LG

Life's Good

LG-C410

User Guide

All screen shots in this guide are simulated.
Actual displays and the color of the phone may vary.
Some of the contents in this manual may differ from your phone
depending on the software of the phone or your service provider.

BC

www.lg.com

LIMITED WARRANTY STATEMENT

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 TWELVE (12) MONTHS beginning on the date of purchase of the product with valid proof of purchase, or absent valid proof of purchase, FIFTEEN (15) MONTHS from date of manufacture as determined by the unit's manufacture date code.

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. This 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 Canada.

4. The external housing and cosmetic parts shall be free of 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 to reasonably prove the date of purchase.

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 :

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, neglect, abuse, accident, alteration, improper installation, or other acts which are not the fault of LG, including damage caused by shipping, blown fuses, spills of food or liquid.

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

4. That the Customer Service Department at LG was not notified by consumer of the alleged defect or malfunction of the product 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 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. WHAT LG WILL DO:

LG will, at its sole discretion, either repair, replace or refund the purchase price of any unit that does not conform to this limited warranty. LG may choose at its discretion to use functionally equivalent reconditioned, refurbished or new units or parts or any units. In addition, LG will not re-install or back-up any data, applications or software that you have added to your phone. It is therefore recommended that you back-up any such data or information prior to sending the unit to LG to avoid the permanent loss of such information.

4. STATE LAW RIGHTS:

No other ex warranty is applicable to this product. THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MARKETABILITY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN. LG INFOCOMM INC. SHALL NOT BE LIABLE FOR THE LOSS OF THE USE OF THE PRODUCT, INCONVENIENCE, LOSS OR ANY OTHER DAMAGES, DIRECT OR 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 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.

5. HOW TO GET WARRANTY SERVICE:

To obtain warranty service, please call or fax to the following telephone numbers from anywhere in the continental United States:

Tel. 1-800-793-8896 or Fax. 1-800-448-4026

Or visit www.lg.com.
Correspondence may also be mailed to:

LG Electronics MobileComm U.S.A., Inc.

201 James Record Road Huntsville, AL 35824

DO NOT RETURN YOUR PRODUCT TO THE ABOVE ADDRESS.
Please call or write for the location of the LG authorized service center nearest you and for the procedures for obtaining warranty claims.

Table of Contents

Table of Contents

Your Phone

Phone Components

1. **Earpiece:** Lets you hear the caller and automated prompts.

2. **Home screen:** Displays phone status icons, menu items, web items, web information, pictures and more in full color. You can select menu items by touching the corresponding icons on the touchpad.

3. **Send Key** 📞**:** Press this key in standby mode to quickly access the most recent missed, dialed and received calls.

4. **3.5 mm Headset Jack:** Allows you to connect 3.5 mm headset to listen to music or hold conversations.
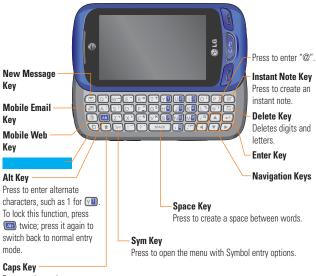
5. **Power/Lock Key** 🔒**:**
   • Powers your phone on/off by pressing and holding the key.
   • Turns your screen on and off and locks it.

6. **End Key** 📞**:** Ends or rejects a call. Press once to return to the standby screen.

7. **Clear/Back Key** C·↩ **:** Allows you to return to the previous screen. Press and hold to activate the Voice Command function.

8. **Volume Keys**
   • **When on the standby screen:** Allows you to set the Ringtone volume. Hold the Volume Down Key to toggle the Vibrating Mode On and Off.
   • **During a call:** Allows you to change the Earpiece volume.
   • **When playing background music:** Allows you to change the music volume.

9. **Charger/USB Port:** Allows you to connect the charger or other compatible accessories.

10. **Camera Key:** Press to start the Camera function. Press and hold to start the Video record function.

Rear View

Back cover

SIM card slot

Battery

Camera lens

Camera Key

microSD™ memory card slot

QWERTY Keys

New Message Key

Mobile Email Key

Mobile Web Key

Alt Key
Press to enter alternate characters, such as 1 for. To lock this function, press [Alt] twice; press it again to switch back to normal entry mode.

Caps Key
Press to change between Upper Case and Lower Case.

Sym Key
Press to open the menu with Symbol entry options.

Space Key
Press to create a space between words.

Press to enter "@".

Instant Note Key
Press to create an instant note.

Delete Key
Deletes digits and letters.

Enter Key

Navigation Keys

Getting Started

Installing the SIM Card and Battery

1. Remove the back cover

Hold the phone on your hand firmly. With the other hand, lift the back cover using the fingertip cutout located on the bottom of the cover and remove it.

2. Remove the battery

Use the fingertip cutout at the bottom of the battery compartment to lift the battery and remove it.

⚠ Warning

Do not remove the battery when the phone is switched on, as this may damage the phone.

3. Install the SIM card

Slide the SIM card into the SIM card slot. Make sure that the gold contact area on the card is facing downward. To remove the SIM card, pull it gently in the opposite direction.

4. Install the battery

Insert the top of the battery first into the top edge of the battery compartment. Ensure that the battery contacts align with the terminals on the phone. Press the bottom of the battery down until it clicks into place and replace the back cover.

Charging your phone

Lift the Charger/USB Port cover on the bottom left side of your LG-C410. Insert the charger connector to the phone (ensure that side 'B' of the connector is facing up) and then plug the other end into the wall socket. Your LG-C410 will need to be charged until fully charged. You will receive a 'Battery Full' notification.

Important!
You should insert the battery before charging.

① Note
Always unplug the charger from the wall socket after the phone is fully charged to save unnecessary power consumption of the charger.

① Warning
Use of unauthorized accessories could damage your phone and void your warranty.

Installing a memory card

You can expand the available memory space on your phone by using a microSD™ card. The LG-C410 will support up to a 32 GB microSD™ card.

① Note
Memory cards must be purchased separately.

1. Remove the back cover and locate the microSD™ memory card slot.

2. Insert a microSD™ card with the gold contact area facing downwards.

3. Replace the back cover.

⚠️ **Note**

If your memory card has existing content it will automatically be filed in the correct folder. For example, videos will be accessible from the Videos folder. If your memory card has protected content (i.e. content such as songs or graphics with Digital Rights Management copywriting loaded from another device), they will not be accessible. You may need to reformat the memory card prior to using it with this device.

On-Screen Icons

The table below describes various display indicators or icons that appear on the phone's display screen.

ICON/ INDICATOR	DESCRIPTION
📶	Network signal strength (number of bars will vary)
📶	No network signal
🔋	Battery empty
✉	New text message
📧	New email
🕐	An alarm is set
♪	Ring profile in use
🔇	Silent profile in use
↵	Call Forward
📅	Calendar event with Alarm is set

ICON/ INDICATOR	DESCRIPTION
🔵	Bluetooth is active
🌐	The browser is active
📳	Vibration mode
🔔	Ring and Vibration mode
📲	Ring after Vibration mode
🔊	Speakerphone
☎	Call in Progress
📟	Voicemail
🔋	Battery Full
🔌	Battery Charging
✈	Flight Mode

General Functions

Making a Call

1. Make sure your phone is powered on.

2. Touch 📞 and enter a phone number using the dial pad or open the slide and enter a phone number using the QWERTY keys. To edit a number on the display screen, simply touch ← to erase one digit at a time.

   ▶ Touch and hold ← to erase the entire number.

3. Press the **Send Key** 📞 to call the number. Or touch Call on the dial pad.

Making a Call with the Send Key

1. Press the **Send Key** 📞 and the most recent missed, dialed and received phone calls will be displayed.

2. Select the desired number.

3. Press the **Send Key** 📞 or touch Call Back.

Making International Calls

1. When entering a phone number, press ⌨ on the QWERTY keyboard and the international access character '+' will appear. When using the dial pad to dial, touch and hold 0+.

2. Enter the country code, area code and the phone number.

3. Press the **Send Key** 📞 to call the number. Or touch Call.

Ending a Call

When you have finished a call, press the **End Key** 📞.

Making a Call from the Contacts

You can store frequently called names and phone numbers in the SIM card as well as in the phone memory known as the Contacts.

You can dial a number by simply selecting a name in the Contacts List and pressing the **Send Key** 📞.

Answering a Call

When you receive a call, the phone rings and the phone icon appears on the screen. If the caller can be identified, the caller's phone number (or name if stored in your Address Book) is displayed.

1. Press the **Send Key** 📞 or unlock the screen and touch [Accept call]. If Any Key has been set as the Answer Mode, any key press will answer a call except for the **Volume Keys** [◄━━━►], **End Key** 📞, **Power/Lock Key** [⏻🔒], or the **Camera Key** [📷].

2. End the call by pressing the **End Key** 📞.

❶ Note
  You can answer a call while using other functions or features.

Adjusting the Volume

During a call, if you want to adjust the earpiece volume, use the Volume Keys of the phone.
In the standby screen, you can adjust the ring volume using the Volume Keys.

Setting Profiles

Press either of the Volume Keys. You can adjust the ringtone volume from the Ringtone menu and you can also set your ringtone profile to Ring, Vibrate All, Silent All.

Profiles —

Vibrating Mode (Quick)

Vibrating Mode can be activated by touching and holding ![key] from the dial pad. You can also set Vibrating Mode by pressing and holding down the Volume Down Key as well.

The phone will display 'Vibrating Mode On'. If you would like to turn Vibrating mode Off, touch and hold ![key] again.

Signal Strength

If you are inside a building, being near a window may give you better reception. You can see the strength of your signal by the signal indicator on your phone's display screen.

Entering Text

You can enter alphanumeric characters by using the phone's touch pad. For example, storing names in the Address Book, writing a message or scheduling events in the calendar all require text to be entered.

The following text input modes are available on the phone.

Changing the Text Input Mode

You can change the text input mode by touching the Text Input Mode toggle button ![abc 123] on the touch screen.

ABC Mode

This mode allows you to enter letters by touching the key labeled with the required letter once, twice, three or four times until the letter is displayed.

123 Mode (Numbers Mode)

Type numbers using one key touch per number. To change to 123 mode in a text entry field, touch ![abc 123].

Symbol Mode

The Symbol Mode enables you to enter various symbols or special characters. To enter a symbol, touch ![abc 123], then ![123 Sym]. Then select the desired symbol.

Using the T9 Mode

The T9 predictive text input mode allows you to enter words easily with a minimum number of key presses. As you touch each key, the phone begins to display the characters that it thinks you are typing based on a built-in dictionary. As new letters are added, the word changes to reflect the most likely candidate from the dictionary. To use T9 Mode, touch ![T9] to activate it. Once activated, an orange dot will be displayed on the T9 Key ![T9].

1. When you are in the T9 predictive text input mode, begin entering a word by pressing the touch screen keys. Touch one key per letter.

▶ The word changes as letters are typed - ignore what is displayed on the screen until the word is typed completely.

▶ If the word is still incorrect after typing completely, touch ▼ on the pop-up menu to see the options. Then select the word you want by touch. (To display the word candidates, first you need to select the **Show Candidate** option. Touch **Options** ▣ > **Text Entry Settings** > **Show Candidate**.)

▶ If the desired word is missing from the word choices list, add it by pressing ▼ and selecting **Add Word** to enter the new word. Then touch **Save** to save the word into the built-in dictionary.

2. Enter the whole word before editing or deleting any letters.

3. Complete each word with a space by touching ▭.

To delete letters, touch ◀. Touch and hold down ◀ to erase the entire text entry.

❶ Note

Pressing the **End Key** 📞 will save your unsaved message in the Drafts folder.

Using the ABC Mode

Use the touch pad keys to enter your text.

1. Touch the touch key labeled with the required letter:

▶ Once for the first letter

▶ Twice for the second letter

▶ And so on

2. To insert a space, touch ▭. To delete letters, touch ◀. Touch and hold down ◀ to erase the entire text entry.

❶ Note

Refer to the table below for more information on the characters available using the keys.

