for extended and standard battery charge.



Extended Standard

Desktop Charger

The desktop charge allows you to place the phone in the stand for charging. It can charge a completely discharged battery in 3 hours.



Cigarette Lighter Charger

You can operate the phone and trickle charge the phone's battery from your vehicle by using the cigarette lighter charger.

It takes 5 hours to charge a completely discharged battery.



The hands-free car kit enables you to attach the phone to the power jack in your car, providing you with hands-free operation. It can charge a completely discharged battery in 5 hours.



Connects your phone to your PC.

Headset

Connects to your phone, allowing hands-free operation. Includes earpiece, microphone, and integrated call answer / termination button.









USB Cable

Connects your phone to your PC.



Holster



Leather cases, headsets and more accessories are available on Verizon Wireless.com.

Safety Information

Please read and observe the following information for the safe and proper use of your phone and to prevent any unanticipated damage. Also, keep the user's manual in an accessible place at all the times after reading it.

Explosion, Shock, and Fire Hazards

- Unplug the power cord and charger during lightning storms to avoid electric shock or fire.
- Do not use your phone in high explosive areas as the phone may generate sparks.
- Do not put your phone in a place subject to excessive dust and keep the minimum required distance between the power cord and heat sources.
- Unplug the power cord prior to cleaning your phone, and clean the power plug pin when it is dirty.
- Do not damage the power cord by bending, twisting, pulling, or heating. Do not use the plug if it is loose as it may cause a fire or an electric shock
- When using the power plug, ensure that it is firmly connected. If it is not, it may cause excessive heat or fire.
- Do not place any heavy item on the power cord. Do not allow the power cord to be crimped as it may cause fire or electric shock.

Do not impact the phone with sharp items such as a nail and keep it away from pets.

Do not disassemble the phone.

Be careful not to let the battery contact metal conductors such as a necklace or coins. When shorted, it may cause an explosion.

Do not disassemble the battery as it may cause electric shock, short-circuit, or fire.

Do not expose the phone to excessive vibration or a sharp impact.

Never place your phone in a microwave oven as it will cause the battery to explode.

General Warnings and Cautions

Store the battery in a place out of reach of children.

Using a damaged battery or placing a battery in your mouth may cause serious injury.

Do not place items containing magnetic components such as a credit card, phone card, bank book or a subway ticket near your phone. The magnetism of the phone may damage the data stored in the magnetic strip.

Do not hold or let the antenna come in contact with your body during a call.

Talking on your phone for a long period of time may reduce the call quality due to heat generated during use.

- If you plan to not use the phone for a long period time, store it in a safe area with the power cord unplugged.
- Only use the batteries, antennas, and chargers provided by LG. The warranty will not be applied to products provided by other suppliers.
- Using the phone in proximity to receiving equipment (i.e., TV or radio) may cause interference in this phone.
- Only authorized personnel should service the phone and its accessories. Faulty installation or service may result in accidents and consequently invalidate the warranty.
- Use only the antenna provided or approved by LG. Unauthorized antennas, modifications or attachments may affect the quality of phone calls, damage the phone or result in a violation of FCC regulations.
- Do not use the cellular phone if the antenna is damaged. If a damaged antenna contacts the skin, it may cause a slight burn. Please contact an LG Authorized Service Center to replace the damaged antenna.
- Do not use the cellular phone in areas where its use is prohibited. (For example: aircraft, hospitals).
- Do not expose the cellular phone to high temperatures or high humidity.
- Do not immerse your cellular phone in water. If this happens, turn it off immediately and remove the battery. If the phone does not work, take it to an LG Authorized Service Center.

Technical Details

The VX3100 is a dual-band phone that operates on both Code Division Multiple Access (CDMA) frequencies: cellular services at 800 MHz, and Personal Communication Services (PCS) at 1.9 Ghz.

CDMA technology uses a feature called DSSS (Direct Sequence Spread Spectrum) that enables the phone to keep communication from being crossed and to use one frequency channel by multiple users in the same specific area. This results in a 10-fold capacity increase when compared with analog mode. In addition, features such as soft / softer handoff, hard Handoff, and dynamic RF power control technologies combine to reduce call interruptions.

The Cellular and PCS CDMAnetworks consist of MSO (Mobile Switching Office), BSC (Base Station Controller), BTS (Base station Transmission System), and MS (Mobile Station). The following table lists some major CDMAstandards

CDMAStandard Designator		Description
Basic air interface	TIA/EIA/IS-95-A ANSI J-STD-008	Protocol between MS and BTS for Cellular & AMPS Protocol between MS and BTS for PCS
Network	TIA/EIA/IS-634 TIA/EIA/IS/651 TIA/EIA/IS-41-C TIA/EIA/IS-124	MAS-BS PCSC-RS Intersystem operations Nom-signaling data comm.
Service	TIA/EIA/IS-96-B TIA/EIA/IS-99 TIA/EIA/IS-637 TIA/EIA/IS-657	Speech CODEC Assign data and fax Short message service Packet data
Performance	TIA/EIA/IS-97 TIA/EIA/IS-98 ANSI J-STD-018 ANSI J-STD-019 TIA/EIA/IS-125	Cellular base station Cellular mobile station PCS personal station PCS base station Speech CODEC

^{*} TSB -74: Protocol between an IS-95Asystem and ANSI J-STD-008

¹xRTT system receives twice as many subscribers in the wireless section as IS-95. Its battery life is twice as long as IS-95. High-speed data transmission is also possible.



Turning the Phone On and Off

Turning the Phone On

- Install a charged battery pack or connect the phone to an external power source such as a cigarette lighter adapter or car kit.
- 2. Press for a few seconds until the red light in the middle of the phone flashes.

NOTE: Like any other radio device, avoid any unnecessary contact with the antenna while your phone is on.

Turning the Phone Off

Press and hold until the display turns off.

Making a Call

When you make a call, follow these simple steps:

Make sure the phone is turned on. If not, press



- 2 Enter the phone number, with area code (if needed).
- Press . If the phone is locked, enter the lock 3 code.

Call Failed indicates that the call did not go through. Restricted If this message displays on your screen, then outgoing calls are in restricted mode. You can only dial phone numbers saved in the Emergency or Phone Book list.

To turn off this function:

Menu-> 6 Settings -> 4 Security-> Enter Lock Code -> Restrict -> No -> Ok

4. Press to make the call. If one-touch is enabled, type in the phone book speed dial number or hold the last digit until the call is made

NOTE: The phone number and entry name appear on the display when you type in the speed dial number and hold the last digit.

Correcting Dialing Mistakes

If you make a mistake while dialing a number, press once to erase the last digit entered or hold down are for at least two seconds to delete all digits.

Receiving Calls

- When the phone rings or vibrates press any key except to answer.
 - If you press or the side keys while the phone is ringing, the ringing or vibration is muted for that call.
- 2. Press wice to end the call.

Using Manner, Silence All, and Lock Mode

Manner Mode (Quick)

Use Manner Mode in public places.

 When in Standby Mode, activate Manner Mode quickly by pressing for 3 seconds.



When Manner Mode is set, জ is displayed on the screen, the key tones are silent, and the phone is set to vibrate.

NOTE: The phone remains in Manner Mode even if you turn it off and back on.

NOTE: To cancel Manner Mode, press to switch into Silence All then to Normal Mode.

Silence All Mode (Quick)

 From Manner Mode you can activate Silent All Mode quickly by pressing for 3 seconds.



When Silence All Mode is set, the key tones are quiet and the lamp blinks instead of the phone ringing or vibrating.

NOTE: To cancel Silent All Mode, press to switch into Normal Mode then to Manner Mode.

Lock Mode (Quick)

Use Lock Mode to prevent others from using your phone.



 In standby mode, to activate lock mode quickly, press after 3 seconds. Lock mode setting is displayed. NOTE: To cancel the Lock Mode, Press Soft Key 1, Unlock, then enter your 4 digit password.

Call Waiting

If your cellular service offers call waiting, while a call is in progress you may hear two beeps indicating another incoming call. When call waiting is enabled, you may put the active call on hold while you answer the other incoming call. Check with your cellular service provider for information about this function.

