# **[LG230]** Quick Reference Guide

Some of content in this user guide may be different from your phone depending on the software of the phone or your service provider. Features and specifications might be subject to change without prior notice.

# 🔁 LG

ENGLISH

Bluetooth QD ID B015489

Visit http://ca.lgservice.com/index\_b2c.jsp for the User Guide fully illustrated on how to use your phone.

P/N: MSAB0029601(1.0) H

# **Receiving Calls**

1. When the phone rings or vibrates, you can answer the call by simply opening the flip. Note

Printed in Korea

If the Answer Options setting is set to Any Key, you can:

- > Open the flip and press the Left Soft Key 🥣 [Quiet] to mute the ringing or vibration for that call.
- > Open the flip and press the Right Soft Key 🕞 [Ignore] to end the call or send it directly to Voicemail.
- 2. Press 💿 to end the call, or simply close the flip.

# Bluetooth®

The LG230 is compatible with devices that support the Headset, Handsfree, Phonebook Access and Object Push for vCard & vCal.

You may create and store 20 pairings within the LG230 and connect to one device. The approximate communication range for Bluetooth® wireless technology is up to 30 feet (10 meters).

Notes

) Read the user guide of each Bluetooth $^\circ$  accessory that you are trying to pair with your phone because the instructions may be different.

#### Messaging Menu 5 Text Message Text Messages are grouped by senders/receivers with date. Allows you to create a message with Text, Picture and Sound and send Picture Message it. The limit number of receivers and subject length of your message is displayed on the phone, but it may vary depending the type of your message. Your phone will alert you when you have new messages. Inbox Sent Up to 50 sent messages can be stored in Outbox lists and contents of sent messages verify whether the transmission was successful or not. Drafts Displays draft messages. Allows you to view the number of new voice messages recorded in the Voicemail Voicemail box. Web Alerts Get alerts from your phone when Web Messages has arrived. Allows you to display, edit, and add text phrases. These text strings Templates allow you to reduce manual text input into messages. Allows you to configure settings for your messages. Settings All Messages/ Text Messages/ Picture Messages/ Edit Voicemail #/ Web Alerts Delete All Inbox/ Sent/ Drafts/ Web Alerts/ All Messages

# **Getting Started With Your Phone**

#### Removing the Battery

Remove the battery cover by sliding it downward followed by the arrow indicator. Align the battery with the terminals near the top of the phone. Align the battery cover then slide it to the right side until it clicks into place.



## **Charging the Battery**

6

Installing the Battery

#### To use the charger provided with your phone: Notice

> Please use only an approved charging accessory to charge your LG phone. Improper handling of the charging port, as well as the use of an incompatible charger, may cause damage to your phone and void the warranty

1. Plug the end of the AC adapter into the phone's charger port and the other end into an electrical outlet

2. The charge time varies depending upon the battery level.

# Menus Overview

1. Web	5. Messaging	7. My Downloads
1. Web	1. Text Message 2. Picture Message	1. Games 2. Applications
2. Call History 1. Missed Calls 2. Received Calls	3. Inbox 4. Sent 5. Drafts 6. Voicemail	3. Memory 8. Contacts 1. New Contact
3. Dialed Calls 4. All Calls 5. Call Timer	7. Web Alerts 8. Templates 9. Settings	2. Contact List 3. Groups 4. Speed Dials
3. Bluetooth	0. Delete All	5. Services
1. Paired Devices 2. Power	6. Tools	6. My Name Card
3. Auto Pair Handsfree 4. My Visibility 5. My Bluetooth Name 6. My Bluetooth Info	1. Self Serve 2. Voice Command 3. Alarm Clock 4. Calendar 5. Ez Tip Calc	9. Settings 1. Sound 2. Display 3. Security 4. Call Settings
<b>4. Multimedia</b> 1. Take Photo 2. Record Voice 3. Pictures 4. Audio	6. Notepad 7. Calculator 8. World Clock 9. Stopwatch 0. Unit Converter *. Update Phone	5. System 6. Roaming 7. Phone Info