Touch 🔼 to input an Upper Case letter. To change text entry mode from Lower Case to Upper Case, touch 🔼 twice and the icon will switch to 🔼 - indicating that Caps Lock has been activated.

Key	Characters in the Order Display	
	Upper Case	Lower Case
1	. , ' @ ? ! - : / 1	. , ' @ ? ! - : / 1
2	A B C 2	a b c 2
3	D E F 3	d e f 3
4	G H I 4	g h i 4
5	J K L 5	j k l 5
6	M N O 6	m n o 6
7	P Q R S 7	p q r s 7
8	T U V 8	t u v 8
9	W X Y Z 9	w x y z 9
0	Space Key, 0 (Long press)	Space Key, 0 (Long press)

Using the 123 (Numbers) Mode

The 123 Mode enables you to enter numbers in a text message (a telephone number, for example) more quickly. Touch the keys corresponding to the required digits before manually switching back to the appropriate text entry mode.

My Dictionary

The T9 Dictionary is a feature that allows the user to add any unique or personal words to the T9 standard language database. The T9 Dictionary function can be selected by touching **Options** 🔲 > **Text Entry Settings** > **My Dictionary** while entering text. Within the T9 Dictionary function, the user can add, modify, delete or reset personal words.

❶ Note

You can select a different T9 language from the same Options menu. By default, T9 entry modes are set to off.

QWERTY Keyboard

Text input using the QWERTY Keyboard

When you are entering text, the QWERTY keyboard will default to ABC mode. If you are entering a number, for example when making a call, the keyboard number keys will default to numbers. However, while in ABC mode you can still enter numbers by pressing [Alt]. To lock the Alt Key, press it twice; press it again to switch back to normal entry mode.

❗ Note

Some fields may allow only one text input mode (e.g. telephone number in Address Book fields).

In the text entry field, press [Sym] and select a symbol from the touch screen.

Complete each word with a space by pressing [SPACE]. To delete a character, press [Del].

Using the Korean Mode

Allows you to type in Korean.

When you use Touch Keypad

Allows you easily input the letters. To input ㅎ, touch `ㅇ` and touch `획추가`. To input ㄲ, touch `ㄱ` and touch `쌍자음`.

23

When you use Qwerty Keypad

Open the slide and touch **Options** 🔲.
Choose **Text Entry Settings** and **Show Key Guide**. You can see the Korean key guide on the monitor. To input numbers, touch ⟨Alt⟩.

Press ⟨⬆⟩ and you can see the Korean key guide as below. To lock to this mode, press it twice; press it again to switch back to normal entry mode.

Address Book

From the standby screen, touch ▦ and touch 📇 to access your Address Book.

AT&T Address Book Native Sync (AAB)

AT&T Address Book Native Sync (AAB) is a service application for the synchronization of phone contact list information with the AAB server. When you turn on the phone or change your SIM card, the AAB application is displayed after entering the Address Book.

After checking the membership identification for this service, you can find the menu for the synchronization with the AAB server.

▶ From the standby screen, touch 📇 > **Options** 🔘 > **My Settings** > **AT&T Address Book**.

Address Book

The Address Book allows you to save and manage contact address information. The Address Book's functions allow you to add a new address or search saved contact addresses by name. To search for a contact, touch 🔍 and input the contact person's name. If you input 'At', it will show all contacts beginning with 'At' in their names.

▶ 🔍: Search a contact.

▶ 🔤: Allows you to quickly jump to a contact of a specific letter.

New Contact

The Add New option allows you to add a new contact address. You can enter contact address information, including: name, phone numbers, email addresses, group information, pictures, ringtone and a memo.

1. From the standby screen, touch 📇 and touch **Add New**.

2. Touch 🔲 to set a Picture ID for a contact by using a saved picture from Pictures or taking a new picture of the contact person. Choose from **No picture**, **Pictures** or **Take New Picture**. After you take a new picture of the contact person, touch 🔲 set as the Contact Picture ID.

▶ Enter the contact's first and last name.

▶ Enter a phone number. Touch 📞 so you can set that number as a Speed Dial. For more information, see the "Speed Dial" section.

▶ Enter an email address.

▶ Select a Group for the contact.

▶ Set the ringtone for the contact or leave it as default ringtone.

▶ Add memo if necessary.

▶ Choose whether to save the contact to Phone or SIM Card memory.

3. Touch **Save** to save the contact.

Caller Groups

The Groups option allows you to manage group information. You can also configure a ring tone for a group so that the group ring tone sounds when a call from a specific contact address within that group is received and there is no ring tone configured for the specific contact address.

1. From the standby screen, touch 🔲 and touch **All Contacts**.

2. A drop-down menu will appear. Touch **Groups**.

Speed Dial

You can assign a frequently-called contact to a speed dial list. You can select a number from 2 to 9 as a speed dial. You can configure speed dial numbers for any of the 8 numbers for a specific contact address.

1. From the standby screen, touch 📇.

2. Touch a contact.

3. Touch 🔲 > **Set Speed Dial**.

4. Touch the Speed Dial location from 2 through 9.

▶ Your Voicemail is already set to speed dial 1. This is a default setting and can not be changed.

▶ To call an assigned speed dial number, touch 📞 from the standby screen. Then touch and hold the assigned number; the call will be placed to the assigned number automatically.

To see your Speed Dial entries:

1. From the standby screen, touch 📇 and touch **All Contacts**.

2. A drop-down menu will appear, touch **Speed Dial**.

Management

This menu allows you to copy information from your SIM card, e.g. name, handset number, etc. to your handset. If a name is duplicated during the copying operation, the information is also duplicated.

You can also copy entries from the SIM card to the phone memory and entries from the handset memory to the SIM card (not all the data will be copied).

From this menu, you are also able to delete entries in the SIM card and the Handset.

1. From the standby screen, touch 📇 and touch **Options** 🔲.

2. A drop-down menu will appear. Touch **SIM Management**.

Service Dial Numbers

You can view the list of Service Dial Numbers (SDN) assigned by your network provider. Such numbers could include the emergency services, directory assistance and voice mail numbers.

1. From the standby screen, touch 📇 and touch **Options** 🔲.

2. A drop-down menu will appear. Touch **Service Dial Numbers**.

3. The names of the available services will be shown.

4. Touch a service number. Press the **Send Key** 📞.

My Contact Info

This displays your own contact information. You can edit and create the contact information. Depending on the SIM card, the number of business cards you can enter can vary.

1. From the standby screen, touch 📇 and touch **Options** 🔲.

2. A drop-down menu will appear. Touch **My Settings** and **My Contact Info**.

3. Touch an empty field, then enter and save your information.

In-Call Menu

Your phone provides a number of control functions that you can use during a call. To access these functions during a call, touch **Options** 🔘.

During a Call

Making a Second Call

You can select a number you wish to dial, to make a second call.

1. Touch ▣, enter the second phone number and touch 🔲.

   or

   Touch 🔲 to select a contact from your Address Book and then touch 📞.

Swapping Between Two Calls

Once the second call has been dialed (and answered), you can switch between the two on-going calls.

Press the **Send Key** ➿or touch 🔲.

Answering an Incoming Call

To answer an incoming call when the handset is ringing, simply press the **Send Key** ➿ or touch 🔲. The handset is also able to warn you of an incoming call while you are already on a call. Two tones will sound in the earpiece, and the display will show that a second call is waiting. This feature, known as **Call Waiting**, is only available if your network supports it.

If Call Waiting is turned on, you can put the first call on hold and answer the second call by pressing the **Send Key** ➿.

Rejecting an Incoming Call

You can reject an incoming call without answering by simply pressing the **End Key** ➿ or touching 🔲.

Muting the Microphone

You can mute the microphone during a call by touching [icon]. The handset can be unmuted by touching [icon] again. When the handset is muted, the caller cannot hear you, but you can still hear the caller.

Using the Speakerphone

You can use the integrated Speakerphone during a call by touching [icon]. The loudspeaker is automatically deactivated when you end the call.

⚠ Warning

Due to increased volume levels, do not place the phone near your ear while the speakerphone is enabled.

Conference Calls

The conference service provides you with the ability to have a simultaneous conversation with more than one caller. The conference call feature can be used only if your network service provider supports this feature.

Once a conference call is set up, calls may be added, disconnected or separated (that is, removed from the conference call but still connected to you) by the person who set up the conference call. These options are all available from the In-Call menu.

The maximum number of callers in a conference call is five. Once started, you are in control of the conference call, and only you can add calls to the conference call.

Making a Second Call

You can make a second call while currently on a call simply by pressing [Dialpad], entering the second number and pressing the [Call]. When the second call is connected, the first call is automatically placed on hold. You can swap between calls by pressing the **Send Key** 📞.

Setting Up a Conference Call

To set up a conference call, place the first call. Once that is connected, follow the steps above to make a second call. You can then join the two separate calls by touching **Options** 📱 and select **Merge Calls**.

Activate the Conference Call on Hold

To activate a conference call on hold, press the **Send Key** 📞.

Adding Calls to the Conference Call

To add a call to an existing conference call, touching **Options** 📱 and select **Merge Calls**.

Private Call in a Conference Call

To have a private call with one caller from a conference call, touch 📩. When the numbers of the callers are displayed, touch [Private] next to the one you wish to speak in private with. Only the person who initiates the Conference Call can initiate a Private Call.

Ending a Conference Call

The currently active conference call can be disconnected by pressing the **End Key** 📞.

Your Standby Screen

From the standby screen, you can access all menu options, make a quick call and view the status of your phone - as well as many other things.

Touchscreen Tips

▶ The standby screen is also a great place to get accustomed to the touchscreen.

▶ To select an item, touch the icon accurately.

▶ To scroll through lists, touch the last item visible and slide your finger up the screen. The list will move up so more items are visible.

▶ There's no need to press hard. The touchscreen is sensitive enough to pick up on a light yet firm touch.

▶ Use the tip of your finger to touch the option you require. Do not use your fingernail.

▶ When the screen light is off, press the **Power/Lock Key** [⏻🔒] on the top side twice to restore the standby screen.

▶ Don't cover the phone with a case or cover as the touchscreen will not work with any material covering it.

The Quick Keys

The Quick Keys on your standby screen provide easy, one-touch access to your most used functions.

	Touch to bring up the touch dial pad, to make a call. Input the number as you would using a normal key pad and touch **Call** or press the **Send Key** 📞.
	Touch to open your contacts and search for the number you want to call. You can also create new contacts and edit existing ones.
	Touch to access the Messaging menu. From here you can create a new outgoing message.
	Touch to open the Main Menu which is separated into four sub-menus. Touch the vertical tabs along the right side of the screen to view further options.

Quick Keys

Home Screen

LG-C410 provides three types of Home Screens. To swap between the Home Screens, just swipe quickly over the display from left to right or right to left.

Widget

Allows you to use Widgets and even add them to your Home screen.

▶ The Widget Home screen is your default Home screen. If you are on another Home screen, touch **A Widget** at the top of the screen.

▶ Touch ▲ to open the widget panel.

▶ Drag a widget from the menu onto the Widget Home screen. You can drag the widget panel to the left or right to view additional widgets. Touch ▼ again to close the widget panel.

▶ You can play songs, add memos, check the calendar, play a slide show, set an alarm, set your current and second city or add calendar events directly from the standby screen using the Widget Home Screen.

Widget

Contacts

Allows you to easily contact your friends and family by displaying your favorite contacts on the standby screen.

▶ First, touch **Contacts** from the standby screen. Then touch ⚙ .

Contacts—

▶ Touch Add to register your favorite contacts. You can add up to 30 contacts on the screen.

▶ If you want to delete a contact from this screen, touch ✕ .

▶ Touch Done to finish editing the Contacts on this screen.

35

▶ To access your Contacts, simply touch on their corresponding icon. Touch Call to call, to send a message and to check messages received from that person. And touch to check call history.

▶ If you want to view one of the Contacts, touch the picture. The detail view screen will be displayed.

Shortcut

Add your favorite menu on the standby screen.

▶ Touch ★ Shortcut from the standby screen.

▶ Touch to edit the shortcuts.

Shortcuts

▶ Touch Add to add another application, touch to delete the application from Shortcuts, or touch Done to finish.