- 1. Press to receive a waiting call.
- 2. Press again to switch between calls.

Mute

The mute function prevents the other party from hearing your voice, but allows you to hear the other party.

- 1. Press Soft Key 2, Mute, during a call.
- 2. To cancel Mute, press Soft Key 2 again.

Redialing Calls

 Press to redial the last number in your call history. The last 30 numbers are stored in the call history list and you can also select one of these to redial.

Adjusting the Volume

Use the side keys to adjust the earpiece, ringer, and key beep volumes. The upper key is used to increase and the lower key is used to decrease the volume.

You may adjust the earpiece volume during a call.

The ringer volume can be adjusted through the menu.

The key beep volume is adjusted through the menu.

Power Save Mode

When the phone is in an area without service for 15 minutes, it stops searching for service and enters into Power Save Mode. When your phone activates this feature, *Power Save* is displayed on the screen.

The phone automatically checks for service periodically or you can check manually by pressing any key.

Signal Strength

Call quality depends on the signal strength in your area. The signal strength is indicated on the screen by the number of bars next to the signal strength icon: the more bars, the better the signal strength. If the signal quality is poor, move to an open area. If you are in a building, the reception may be better near a window.

Speed Dialing

Speed dialing is a convenient feature that allows you to make phone calls quickly and easily.

- 1. Enter a speed dial number from 1 to 199.
- 2. Press .

Your phone recalls the phone number from your personal directory, displays it briefly and then dials it.

Caller ID

Caller ID lets you know who is calling by displaying the number of the person calling when your phone rings. If the caller's name and number are already stored in your phone book, the corresponding name appears with the number.

Check with your service provider to ensure they ofer this feature.



Entering information using T9 Text Input

You can edit the Banner, Scheduler, Short Message, and Phone Book using T9 Text Input.

Input mode

T9 Text Input provides five modes for entering text, numbers, special characters, and punctuation.

T9En (T9) Mode

Type text using one keystroke per letter. The phone translates keystrokes into common words by using the letters on each key and a compressed database. The default is T9 mode.

Abc (Multi-tap) Mode

Use Abc mode to add words to the T9 database.

123 (Numbers) Mode

Type numbers using one keystroke per number. To change to 123 mode in a text entry field, press Soft Key 2 until 123 mode is displayed.

Symbol Mode

Insert special characters and punctuation. You may use any of the 32 special characters. When the cursor is located where you want the special character, switch to Symbol mode.

Key Functions

Soft Key 2: Press to scroll through the menus in the following order: Abc-> 123-> Symbol-> Help-> T9En->.

Shift: Use to change case.

Type Text: In T9 mode, press one key per letter to enter text.

Type Numbers: In 123 mode, press once to enter numbers.

Next: In T9 mode, press to display other matching words.

Punctuation) In T9 mode, press to insert punctuation in a word and complete a sentence.

Space: Press to complete a word or insert a space.

Clear: Press to delete a single space or character. Hold to delete entire words.

Press the Navigation Key (to cycle through and select from the following characters:



4	Synt	100	
Car	7 20 7 55 1 6 8 scel	+ 60 \$ 60 2 90 Sun	2/4
4	Synt	ol	,
6	- 8	(8	4/4
Car	cel	Sun	bol

Changing Letter Case

There are three options for selecting letter case:

Initial Cap (T9En/Abc)

Only the first letter is capitalized.

Caps Lock (T9EN/Abc)

Press to change to Caps Lock. All subsequent letters are capitalized.

Lower case (T9en/abc)

Press again to change to lower case. All subsequent letters are in lower case.

Example: Using T9 Text Input

Typing In T9 Mode

To type the message

Call the office

follow these steps:

- 1. Press: Soft Key 2 to change the case to T9En mode.
- 2. Press: 2 2 2 5 5 5 .
- 3. Press: **a** to complete the word and add a space.
- 4. Press: 8 411 34 41 6 34 34 41 24 34.
- 5. The display shows: Call the office.

Using the NEXT Key

After you have finished typing a word, if the word displayed is not the word you want, press to display additional choices of words from the database.

For example:

- 1. Press: 4" 6- 6- 3".
- 2. The display shows the word Good.
- 3. Press: 0- .
- 4. The display gives you additional choices such as: Home, Gone, Hood, etc.

Adding Words to the T9 Database

If a word is not in the T9 database, add it by using Abc (Multi-tap) mode text entry. The word is automatically added to the T9 database when you return to T9 mode.

For example, follow these steps:

- Press: Soft Key 2 to change case to Abc (multitap) mode.
- 2. Press: 2 2 6 6 6 6 7 7 ...
- 3. Display: Bop
- Press: Soft Key 2 > to change letter case to T9 mode and then the word Bop is added to the T9 database.
- 5. Press: to erase the existing word.

- 6. Press: 2 6 7 7......
- 7. Display: Cop
- 8. Press: 0
- 9. Display: Bop

Examples Using Abc (Multi-tap) Text input

To type a new message, follow these steps:

- 1. Press: Soft Key 2 > to change case to Abc mode.
- 2. Press: ** to change to Abc Caps Lock mode.
- 3. Press: 5[™] 5[™] 5[™] 4[™].
- 4. Display: LG

Phone Book Features

You can store up to 199 entries in your phone book with easy access to your most frequently dialed phone numbers.

Personal Phone Book Memory

The phone has 199 personal phone book memory locations where you can store up to 5 phone numbers of up to 32 digits.

Saving Numbers in Your Personal Phone Book

Use memory locations 1 through 9 for one-touch dialing of your most frequently used phone numbers.

- Input the phone number that you want to save (up to 32 digits).
- Press Soft Key 1 **Option**, and the submenu appears.
- 3. Select Save on the sub-menu.
- 4. The phone will prompt you for the memory location where the number should be saved. Press Soft Key 1 Next, to automatically store the number in the first available memory location, or enter a specific three-digit memory location and then press Soft Key 1 Next, to store the number.
- Select the desired label: Home, Office, Mobile, Pager, or Data/Fax by using (n-).
- Enter a name for the phone number(up to 16 characters). If you do not want to enter a name, go to the next step.
- You may select the desired ID ring type and secret setting using
- Press Soft Key 1 Save, a confirmation prompt is displayed.













Retrieving Numbers

Retrieving by Name Search

- 1. Press Soft Key 2 Names.
- 2. Enter the character(s) that you want to search for such as the first letters of the name.
- 3. Alist of matching entries is displayed.
- Select an entry and press Soft Key 1 View to see more information in that entry, or press to place the call.

Making a call from Your Phone Book

You can place a call from any memory location either by using speed dial or by entering the phone number and pressing .

One-Touch Speed Dialing

This feature enables you to store your nine most frequently used numbers in your phone book in memory locations 1 through 9. For locations 1 through 9, use one-touch dialing by pressing and holding the corresponding key to the memory location to be dialed or press a number and then press

Two-Touch Speed Dialing

This feature enables you to dial numbers in your phone book through two keys for locations 10 to 99. Press the first digit and then press and hold the key of the second digit OR press the first and second digit, and then press



Three-Touch Speed Dialing

This feature enables you to dial numbers in your phone book by pressing three keys for locations 100 to 199. Press the first and second digits, and then press and hold the key of the third digit OR press the first, second, and third digits, and then press

Advanced Phone Book Features

Pause

When you call automated systems such as voicemail or credit billing numbers, you often have to enter a series of numbers. Instead of entering these numbers by hand, you can store the numbers in your phone book separated by pauses using special characters (H, T)

There are two different types of pauses that you can use when storing a number; hard and 2-second:

Hard pause (H)

The phone stops dialing until you press Soft Key 1, Resume to advance to the next number.

2-sec pause (T)

The phone waits two seconds before sending the next number.

Storing a number with pauses

- 1. Enter the phone number.
- 2. Press Soft Key 1 Option.
- 3. Select hard or 2-sec pause.
- Enter additional number(s) (e.g., pin number or credit card number).
- Press Soft Key 1 twice and the sub-menu appears. Select Save on the sub-menu.
- The phone prompts you for the memory location where the number should be saved. Press Soft Key

- 1 **Next** to automatically store the number in the first available memory location, or enter a specific three-digit memory location and then press Soft Key 1 to store the number.
- Select the desired description: Home, Office, Mobile, Pager, or Data/Fax by using ().
- Enter a name for the phone number (up to 16 characters). If you do not want to enter a name, go to the next step.
- 9. You may select the desired ID ring type and secret setting using (2).
- Press Soft Key 1 Save, a confirmation prompt is displayed.