#### Menu Access

To use phone menus, press or using Navigation Key to highlight and select. Press the number key that corresponds to the submenu

Tools Menu 6	
Self Serve	Content archiving. Backs up your contacts, ringtones, music and more.
Voice Command	This feature provides you with the following options equipped with AVR (Advanced Voice Recognition) technology.
Alarm Clock	Allows you to set one of three alarms. At the alarm time, Alarm $(1, 2, 3, 4, or 5)$ will be displayed on the LCD screen and the alarm will sound.
Calendar	Allows you to keep your agenda convenient and easy to access. Simply store your appointments and your phone will alert you with a reminder you set.
Ez Tip Calc	Allows you to quickly and easily calculate bill amounts using the bill total, tip % and number of people as variables.
Notepad	Allows you to add new, view, and delete notes.
Calculator	Allows you to perform simple mathematical calculations. You can enter numbers up to the eighth decimal place. Calculations can be made with up to 3 lines at one time.
World Clock	Allows you to determine the current time in another time zone or country by navigating with the left or right navigation keys.
Stopwatch	Allows you to use your phone as typical stopwatch.
Unit Converter	Allows you to convert units of measurement.
Undate Phone	This feature allows your phone to upgrade to the latest software and

his feature allows your phone to upgrade to the latest software and Update Phone keeps your phone up to date with the latest features.



#### How to Use Menus

This section provides a quick glance of features on your phone.

#### Web Menu 1

The Web feature allows you to view Internet content especially designed for the mobile phone interface. For specific information on Web access through your phone, contact your service provider

- Send and receive Internet e-mail.
- Browse and search the World Wide Web via web pages especially designed for wireless phone customers.
- Set bookmarks to directly access your favorite sites.
- Retrieve information, such as stock quotes and flight schedules from the Internet.

#### Call History Menu 2

The Calls Menu is a list of the last phone numbers or Contact 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.

Missed Calls	Allows you to view the list of missed calls; up to 40 entries.
Received Calls	Allows you to view the list of incoming calls; up to 40 entries.
Dialed Calls	Allows you to view the list of outgoing calls; up to 40 entries.
All Calls	Allows you to view the list of all calls; up to 120 entries.
Call Timer	Allows you to view the duration of selected calls.

My Downloads	Menu 7
Games	Allows you to download games once Get New is selected and connected to browser.
Applications	Allows you to download applications, if available, once Get New is selected Launch Web and you've connected to the browser.
Memory	Allows you to check your LG230 internal phone memory.

#### Contacts Menu 8

The Contacts Menu allows you to store names, phone numbers and other informa- tion in your phone's memory.	
New Contact	Allows you to add a new number to your Contact List.
Contact List	Allows you to view your Contact List.

Groups	Allows you to view your grouped Contacts, add a new group, change the name of a group, delete a group, or send a message to everyone in the selected group.
Speed Dials	Allows you to view your list of Speed Dials or designate Speed Dials for numbers entered in your Contacts.
Services	*611 and 411 numbers are available for services.

Allows you to view all of your personal Contact information including My Name Card name, phone numbers, and email address in one entry.



Turn the phone off. Slide the battery cover to

left side and remove it. Use the opening near

the top of the battery to lift the battery out.

Please make sure that the LG logo faces down before inserting a charger or data cable into the charger port of your phone.

Phone Overview

#### Turning the Phone On and Off

#### Turning the Phone On

1. Install a charged battery or connect the phone to an external power source.

2. With the flip open, press 🔄 (located above the 🔤 key on the keypad) until the LCD screen lights up.

#### **Turning the Phone Off**

With the flip open, press and hold an until the display turns off.

#### Making Calls

- **1**. Make sure the phone is turned on. If not, open the flip and press 💿 for about three seconds. If necessary, enter the lock code.
- 2. Enter the phone number.
- 3. Press 👝
- 4. Press 💿 to end the call.

Note

> Your phone has a Voice Commands feature that also lets you make calls by saying a phone number, name, or location.