Annunciator Bar

With your phone's Annunciator bar, you can quickly connect to the Music Player, Bluetooth service and more.

Touch the top side of the standby screen.

▶ You can use the Music Player or turn on Bluetooth.

▶ You can set your profile by touching 🔔 and choosing from Ring, Ring and Vibration, Ring after Vibration, Silent, or Vibration.

Menu Tree

Touch ▦ in the standby screen to open the **Main Menu**. From here you can access the following menus: **Phone**, **Multimedia**, **My Stuff** and **Settings**

Phone
- Dialing
- Address Book
- Recent Calls
- Messaging
- Mobile Email
- YPmobile
- AT&T GPS
- myAT&T

Multimedia
- AT&T Code Scanner
- Mobile Web
- Shop Music
- AppCenter
- Music Player
- App Manager
- Games & Apps
- Camera

My Stuff
- AT&T Social Net
- Audio
- Pictures
- Video
- Tools
- Clock
- File Manager
- Other Files

Settings
- Call
- Sound
- Display
- Phone
- Bluetooth
- Connection
- Application
- More

Messaging

This section includes functions related to SMS (Short Message Service), MMS (Multimedia Message Service), Voicemail as well as the network's service messages.

New Message

1. From the standby screen, touch .

2. Touch **Create New Message**.

Editing a message

The following options are available when editing a Message.

▶ **Symbol:** You can insert symbols ranging from sentence notes to emoticons. Touch the [abc 123] twice and you can select the symbols you want. You can use **Previous** and **Next** to scroll through the various pages of symbols.

Inserting Multimedia Files

Inserting Multimedia files in outgoing messages is easy. While editing a message, press [Insert] and select an option from below:

▶ **Picture:** You can preview the selected picture. Touch [Insert] to insert the selected picture.

▶ **Audio:** You can insert from your saved Audio files.

▶ **Video:** You can insert from your saved Video clips.

▶ **Slide:** Allows you to add another slide to the message.

▶ **Take New Picture:** You can insert a new image taken from the camera by pressing the **Camera Key** [icon] or touching [icon].

① Note

Refer to page 61 for camera options.

▶ **Record New Audio:** You can record a new audio clip by touching ● REC .

  • **Recording mode:** MMS mode will limit the recording length so that it can be sent by MMS. General mode will record as long as memory is available.

  • **Quality:** Choose from Normal, Economy, or Fine. The higher the quality, the larger the file.

▶ **Record New Video:** You can record a new video.

▶ **More:** Allows you to insert a Template, vCard, vCalendar, vNote, vTask or Contact.

🔘 Note

vCard, vCalendar, vNote, vTask and Contact are created by the Address Book, Calendar, Notepad and Tasks functions. Go to the corresponding sections for more detailed information.

Using Options

While entering a text message, touch **Options** 📵 to use the options below.

• **Text Entry Settings**

  - Language: Allows you to set the text entry language to English, French, Spanish, or Korean.

  - Show/Hide Candidate: When in T9 Entry Mode, you can see the word candidates as you type.

  - Show/Hide Next Word: Allows you to see the next word as you type.

  - My Dictionary: Allows you to manage the words in the Dictionary.

• **Copy & Paste:** Allows you to copy text and paste it in a text field.

• **Preview:** Allows you to preview your message.

• **View attachment:** Allows you to view the message's attachment.

• **Save to Drafts:** Saves the selected message to Drafts.

• **Remove Elements:** Allows you to remove elements from the message.

- **Slide Settings**

  - **Duration:** Allows you to set the duration of the slide presentation.
- **Writing Font Size:** Set the writing Font size to Small, Medium and Large.
- **Cancel Message:** Allows you to exit the Message without saving your input message.

Sending a Message

After completing a message, select **Send To** to select recipients.

- Enter the recipient(s). With **Options** 🔲, you can choose an option from below.

  - **Enter Number:** You can input the recipient(s) number using the touch keypad or QWERTY keyboard.
  - **Enter Email:** You can enter an Email address instead of a phone number.
  - **Caller Groups:** Choose a contact from your Groups.
  - **Recent Recipients:** Choose a contact from recent messages.

  - **Recent Calls:** Choose a contact from recent calls.
  - **Delivery Options:** Allows you to set **Add Cc** and **Add Bcc**.
  - **Save to Drafts:** Saves the selected message to Drafts.
  - **Cancel Message:** Allows you to cancel the message.

Message folders

The folder structure on your LG-C410 was designed to be fast and easy to use.

▶ **Inbox:** All the messsages you receive are placed into your Inbox.

▶ **Drafts:** If you don't have time to finish writing a message, you can save it as a draft.

▶ **Outbox:** All Sending and Sent messages are placed into your Outbox.

▶ **Note**

If you see the message "Message box full.
Delete old messages.", then you should delete
some messages from your Inbox.

Inbox

You will be notified when you receive a
message. They will be stored in the Inbox. In
the Inbox, you can identify each message by
icons. To reach the Inbox, from the standby
screen, touch [icon].

The following options are available in the
Inbox folder when you touch [icon].

▶ **Delete:** You can pick a message and
delete it.

▶ **Sort By:** You can sort all messages by
Date, From Read/Unread and Subject.

▶ **Standard/Conversation View:** You can
select between the two viewing modes.

▶ **Delete All Read Messages:** You can
delete all read messages.

▶ **Message Settings:** Allows you to set
messaging settings.

The following view modes are available for
your Inbox.

Conversation View

This mode allows you to view all messages
with each contact in conversational order.

Touch a conversation to expand messages (to
display each message in its entirety). Touch
it again to only see the first 2 lines of each
message.

Standard View

Allows you to view messages individually.
When viewing a message, the following
options are available in standard view:

▶ **Add to Address Book:** You can save the
sender's phone number in the Contact List.

▶ **Select Slide:** If the multimedia message
has more than one slide, you can select
and move to the desired slide.

▶ **Extract Data:** You can make a voice call or send a message. You can save the number As New contact or Updating Existing.

▶ **View Attachment:** Allows you to view the message's attachments.

▶ **Copy to SIM/Phone:** Allows you to copy the message to the SIM card or the phone.

▶ **Move to SIM/Phone:** Allows you to move the message to the SIM card or the phone.

▶ **Message Details:** You can view information about received messages; message Type, Subject, Sender's address, and message Time.

Drafts

You can view the messages saved as drafts. To see the Drafts folder, touch 🔽 from the standby screen, then touch **Inbox** and touch **Drafts** from the drop-down menu.

Outbox

The Outbox is a place where you can find your sent messages. To see the Outbox folder, touch 🔽 from the standby screen, then touch **Inbox** and touch **Outbox** from the drop-down menu.

When you press the **Send Key** 📞, you can make a call to the number of the recipient number of the selected message.

If a message is not successfully sent, you will receive a Message Sending Failure notification on the screen. Another attempt will be made to send the failed message and after two unsuccessful attempts, the message will no longer be sent automatically. In order to send the message that has failed, you must touch ⬛ Resend to resend the message.

The Outbox will display all failed, sent and pending messages in the order in which they are sent. Touch **Options** 🔲 to use options available from the Outbox.

▶ **Delete:** Deletes a message you choose.

▶ **Sort by:** Sorts by Date, To and Subject.

▶ **Message Settings:** Allows you to set messaging settings.

▶ **Delete All:** Delete all messages.

The following options are available when you select a message in Outbox and touch **Options** 🔲.

▶ **View Status:** Shows the message status.

▶ **Select Slide:** If the multimedia message has more than one slide, you can select and move to the desired slide.

▶ **View Attachment:** To view the message attachment.

▶ **Copy to SIM/Phone:** Allows you to copy the message to the SIM card or the phone.

▶ **Move to SIM/Phone:** Allows you to move the message to the SIM card or the phone.

▶ **Message Details:** Allows you to view the message information.

Voicemail

If provided by your network, callers can leave you messages if they call and you don't answer.

To access from the standby screen, touch 📞, then press and hold down 1 ⚬.

🟠 Note

Please check with your network service provider for details of their service in order to configure the handset accordingly.

Message Settings

To configure **Messaging settings**, touch 📩 from the standby screen, touch **Options** 🔲, then select **Message Settings** for the following options.

Message Alert

You can set the Sounds, Volume, Alert Type, and Alert Interval.

Save To

Choose a default save location between Phone and SIM Card.

Signature

This feature allows you to create your signature.

Text Message

▶ **Text Templates**

There are 6 predefined messages in the list. You can view and edit the template messages or create new ones.
The following options are available when you touch **Options** 回.

- **Delete:** Allows you to delete the selected template message.
- **Delete All:** Deletes all text message templates in the folder.
To edit an existing Template, touch it (to open) then touch the text. The Edit Template screen will automatically open.

▶ **Message Center Number:** The details for the Message Center are pre-loaded onto your handset and should not be changed.

▶ **Email Gateway:** The details for the Email Gateway are pre-loaded onto your handset and should not be changed.

▶ **Insert Signature:** Insert signature you created.

Multimedia Message

▶ **Multimedia Templates:** Multimedia templates are available and can be created here.

▶ **Download Options**

- **Download Without Ask:** Allows Multimedia Messages to be downloaded automatically.
- **Ask Always:** You can download a multimedia message manually.
- **Discard:** Used when the user rejects download of the Multimedia Message.

▶ **Message Center:** The details for the Multimedia gateway are pre-loaded onto your handset and should not be changed.

Voicemail Number

This menu allows you to set the voicemail center number if this feature is supported by AT&T. Please check with AT&T for details of their service in order to configure the handset correctly.

Service Message

You can set the Service option to determine whether or not you will receive service messages.

Mobile Email

Mobile Email allows you to access your Yahoo! Mail, AOL Mail, AIM Mail, Windows Live Hotmail, AT&T Mail, Gmail and other providers accounts on your phone. So now you can quickly and easily check your email while you are away from your computer.

To Set Up Mobile Email

▶ **Open Mobile Email:** From the standby screen, touch [ ], and touch [ ].

▶ **Select an Email Provider:** Touch the email provider you wish to use.

▶ **Read and Accept the Terms of Use**

▶ **Log In**

  1. Touch the email address field and type in your existing email address.

  2. Touch the Password field and enter your password.

  3. To save your password scroll down to **Remember Password** and select it and check the box.

  4. Touch **Sign In**.

▶ **Opening an Email:** Scroll down and touch the message you want to open to highlight it. Then touch it again to open the message. When the email is open, select **Options** to reply, forward or delete.

▶ **Deleting an Email:** Scroll down to the email you want to delete, touch the subject line to highlight it, touch **Options**, and then **Delete**. Touch **Delete** once more to confirm.

AT&T GPS

From the standby screen, touch [icon], then touch [icon] to access AT&T GPS.

The **AT&T Navigator** application on your device uses GPS position determination technology and access to your carrier's data network to provide you with driving directions and a host of other services, including:

▶ GPS navigation that gives you turn-by-turn directions to any destination address in the continental United States. If you miss a turn or get off-track, AT&T Navigator will calculate a new route for you. You can enter a destination address by using AT&T Navigator's automatic voice recognition system or by typing on the device's keypad.

▶ Audio and visual traffic alerts while driving or viewing maps, as well as traffic re-routing capabilities to minimize delays on your trip.

▶ A Search feature that allows you to find businesses or points of interest near your current location, an airport, a waypoint, or any other entered address. You can read ratings and reviews for businesses and easily call the business that you have found to check on the availability of an item or to make a reservation. You can navigate to the business location now or save the address for later use.

▶ Maps of the area around your current location, around a marked waypoint, or around an address that you had previously entered. You can pan the map (adjust left, right, up, or down) and zoom in or out. You can also mark a point under the cursor as a waypoint.

▶ A compass-like indicator presenting your direction of travel, location, and speed.

▶ The ability to personalize your application preferences by selecting U.S. customary or metric distance units, the language for audible guidance, and so on.

You can also use many of AT&T Navigator's features on the TeleNav website, such as getting driving directions (Route Planning) and using the Search function to find businesses, churches, schools, and government offices. You can also use the TeleNav website to add an address to your My Favorites list, manage your My Favorites and Recent Places lists, and shop at the TeleNav Store.