Prepending a Stored Number

Prepend can be used if you are out of your home system area and need to add the area code to an existing phone book number. When a phone book entry or message callback number shows up on the display, you can add to the beginning of the original number. However, you cannot edit the original number.

- 1. Recall a number in memory.
- 2. Enter the prepend digits and the phone number.
- 3. Press .

Dynamic Search

Dynamic search compares entered letters against the entries in the phone book and then displays a matching list in descending order. You can then select a number from the list to call.



General Guidelines

- Press Soft Key 1 Menu and seven menu items appear on the display.
- 2. Press to go through the list of menu features.
- Highlight the menu item that you want and press Soft Key 1 Select. The sub-menu list appears on the screen.
- 4. Highlight the sub-menu item that you want and press Soft Key 1 **Select**.
- 5. Adjust your setting using the 😭 .
- Press Soft Key 1 Ok to save the settings or Soft Key 2 Back to cancel without saving.

Call History (Menu 17)

Use call history to view a list of the last phone numbers or phone book entries for calls you placed, accepted, or missed. It is continually updated as new numbers are added to the beginning of the list and the oldest entries are removed from the bottom of the list





Outgoing (Menu 10 10)

Allows you to view the list of outgoing calls; up to 10 numbers and entries.

- 1. From the menu, select **Call History**.
- 2. Press **10** Outgoing.
- 3. Press Soft Key 1 Option to view the list.
- 4. Place a call by pressing .

Incoming (Menu 🔼 🗫)

Allows you to view the list of incoming calls; up to 10 numbers and entries.

- 1. From the menu, select **Call History**.
- 2. Press **2** Incoming.

- 3. Press Soft Key 1 Option to view the list.
- 4. Place a call by pressing .

Missed Calls (Menu 10 34)

Allows you to view the list of missed calls; up to 10 numbers and entries.

- 1. From the menu, select Call History.
- 2. Press 3 Missed.
- 3. Press Soft Key 1 Option to view the list.
- 4. Place a call by pressing .

Erase History (Menu 🜆 🐠)

Allows you to erase the call history list.

- 1. From the menu, select **Call History**.
- 2. Press **Erase History**.
- 3. Press either **Yes** or **No** and press Soft Key 1 **Ok**.

Call Timer (Menu 70 51)

Call Timer Information is not intended to be used for billing purposes. The call timer simply allows you to view the time duration of the calls.

1. From the menu, select Call History.

- 2. Press **5^m Call Timer**.
- Select from Last Call/ Home Calls/ Roam Calls/ All Calls, and press Soft Key 1 Select.

Phone Book (Menu 22)

List Entries (Menu 2 7 7)

Use to search for a phone number by name.

- 1. Press Soft Key 1 Menu.
- 2. Press **2- Phone Book**.
- 3. Press **1** List Entries.





4. Enter the letter(s) that you want to search for (at least three letters are required for a quick search). Then press Soft Key 1 Find, a list of matching names is displayed. If no matches are found the message Not Found appears.

NOTE: On the List Entries menu, you can change the text mode by pressing Soft Key 2. (Abc -> 123 -> Symbol -> Help -> T9En)

List E-mail (Menu 2 2 2)

Use to search for an e-mail address.

- 1. Press Soft Key 1 Menu.
- 2. Press Phone Book.
- 3. Press 2 List E-mail.
- Enter the E-mail address you want to search for and press Soft Key 1 Find. If the E-mail address is found, it is displayed. If the E-mail address is not found, the message Not Found appears.
 - Select the item you want to view using (*).
- After selecting the E-mail address from the list, press Soft Key 1 View and the phone book entry is displayed.
- 6. After selecting the E-mail label, press (to move to an available entry where you can edit or delete.
- To save, press Soft Key 1 Save or press Soft Key 2
 Option and Select Save Entry on the sub-menu.

Delete an E-mail address

Move to the phone book from either List E-mail or List Entries. After selecting the E-mail label, press to move to the memory location, press and hold to delete the E-mail address and press Soft Key 1 **Save** to confirm.

New Entry (Menu 2 3)

You can save up to 199 phone numbers, pager numbers etc. in the phone book.

- Press Soft Key 1 Menu.
- 2. Press **2** Phone Book.
- 3. Press New Entry.
- 4. Enter the information, then press Soft Key 1 Next .
- 5. Select the memory location number.
- 6. Press Soft Key 1 Next.
- 7. Refer to the list below and select the desired number type using () .
- 8. Enter Name.
- 9. You may select the desired ID ring type 🎵 , secret 🚊 / 🕝 , sms alert 🚉 using 🖜 .

Phone Type

- Home Phone Number Entry
- iii Office Phone Number Entry
- Mobile Phone Number Entry
- Pager Number Entry
- Data/Fax Number Entry
- E-Mail Address entry

New E-mail (Menu 2 41)

You can save E-mail addresses.

- 1. Press Soft Key 1 Menu.
- 2. Press **2...** Phone Book.
- 3. Press Am New E-mail.
- 4. Enter the information, then press Soft Key 1 Next.
- 5. Select the memory location number.
- 6. Enter Name.
- 7. If you want to enter other phone numbers, select the phone number type you want with press the () and then enter the phone number.

Messages (Menu 🔝)

Text messages, paging and the voice mailbox are available as soon as the power is on. You can access the above types of messages using the message key (**).



In addition, you can make a call to the callback number by pressing during a message check. The phone can store up to 116 messages (1 voice message: 50 inbox text messages, 50 outbox text messages, 15



Note: Check whether your carrier provides the above features and if there are any limitations.

saved text messages) with 160 characters per message. Users may read and edit messages saved in the outbox during transmission and send them.

Character limits: The VX3100 supports up to 160 characters per message including header information. The information that is stored in the message is determined by phone mode and service capability. You can check types of messages by pressing the message kev 🗐

Message Menu

- Voice Mail: Shows the number of messages in your mailbox
- New Message: Sends a message.
- Inbox: Shows a list of received messages.
- Outbox: Shows a list of sent messages.
- Saved: Shows a list of saved and draft messages.

 Msq Settings: Selects alert type for new messages.
- Erase All: Deletes all stored messages.
- Mail Groups: Shows a list of groups.

New Message Alert

There are four ways your phone alerts you to new messages.

- 1. The phone displays the message on the screen.
- 2. One of four ring types is heard if selected.
- 3. The red light blinks.

NOTE: If you receive the same message twice, your phone deletes the older one and the new one is stored as a DUPLICATE.

Voice Mail (Menu 32 10)

Allows you to view the new voice messages recorded in the voice mailbox. Once you exceed the storage limit, the old messages are overwritten. When you have a new voice message, your phone alerts you.

Checking your Voice Mail box

- 1. Press Soft Key 1 Menu.
- Press Message.
- 3. Select **7. Voice Mail.**

To delete information press Soft Key 1 Clear and then select Clear.

New Message (Menu 3 2 2)

You can send text messages, pages, and e-mail transmissions

Text messages transmit with or without numbers and pages transmit only numbers.

To send a message, enter an SMS phone number. To send e-mail, enter recipient's e-mail address.

Continue Use to save the current address.

Next Addr Use to enter an additional

address.

Book Use to enter an address from the

phone book. After viewing the

phone number or e-mail address, you may add them as recipients.

Group Use to enter the addresses in an

entire mail group.

Back Goes back to the previous page.

Inbox (Menu 344 344)

You can search for and view received text messages, page messages, and e-mail messages. Received messages are sorted so that the newest message is displayed first in the Inbox.

To view the list of received messages:

1. Press Soft Key 1 Menu.

2. Press Message.

3. Select Inbox.

 Display the Erase/Lock pop up by pressing Soft Key
 and selecting an option while looking at the Inbox message.

Reply Reply to the message.

Reply Copy Reply to the message and

send a copy of the original.