#### Bluetooth Menu 3

The LG230 is compatible with devices that support the Headset, Handsfree, Phonebook Access and Object Push for vCard & vCal. You may create and store 20 pairings within the LG230 and connect to one device. The approximate communication range for Bluetooth<sup>®</sup> wireless technology is up to 30 feet (10 meters).

Paired Devices/ Power/ Auto Pair Handsfree/ My Visibility/ My Bluetooth Name/ My Bluetooth Info

#### Multimedia Menu 4

Take Photo	Take pictures straight from your phone.
Record Voice	Allows you to record short verbal reminders.
Pictures	View, take, and trade your digital pictures and right from your wireless phone.
Audio	Allows you to listen or get new ringtones.

Settings Menu 9	)
Sound	Provides options to customize the phone's sounds.
Display	Provides options to customize the phone's display screen.
Security	The Security menu allows you to secure the phone electronically.
Call Settings	The Call Settings Menu allows you to designate how the phone handles both incoming and outgoing calls.
System	Allows you to set up the phone management environment. Leave this setting as the default unless you want to alter system selection as instructed by your service provider.
Roaming	Allows you to update PRL.
Phone Info	Allows you to check My Number, SW/HW Version, and Icon Glossary.

#### Important Safety Precautions and Warranty Information

Read these simple guidelines. Breaking the rules may be dangerous or illegal. Further detailed information is given in this user guide.

XQ.

WARNING! Violation of the instructions may cause serious injury or death.



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

Never use an unapproved battery since

this could damage the phone and/or

battery and could cause the battery to

- explode. Never store your phone in temperature
- less than -4°F or greater than 122°F. Do not dispose of your battery by fire or with hazardous or flammable materi-
- als When riding in a car, do not leave you Â phone or set up the hands-free kit near to the air bag. If wireless equipment is improperly installed and the air bag is
  - deployed, you may be seriously injured. • Do not use a hand-held phone while driving.
- Do not use the phone in areas where its use is prohibited. (For example: aircraft, hospital)
- Do not expose the battery charger or adapter to direct sunlight or use it in places with high humidity, such as a

#### □ Safety (Continued)

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

#### Posted Facilities

your phone OFF in any facility where posted notices so requir Aircraft FCC and Transport Canada 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. Votential areas may include: fueign areas (such as gaso-line stations); below deek on boats; fuel or chemical transfer or storage The statusts), below deck of bods, lue or chemical dataset of storage facilities; vehicles using liquefde petroleum gas (such as propare or butane); areas where the air contains chemicals or particles (such as grain, dust, or metal powders); and any other area where you would no mally 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 opratble wireless equipment, in the area over the air bag or in the air bag deployment area. If in-vehicle wireless equipment improperly installed and the air bag inflates, serious injury could result.

Charger and Adapter Safety • 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. Battery Information and Care

Please dispose of your battery properly or take it to your local wireless carrier for recycling.
 Do not dispose of your battery by fire or with hazardous or flamma-

#### Safety (Continued)

For the spent way a 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 of dnamati-cally with distance. For example, you could use a headset and carry the wireless phone away from your body or use a wireless phone cor and the second s

#### 10. What about children using wireless phones?

The scientific evidence does not show a danger to users of wireless The scientific evidence does not show a danger to users of wireless phones, including children and trenagers. If you want to take steps to lower exposure to radio frequency energy (RF), the measures described above would apply to children and teenagers using wireless phones. Reducing the time of wireless phone use and increasing the distance between the user and the RF source will reduce RF exposure. Some groups sponsored by other national governments have advised that children be discouraged from using wireless phones at all. For example, the government in the United Kingdom distributed leaflets example, the government in the United Kingdom distributed leaflets containing such are accommendation 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 precatitionary; it was not based on scientific evidence that any health hazard exists.