🔶 Notes

For best GPS performance

• In order to improve GPS antenna sensitivity, do not cover the GPS antenna area of the device.

• Your GPS antenna sensitivity might be weakened if you are in a high rising building, underground, or location surrounded by metal or concrete.

• Use near the window indoors for better GPS antenna sensitivity.

• For battery durability, please use vehicle power adapter in your car.

• It could take 2~3 minutes to get your GPS position depending on the condition of the environment or network.

YPmobile

From the standby screen, touch ![grid icon], then touch ![yp icon] to access YellowPages.com.

Unleash the power of YellowPages.com local search on your mobile phone.

Find a business, get maps and directions, and save your favorites: our mobile app gives you what you need, whenever and wherever you need it.

▶ Search for local businesses.

▶ View ratings and call businesses.

▶ Save businesses for future access.

▶ Get maps and view step-by-step directions.

* For more information, refer to
  www.yellowpages.com

Mobile Web

This application connects you to the Internet. By default, the account connects you to AT&T's homepage.

Mobile Web is one of the services provided by AT&T and it gives you access to all the cool things you can do with your wireless phone.

ⓘ Note

Check the availability of WAP services, pricing and tariffs with your network operator and/or the service provider whose service you wish to use. Service providers will also give you instructions on how to use their services.

Please contact your service provider to open an Internet account.

Launch the Browser

To launch the browser from the standby screen, touch 🔡, 🔳, and then 🔵. You can also access Mobile Web from the Qwerty keyboard by pressing 🔳.

Once connected, the homepage is displayed.

To exit the browser at any time, press the **End Key** 📞.

Menus for the Browser

You can surf the Internet using either the phone keys or the Browser menu.

Using the Navigation Keys

When surfing the Internet, the navigation keys function similarly from when the phone is on standby mode.

Using the Browser Menu

Online menu

Once you are connected to the Internet, the following menu options are available when you touch **Options** 🔳:

▶ **Home:** Moves to the initial homepage.

▶ **Windows:** You can have several browser windows to navigate different web pages at the same time.

▶ **Enter URL:** Connects to the specific URL after editing.

▶ **Bookmarks:** You can add or save the current page to Bookmark or view the list saved under Bookmark.

▶ **Landscape View:** Allows you to view broad web pages easily.

▶ **View Full Screen:** View current page in full screen.

▶ **Back:** Allows you to go back to the previous page.

▶ **Forward:** Allows you to revisit the page you viewed prior to going back.

▶ **Search Text:** You can search the text what you want to find.

▶ **Recent Pages:** Allows you to see a list of recently visited web pages.

▶ **Send URL:** Allows the current page URL via SMS to another person.

▶ **Settings:** Allow you to set options such as Cache, Cookie and other Browser Settings.

▶ **Browser Help:** Opens Help Overview to help make your browsing experience easier.

▶ **Exit:** Exits the browser.

AppCenter

To launch AppCenter while in the standby screen, touch , , and then touch .

Home

Displays the AppCenter home page.

Search

Allows you to search for applications, games, music, and much more.

Categories

Allows you to easily browse for media through categories.

Account

Allows you to view your current apps, change your purchase confirmation, and read the privacy policy.

Note

Additional charges may incur when downloading any media files. Contact AT&T for additional information.

Music Player

Music Player

To launch Music Player while in the standby screen, touch [icon], [icon], [icon], and select **Music Player**.

▶ **All Songs:** You can view all the songs in your music library.

▶ **Playlists:** You can make your own playlists.

▶ **Artist:** Shows the list of artists of all the songs in your music library, and shows all the songs by a chosen artist.

▶ **Album:** Shows the list of albums of all the songs in your music library, and shows all the songs on a chosen album.

▶ **Genre:** Shows the list of genres of all the songs in your music library, and shows all songs of a specific genre.

▶ **Shuffle:** Allows you to play all the songs in your music library with shuffle.

▶ **Favorites:** Allows you to play your favorite songs.

❶ Note

Copyrights of music files may be protected by copyright and intellectual property laws. Please ensure that you adhere to the applicable Terms of Use of materials laws prior to downloading or copying files.

Playing Music

To listen to music in your phone or the external memory, follow these quick easy steps:

1. From the standby screen, touch [icon], then open the Multimedia tab by touching [icon] and touch [icon].

2. You can select from All Songs, Playlists, Artist, Album, Genre, Favorites, and Shuffle songs to select your Music. The Now Playing menu will be only available when music is playing.

Repeat — Minimize
Shuffle — Favorite

Playlist

Volume

▶ Touch the song you wish to play.

▶ Touch ▐▐ to pause the selected song. While playing, touch ◀✕ to adjust the volume. Touch ▶▶▌ and ▐◀◀ to skip to the next song or previous song.

▶ Touch ▦ to Minimize the music player and access other phone functions while music is playing.

❶ Note
Files under 300 kb may not be displayed in this function and may be categorized as Ringtones.

Adding Music To Your Handset

Music files can be added to your handset by using one or more of the following methods:

▶ Download music and ringtones over the AT&T network directly to your device via the Shop Music link in the AT&T Multimedia menu.

▶ From your existing digital media collection on your PC via Windows Media® Player and/or Windows Explorer.

▶ From your PC using other music subscription services, such as Napster or Rhapsody.

❶ Note

In order to effectively store all your music files on your SD card, it's important to ensure that there is enough free space available remaining on the SD card to support file transfer. If there is not enough free space on the SD card, this may result in transfer failures or lost data.
(The maximum number of music files that the handset can support is 2000.)

A 512 MB card requires up to 3 MB of free memory.

A 4 GB card requires up to 6 MB of free memory.

A 8 GB card requires up to 15 MB of free memory.

A 16 GB card requires up to 25 MB of free memory.

Purchasing and downloading Music directly to your Device

1. From the standby screen, touch 🚏, 🖿 and then ▶.

2. Select **Shop Music**.

3. Navigate the **Shop Music** page to download today's hottest music, ringtones and other personalized content directly to your phone.

❶ Note

Some sites are data intensive (i.e. previews via streaming) so the user should be enrolled in an unlimited data plan before using these services to avoid per-use data charges.

Additional charges may apply when downloading music, ringtones etc.

Transferring Music using your PC

Before You Get Started

To transfer music from your PC to your device, you will need the following:

▶ Windows Media® Player 10 (or above) or other digital music management software such as Napster or Rhapsody.

▶ A microSD™ card*
(supports up to 32 GB cards)

▶ USB data cable*

* microSD™ card and USB data cable sold separately; go to att.com/wireless for details.

◑ Note

This device is not compatible with iTunes and/or iTunes files.

Transferring Music from the Digital Music Service

1. Using your computer, open your preferred PC music management client.

2. Download the selected song to your library.

3. Make sure the microSD™ card is inserted properly into the handset.

4. Use the USB data cable to connect the handset to the PC.

5. Once the USB connection has been established, the handset displays "Connected." and the computer screen then shows the LG-C410 device. If the detection does not occur, skip to the **Changing USB Connection Setting** section on page 58.

6. Follow the instruction in the program to transfer music to your handset.

◑ Note

If you have a USB hub, connect the handset directly to your computer rather than through the hub.

Transferring Music using Windows Media Player

1. Open Windows Media® Player on your computer (version 10.0 or higher).

2. Use the USB data cable to connect the handset to the PC.

3. Once the USB connection has been established, the handset displays "Connected." and the computer screen then shows the LG-C410 device.

❶ Note

If the target computer does not detect the newly connected handset or provide an MTP Player dialog window on the PC screen, skip to **Changing USB Connection Settings** section on page 58.

4. From within the Windows Media® Player application, click on the Sync tab. Previously downloaded songs are then listed on the left side of the application.

5. Choose the destination location for the media files. The LG-C410 Music Sync Player appears in a drop-down list on the right side of the screen.

❶ Note

If there are no items present in the playlist, click the Edit Playlist button and begin adding the music files from among the various media categories.

6. Drag the songs to the Sync tab and click the Start Sync button to download the selected songs to your handset. A "synchronization in progress" message appears on the application. Do not unplug the handset during this process. Once complete, the progress bar will disappear.

7. It is now safe to unplug the USB connector from the handset once synchronization is complete.

Drag and Drop Music Using LG-C410 As A Mass Storage Device

1. Make sure the microSD™ card is inserted properly into the headset.

2. Connect the device to a PC using a LG-C410 USB data cable.

3. A bubble may appear on the PC, "Found New Hardware LG USB Modem".

4. Access My Computer on the PC.

5. The phone's memory card will be listed under "Devices with Removable Storage" in the same location as an optical drive.

❶ Note

The PC will automatically assign a drive letter.

6. Explore through the files in a new window for the desired music files.

7. Drag and drop the desired music content from the PC window to the "Storage Card" window.

8. Disconnect the device from the USB cable.

9. Access the Music Player on the phone.

❶ Note

If the target computer does not detect the newly connected handset as Mass Storage, skip to Changing USB Connection Settings section below.

Changing USB Connection Settings

1. From the standby screen, touch 📱 and 🔵.

2. Select **Connection**.

3. Touch **USB Connection Mode**.

4. Touch **Music Sync** (if using Windows Media® Player or other Digital Music Services) or **Mass Storage** (if you are going to drag or drop files).

5. Reconnect the device to a PC.

Deleting Music Files

The following are the three options available to delete music from your phone:

1. Delete a file using Mass Storage, but not using the Music Sync function.

2. Delete a file by directly inserting the microSD™ card into the PC.

3. Delete a file using delete function on the phone.

⚠ Note

If you delete a playlist from the phone, the songs in the playlist will not be removed and remain in the All Songs folder.

Execute your file operations like Delete, Move and Copy using Music Sync.

Be aware that all of the existing data will be erased on microSD™ card if you use the below process.

• Use the Memory Card function in the Settings menu (Menu > Settings > Phone > Reset Settings > Master Clear > Memory Card).

• Format external memory using Mass Storage.

Additional Music Services

There may be other AT&T music applications preloaded or available for your phone that allow you to:

▶ Identify the name, artist and album to a song from a song sample.

▶ Listen to the latest Hip Hop, R&B, Rock, Jazz, or Country streaming commercial-free radio channels, anywhere you go.

▶ View the latest music videos.

▶ View music news and information.

▶ Cut custom-made ringtones from the favorite parts of your favorite songs, etc.

⚠ Note

Some sites are data intensive (i.e. previews via streaming) so the user should be enrolled in an unlimited data plan before using these services to avoid per-use data charges.

Additional charges may apply for downloading content or use of these services.

Multimedia

App Manager

Allows you to download and use useful and entertaining applications.

To access the App Manager from the standby screen, touch [icon], [icon], and then [icon].

Games & Apps

Allows you to download and play games and use applications to your enjoyment.

To access Games & Apps from the standby screen, touch [icon], [icon], and then [icon].

Camera

From the standby screen, touch [icon], [icon], and then [icon] to access the Camera function.

Take Photo

Using the camera built into your phone, you can take pictures of people or events while on the move. Additionally, you can send photos to other people in a picture message.

Press the **Camera Key** [icon] to go to Camera Mode directly. Or choose [icon] from the [icon] tab. Then select **Take Photo**. You can also take video by pressing and holding the **Camera Key** [icon] to open the Camcorder Mode.

Getting to know the viewfinder

Zoom: Allows you to zoom in and out.

Back: Touch here to exit camera mode or return to the previous screen.

Camera mode: Indicates that camera mode is selected.

Image Size: Displays the current image size.

Album: Allows you to view your picture album.

Capture: Takes the picture.

Camcorder: Toggle between camera to camcorder mode.

Settings: Touch this icon to open the settings menu. See the Settings Menu section on page 62 for details.

Brightness: Allows you to set the brightness level.

Image Size: Allows you to change the resolution of the image.

Note

The shortcut options disappear after a few seconds automatically.
To recall the options, touch the screen again.

Settings Menu

▶ **White Balance:** Allows you to set the white balance to Auto, Daylight, Cloudy, Illuminate, or Indoors.