Forward Forwards a received message

to others. After recipients are entered, the messages can be

forwarded.

Erase Deletes the selected message

from the Inbox.

Save addr Stores the callback number

and e-mail address into your

phone book.

Save Text Save the text into the message.

Save Msg Save inbox message into the

Saved folder.

Lock Lock a message so that it is

not erased if the Erase Inbox or Erase All feature is used.

Out of Memory Warning

If the memory is full, no more messages can be received until enough memory space becomes available. The message **NOT ENOUGH MEMORY** is displayed and new messages are not accepted.

Outbox (Menu 34 44)

Up to 50 sent messages can be stored in the Outbox. Users may view lists and contents of sent messages in this menu and may also verify whether the transmission was successful or not.

- 1. Press Soft Key 1 Menu.
- Press Message.
- 3. Select Outbox.

4. **Erase/Lock** pop up can be displayed by pressing Soft Key 2 while viewing an Outbox message.

Resend Allows you to retransmit the

selected message.

Send To Allows you to send the

message.

Erase Use to delete a selected

message in the Outbox.

Save Text Use to save the draft message

in the canned message.

Save Msg Save outbox message into the

Saved folder.

Lock Lock a message so that it is

not erased if the Erase Inbox or Erase All feature is used.

Cancel Cancels the transmitted

message.

Status Used to check the information

about the sent message such as the message ID, error class, cause code, etc.

Message Status Reference

Icons		Descriptions	
•	Sent	Messages saved in Short Message Center (SMC) have been transmitted.	
lack	Fail	Indicates a failed message transmission.	
/	Delivery	Message has been delivered.	
5	Cancel	After transmission to message center has occurred, messages that have not been delivered may be canceled by transmitting cancel message.	
	Save	Indicates that messages are only stored in the Outbox and have not been transmitted.	
M	Multi- sending	Indicates more than one designated recipient.	
L	Pending	Transmission is unavailable in a no service area. Messages are pending transmission. Pending messages are transmitted automatically when digital mode becomes available.	

Saved (Menu 34 51)

- 1. Press Soft Key 1 Menu.
- 2. Press Message.
- 3. Select **5^H** Saved.

This function shows all the saved draft messages. Saved List shows the number of saved messages.

Msg Settings (Menu 3 6 6 6)

- 1. Press Soft Key 1 Menu.
- 2. Press 3. Message.
- 3. Select 6 Msg Settings.

Alert, default callback number, Auto Save and Auto Delete may be configured for receiving new messages. The phone alerts you in 3 ways when you receive a new message:

- By displaying a message on the screen.
- By sounding a beep or vibrating.
- By blinking.

Auto Save (Menu 3 6 7)

With this feature on, messages are automatically saved in the Outbox when transmitted.

Auto Delete (Menu 3 6 2 2)

With this feature on, read messages are automatically deleted when you exceed the storage limit.

Callback # (Menu 3 6 6 3)

Callback number.

Msg Alert (Menu 3 6 4 4)

Allows you to select the alert type for a new message. Alert types are VoiceMail, Text Msg, Page Msg, E-mail Msg and Info Alert.

Signature (Menu 34 6- 54)

You may edit the signature you want to automatically send with your messages.

Direct View (Menu 32 6- 6-)

Allows you to directly display the content when receiving a message.

Msg Entry (Menu 34 6- 7-)

Allows you to select the default input method including **Abc**, **T9**, **123**.

Font Size (Menu 3 6 6 8)

Allows you to determine the font to use when entering message content or reading the texts in Inbox, Outbox, and Saved.

Delivery ACK (Menu 3 6 9 9)

Allows you to select delivery acknowledgement with your messages.

Erase All (Menu 34 74)

All the text messages and pages are deleted when you select Erase All from the Message Menu screen. Locked messages are not erased.

Inbox (Menu 34 7 7 10)

Delete all unlocked messages in the Inbox.

Outbox (Menu 34 74 24)

Deletes all unlocked messages in the Outbox.

Saved (Menu 3 7 3)

Deletes all unlocked messages in the Saved Folder.

All (Menu 3 7 7 4 1)

Deletes all unlock messages from Inbox, Outbox, and Saved folder.

Mail groups (Menu 34 84)

Allows you to enter a new mail group, change the name of a mail group, or delete a mail group.

- 1. Press Soft Key 1 Menu.
- 2. Press **3...** Message.
- 3. Select 8 Mail Groups.

Mobile Web (Menu 🜆)

The MiniBrowser feature allows you to view internet content especially designed for the mobile phone interface. Access and selections within this feature are serviceprovider dependent. For specific information on MiniBrowser access. through your phone, contact your service provider.





Start Browser (Menu 411 10)

- 1) A reminder of the charge appears. Press Soft Key 1 Yes to launch the MiniBrowser.
- 2) After a few seconds, you see the Home Page.

Ending MiniBrowser Session



Navigating through the Browser

While using MiniBrowser, on-screen items may be presented in one of the following ways:

numbered options

links embedded in content

text or numbers.

You can act on the options or the links by using the Soft Keys just below the display screen.

Navigation

Scrolling

You can use to scroll through the content if the current page does not fit on one screen. The currently selected item is indicated by a cursor on the screen.

Fast Scrolling

Press and hold to quickly move the cursor up and down on the current screen.

Scrolling by page

Press the Side Keys to move up and down a page at a time.

Home Page

To go to the Home Page, press and hold ...

View Browser Menu

Press and hold **o** to use the browser menu.

Clearing out text/number entered

When entering text or numbers, press to clear the last number, letter or symbol. Press and hold to clear the input field completely.

Selecting and activating items

If the items on a page are numbered, you can use your numeric keypad or you can select the items by moving the cursor and pressing the appropriate Soft Keys.

Soft Keys

To navigate to different screens or select special functions, use the Soft Keys. Note that the function associated with the Soft Keys can change for each page and depend on each highlighted item.

Soft Key 1

Soft Key 1 is used primarily for first options or selecting an item but its function may change, depending on the content displayed.

Soft Key 2

Soft Key 2 is used primarily for secondary options or a menu of secondary options.

Entering Text, Numbers, or Symbols

When you are prompted to enter text, the current text entry method appears on Soft Key 2 as Alpha, Symbol. Number, Word or Smart.

To change the input mode, use Soft Key 2.

To create an upper case character, use . The current text method appears on Soft Key 2 as ALPHA or SMARTand allows you to shift to input case sensitivity.

Initiating a phone call from MiniBrowser

You can make a phone call from MiniBrowser if the site you are using supports the feature (the phone number may be highlighted and Soft Key 1 appears as Call). The browser connection is terminated when you initiate the call. After you and the call, your phone returns to the

the call. After you end the call, your phone returns to the screen from which you initiated the call.

Using Bookmarks

You can bookmark many individual pages for easy access at a later time. Bookmarks save you time by reducing the number of steps it takes to access a desired page.

To create a bookmark:

Go to the page that you want to mark. On the browser menu, select Mark Site or press and hold ...

If the page has a title, it is automatically used for the name of the bookmark. When the bookmark is saved, you can change the bookmark name if you choose. Selecting Save creates a link to the page and adds its name to the bottom of your bookmarks list.

A message appears confirming that the bookmark is added to the list. Select Soft Key 1 **Ok** to return to the screen that you marked to resume navigation within MiniBrowser.

This function is dependent upon the html coding of the page and determined by the website.

Finding a bookmark

From the Home Page, press and hold the number associated with the bookmark in the bookmark list.

Web Messages (Menu 4™ 2∞)

If there are any browser messages, the list is displayed.

Web Settings (Menu 4 3)

Prompt (Menu 41 34 16)

You can specify whether you want the phone to display warning prompts while using the MiniBrowser.

The first prompt occurs prior to making a MiniBrowser call; you are informed that there is a charge and asked if you still want to launch the browser. This step is used to prevent accidental activation of the browser since all subscribers are provided with the browser automatically. The second prompt asks if you want to exit the browser, after you press

- To Start: You only see the prompt asking whether or not to start.
- To end: You see the prompt asking to stop.
- Both: You see the prompts asking whether to start and stop.
- None: No warning prompts are displayed.