#### 11. What about wireless phone interference with medical

1. what about wretess profile interference with medical equipmet? Radio frequency 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 (EM) of implanted cardiac pacemakers and definitilators from wireless tele phones. 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 manufactu rine man utant, a joint enor by the 10%, includa device manufacture ers, and many other groups, was completed in late 2000. This stan-dard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from wireless phone EMI. The FDA has tested

• Do not use harsh chemicals (such as alcohol, benzene, thinners, etc.) or detergents to clean your phone. This alcohol, benzene, thinners, etc.) or detergents to clean your phone. This could cause a fire Do not drop, strike, or shake your

phone severely. It may harm the internal circuit boards of the phone. Do not use your phone in high explosive areas as the phone may generate sparks

- Do not damage the power cord by bending, twisting, pulling, or heating. Do not use the plug if it is loose as it may 6 cause a fire or electric shock.
- Do not place any heavy items on the power cord. Do not allow the power 50 cord to be crimped as it may cause elec-
- tric shock or fire. • Do not handle the phone with wet
- hands while it is being charged. It may cause an electric shock or seriously X damage your phone.
- Do not disassemble the phone.

Never use an unapproved battery since this could damage the phone and/or battery and could cause the battery to colode.
 The battery does not need to be fully discharged before recharging.
 Use only LG-approved chargers specific to your phone model since they are designed to maximize battery life.
 On ord disassemble or shortcritori the battery.
 Keep the battery's metal contacts clean.

Recharge the battery after long periods of non-use to maximize bat-

Use of extended backlighting, MiniBrowser, and data connectivity kits affect battery life and talk/standby times.

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

Unplug the power cord and charger during lightning storms to avoid electric shock or fire.

Make sure that no sharp-edged items such as animal's teeth, nails, come into contact with the battery. There is a risk of this causing a

Do not use harsh chemicals(such as alcohol, benzene, thinners, etc.) or detergents to clean your phone. There is a risk of this causing a

may cause an electric shock or seriously damage your phone. • Do not drop, strike, or shake your phone severely. Such actions may harm the internal circuit boards of the phone. • 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 electric those.

electing 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 items on the power cord. Do not allow the power cord to be crimped as it may cause fire or electric shock.

hearing aids for interference from handheld wireless phones and

nearing aids for interference room nanomed wreess ponoes 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 phoness oo that no interference occurs when a person uses a "com-patible" phone and a "compatible" hearing aid at the same time. This

standard was approved by the IEEE in 2000. The FDA continues to

the FDA will conduct testing to assess the interference and work to

For additional information, please refer to the following resource

(http://www.fcc.gov/oet/rfsafety) International Commission on Non-Ionizing Radiation Protection (http://www.icnirp.de)

World Health Organization (WHO) International EMF Project

FDA web page on wireless phones (http://www.fda.gov/cellphones/)

ications Commission (FCC) RF Safety Program

12. Where can I find additional information?

(http://www.who.int/peh-emf/en/) National Radiological Protection Board (UK)

(http://www.hpa.org.uk/radiation/)

monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occu

e. o not handle the phone with wet hands while it is being charged. It

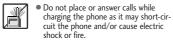
Safety Information

Explosion, Shock, and Fire Hazards

tery life will vary due to usage patterns and environmental condi-

the battery when it no longer provides acceptable perform-the battery can be recharged several hundred times before

nce this could damage the phon



 Do not hold or let the antenna come in contact with your body during a call. • Make sure that no sharp-edged items

such as animal's teeth or nails, come into contact with the battery. This could cause a fire.

Store the battery out of reach of chilal ( dren 90

- Be careful that children do not swallow any parts. This could cause asphyxiation or suffocation resulting in serious injury or death.
- Unplug the power cord and charger during lightning storms to avoid electric shock or fire.
- Only use the batteries and chargers provided by LG. The warranty will not be applied to products provided by other suppliers
  - Only authorized personnel should service the phone and its accessories. Faulty installation or service may result in accidents and consequently invalidate the warranty.