▶ **Night mode:** Choose to turn Night mode On or Off.

▶ **Shot Mode:** Choose from Normal and Continuous Shot.

▶ **Color Effects:** Set the Color Effects to Off (Color), Mono, Sepia, Negative, or Blue.

▶ **Timer:** Set the Timer to Off, 3 Seconds, 5 Seconds, or 10 Seconds.

▶ **View Mode:** Choose between Full Image and Full Screen.

▶ **Shutter Tones:** Can be set to Tone 1, Tone 2, Tone 3, or Off.

▶ **Primary Storage:** Choose to save a photo to Phone or Memory Card.

▶ **Reset Settings:** Allows you to set to the default settings.
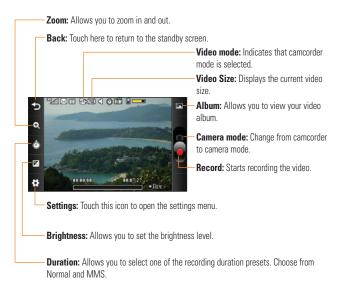
❶ Note

In Take Photo mode, you can adjust the zoom scale by moving the slider. The maximum zoom levels depend on the resolution as follows.

Resolution	Zoom scale
2M (1600x1200)	Level 1
1M (1280x960)	Level 1
VGA (640x480)	Level 1 ~ Level 10
QVGA (320x240)	Level 1 ~ Level 10

Record Video

When recording video, you have many of the same Settings options as with taking a photo.

Getting to know the viewfinder

Zoom: Allows you to zoom in and out.

Back: Touch here to return to the standby screen.

Video mode: Indicates that camcorder mode is selected.

Video Size: Displays the current video size.

Album: Allows you to view your video album.

Camera mode: Change from camcorder to camera mode.

Record: Starts recording the video.

Settings: Touch this icon to open the settings menu.

Brightness: Allows you to set the brightness level.

Duration: Allows you to select one of the recording duration presets. Choose from Normal and MMS.

Settings Menu

▶ **White Balance:** Allows you to set the white balance to Auto, Daylight, Cloudy, Illuminate, or Indoors.

▶ **Color Effects:** Set the Color Effects to Off (Color), Mono, Sepia, Negative, or Blue.

▶ **Video Size:** Sets the size of video to QVGA (320x240) or QCIF (176x144). The selected size appears on the camcorder screen.

▶ **Primary Storage:** Choose to save a video clip to Phone or Memory Card.

▶ **Recording Tones:** Set Recording Tones On or Off.

▶ **Reset Settings:** Allows you to set to the default settings.

⬤ Note

In Video Record mode, you can adjust the zoom scale by moving the slider. The maximum zoom levels depend on the resolution as follows.

Resolution	Zoom scale
QVGA (320x240)	Level 1 ~ Level 10
QCIF (176x144)	Level 1 ~ Level 10

Album

You can view the Album containing your Pictures and Videos. To view the available options, touch ▶.

🔙 **Back:** Goes back to previous menu.

📧 **Send Via:** You can send the picture or video via Message or Bluetooth.

📑 **Sort By:** You can sort the pictures and videos by date, type, name, of favorite.

🖼 **Slide Show:** Plays a slide show of your images.

➕ **More:** The following additional options are available: Favorite, Print via Bluetooth, Delete, or Delete All.

My Stuff

AT&T Social Net

Allows you to stay connected to friends, family, and coworkers via Facebook, MySpace, and Twitter. It also keeps you up-to-date on the latest news, sports, and entertainment.

To access AT&T Social Net from the standby screen, touch 🔲, 🔲, and then 🔳.

Audio

From the standby screen, touch 🔲, 🔲, and then ⚫ to access the Audio menu.

▶ **Voice Recorder:** Allows you to record your own audio.

▶ The available pre-loaded audio files will be displayed.

Pictures

From the standby screen, touch 🔲, 🔲, and then 🖼 to access the Pictures menu.

▶ **Take Picture:** It starts up camera mode and allows you to take pictures.

▶ **Make Animated GIF:** You can make an animation file with the selected images in the list.

▶ The available pre-loaded image files will be displayed.

Video

From the standby screen, touch 🔲, 🔲, and then 📹 to access the Video menu.

▶ **Record Video:** You can record your own video.

▶ The available pre-loaded video files will be displayed.

❶ Note

DRM sometimes restricts some functions, such as sharing.

Tools

From the standby screen, touch 🔢, 🗂, and then 🔧 to access the Tools menu.

Voice Recorder

Use the Voice Recorder to record voice memos or other sounds.

▶ **Settings**

- **Recording Mode:** MMS record mode shortens the time so that the recording can fit in an MMS message and General mode provides longer recording time.

- **Quality:** You can assign the default quality to the Normal, Economy or Fine.

- **Storage:** You can assign the default storage to the phone memory or memory card.

▶ Touch ◉REC to start recording. Touch ❙❙ Pause to pause recording. To continue recording, touch ◉Resume. To stop recording, touch ■ Stop. The recording will be saved automatically.

▶ To start a new recording, touch ◉ Record New Audio.

▶ To play the recording, touch Play.

▶ To send the recording by Message or Bluetooth, touch Send Via Message or Send Via Bluetooth.

▶ To delete the recording, touch Delete and confirm by touching **Yes**.

66

Voice Command

Voice Command is the function whereby your phone's voice recognition engine identifies the voice of the user and carries out the requested commands. When the user operates the Voice Command function, there are five possible commands, Call <Name or No.>, Listen Voicemail, Missed Calls, Messages, and Time & Date.

1. Call <Name or No.>: This function is activated only when the user says the command "Call" followed by the name stored in the Address Book or specified phone number. The voice engine inside the handset recognizes the user's utterance and displays name lists or phone numbers from the phone's Address Book. However, interfering noise might cause a problem displaying candidates. Additionally, the user has the option to superimpose a number type at the end, such as "mobile", "home" or "work".

2. Listen Voicemail: This command is activated when the user says the words "Listen Voicemail". The user will then be automatically connected to voicemail.

3. Missed Calls: This command is activated when the user says the words "Missed Calls". The mobile phone presents the missed calls lists.

- **Commands available to user**

  - **Yes:** Dials the phone call.

  - **No:** Moves to the next missed call on the list.

  - **Cancel:** Returns to the main Voice Command menu.

  - **Exit:** Terminates Voice Command.

  - **Next:** Moves to the next missed call on the list.

4. Messages: This command is activated when the user says the word "Messages". The phone displays details of unread text or multimedia messages.

- **Commands available to user**

  - **Yes:** Dials the phone call.

  - **No:** Moves to the next unread message.

  - **Cancel:** Returns to the main Voice Command menu.

  - **Exit:** Terminates Voice Command.

  - **Next:** Moves to the next unread message.

5. **Time & Date:** This command is activated when the user says the words "Time & Date". The phone displays the current local time and date.

6. **Play Music:** This command is activated when the user says the words "Play Music". The phone plays the songs in the music list.

The Voice Command function also has options accessible by touching **Options** 🔲 when in the Voice Command screen. They are:

- **Mode**

  - **Speed:** Voice Command is abbreviated.

  - **Normal:** Voice Command is played normally.

- **Best Match**

  - **1 Match:** The most likely match will be displayed to find a number from the Address Book.

  - **4 Matches:** The four most likely matched names will be displayed to find names from the Address Book.

- **Sensitivity**

  - **High:** Operation and performance of the voice recognition engine is rarely affected by the user's voice command and surrounding sound.

  - **Medium:** Operation of voice recognition engine is normally affected by user's voice command and surrounding sound.

  - **Low:** Operation of voice recognition engine is strongly affected by user's voice command and surrounding sound.

• **Speakerphone Mode**

  - Automatic On: When this option is selected, sound is heard through the speakerphone and is loud enough so you can hear the output when the phone is away from the ear, at a distance.

  - Off: When this option is selected, sound is quieter and can only be heard through the Earpiece.

• **Call Alert**

  - Ring Only: Rings repeatedly when you receive a call.

  - Ring After Name: Tells the name of the contact you saved once and then rings repeatedly when you receive a call.

  - Name Repeat: Tells the name of the contact you saved repeatedly when you receive a call.

Calendar

When you enter this menu, a calendar will be displayed. The red square cursor is used to display the selected day. The bottom bar on the calendar indicates schedule(s) for that day. This function helps to remind you of the schedule. The phone will sound an alarm tone if it has been set for a specific schedule item.

The following options are available when you open the Calendar function and touch **Options** .

▶ **New Schedule:** Allows you to add a new schedule on the date you select.

▶ **Search:** Allows you to search the saved schedule(s).

▶ **Set Holiday:** Allows you to set your personal holiday for the selected date.

▶ **View All:** Allows you to view all saved schedules.

▶ **Week View:** Allows you to change Calendar view mode to Month View or Week View.

▶ **Go to Date:** Allows you to jump to a specific date.

▶ **Selective Delete:** Allows you to delete Old Schedules or All Schedules selectively.

▶ **Settings:** Allows you set Default View and Weekly Begin day.

Notepad

You can create up to a maximum of 30 memos.

1. From the standby screen, touch ⊞, ▢, ▨, and choose **Notepad**.

2. To create a new Note, touch **New Note**, input the memo and touch [Save] to save.

World Clock

The World clock function provides time information for major cities worldwide.

To add a new City

1. From the standby screen, touch ⊞, ▢, ⏰ and touch the **World Clock** tab at the bottom of the screen.

2. Touch **New City**.

3. Scroll up and down to select the desired city.

▶ To make it easier, touch ⊞ and a map will be displayed. Touch the map preview at the top right corner of the screen and choose city you want to know the time of.

⊕ **Note**
The first time you use this function, you will be asked to enter the name of your current City.

Tasks

This feature allows you to save and manage a task.

To add a New Task

1. From the standby screen, touch ⊞, ▢, ▨ and select **Tasks**.

2. Touch **New Task**.

3. Enter the **Due Date**, **Note** and **Priority** for the new task.

4. Touch **Save** to save the task item.

The following options are available by touching **Options** 🔲 in the main Tasks menu:

▶ **New Task:** Allows you to create a new task.

▶ **Delete:** Allows you to delete any tasks created.

▶ **Delete All:** Allows you to delete all tasks.

▶ **Send Task Via:** Allows you to send tasks via Text Message, Multimedia Message, and Bluetooth.

▶ **Sort By:** Allows you to sort tasks by Date, Status, and Priority.

▶ **View Calendar:** The calendar window will display, from there you will be able to create new tasks.

Stopwatch

This menu allows you to record the elapsed time of an event. The duration of an individual lap time (up to 99 times) and the total time can also be displayed.

▶ **New Time**

  1. From the standby screen, touch 📳, ▣, 🕐 and touch the **Stopwatch** tab at the bottom of the screen.

  2. Select **New Time**.

  3. To start timing, touch ┃ Start ┃. The running time is displayed as HH.MM.SS.hh (hours, minutes, seconds, hundredths of a second).

  4. During the timing, you can record an individual lap time by touching ┃ Lap ┃. Up to 99 lap times can be recorded.

  5. You can stop timing by touching ┃ Stop ┃ or restart by touching ┃ Resume ┃.

  6. To reset the stop watch, touch ┃ Reset ┃.

▶ **Saved Times:** You can see the saved recorded times.

▶ **Show Last:** Displays the last time taken with the Stopwatch.

Calculator

The calculator function allows you to calculate simple mathematical equations.

To access the Calculator

1. From the standby screen, touch ⚏, ▭, ▨ and select **Calculator**.

Tip Calculator

This feature allows you to quickly and easily calculate the tip amount based on the total bill as well as the split of the total bill based on the number of people.

To access Tip Calculator

1. From the standby screen, touch ⚏, ▭, ▨ and select **Tip Calculator**.

Unit Converter

This function converts any measurement into a unit you want.

There are 7 types of units that can be converted: Currency, Area, Length, Weight, Temperature, Volume and Velocity.

To access Unit Converter

1. From the standby screen, touch ⚏, ▭, ▨ and select **Unit Converter**.

Clock

The alarm clock function allows you to set up multiple separate alarms. You can set the time, repetition interval and desired alarm tone.