Alert Sound (Menu 4 3 2 2)

There are 3 alert options. Mute, 2 alerts and 4 alerts options are provided in this menu. The user may select a browser alert sound.

Utilities (Menu 51)

Games (Menu 5º 70)





Mobile Hawk (Menu 52 70



70)

You control a Mobile Hawk helicopter. Your objective is to destroy the enemy's helicopters, tanks, and automobiles. If you attack ambulances, you lose 5 points for each. Clear each stage by destroying the building at the end of the stage.

To Play the Game

- 1. Press Soft Key 1 Menu.
- Press 5 Utilities.
- 3. Press Games and then press Mobile Hawk.
- 4. For a new game, press 7.

5. To start the game, press Soft Key 1 💆 .

Keypad Configuration - Menu Screen

- 16 : Moves to the selected menu screen.
- 2 : Moves to Score screen.
- : Moves to Keypad Configuration screen.
- : Resumes the game if paused.
- : Moves to the Game Selection screen.
- : Ends the game.

When you see the game's logo on the screen, you can select from stage 1 to stage 10 by using 0 to 9 on the keypad. After selecting a stage, you begin gameplay by pressing Soft Key 1 .

Keypad Configuration - Game Screen

- : Moves Mobile Hawk one tile up. If you push and hold the button, Mobile Hawk keeps moving upwards.
- : Moves Mobile Hawk one tile to the left. If you push and hold the button, Mobile Hawk keeps moving to the left.
- 5 : Moves Mobile Hawk one tile to the right. If you push and hold the button, Mobile Hawk keeps moving to the right.
- 6 : Fires air-to-air missile.
- : Moves Mobile Hawk one tile down. If you push and hold the button, Mobile Hawk keeps moving downward.

g...: Fires air-to-ground missile.

(: Moves Mobile Hawk one tile to the left.

: Moves Mobile Hawk one tile to the right.

: Moves Mobile Hawk one tile up.

. Moves Mobile Hawk one tile down.

: Pauses the game.

Score input screen

70 :1.

2 : 2 AB C

3₩ :3DEF

4⋅ :4 G H I

5⊯ :5JKL

6 M N O

7- :7PQRS

8₩ :8 TU V

9 : 9 W X YZ

o= :0@,!?*/#\$%

♣# : Space

: Delete

: Ends the game

: Switches between lower and uppercase.

: Input name completed
Black Jack (Menu 5- 10 2-)

Black Jack is a card game. The one whose cards add closest to 21 wins the hand. The player and the dealer get dealt two cards each. The player then chooses to receive another card (Hit) or use what was dealt (Stay). You can get as many cards as you want.

To play Black Jack

- 1. Press Soft Key 1 Menu.
- 2. Press **5** Utilities.
- 3. Press **16 Games** and then press **2 Black Jack**.
- 4. For a new game, press 1.
- 5. To start the game, press Soft Key 1 .

Keypad Configurations - Menu Screen

- : Begins a new game.
- 2 : Moves to score screen.
- : Moves to key configurations screen.
- : Resumes the game if paused.
- : Ends the game.

Key Configurations - Game Logo Screen

- : Pauses the game.
- : Ends the game.
- : Moves to Betting screen.

Key Configurations - Betting Screen

2 : Decreases bet.

5 : Increases bet.

Ends the game and moves to Input Name screen.

: Pauses the game.

: Ends the game.

: Moves to Dealing Screen.

Keypad Configurations - Dealing Screen

: Pauses the game.

: Ends the game.

Keypad Configurations - Game Screen

3₩ : HIT

5 : STAY

: DOUBLE (Appears only when you have two of

the same card; such as 2 K's)

: Pauses the game

: Ends the game

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Game Settings (Menu 5™ 1 3 m)

You can set the volume and backlight level during game play.

- 1. Press Soft Key 1 Menu.
- 2. Press **5** Utilities.
- 3. Press **16 Games** and then press **3 Setting**.
- 4. Use to choose the setting between *Sound volume* and *Backlight*.

Schedule (Menu 52 2)

Allows you to input your schedule. If you input the time and memo, an alarm rings at the set time.

- 1. Press Soft Key 1 Menu.
- 2. Press **5** Utilities.
- 3. Select **2...** Schedule.
- (Moves cursor to the left
- () 6- () : Moves cursor to the right
- (*) 2... : Moves to the previous week
- () : Moves to the next week
- 1 : Moves to the previous year

: Moves to the next year

: Moves to the previous month

: Moves to the next month

5 : Moves to today

Add Event (Menu 51 2 10)

- 1. Press Soft Key 1 Menu.
- 2. Press **5** Utilities.
- Press Schedule and then press Add Event.
- Select the date using your keypad, then press Soft Key 1 Select.
- Enter the time and date of the event using your keypad.
- 6. To toggle between am and pm, select am/pm using Soft Key 2 am/pm or .: am, .: pm.
- 7. Enter a title and press Soft Key 1 Save.
- 8. Press 🚳 .

View Daily (Menu 5 2 2 2 2)

Allows you to view all events on a selected date.

1. Press Soft Key 1 Menu.

- 2. Press **5** Utilities.
- Press Schedule and then press View Daily.
- 4. Select the date using your keypad, then press Soft Key 1 **Select**.
- 5. Select the item and press Soft Key 1 View.
- 6. Press Soft Key 1 Option. Select Erase or Edit.

View All (Menu 52 2 3 3)

Allows you to view all stored events.

- 1. Press Soft Key 1 Menu.
- 2. Press **5** Utilities.
- 3. Press **Schedule** and then press **3...** View All.
- 4. Select the item and press Soft Key 1 View.
- 5. Press Soft Key 1 Option. Select Erase or Edit.

Erase All (Menu 5¹² 2¹⁴ 4¹¹)

Allows you to delete all items stored in the scheduler.

- 1. Press Soft Key 1 Menu.
- Press 5 Utilities.
- 3. Press 2. Schedule and then press 4. Erase
 All.
- 4. To delete information, scroll to Yes and press Soft Key

1 Ok.

Erase Old (Menu 5[™] 2[™] 5[™])

Erases only past items.

- 1. Press Soft Key 1 Menu.
- 2. Press **5** Utilities.
- Press Schedule and then press F Erase Old.
- To delete information, scroll to Yes and press Soft Key
 Ok.

Alarm (Menu 5[™] 3[™])

This feature works only in digital areas. To change an event alarm time:

- 1. Press Soft Key 1 Menu.
- 2. Press **5** Utilities.
- Press Alarm.
- 4. Set the alarm time and press Soft Key 1 Save.
- 5. You can change the alarm mode using (Off/Once/Daily)
- 6. You can move to the edit window using .
- When the alarm time is reached, **Alarm** is displayed on the LCD screen and the alarm sounds.
- To toggle between am and pm, select am/pm using

Soft Key 2 am/pm or 2 :am, 7 : pm.

- Ringing (or vibration, Vib1+Ring, Vib2+Ring, Vib3+Ring) stops when any key is pressed or the cellcase is opened.
- Ring volume is controlled according to the setting in reception mode. However, ringing (or vibration, Vib1+Ring, Vib2+Ring, Vib3+Ring) is not heard when reception mode is in Lamp.

Settings (Menu 🔂)



Sounds (Menu 6 7)



Ring Sound (Menu 🚰 🏗 🚺

- 1. Press Soft Key 1 Menu.
- 2. Press **Settings**.
- Press Sounds and then press Ring Sound.
- 4. Press (until you find the sound you desire.
- 5. Press Soft Key 1 Ok to save the ring sound.

NOTE: The beep or bell may cause serious injury to the eardrum so the phone increases the volume

incrementally.

Key Tone (Menu 6 1 2 2)

To set the Key Tone length and touch tone playback speed:

- 1. Press Soft Key 1 Menu.
- Press Settings.
- 3. Press **76** Sounds and then press **2** Key Tone.
- 4. Set Normal / Long with () and press Soft Key 1 Ok.

Normal Sends out a tone for a fixed period of

time even if you keep the key pressed.

Long Sends out a continuous tone for as long

as you keep the key pressed.

NOTE: Use the side key buttons. The upper button increases the volume and the lower button decreases the volume.