#### □ Safety (Continued)

Do not place or answer calls while charging the phone as it may short-circuit the phone and/or cause electric shock or fire. If you put your phone in a pocket or bag without covering the receptacle of the phone (power plug pin), metallic articles (such as roin, paperclip or pen) may short-circuit the phone. Always cover

the receptacle when not in use. O not short-circuit the battery. Metallic articles such as a coin, papercip or pen in your pocket or bag may short-circuit the + and terminals of the battery (metal strips on the battery) upon moving. Short-circuit of the terminal may damage the battery and cause an

ever place your phone in a microwave oven as it will cause the bat-

#### General Warnings and Cautions

Only use the batteries, antennas, and chargers provided by LG. The warranty will not be applied to products provided by other suppliers Store the battery in a place out of reach of children.
 Using a damaged battery or placing a battery in your mouth may cruits actions within.

cause serious injury. ■ Do not place items containing magnetic components such as a cred-it card, phone card, bank book or 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 dur-

- Do not hold or let the anterna come in contact with your body during a call.
  Talking on your phone for a long period of time may reduce call quality due host agenerated during use.
  When the phone is not used for a long period time, store it in a safe place with the power cord unpluged.
  Using the phone in proximity to receiving equipment (e., TV or radio) may cause interference to the phone.
  Only authorized personnel should service the phone and its accessiones. Faulty installation or service may result in accidents and consequently invalidate the warranty.
  Do not use the phone if the anterna is damaged. If a damaged anterna.
  Do not use the phone in areas where its use is prohibited. (for example arciff)

- example: aircaft) Do not immers your phone in water. If this happens, turn it off immediately and remove the battery. If the phone does not work, take it to an I. Cauthorized Sense Center. Use accessories, such as earphones and headsets, with caution. Ensure that cables are tucked away safely and do not touch the antenna unnecessarily.

#### Safety (Continued) Consumer Information on SAR

(Specific Absorption Rate) This Model Phone Meets the Government's Requirements for

This mouter more weeks the Government's nequirements for Exposure to Radio Waves. Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emis-sion limits for exposure to radiofrequency (RF) energy set by the Federa Communications Commission (FCC) of the U.S. Government. These FCC exposure limits are derived from the recommendations of two expert organizations, the National Counsel on Radiation Protection and ment (NCRP) and the Institute of Electrical and Electronics Engineers (IEEE). In both cases, the recommendations were developed Engineers (IEEE). In both cases, the recommendations were developed by scientific and engineering experts drawn from industry, government, and academia after extensive reviews of the scientific literature related to the biological effects of RF energy. The exposure Limit for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR is a measure of the rate of absorp-Absorption Kate, or SAK. The SAK is a measure of the rate of absorp-tion of RF energy by the human body expenses of numits of watts per-kilogram (W/kg). The FCC requires wireless phones to comply with a safety limit of 1.6 watts per kilogram (1.6 W/kg). The FCC exposure limit incorporates a substantial margin of safety to give additional pro-tection to the public and to account for any variations in measurement  $T_{out} = 6.2$  fb. fests 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 at the ingrest certained power level, the actual soft level on the pitote 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 test ed and certified to the FCC that it does not exceed the limit established by the governmentadopted requirement for safe exposure. The tests are by the governmentauopeer requirement to state exposure. The test and performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. This device was tested for typical body-worn operations with the back of the phone kept 0.79 inches (2.0 cm) between the user's body and the back of the phone. To comply with FCC RF exposure requirements, a minimum separation dis tance of 0.79 inches (2.0 cm) must be maintained between the user s body and the back of the phone. Third-party beltclips, holsters, and

911. • Your service provider programs one or more emergency phone numbers, such as 911, that you can call under any circumstances, even when your phone i locked. Your phone's preprogrammed emergency number(s) may not work in all locations, and sometimes an emergency call cannot be placed due to network, environmental, or interference issues.

ing! Important Safety Information

Avoiding hearing damage Permanent hearing loss may occur if you use your phone and/or head set at a high volume. Set the volume to a safe level. You can adapt over time to a higher volume of sound that may sound normal but can

over time to a nigher volume of sound that may sound norma but can be damaging to your hearing. If you experience nighing in your ears or muffled speech, stop listening and have your hearing checked. The load of the volume, the less time is required before your hearing could be affected. Hearing experts suggest that to protect your hearing.

high volume. • Avoid turming up the volume to block out noisy surroundings. • Turm the volume down if you can't hear people speaking near yo For information about how to set a maximum volume limit on your phone, see the features guide for your phone.

ramg your priore safely sed your phore while operating a vehicle is not recommended and egal in some areas. Be careful and attentive while driving. Stop using ur phone if you find it disruptive or distracting while operating any pe of vehicle or performing any other activity that requires your full vehicle.