To set a New Alarm

1. From the standby screen, touch ⚏, ▭, and then 🕐.

2. Select **New Alarm**.

3. Configure the following settings:

▶ **Time:** Input your desired alarm time by specifying the hour and minutes. If the time is in the 12 hour format, you have to select either   am   or   pm   by touching it. You can also choose a predefined amount of time (15 Minutes Later, 30 Minutes Later, 45 Minutes Later, 1 Hour Later, Off).

▶ **Repeat:** Select the desired repeat mode from Once, Daily, Mon ~ Fri, Sat ~ Sun, Select Weekday, and Except Holiday.

▶ **Alarm Tone:** Select the desired alarm tone to use for the set alarm.

▶ **Alarm Volume:** Allows you to adjust the alarm volume.

▶ **Alert Type:** Select the desired Ring Alert Type.

▶ **Memo:** Input alarm name.

▶ **Snooze Interval:** You can set the snooze interval at 5 Minutes, 15 Minutes, 30 Minutes, 45 Minutes, 1 Hour, or Off.

4. Touch **Save** to save your alarm.

Quick alarm

In the Alarm Clock menu, touch **Quick Alarm** to set a Quick Alarm.

1. Drag the bar from left to right to set the time; 60 minutes is the maximum set value.

2. Scroll down to configure the options Alarm Tone, Alarm Volume, Alert Type, Memo and Snooze Interval.

3. Touch **Save** to save the alarm.

File Manager

From the standby screen, touch 🏭, 🔲 tab, and then 🔳 to access the File Manager.

This allows you to view all types of contents files in the internal phone memory and the external memory card.

Touch **Options** 🔲 for the following options:

▶ **Send Via:** Send the selected file via Bluetooth or MMS.

▶ **Delete:** Allows you to delete the selected file.

▶ **Move:** You can move selected files to the Phone Memory or Memory Card.

▶ **Copy:** You can copy selected files to the Phone Memory or Memory Card.

▶ **New Folder:** Allows you to create a new folder manually.

▶ **Sort By:** You can sort the folders by name, date, and type.

▶ **Delete All:** You can delete all files and folders.

▶ **Rename:** You can edit the name of the selected file.

❶ Note

Limits: System files/folders cannot be listed.

Other Files

When you receive files of an undefined format (such as .vcs, .vcf, etc.) via email, the files are saved in this folder.

From the standby screen, touch [icon], [icon] and then [icon] to access the Other Files menu.

The following options are available when you touch **Options** [icon].

▶ **Send:** Send the selected file via Bluetooth, Online Locker or MMS.

▶ **Delete:** Allows you to delete the selected file.

▶ **Move:** You can move selected files to the Phone Memory or Memory Card.

▶ **Copy:** You can copy selected files to the Phone Memory or Memory Card.

▶ **Sort By:** You can sort the folders by name, date, and type.

▶ **Delete All:** You can delete all files and folders.

▶ **Used Space:** You can view internal and external memory status.

▶ **Rename:** You can edit the name of the selected file.

Settings ⚙

Call

From the standby screen, touch ▦, ⚙, and then 📞 to access the Call settings menu.

Call Forwarding

When this network service is activated, you can direct your incoming calls to another number, for example, to your voice mailbox number. For details, contact AT&T. Select one of the forwarding options, for example, select If Busy to divert voice calls when your number is busy or when you reject an incoming call.

The following options are available:

▶ **All Voice Calls:** Diverts voice calls unconditionally.

▶ **If Busy:** Diverts voice calls when the phone is in use.

▶ **If No Answer:** Diverts voice calls which you do not answer.

▶ **If Out of Reach:** Diverts voice calls when the phone is turned off or is out of coverage.

▶ **Deactivate All:** Turns Off all call forwarding options so that all incoming calls are received by your handset.

Send My Number

This network service allows you to set your phone number to be displayed (**On**) or hidden (**Off**) from the person you are calling. You can select **Set by Network** if you prefer to have different settings for different service providers.

Auto Redial

If you select On, your phone redials the number you're trying to call up to 10 times after you hear a quick, busy signal. Press the **End Key** 📵 to stop the call attempts.

This feature attempts to redial numbers that are engaged due to the wireless network. It does not redial numbers to an engaged party.

⚠ **Note**
There will be no alert indicating the call has been connected. You must stay on the line to hear when the call is connected.

Answer Mode

This allows you to determine how to answer the phone.

▶ **Any Key:** You can answer an incoming call by touching any key.

▶ **Send Key Only:** You can only answer an incoming call by pressing the **Send Key** ![send key icon].

Minute Minder

This option allows you to specify whether the phone will beep every minute during a call to keep you informed of the length of the call.

Call Waiting

The network will notify you of a new incoming call while you have a call in progress. Select **Activate** to request the network to activate call waiting, **Deactivate** to request the network to deactivate call waiting, or **View Status** to check if the function is active or not.

Call Reject

This menu allows you to turn **On** or **Off** Call Reject for all numbers or the numbers in the Call Reject List.

▶ **Call Reject On/Off:** This feature allows you to choose whether to reject incoming calls or calls from specific phone numbers. When the **Reject All Calls** option is set, all incoming calls are routed directly to Voicemail. **Reject on List** allows you to enable Call Reject for the numbers saved on your Call Reject List.

▶ **Call Reject List:** Allows you to view a list of the numbers you wish to reject and add new numbers to the list. You have the option of choosing numbers from your Contacts List or new numbers.

▶ **Reject with SMS List:** Allows you to manage the list of text messages that are used to reply to an incoming call when rejecting it.

Send DTMF Tones

Allows you to manage DTMF tones. Select from `ON`/`OFF`.

TTY

Allows you to turn TTY on and off. Choose from TTY Full, TTY Talk, TTY Hear, and TTY Off.

Hearing Aid

Allows you to manage the Hearing Aid mode. Select from `ON`/`OFF`.

Time & Cost

You can check Call Duration and Data Counter.

Sound

From the standby screen, touch 📳, 📷, and then 🔊 to access the Sound settings menu.

Ringtone

▶ **Sounds:** Shows and plays ring tones. You can select your preferred Ringtone by touching the ringtone listed.

▶ **Volume:** Allows you to adjust your Ringtone volume.

▶ **Alert Type:** Supports 3 ring alert types: Ring, Ring and Vibration, and Ring after Vibration.

▶ **Increasing Ringtone:** Allows you to select an Increasing Ringtone type which is played when you receive an incoming call.

Message Tone

▶ **Sounds:** Shows and plays message tones. You can select your preferred Message tone by touching the message tone listed.

▶ **Volume:** Allows you to adjust your new message alert tone volume.

▶ **Alert Type:** Supports 4 message alert types: Ring, Ring & Vibrate, Vibrate and Silent.

▶ **Alert Interval:** Supports 5 message alert interval: Once, Every 2 Min., Every 5 Min., Every 10 Min. and Every 15 Min.

⏻ Note
Full length music tracks cannot be set as either ringtones or message tones.

Alert Tone

▶ **Sounds:** Allows you to select a set of alert tones. Supports 2 alert tone types: Alert Tone 1 and Alert Tone 2.

▶ **Volume:** Allows you to adjust your alert tone volume.

▶ **Alert Type:** You can select to set Alert Tones to Ring or Silent.

Dial Readout

Select from OFF / ON .

Keypad Tone

This menu option allows you to select a tone that the phone sounds when a key is pressed.

▶ **Sounds:** Allows you to select a set of keypad tones. Supports 3 keypad tone types: Beep, MIDI1 and MIDI2.

▶ **Volume:** Allows you to adjust your keypad tone volume.

Multimedia

This menu allows you to adjust your multimedia volume.

Call

This menu allows you to adjust your call volume.

Display

From the standby screen, touch ![icon], ![icon], and then ![icon] to access the Display settings menu.

Wallpapers

This menu allows you to set a picture or color as your background. You may also choose to have no background wallpaper.

Fonts

You can configure the font size and color of the numbers which appear in the Dialing screen when you make a call. You can also set the font size for menus and lists.

Brightness

You can set the brightness of the display screen.

Backlight Timer

Use this to set the duration of the touch screen backlight and keypad.

Phone

From the standby screen, touch ![icon], ![icon], and then ![icon] to access the Phone settings menu.

Date & Time

▶ **Auto Update:** Allows you to configure the time and date to automatically update according to the current local time zone.

▶ **Date Format:** This allows you to enter the day, month, and year.
ddd, MMM DD (day, month date)
MM/DD/YYYY (month/date/year)
DD/MM/YYYY (date/month/year)
YYYY/MM/DD (year/month/date)

▶ **Time Format:** This allows you to enter the current time. The time format can be changed between 12 Hours and 24 Hours.
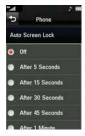
Languages

You can change the language for the display text on your phone. This change will also affect the Language Input mode.

Auto Screen Lock

This allows you to set the amount of time before your screen locks automatically.

Set Flight Mode

This allows you to use only the phone's features that do not require the use of the wireless network when you are in an airplane or in places where the wireless network is prohibited. If you set the flight mode `ON`, you will be prompted to confirm your selection. After you confirm it by touching `Yes` the Flight mode icon will be displayed on the screen instead of the network signal icon.

▶ `ON`: You cannot make (or receive) any calls, including emergency calls or use other features that require network coverage.

▶ `OFF`: Deactivates Flight Mode and re-establishes your wireless connections.

Touch

You can customize the Touch settings and change Touchscreen Feedback. When you set Sound as Touchscreen Feedback type, you can choose your desired sound type and adjust its volume.

Security

Various codes and passwords are used to protect the features and settings of your phone. They are described in the following sections.

▶ **Phone lock:** You can use a security code to avoid unauthorized use of the phone. If you set phone lock to **When Power On**, the phone will request a security code whenever you switch the phone on. If you set the phone lock to **When SIM Changed**, your phone will request a security code only when you change your SIM Card. If you set the phone lock to **Lock Phone Now**, your phone will lock immediately.

▶ **PIN Code Request:** When the PIN code request feature is set to ON, you must enter your PIN each time you switch the phone on. Consequently, any person who does not have your PIN cannot use your phone without your approval.

❶ Note

Before setting the PIN code request feature to Off, you must enter your PIN.

▶ **Fixed Dial Number:** This allows you to restrict your outgoing calls to selected phone numbers, if this function is supported by your SIM Card. The PIN2 code is required.

• **FDN On/Off**

   - ON : You can only call phone numbers stored in the FDN List. You must enter your PIN2.

   - OFF : You can call any number.

• **FDN List:** You can enter new FDN entries.

▶ **Change Codes:** The Change codes feature allows you to change your current password to a new one. You must enter the current password before you can specify a new one. You can change the access codes for: **Security Code**, **PIN1**, **PIN2**

🕛 Note

Not all SIM Cards have a PIN2. If your SIM Card does not, this menu option is not displayed.

Reset Settings

This function allows you to restore factory settings. To do this, you need the security code.

▶ **Master Reset:** Restores the settings (e.g.: Audio, Display, Language, Date & Time, Bluetooth Settings) stored in the handset memory to default values.

▶ **Master Clear:** Deletes downloaded or user created contents (e.g.: images, videos) from the phone and the external memory card.

• **Phone**

  - Deletes all downloaded or user Images, Videos and Sounds from the phone memory.

  - Deletes personal information stored in the handset memory (e.g.: address book, messages, tasks, alarm, Calendar schedules) to default values.

  - Restores the settings stored in the handset memory to the default values.

• **Memory Card:** Deletes all contents from the external memory card.

Bluetooth

From the standby screen, touch 🔡, 🔘, and then 🔋 to access the Bluetooth function settings menu.

Your phone has built-in Bluetooth® wireless technology, which makes it possible for you to connect your phone wirelessly to other Bluetooth® devices such as a hands-free device, PC, PDA, a remote screen or other phones. The devices registered in your phone can only be connected one at a time.

You can have a conversation via a cordless Bluetooth® hands-free phone or browse the Internet, wirelessly connected, via a mobile phone.

You can also exchange, for example, business cards, calendar items and pictures.