NOTE: Dual-Tone Multi Frequency (DTMF) Signaling works by the simultaneous transmission of two tones, one from a group of low frequencies and another from a group of high frequencies. Each group of frequencies consists of four frequencies. Setting Key Beep length to long extends the DTMF tone. Press Menu, then Key Tone Using then Long. Press Soft Key 1 Ok.

Ring Type (Menu 6 7 3 3)

- 1. Press Soft Key 1 Menu.
- 2. Press 6 Settings.
- 3. Press **16** Sounds and then press **3** Ring Type.
- 4. Select one of six ring types Ring, Vibrate, Vib1+Ring, Vib2+Ring, Vib3+Ring and Lamp with ()-).

NOTE: The number after Vib means the number of vibrations.

5. Press Soft Key 1 Ok to save the ring type.

Ring Volume (Menu 6- 70 411)

- 1. Press Soft Key 1 **Menu**.
- 2. Press **Settings**.
- 3. Press **10** Sounds and then press **40** Ring Volume.
- 4. Adjust the volume of the ringer or level of the vibrate with ().
- 5. Press Soft Key 1 **Ok** to save the ring volume or vibrate level

Ear Volume (Menu 6 1 1 5)

- 1. Press Soft Key 1 Menu.
- Press **Settings**.
- 3. Press **7. Sounds** and press **5. Ear Volume**.

- 4. Adjust the earpiece volume with (-).
- 5. Press Soft Key 1 Ok to save the earpiece volume.

Key Volume (Menu 🖅 🏗 🗺)

To adjust the key beep volume.

- 1. Press Soft Key 1 Menu.
- 2. Press **6- Settings**.
- 3. Press **5** Sounds and then press **6** Key Volume.
- 4. Adjust the key volume with (-).
- 5. Press Soft Key 1 Ok to save the key volume.

Alerts (Menu 🚰 🏗 📶)

Any of the four Alert options can be turned on or off.

- 1. Press Soft Key 1 Menu.
- Press Settings.
- Press To Sound and then press To Alerts.

Fade (Menu 6- 7- 7- 10)

Sets an alert to inform you when you have lost a call or services.

Minute (Menu 6- 7- 2-)

Alerts you 10 seconds before the end of every minute during a call.

Service (Menu 6- 7- 3-)

If on, alerts you when the service changes. When you enter the service area, the phone displays the *Entering Service Area* message. When you leave the service area, the phone displays the *Leaving Service Area* message.

Call Connect (Menu 6 10 7 10)

Alert tone notifies the user when the call is connected.

- 4. Choose among the options and press Soft Key 1 Ok.
- 5. Set Off/On with () and then press Soft Key 1 Ok.

Set power On/Off tones.

- 1. Press Soft Key 1 Menu.
- 2. Press 6 Settings.
- Press To Sounds and then press Don/Off Tones.
- 4. Set On/Off with and then press ()-).

Display (Menu 6 2 2)

Banner (Menu 6- 2- 10)

Allows you to enter a string of up to 16 characters to be displayed on the LCD screen.

- 1. Press Soft Key 1 Menu.
- 2. Press **5** Settings.
- 3. Press **2** Display and then press **1** Banner.
- Enter a Banner name and then press Soft Key 1 Save.

If you use ERI Service, ERIText is shown on banner.

Backlight (Menu 6 2 2 2)

Allows you to set the backlight duration.

- 1. Press Soft Key 1 Menu.
- 2. Press 6- Settings.
- 3. Press **2** Display and then press **2** Backlight.
- 4. Choose an option and press Soft Key 1 Ok.
- Always off means that the backlight is never on.
- 17 seconds turns the backlight off 7 seconds after the last key was pressed.
- 115 seconds turns the backlight off 15 seconds after the last key was pressed.

- **30 seconds** turns the backlight off 30 seconds after the last key was pressed.
- On when cellcase open means that the backlight is always on while the cellcase is open.

Contrast (Menu 6 2 3 3)

Allows you to set the contrast of the display.

- 1. Press Soft Key 1 Menu.
- Press Settings.
- 3. Press **2. Display** and then press **3. Contrast**.
- 4. Adjust the contrast with (-).
- 5. Press Soft Key 1 Ok to save the setting.

Menu Style (Menu 6- 2- 411)

Allows you to choose whether you want the menu to show as a list or as icons.

- 1. Press Soft Key 1 Menu.
- 2. Press 6 Settings.
- 3. Press **Display** and then press **Menu Style**.
- 4. Select *Icon* or *List* and press ()-).

System (Menu 🖅 🛂)

Select System (Menu 6 3 16)

This function enables you to set up the phone producer's management environment. Leave this setting as the default unless you want to alter system selection as instructed by your service provider.

- 1. Press Soft Key 1 Menu.
- 2. Press **6- Settings**.
- Press System and then press Select System.
- 3. Select an option and press ()-).

Home Only/Automatic_A/Automatic_B displays.

Set NAM (Menu 6 2 2 2)

Select the phone's NAM (Number Assignment Module) if the phone is registered with multiple service providers.

- 1. Press Soft Key 1 Menu.
- 2. Press **6- Settings**.
- 3. Press **3...** System and then press **2...** Set NAM.
- 3. Select NAM1 or NAM2 and press ().

Auto NAM (Menu 6 3 3 3)

Allows the phone to automatically switch between programmed telephone numbers corresponding to the service provider area.

- 1. Press Soft Key 1 Menu.
- 2. Press 5 Settings.
- Press System and then press Auto NAM.
- 3. Select On or Off and press () -).

Serving Sys (Menu 6 3 4 4)

You can identify the channel number of a system that is served and a SID Number. This information is only for technical support.

- 1. Press Soft Key 1 Menu.
- Press 6 Settings.
- 3. Press **3. System** and then press **4. Serving Sys**.

TTY Mode (Menu 6 3 5 5)

Users can attach a portable TTY device to the 2.5 mm jack on the phone and communicate with other parties using a TTY. TTY users must have a TTY/TDD device.

 Attach a TTY cable to the 2.5 mm jack, located on the top of the handset.

- 2. Press Soft Key 1 Menu.
- 3. Press 6- 3. 5 . 5 . .
- 4. TTY Mode displays.
- 5. Select an option and press OK.

Security (Menu 6 4 4)

Lock Mode (Menu 6 4 1 1)

Keeps your phone from unauthorized use. Once the phone is locked, it is in restricted mode until the lock code is entered. This allows you to receive phone calls and still make emergency calls. The lock code is commonly the last 4 digits of your phone number.

You can modify the lock code using the New Lock code within the Security menu.

- 1. Press Soft Key 1 **Menu** and then press **6** Settings.
- Press Security.
- 3. Enter the four-digit Lock code.
- 4. Press **10 Lock Mode**.
- 5. Select an option and press ()

Mever means that the phone is never locked (Lock mode can be used). When locked, you can receive incoming calls

or make only emergency calls.

On power up means the phone is locked when it is

turned on.

Always means that the phone is always locked.

Restrict (Menu 🗗 💤)

- 2. Press **Security**.
- 3. Enter the four-digit Lock code.
- 4. Press **2** Restrict.
- 5. Select On or Off with and then press (---)

If you set it to On you can only place calls to emergency numbers and phone numbers stored in the phone book. You can still receive calls in the restrict mode.

Emergency # (Menu 6 4 34)

You can call emergency numbers and 911, even when the phone is locked or restricted. To enter 3 emergency numbers:

- 1. Press Soft Key 1 Menu and then press 5 Settings.
- 2. Press **Security**.
- 3. Enter the four-digit Lock code.
- 4. Press **3...** Emergency#.

New Lock Code (Menu 6 4 4 4 4)

- 1. Press Soft Key 1 Menu and then press **Settings**.
- 2. Press **Security**.
- 3. Enter the four-digit Lock code.
- 4. Press Am New Lock Code.
- 5. To confirm, enter the new lock code again.

Erase Data (Menu 6 4 5)

- Press Soft Key 1 Menu and then press Settings.
- 2. Press **Security**.
- 3. Enter the four-digit Lock code.
- 4. Press **5^M Erase Data**.
- Select No or Yes with (and then press Soft Key
 Ok.