1. Do writeless phones pose an examin mazardr The available scientific evidence does not show that any health prob-lems are associated with using wireless phones. There is no proof, however, that wireless phones are abolotely safe. Wireless phoness emit Dw levels of radiofrequency energy (RF) in the microwave range while being used. They also emit very low levels of RF when in the Main Menu Screen. Whereas high levels of RF can produce health effects (by heating fitsue), 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 clubic have enverted that come biological effects.

effects. Some studies have suggested that some biological effects may occur, but such findings have not been confirmed by additional

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-emit

similar accessories containing metallic components should not be used. Body-worn accessories that cannot maintain 0.79 inches (2.0 cm) sep-antion distance between the user's body and the back of the phone, and have not been tested for typical body-worn operations may not comply with FCC RF exposure limits and should be avoided. The FCC has granted an Equipment Authorization for this model phone, with all reported SAR levels evaluated as in compliance with the FCC RF

with all reported SAR levels evaluated as in compliance with the FCC. We emission guidelines. The highest SAR value for this model phone when tested for use at the ear is 1.20 W/kg and when worn on the body, as described in this user's manual, is 0.41 W/kg. While there may be differ ences between SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure. SAR infor-mation on this model phone is on file with the FCC and can be found under the Director Cant excited and the M/kameting result of field there.

under the Display Grant section of http://www.fcc.gov/oet/fccid after

To find information that pertains to a particular model phone this site

To find information that pertains to a particular model phone, this site uses the phone FCC ID number which is usually printed somewhere on the case of the phone. Sometimes it may be necessary to remove the battery pack to find the number. Once you have the FCC ID number for

a particular phone, follow the instructions on the website and it should

totand on the Celabol recommunications moduly association (Circly) website at http://www.cita.org/ '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 addi-

unications Industry Association (CTIA

provide values for typical or maximum SAR for a particular phone

Additional information on Specific Absorption Rates (SAR) can be

tional protection for the public and to account for any variations in

searching on FCC ID.

found on the Cellular Telecomr

sories containing metallic comp

search. In some cases, other researchers have had difficulty in producing those studies, or in determining the reasons for inconsis

w that any health pro

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?

Using your phone safely Use of your phone while operatin illegal in some areas. Po sand t

#### □ 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 causes undesired operation.

#### Industry Canada Compliance

This phone complies with Industry Canada RSS 133. This phone complies with the Class B limits for radio noi: emissions as set out in the interference causing standard entitled "Digital Apparatus" (ICES-003) of Industry radio noise emissions Canada.

#### □ FCC RF Exposure Information

WARNING! Read this information before operating the phone.

In August 1996, the Federal Communications Commission (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) electromag-netic energy emitted by FCC regulated transmitters. Those guidelines are consistent with the safety standard previ-ously set by U.S. Canada and international standards bodies. The design of this phone complies with the FCC es and these international standards

#### Bodily Contact During Operation

This device was tested for typical use with the back of the phone kept 0.6 inches (1.5 cm) from the body. To com-ply with FCC RF exposure requirements, a minimum separation distance of 0.6 inches (1.5 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 0.6 inches (1.5 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.

#### Uvehicle-Mounted External Antenna (Optional, if available.)

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

#### **Caution**

Use only the supplied and approved antenna. Use of unauthorized antennas or modifications could impair call quali-ty, 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 in contact with the skin a minor burn may result. Contact your local dealer for a replacement antenna.