Music playing is supported through a Bluetooth® headset.

Hands-free profile

This icon appears when the hands-free profile is used between the hands-free device. This allows you to call using a Bluetooth® connection.

A2DP profile

This icon appears when the A2DP profile is used between the stereo headset device and the phone. This allows you to listen to an audio clip. A2DP is the Advanced Audio Distribution Profile, which provides support for streaming either mono or stereo audio using Bluetooth®.

Hands-free + A2DP profile

This icon appears when both profiles of the hands-free and the A2DP are used between the compatible device and the phone. This allows you to call and listen to an audio clip using a Bluetooth® connection.

When using each device, see the manual that comes with the device.

❶ **Note**

We recommend that your phone and the Bluetooth® device you are communicating with should be no more than 10 meters apart. The connection may be improved if there are no solid objects between your phone and the other Bluetooth® device.

▶ **Bluetooth:** This menu allows you to turn Bluetooth On or Off.

▶ **My Visibility:** This menu allows your phone to be visible to other Bluetooth® devices for pairing.

▶ **Search New Device:** This function allows you to search for and add new devices.

▶ **My Devices:** This function allows you to view the list of all devices that are paired with your phone.

▶ **My Bluetooth Info:** This menu allows you to configure the profile for Bluetooth.

  - **My Device Name:** Allows you to change the handset's name so other Bluetooth devices trying to pair with you can easily find it.

  - **Supported Services:** Shows you all services that the handset supports.

  - **Primary Storage:** Select from Handset and Memory Card to determine the location of files received via Bluetooth.

To pair with another device

1. From the standby screen, touch 📇, 🔘, and then 🟦.

2. Touch   Search New Device   to search for the device you wish to pair.

3. If you want to stop searching, touch
Cancel .

4. All of the devices found are displayed.

5. Touch the desired device and enter the
password. If you would like to search
again, touch Refresh .

Connection

From the standby screen, touch :::, [icon], and
then [icon] to access the Connection menu.

USB Connection Mode

You can transfer files from a compatible PC
to the memory in your phone using the Mass
Storage. When you connect the phone to a PC
using the USB cable, this will be displayed as
a removable disk through Windows Explorer.

The USB Connection Mode determines how
your Phone will communicate with other
USB devices when they are connected with
a USB cable.

Internet Profiles

This menu shows the Internet Profiles. You
can add, delete, and edit Internet Profiles by
touching **Options** [icon]. However, you cannot
delete or edit default configurations provided
by AT&T.

Access Points

This menu shows the Access Points. You
can register, delete, and edit by touching
Options [icon].
However, you cannot delete or edit default
configurations provided by AT&T.

Application

From the standby screen, touch [icon], [icon], and then [icon] to access the Applications menu.

This menu allows you to adjust the settings to the following features on the phone:

Browser

This menu allows you to customize your Browsing experience by giving you the option of changing the following settings.

Accounts

This includes the network information used to connect the browser to the Internet. Select the desired account by tapping the setting.

This will activate the account that will be used for future connections. AT&T WAP is the predefined account that is set as default.

The following options will be available when you touch **Options** [icon]:

▶ **Delete:** Allows you to delete the account.

▶ **Reset All:** Allows you to delete all accounts you have created.

❗ **Note**

You cannot edit and delete pre-installed accounts. In order to create a new account, please fill in the network information.

▶ **Account Name:** Name associated with new account.

▶ **Homepage:** Homepage URL.

▶ **Internet Profile:** You can choose one from the Internet profiles.

❗ **Note**

▶ AT&T has provided default settings regarding account information.

▶ Creating or editing an account requires caution. The browser cannot connect to the Internet if the account information is incorrect.

Appearance

You can choose the settings of the browser appearance (Text size, Encoding, Show Image, JavaScript).

Cache

The web pages you have accessed are stored in the memory of the phone.

▶ **Clear Cache:** Remove all cached data in the memory.

▶ **Allow Cache:** Allows you to turn the memory cache On or Off.

 Note

A cache is a buffer memory, which is used to store data temporarily, especially when it is online.

Cookies

The information of services you have accessed are stored in what is called a Cookie.

▶ **Delete Cookies:** Allows you to delete all stored cookies.

▶ **Allow cookies:** Allows you to turn cookies On or Off.

Clear Login Info.

Allows you to clear your registered user ID's and passwords.

Rendering mode

You can set the Rendering mode to **Standard** or **Text Only**.

Security

A list of the available certificates is shown.

▶ **Certificates:** You can see the list of certificates and view them in detail.

▶ **Clear Session:** Removes the secure session.

Secure Popup

You can control the pop-up which indicates a secure page.

Messaging

To set the message settings from standby screen, touch [icon], **Options** [icon], and then **Message Settings**.

For more information regarding Message Settings, please refer to page 44.

Voice Command

This menu allows you to set various Voice Command settings. Refer to page 68 for details.

More

From the standby screen, touch ⊞, ▣, and then ▣ to access the More settings menu.

Start Up Guide

This menu will start the animated guide. This guide will help you, using animated visuals, quickly learn some of the functions of your LG-C410.

Memory

Used Space

This function shows the status of the user memory of the handset.

▶ **Phone Common:** This will display the memory currently used up in your phone and will categorize it by types of files using the memory.

▶ **Memory Card:** You can check the current status of the external memory card in the Memory status menu.

▶ **Phone Reserved:** This function shows the status of the reserved memory for the user (Text Message, Contacts, Calendar, Tasks, Notepad).

▶ **SIM Card:** This function shows the status of the SIM Card user memory.

Set Storage Defaults

You can set Storage default for each case. When you need to save files from Camera, Internet Download, Bluetooth and Voice Recorder, set Phone Memory or Memory card. You can set each case separately or choose the All option and set the Storage Default all the same.

Software Update

The AT&T server notifies devices using a WAP push message when new software exists. Also the user can check for the software update using the menu "Check for Update". If the new software does not exist the user can not use this feature in 24 hours. Before updating new software after downloading it from the AT&T server, users can decide whether they would like to postpone the operation. Reminder times can be set to 30 minutes, 1 hour and 4 hours. When the time is up, users are prompted again or users can resume the postponed operation using this menu at any time. The software update can only be postponed three times and will automatically start after the third postpone period expires.

Phone Information

This menu is used to view Operation System, My Numbers, Manufacturer, Model Name, Device ID, Hardware Version, Software Version, Language and DM Client Version information.

Q&A

Please check to see if any problems you have encountered with the phone are described in this section before taking the phone in for a service or calling a service engineer.

Q How do I view the list of outgoing calls, incoming calls and missed calls?
A Press the **Send Key** 📞.

Q Why is the connection inconsistent or not audible in certain areas?
A When in an area with poor reception, connection may be inconsistent and inaudible. Relocate to another area and try again.

Q Why won't the LCD turn on?
A Remove the battery, then replace it. Then turn on the power. If there is no change, fully charge the battery and try again.

Q Why does the phone heat up?
A The phone may get warm when there is a very long call duration, when games are played or even when surfing the Internet for a long time. This has no effect upon the life of the product or performance.

Q Why does the battery run out so quickly during normal use?
A This may be due to the user environment, a large number of calls or a weak signal.

Q Why is no number dialed when an Address Book entry is recalled?
A Check that the number has been stored correctly by using the Address book Search feature. Re-store them, if necessary.

Accessories

There are a variety of accessories available for your mobile phone, some of which may be sold separately. You can select these options according to your personal communication requirements. Consult your local dealer for availability.

Travel Adapter

This adapter allows you to charge the battery. It supports standard US 120 Volt 60Hz outlets.

USB Cable

Battery

❶ Note

• Always use genuine LG accessories. Failure to do this may invalidate your warranty.

• Accessories may be different in different regions; please check with our regional service company or agent for further enquiries.

For Your Safety

Important Information

This user guide contains important information on the use and operation of this phone. Please read all the information carefully for optimal performance and to prevent any damage to or misuse of the phone. Any changes or modifications not expressly approved in this user guide could void your warranty for this equipment. Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Before You Start

WARNING! This product contains chemicals known to the State of California to cause cancer and birth defects or reproductive harm. Wash hands after handling.

Safety Instructions

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

Always store your phone away from heat. Never store your phone in settings that may expose it to temperatures less than 32°F or greater than 104°F, such as outside during extreme weather conditions or in your car on a hot day. Exposure to excessive cold or heat will result in malfunction, damage and/or catastrophic failure.

Be careful when using your phone near other electronic devices. RF emissions from your mobile phone may affect nearby in adequately shielded electronic equipment. You should consult with 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. Never place your phone in a microwave oven as this will cause the battery to explode.

IMPORTANT! Please read the TIA SAFETY INFORMATION before using your phone.

Safety Information

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

▶ Do not disassemble this unit. Take it to a qualified service technician when repair work is required.

▶ Keep away from electrical appliances such as TVs, radios, and personal computers.

▶ The unit should be kept away from heat sources such as radiators or cookers.

▶] Do not drop.

▶ Do not subject this unit to mechanical vibration or shock.

▶ The coating of the phone may be damaged if covered with wrap or vinyl wrapper.

▶ Use dry cloth to clean the exterior of the unit. (Do not use solvent such as benzene, thinner or alcohol.)

▶ Do not subject this unit to excessive smoke or dust.

▶ Do not keep the phone next to credit cards or transport tickets; it can affect the information on the magnetic strips.

▶ Do not tap the screen with a sharp object; otherwise, it may damage the phone.

▶ Do not expose the phone to liquid or moisture.

▶ Use the accessories like an earphone cautiously. Do not tap the antenna unnecessarily.

microSD card information and care

▶ The microSD card cannot be used for recording copyright- protected data.

▶ Keep the microSD card out of the small children's reach.

▶ Do not leave the microSD card in extremely hot location.

▶ Do not disassemble or modify the microSD card.

HAC

This phone has been tested and rated for use with hearing aids for some of the wireless technologies that it uses. However, there may be some newer wireless technologies used in this phone that have not been tested yet for use with hearing aids. It is important to try the different features of this phone thoroughly and in different locations, using your hearing aid or cochlear implant, to determine if you hear any interfering noise. Consult your service provider or the manufacturer of this phone for information on hearing aid compatibility. If you have questions about return or exchange policies, consult your service provider or phone retailer.

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) 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.

CAUTION

Use only the supplied 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. A damaged antenna could cause a minor skin burn. Contact your local dealer for a replacement antenna.

Body-worn Operation

This device was tested for typical body-worn operations with the back of the phone kept 0.39 inches (1cm) between the user's body and the back of the phone. To comply with FCC RF exposure requirements, a minimum separation distance of 0.39 inches (1cm) must be maintained between the user's body and the back of the phone. Third-party belt-clips, holsters, and similar accessories containing metallic components may not be used.

Body-worn accessories that cannot maintain 0.39 inches (1cm) separation 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.

Part 15.19 statement

This device complies with part15 of FCC rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

Part 15.21 statement

Changes or modifications that are not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Part 15.105 statement

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.If you experience interference with reception (e.g.,television), determine if this equipment is causing the harmful interference by turning the equipment off and then back on to see if the interference is affected. If necessary, try correcting the interference by one or more of the following measures:

▶ Reorient or relocate the receiving antenna.

▶ Increase the separation between the equipment and receiver.

▶ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

▶ Consult the dealer or an experienced radio/TV technician for help.

Cautions for Battery

▶ Do not disassemble or open crush, bend or deform, puncture or shred.

▶ Do not modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, expose to fire, explosion or other hazard.

▶ Only use the battery for the system for which it is specified.

▶ Only use the battery with a charging system that has been qualified with the system per this standard. Use of an unqualified battery or charger may present a risk of fire, explosion, leakage, or other hazard.

▶ Battery usage by children should be supervised.

▶ Avoid dropping the phone. If the phone is dropped, especially on a hard surface, and the user suspects damage, take it to a service center for inspection.

▶ Improper battery use may result in a fire, explosion or other hazard.

▶ For those host devices that utilize a USB port as a charging source, the host device's user manual shall include a statement that the phone shall only be connected to products that bear the USB-IF logo or have completed the USB-IF compliance program.