Features (Menu 6 5)

Auto Retry (Menu 🚰 🎜 🚹)

Allows you to set the length of time the phone waits before automatically redialing a number when the attempted call fails.

- 1. Press Soft Key 1 Menu.
- 2. Press 6- Settings.
- Press Features and then press Auto Retry.
- 4. Select an option and press ()-).
- Off/Every 10 sec./Every 30 sec./ Every 60 sec.

Answer Call (Menu 6 5 2 2)

Allows you to determine when to answer the phone.

- 1. Press Soft Key 1 Menu.
- 2. Press 6 Settings.
- Press Features and then press Answer Call.
- 4. Select an option and press (--).
- Any Key/SEND Only/Filp Open

Auto Answer (Menu 🚰 🏞 🗫)

Allows you to set select the ring type before the phone automatically answers a call. This feature is used only with the car kit.

- 1. Press Soft Key 1 Menu.
- 2. Press **Settings**.

- 3. Press **5** Features and then press **3** Auto Answer
- 4. Select an option and press (-).



- Off
- After 1 ring When you have an incoming call, the phone automatically responds after 1 ring.
 - After 3 rings When you have an incoming call, the phone automatically responds after 3 rings.

One-Touch (Menu 6 5 4 4)

- 1. Press Soft Kev 1 Menu.
- 2. Press **5- Settings**.
- 3. Press Fr Features and then press 4 One-Touch .
- 4. Select *Enable* or *Disable* and press ()



Voice Privacy (Menu 6 5 5 5)

Set the voice privacy feature for CDMA calls as Enhanced or Standard. CDMA offers inherent voice privacy. Check with your service provider for availability of the enhanced voice privacy mode.

- 1. Press Soft Key 1 Menu.
- 2. Press 5 Settings.

- 3. Press FP Features and then press FP Voice Privacy.
- 4. Select Enhanced or Standard and press ().



Auto Volume (Menu 6 5 6 6)

This feature provides a better audio experience by enabling the Auto Volume feature to control the dynamic range and volume of the sending and receiving voice across different levels of speaker and environments.

- 1. Press Soft Kev 1 Menu.
- 2. Press **Settings**.
- 3. Press **5** Features and then press **6** Auto Volume
- 4. Select On or Off and press () -).



Language (Menu 6 5 7 7 7)

Select the language of your preference.

- 1. Press Soft Key 1 Menu.
- 2. Press 6 Settings.
- 3. Press **5^{LL}** Features and then press **7...** Language.
- 4. Select a language with (and press Soft Key 1 Ok.

Status Light (Menu 🗫 🏞 🚱)

Notifies you that your phone is working normally.

- 1. Press Soft Key 1 Menu.
- 2. Press **5** Settings.
- Press F Features and then press S Status Light.
- 4. Select an option and press ()-).

Data Setting (Menu 6 6)

Data/Fax (Menu 6- 6- 10)

In the Data/Fax setting, you can use your phone to transmit data and faxes. Wireless data communication services refer to the utilization of subscriber terminals for access to the internet with personal computers or laptops at 19.2 Kbps or at maximum of 230.4 Kbps. The connection speed depends on your carrier's network and other variables. Contact communication information specifications must match the network.

- 1. Press Soft Key 1 Menu.
- 2. Press **5** Settings.
- Press Data Setting and then press Data/ Fax.
- 4. Select an option and press ().

Off/Fax In Once/Fax In Always/Data In Once/ Data In Always

NOTE: The Data Connection Kit allows you to connect your PC or PDAto your LG wireless phone, freeing you from having to locate a telephone outlet. You can send or receive an e-mail, a fax, or access the Internet anytime, anywhere.

Speed (Menu 6 6 2 2)

This setting enables you to set the port speed.

- 1. Press Soft Key 1 Menu.
- Press Settings.
- 3. Press **5** Data Setting and then press **2** Speed.
- 4. Select an option and press ()

115,200/230,400/19,200

Set the port speed based on your carrier's network. Contact your carrier to determine the maximum available speed.

NOTE: When using the 1X HSPD data service via a RS-232C data cable, the port speed is set to 115,200. (230,400 is not supported). When using the 1X HSPD data service via a USB data cable, you may get better port speed if the port speed is set to 230,400 rather than 115,200.

Location (Menu 6 7 7)

Allows you to adjust your GPS setting to always on or only for 911 calls.

Settings (Menu 6 7 7 10)

- 1. Press Soft Key 1 Menu.
- 2. Press **5** Settings.
- Press Location and then press Settings.
- 4. Select an option and press ().

E911 Only/Location On

NOTE: GPS satellite signals are not always transmitted, especially under bad atmospheric and environmental conditions, indoors or otherwise.

Phone Info (Menu 7...)

My Phone # (Menu **7...**)

Use to display your phone number on the screen.

- 1. Press Soft Key 1 Menu.
- 2. Press **7...** Phone Info.
- 3. Press 7. My Phone #.





S/W Version (Menu 7 2 2)

Allows you to view the software, PRL, ERI, and browser version.

- 1. Press Soft Key 1 Menu.
- 2. Press **Phone Info**.
- 3. Press **2...** S/W Version .

Shortcut Help (Menu 🗫 🐷)

Allows you to view condensed information about using the phone.

- 1. Press Soft Key 1 Menu.
- 2. Press **7--- Phone Info**.
- 3. Press **3...** Shortcut Help.



TIA Safety Information

The following is the complete TIA Safety Information for Wireless Handheld phones.

Exposure to Radio Frequency Signal

Your wireless handheld portable telephone is a low power radio transmitter and receiver. When it is ON, it receives and also sends out radio frequency (RF) signals.

In August, 1996, the Federal Communications
Commissions (FCC) adopted RF exposure guidelines
with safety levels for hand-held wireless phones. Those
guidelines are consistent with the safety standards
previously set by both U.S. and international standards
bodies:

ANSI C95.1 (1992) * NCRP Report 86 (1986) ICNIRP(1996)

Those standards were based on comprehensive and periodic evaluations of the relevant scientific literature. For example, over 120 scientists, engineers, and physicians from universities, government health agencies, and industry reviewed the available body of research to develop the ANSI Standard (C95.1).

The design of your phone complies with the FCC guidelines (and those standards).

Antenna Care

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the phone and may violate FCC regulations.

Phone Operation

NORMAL POSITION: Hold the phone as you would any other telephone with the antenna pointed up and over your shoulder.

Tips on Efficient Operation:

For your phone to operate most efficiently:

Do not touch the antenna unnecessarily when the phone is in use. Contact with the antenna affects call quality and may cause the phone to operate at a higher power level than otherwise needed.

American National Standards Institute; National Council on Radiation Protection and Measurements; International Commission on Non-Ionizing Radiation Protection

Driving

Check the laws and regulations on the use of wireless telephones in the areas where you drive and always obey them. Also, if using your phone while driving, please observe the following:

- Give full attention to driving -- driving safely is your first responsibility;
- · Use hands-free operation, if available;
- Pull off the road and park before making or answering a call if driving conditions or the law so require.

Electronic Devices

Most modern electronic equipment is shielded from RF signals. However, certain electronic equipment may not be shielded against the RF signals from your wireless phone.

Pacemakers

The Health Industry Manufacturers Association recommends that a minimum separation of six inches be maintained between a handheld wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research.

Persons with pacemakers:

- Should ALWAYS keep the phone more than six inches from their pacemaker when the phone is turned ON;
- Should not carry the phone in a breast pocket
- Should use the ear opposite the pacemaker to minimize the potential for interference
- Should turn the phone OFF immediately if there is any reason to suspect that interference in taking place.

Hearing Aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may want to consult your service provider [or call the customer service line to discuss alternatives.] Optional for each phone manufacturer.

Other Medical Devices

If you use any other personal medical device, 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.

Health Care Facilities

Turn 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 use 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

Turn your phone OFF in any facility where posted notices so require.

Aircraft

FCC regulations prohibit using your phone while in the air. Switch OFF your phone before boarding an aircraft.

Blasting Areas

To avoid interfering with blasting operations, turn your phone OFF when in a "blasting area" or in areas posted: "Turn off two-way radio". Obey all signs and instructions.