#### □ Safety (Continued)

ting 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 wire-less 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 acting a construct a do not intel<sup>®</sup> filth annul atom. cts such as wi phones before they can be 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.

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

 Environmental Protection Agency Occupational Safety and Health Administration

ations and Information Admin The National Institutes of Health participates in some interagency working group activities, as well. The FDA shares regulatory respo bilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States 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 FDA and other health agencies for safety questions about wireless phones. The FCC also regulates the base stations that the wireless phone networks rely youn. 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 time slower than those they can get from wireless phones. Base stations are thus not the subject of the safety ques-tions disoursed in this document.

#### 3. What kinds of phones are the subject of this update?

with built-in antennas, often called "cell", "mobile", or "PCS" phone These types of wireless phones can expose the user

# radiofrequency energy (RF) because of the short distance between the phone and the user's head. These RF exposures are limited by FCC safety guidelines that were developed with the advice of the FDA and other feedan leakth and safety agencies. When the phone is located at greater distances from the user, the exposure to RF is draslocate at greater distances from the user, the exposure to it is dras-tically lower because a persors it? Peropsure 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 expo-sures far below the FCC safety limits.

#### 4. What are the results of the research done already?

rch done thus far has produ many studies have suffered from flaws in their research methods many sources nave sameted norm naves in new research memory. Animal experiments investigating the effects of radiofrequency energy (RP) exposures characteristic of wireless phones have yielded con-flicting 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 develop I more a minute of the statust of the segment and provide the state of lar to the conditions under which people use wireless phones, so we don't know with certainty what the results of such studies mean for human health. Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, gloma, meningioma, or acoustic neuroma, tumors of the brain or salivary gland, leukemia, or other cancers. None of the stud-ies 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 per od of phone use in these studies was around three y

# 5. What research is needed to decide whether RF exposur

. What testant is meeted to declude which is no exposure from wireless phones poses a health risk? A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the data that are needed. If elime animal exposure studies could be com-

#### Warranty Information

#### 1. WHAT THIS WARRANTY COVERS:

- 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 product extends for ONE (1) year beginning on the date of purchase of the product by the original end user.
- (2) The limited warranty extends only to the original end user of the product and is not assignable or transferable to any subsequent purchaser/end user.
- (3) This warranty is good only to the original end user of the product during the warranty period as long as it is in Canada.
- (4) Upon request from LG, the consumer must provide information to reasonably prove the date of pur-
- (5) During the applicable warranty period, LG will repair or replace at LG's sole option, without charge to the original end user, any defective component part of the phone or accessory. (6) LG may, use rebuilt, reconditioned, or new parts or components when repairing any product or

(1) Defects or damages resulting from use of the product in other than its normal and customary manner

(2) Defects or damages from abnormal use, abnormal conditions, improper storage, exposure to moisture

or dampness, unauthorized modifications, unauthorized connections, unauthorized repair, misuse,

(3) Breakage or damage to antennas unless caused directly by defects in material or workmanship

alleged defect or malfunction of the product, during the warranty period.

(5) Products which have had their serial numbers removed or made illegible

(4) If the carrier's or manufacturer's Customer Service Centre was not notified by the end user of the

(7) All plastic surfaces and all other externally exposed parts that are scratched or damaged due to nor-

neglect. abuse, accident, alteration, improper installation, or other acts which are not the fault of LG

- replace a product with a rebuilt, reconditioned or new product.

including damage caused by spills of food or liquids.

(6) Damage resulting from use of non-LG approved accessories.

(8) Products serviced by non-authorized persons or companies.

2. WHAT THIS WARRANTY DOES NOT COVER:

mal customer use.

#### □ Safety

#### TIA/Teleco ication

Industry Association) Safety Information The following is the complete TIA Safety Information for wireless hand held phone

#### Exposure to Radio Frequency Signal

Your wireless handheld portable phone 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 for control (W) signals in August, 1990, the resource guidelines with a factor levels for handheld wireless phones. Those guidelines are consistent with the safety standards previously set by both U.S. and international standards

- ANSI C95.1 (1992)
- NCRP Report 86 (1986)
- ICNIRP (1996) Health Canada, Safety Code 6, 1999.