Potentially Explosive Atmosphere

Turn 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. Areas with a potentially explosive atmosphere are often, but not always marked clearly. Potential areas may include: fueling areas (such as gasoline stations); below deck on boats; fuel or 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.

For Vehicles Equipped with an Air Bag

An air bag inflates with great force. DO NOT place objects, including either installed or portable wireless

equipment, in the area over the air bag or in the air bag deployment area. If in-vehicle wireless equipment is improperly installed and the air bag inflates, serious iniury could result.



M FDA Consumer Update

The U.S. Food and Drug Administration's Center for Devices and Radiological Health Consumer Update on Mobile Phones:

1. 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 radiofrequency 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.

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

Under the law, the 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 radiofrequency energy (RF) at a level that is hazardous to the user. In such a case, the 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, the 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.

The 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
- Occupational Safety and Health Administration
- National Telecommunications and Information Administration

The National Institutes of Health participates in some interagency working group activities as well. The 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. The FCC relies on the FDAand other health agencies for safety questions about wireless phones.

The 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 subject of the safety questions discussed in this document.

3. 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 radiofrequency 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 the 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 far below the FCC safety limits.

4. 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 radiofrequency 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 do not know with certainty what the results of such studies mean for human health

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

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

Acombination 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 vears. 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.

6. What is the FDAdoing to find out more about the possible health effects of wireless phone RF?

The 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 radiofrequency energy (RF). The 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.

The FDA and the Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative Research and Development Agreement (CRADA) to do research on wireless phone safety. The 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.

7. How can I find out how much radiofrequency energy exposure I can get by using my wireless phone?

All phones sold in the United States must comply with Federal Communications Commission (FCC) guidelines that limit radiofrequency energy (RF) exposures. The FCC established these guidelines in consultation with the FDA and the other federal health and safety agencies. The FCC limit for RF exposure from wireless telephones is set at a Specific Absorption Rate (SAR) of 1.6 watts per kilogram (1.6 W/kg). The FCC limit is consistent with the safety standards developed by the Institute of Electrical and Electronic Engineering (IEEE) and the National Council on Radiation Protection and Measurement. The exposure limit takes into consideration the body's ability to remove heat from the tissues that absorb energy from the wireless phone and is set well below levels known to have effects. Manufacturers of wireless phones must report the RF exposure level for each model of phone to the FCC.

The FCC website (http://www.fcc.gov/oet/rfsafety) gives directions for locating the FCC identification number on your phone so you can find your phone's RF exposure level in the online listing.

8. What has FDAdone to measure radiofrequency energy coming from wireless phones?

The Institute of Electrical and Electronic Engineers (IEEE) is developing a technical standard for measuring the radio frequency energy (RF) exposure from wireless phones and other wireless handsets with the participation and leadership of FDA scientists and

engineers. The standard, "Recommended Practice for Determining the Spatial-Peak Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques." sets forth the first consistent test methodology for measuring the rate at which RF is deposited in the heads of wireless phone users. The test method uses a tissue-simulating model of the human Standardized SAR test methodology is expected to greatly improve the consistency of measurements made at different laboratories on the same phone. SAR is the measurement of the amount of energy absorbed in tissue, either by the whole body or a small part of the body. It is measured in watts/kg (or milliwatts/g) of matter. This measurement is used to determine whether a wireless phone complies with safety guidelines.

- 9. What steps can I take to reduce my exposure to radiofrequency 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 radiofrequency 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.

10. 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 radiofrequency 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.

11. What about wireless phone interference with medical equipment?

Radiofrequency energy (RF) from wireless phones can interact with some electronic devices. For this reason, the 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 the 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.

The FDAhas 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.

The FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occur,

the FDAwill conduct testing to assess the interference and work to resolve the problem.

12. Where can I find additional information?

For additional information, please refer to:

- FDA web page on wireless phones (http://www.fda.gov/cdrh/phones/index.html
- Federal Communications Commission(FCC)RF
 Safety Program (http://www.fcc.gov/oet/rfsafety)
- International Commission on Non-Ionizing Radiation Protection (http://www.icnirp.de)
- World Health Organization(WHO) International EMF Project (http://www.who.int/emf)
- National Radiological Protection Board(UK) (http://www.nrpb.org.uk/)

Consumer Information on SAR

(Specific Absorption Rate)

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 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, or SAR. The SAR limit set by the FCC is 1.6W/kg. Tests for SAR 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 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. Because the phone is designed to operate at multiple power levels 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 phone model 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 value for this model phone when tested for use at the ear is 1.27 W/kg and when worn on the body, as described in this user guide, is 0.735 W/kg. (Bodyworn measurements differ among phone models, depending upon available accessories and FCC requirements). While there may be differences between SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF emission 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 BEJTM250. Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) website at http://www.wow-com.com.

* In the United States 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.

1. WHAT THIS WARRANTYCOVERS:

LG offers you a limited warranty that the enclosed subscriber unit and its enclosed accessories will be free from defects in material and workmanship, according to the following terms and conditions:

- (1) The limited warranty for the unit and enclosed accessories shall be a period of one (1) year from the date of original purchase. The remaining warranty period for the unit being repaired or replaced shall be determined by presentation of the original sales receipt for the purchase of the unit.
- (2) The limited warranty extends only to the original purchaser of the product and is not assignable or transferable to any subsequent purchaser / end user.
- (3) The limited warranty is good only to the original purchaser of the product during the warranty period as long as it is in the U.S., including Alaska, Hawaii, U.S. Territories, and all Canadian Provinces.
- (4) The external housing and cosmetic parts shall be free of major defects at the time of shipment and, therefore, shall not be covered under these limited warranty terms.
- (5) Upon request from LG, the consumer must provide information satisfactory to LG to prove the date of purchase or exchange.
- (6) The customer shall bear the cost of shipping the product to the Customer Service Department of LG. LG shall bear the cost of shipping the product back to the consumer after the completion of service under this limited warranty.

2. WHAT THIS WARRANTY DOES NOT COVER:

- Defects or damage resulting from use of the product in other than its normal and customary manner.
- (2) Defect or damage from abnormal use, abnormal conditions, improper storage, exposure to moisture or dampness, unauthorized modifications, unauthorized connections, unauthorized repair, misuse, neglect, abuse, accident, alteration, improper installation, or other acts which are not the fault of LG, including damage caused by shipping, blown fuses, or spills of food or liquid.
- (3) Breakage or damage to antennas unless caused directly by defects in material or workmanship.
- (4) Alleged defects or malfunctions of the product if the Customer Service Department at LG was not notified by the consumer during the applicable limited warranty period.
- (5) Products, which have had the serial number, removed or made illegible.

- (6) This limited warranty is in lieu of all other warranties, express or implied either in fact or by operations of law, statutory or otherwise, including but not limited to any implied warranty of marketability merchantability or fitness for a particular use.
- (7) Damage resulting from use of non-LG approved accessories.
- (8) All plastic surfaces and all other externally exposed parts that are scratched or damaged due to normal customer use.
- (9) Products operated outside published maximum ratings.
- (10) Products used or obtained in a rental program.
- (11) Consumables (such as fuses).

3. STATE LAW RIGHTS:

No other express warranty is applicable to this product. THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MARKETABILITY OR MERCHANT-ABILITY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN. LG INFOCOMM U.S.A., INC. SHALLNOT BE LIABLE FOR THE LOSS OF THE USE OF THE PRODUCT, INCONVENIENCE, LOSS OR ANY OTHER DAMAGES, DIRECTOR CONSEQUENTIAL, ARISING OUT OF THE USE OF, OR INABILITY TO USE, THIS PRODUCT OR FOR ANY BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING THE IMPLIED WARRANTY OF MARKETABILITY OR MERCHANTABILITY APPLICABLE TO THIS PRODUCT.

Some states do not allow the exclusive of limitation of incidental or consequential damages or limitations on how long an implied warranty lasts; so these limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

4. HOW TO GET WARRANTYSERVICE:

To obtain warranty service, please call the following telephone number from anywhere in the continental United States:

Tel. 1-800-793-8896 or visit www.lgeservice.com. Please call or write for the location of the LGE authorized service center nearest you and the procedures for obtaining warranty claims.



201 James Record Road Huntsville, AL35824

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