 Health Canada, Safety Code 6, 1999.
 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 obdy of research to develop the ANSI Standard (COS.1). The design of your phone complies with the complexity of your phone complexity of your phone complexity. FCC guidelines, IC Regulations (and those standards).

#### Antenna Care

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

#### Phone Operation

NORMAL POSITION: Hold the phone as you would any other telenhone with the antenna pointed up and over your shoulde

#### Tips on Efficient Operation

w 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.

#### Driving

Check the laws and regulations on the use of ireless phones in the areas where you drive and always obey them. Also, if using your phone whil

#### □ Safety (Continued)

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

- 6. What is the FDA doing to find out more about the possible health effects of wireless phone RF? sible health effects of wireless phone RF7 The FDA is working with the U.S. National Toxicology Program and with groups of investigators around the world to ensure that high pri-ority animal studies are conducted to address important questions about the effects of exposure to radio frequency energy (RF). The FDA has been a leading participant in the World Health Organization International Electromagnetic Fields (EMP) 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 establish-ment of new research moreans around the world. The onier thas a research moreans around the smolt. The onier thas a since the stablish-ment of new research moreans around the world. ment of new research programs around the world. The project has also helped develop a series of public information documents on E issues. The FDA and the Cellular Telecommunications & Internet ents on EMF 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 xperts in government, industry, and academic organizations. CTIA
- funded research is conducted through contracts with independent investigators. The initial research will include both laboratory stud 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 radio frequency 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 radio fre

ency energy (RF) exposures. The FCC established these guidelines consultation with the FDA and the other federal health and safety

- driving, please observe the following: Give full attention to driving -- driving safely is your first responsibil-
- Use hands-free operation, if available;
  Pull off the road and park before making or answering a call if driv ing 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 min The react moustly Manuaccure's Association recommension and a min-mism separation of six inches be maintained between a handhed wire-less phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independ-ent research by and recommendations of Wireless Technology Research.

ent research by and recommendations of wireless rectinology Research Persons with Pacemakers: • Should AUWAYS 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 interformer.

- tial for interference; Should turn the phone OFF immediately if there is any reason to suspect that interference is taking place.

#### Hearing Aids

Some digital wieless 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 infor-

Health Care Facilities Turn your phone OFF in health care facilities when any regulations post-ed in these areas instruct you to do so. Hospitals or health care facilities may use equipment that could be sensitive to external RF energy.

agencies. The ECC limit for RE exposure from wireless telephones in agencies. The PCL limit for NF exposure non-writesis 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 vireless phone and is set well below levels known to have effects Whereas priorie 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 the FDA done to measure the radio frequency

5. What has the FDA done to measure the radio frequency energy coming from wireless phones? The Institute of Electrical and Electronic Engineers (IEEE) is develop-ing 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 Section that the Part (SR) is the Linear Beak Deat Meaks." Specific Absorption Rate (SAR) in the Human Body Due to Wireless 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 head. 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 guideline

9. What steps can I take to reduce my exposure to radio frequency energy from my wireless phone? If there is a risk from these products — and at this point we do not know that there is - it is probably very small. But if you are con know inda tinete is — it is probably key sinal, but in you are con-cerned about avoiding even potential risks, you can take a few simple steps to minimize your exposure to radio frequency energy (RF). Since time is a key factor in how much exposure a person receives,

- (1) 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 merchantability or fitness for a particular purpose.
- (2) Shipping damage is the sole responsibility of the shipping company.

#### 3. EXCLUSION OF LIABILITY:

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#### 4. HOW TO GET WARRANTY SERVICE:

To obtain warranty service, please call the following telephone number from anywhere in Canada: LG Electronics Canada, Inc. Tel. 1-888-542-2623

IG Electronics Canada, Inc. Customer care center: 550 Matheson Blvd East Mississauga, ON L4Z 4G3 1-888-LGCanada

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