Adapter (Charger) Cautions

▶ Using the wrong battery charger could damage your phone and void your warranty.

▶ The adapter or battery charger is intended for indoor use only.

Do not expose the adapter or battery charger to direct sunlight or use it in places with high humidity, such as the bathroom.

For Your Safety

Avoid damage to your hearing

Damage to your hearing can occur if you are exposed to loud sound for long periods of time. We therefore recommend that you do not turn on or off the handset close to your ear. We also recommend that music and call volumes are set to a reasonable level.

▶ If you are listening to music while out and about, please ensure that the volume is at a reasonable level so that you are aware of your surroundings. This is particularly imperative when attempting to cross the street.

Wi-Fi Caution

This device is capable of operating in 802.11a/n mode. For 802.11a/n devices operating in the frequency range of 5.15 – 5.25 GHz, they are restricted for indoor operations to reduce any potential harmful interference for Mobile Satellite Services (MSS) in the US. WIFI Access Points that are capable of allowing your device to operate in 802.11a/n mode(5.15 – 5.25 GHz band) are optimized for indoor use only.

If your WIFI network is capable of operating in this mode, please restrict your WIFI use indoors to not violate federal regulations to protect Mobile Satellite Services.

Safety Guidelines

TIA Safety Information

Provided herein is the complete TIA Safety Information for Wireless Handheld phones. Inclusion of the text covering Pacemakers, Hearing Aids, and Other Medical Devices is required in the owner's manual for CTIA Certification. Use of the remaining TIA language is encouraged when appropriate.

Exposure to Radio Frequency Signal

Your wireless handheld portable telephone is a lowpower 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 handheld 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).

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

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.

Tips on Efficient Operation

For your phone to operate most efficiently: Don't 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 wireless phones 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 require it.

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 (6') 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 (6) 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 is 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 AT&T.

HAC

This phone has been tested and rated for use with hearing aids for some of the wireless technologies that it uses. However, there may

be some newer wireless technologies used in this phone that have not been tested yet for use with hearing aids. It is important to try the different features of this phone thoroughly and in different locations, using your hearing aid or cochlear implant, to determine if you hear any interfering noise. Consult your service provider or the manufacturer of this phone for information on hearing aid compatibility. If you have questions about return or exchange policies, consult your service provider or phone retailer.

Other Medical Devices

If you use any other personal medical device, consult the manufacturer of your device to determine if they are 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. Turn your phone OFF before boarding an aircraft.

Blasting Areas

To avoid interfering with blasting operations, turn your phone OFF when in a 'blasting areas 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 injury could result.

Charger and Adapter Safety

▶ The charger and adapter are intended for indoor use only.

Battery Information and Care

▶ Always unplug the charger from the wall socket after the phone is fully charged to save unnecessary power consumption of the charger.

▶ Please read the manual of specified charger about charging method.

▶ Do not damage the power cord by bending, twisting, or heating. Do not use the plug if it is loose as it may cause electric shock 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 electric shock or fire.

▶ Unplug the power cord prior to cleaning your phone, and clean the power plug pin when it's dirty. When using the power plug, ensure that it's firmly connected. If not, it may cause excessive heat 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 a coin, paperclip or pen) may short-circuit the phone. Always cover the receptacle when not in use.

▶ Recharge the battery after long periods of non-use to maximize battery life. Battery life will vary due to usage pattern and environmental conditions.

▶ Never store your phone in temperature less than -4°F or greater than 122°F. Charge the battery in range of 0°C ~ 45°C.

▶ Charging temperature range is regulated between 0°C and 45°C. Do not charge the battery out of recommended temperature range. Charging out of recommended range might cause the generating heat or serious damage of battery. And also, it might cause the deterioration of battery's characteristics and cycle life.

▶ Do not use or leave the battery under the blazing sun or in heated car by sunshine. The battery may generate heat, smoke or flame. And also, it might cause the deterioration of battery's characteristics or cycle life.

▶ The battery pack has protection circuit to avoid the danger. Do not use nearby the place where generates static electricity more than 100V which gives damage to the protection circuit. If the protection circuit were broken, the battery would generate smoke, rupture or flame.

▶ If the skin or cloth is smeared with liquid from the battery, wash with fresh water. It may cause the skin inflammation.

▶ Please take your phone to an authorized service center immediately if this occurs.

▶ Do not handle the phone with wet hands while it is being charged. It may cause an electric shock or seriously damage your phone.

▶ Do not place or answer calls while charging the phone as it may short-circuit the phone and/or cause electric shock or fire.

▶ The charger and adapter are intended for indoor use only.

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

Explosion, Shock, and Fire Hazards

▶ 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.

▶ When using the power plug, ensure that it is firmly connected. If it is not, it may cause excessive heat 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 a coin, paperclip or pen) may short-circuit the phone. Always cover the receptacle when not in use.

▶ Do not short-circuit the battery. Metallic articles such as a coin, paperclip 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 explosion.

General Notice

▶ 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 subway ticket near your phone. The magnetism of the phone may damage the data stored in the magnetic strip.

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

▶ When the phone is not used for a long period time, store it in a safe place with the power cord unplugged.

▶ Using the phone in proximity to receiving equipment (i.e., TV or radio) may cause interference to the phone.

▶ Do not use the phone if the antenna is damaged. If a damaged antenna contacts skin, it may cause a slight burn. Please contact an LG Authorized Service Center to replace the damaged antenna.

► Do not immerse 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 LG Authorized Service Center.

► Do not paint your phone.

► The data saved in your phone might be deleted due to careless use, repair of the phone, or upgrade of the software. Please backup your important phone numbers. (Ring tones, text messages, voice messages, pictures, and videos could also be deleted.) The manufacturer is not liable for damage due to the loss of data.

► When you use the phone in public places, set the ring tone to vibration so as not to disturb others.

► Do not turn your phone on or off when putting it in your ear.

► Your phone is an electronic device that generates heat during normal operation. Extremely prolonged, direct skin contact in the absence of adequate ventilation may result in discomfort or minor burns. Therefore, use care when handling your phone during or immediately after operation.

Caution: Avoid potential hearing loss.

Prolonged exposure to loud sounds (including music) is the most common cause of preventable hearing loss. Some scientific research suggests that using portable audio devices, such as portable music players and cellular telephones, at high volume settings for long durations may lead to permanent noise induced hearing loss. This includes the use of headphones (including headsets, earbuds and Bluetooth® or other wireless devices).

Exposure to very loud sound has also been associated in some studies with tinnitus (a ringing in the ear), hypersensitivity to sound and distorted hearing. Individual susceptibility to noise-induced hearing loss and other potential hearing problems varies.

The amount of sound produced by a portable audio device varies depending on the nature of the sound, the device, the device settings and the headphones. You should follow some commonsense recommendations when using any portable audio device: **204 Safety**

▶ Set the volume in a quiet environment and select the lowest volume at which you can hear adequately.

▶ When using headphones, turn the volume down if you cannot hear the people speaking near you or if the person sitting next to you can hear what you are listening to.

▶ Do not turn the volume up to block out noisy surroundings. If you choose to listen to your portable device in a noisy environment, use noisecancelling headphones to block out background environmental noise.

▶ Limit the amount of time you listen. As the volume increases, less time is required before your hearing could be affected.

▶ Avoid using headphones after exposure to extremely loud noises, such as rock concerts, that might cause temporary hearing loss. Temporary hearing loss might cause unsafe volumes to sound normal.

▶ Do not listen at any volume that causes you discomfort. If you experience ringing in your ears, hear muffled speech or experience any temporary hearing difficulty after listening to your portable audio

device, discontinue use and consult your doctor.

You can obtain additional information on this subject from the following sources:

Safety 205

American Academy of Audiology 11730 Plaza American Drive, Suite 300

Reston, VA 20190

Voice: (800) 222-2336

Email: info@audiology.org

Internet: www.audiology.org

National Institute on Deafness and Other Communication

Disorders

National Institutes of Health

31 Center Drive, MSC 2320

Bethesda, MD USA 20892-2320

Voice: (301) 496-7243

Email: nidcdinfo@nih.gov

Internet: http://www.nidcd.nih.gov/health/hearing

National Institute for Occupational Safety and Health Hubert H. Humphrey Bldg.

200 Independence Ave., SW Washington, DC 20201 Voice: 1-800-35-NIOSH (1-800-356-4674)

Internet: http://www.cdc.gov/niosh/topics/noise/default.html

FDA Consumer Update

The U.S. Food and Drug Administration 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 Home screen. 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 FDA and 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 handheld 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 FCC 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 don't know with certainty what the results of such studies mean for human health. Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, 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?

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

6. What is the FDA doing 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 with 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 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 frequency 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 the FDA done to measure the radio frequency 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 tissuesimulating 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 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?

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

FDA web page on wireless phones (http://www.fda.gov, click on "C" in the index and "Cell Phones")

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.hpa.org.uk/radiation/)

10 Driver Safety Tips

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

When operating a car, driving is your first responsibility.

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

1. Get to know your wireless phone and its features such as speed dial and redial. Carefully read your instruction manual and learn to take advantage of valuable features most phones offer, including automatic redial and memory. Also, work to memorize the phone keypad so you can use the speed dial function without taking your attention off the road.

2. When available, use a hands-free device. A number of hands-free wireless phone accessories are readily available today. Whether you choose an installed mounted device for your wireless phone or a speaker

phone accessory, take advantage of these devices if available to you.

3. Make sure you place your wireless phone within easy reach and where you can reach it without removing your eyes from the road. If you get an incoming call at an inconvenient time, if possible, let your voicemail answer it for you.

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

5. Do not take notes or look up phone numbers while driving. If you are reading an Address Book or business card, or writing a "to-do" list while driving a car, you are not watching where you are going. It is common sense. Don't get caught in a dangerous situation because you are reading or writing and not paying attention to the road or nearby vehicles.

6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan your calls before you begin your trip or attempt to coincide your calls with times you may be stopped at a stop sign, red light or otherwise stationary. But if you need to dial while driving, follow this simple tip— dial only a few numbers, check the road and your mirrors, then continue.

7. Do not engage in stressful or emotional conversations that may be distracting. Stressful or emotional conversations and driving do not mix; they are distracting and even dangerous when you are behind the wheel of a car. Make people you are talking with aware you are driving and if necessary, suspend conversations which have the potential to divert your attention from the road.

8. Use your wireless phone to call for help. Your wireless phone is one of the greatest tools you can own to protect yourself and your family in dangerous situations — with your phone at your side, help is only three numbers away. Dial 911 or other local emergency number in the case of fire, traffic accident, road hazard or medical

emergency. Remember, it is a free call on your wireless phone!

9. Use your wireless phone to help others in emergencies. Your wireless phone provides you a perfect opportunity to be a "Good Samaritan" in your community. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 911 or other local emergency number, as you would want others to do for you.

10. Call roadside assistance or a special wireless non-emergency assistance number when necessary. Certain situations you encounter while driving may require attention, but are not urgent enough to merit a call for emergency services. But you can still use your wireless phone to lend a hand. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured or a vehicle. You know to be stolen, call roadside assistance or other special non-emergency wireless number. The above tips are meant as general guidelines. Before deciding to use your mobile device while operating a vehicle,

it is recommended that you consult your applicable jurisdiction's local laws or other regulations regarding such use. Such laws or other regulations may prohibit or otherwise restrict the manner in which a driver may use his or her phone while operating a vehicle.

For more information, please call to 888-901-SAFE, or visit our website http://www.ctia.org.

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 (FCC) of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on 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 1.6 W/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 phone when tested for use at the ear is **X.XX** W/kg and when worn on the body, as described in this user's manual, is **X.XX** W/kg. (Body-worn measurements differ among phones 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 **ZNFC410**.

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) website at http://www.ctia.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 additional protection for the public and to account for any variations in measurements.

FCC Hearing-Aid Compatibility (HAC) Regulations for Wireless Devices

On July 10, 2003, the U.S. Federal Communications Commission (FCC) Report and Order in WT Docket 01-309 modified the exception of wireless phones under the Hearing Aid Compatibility Act of 1988 (HAC Act) to require digital wireless phones be compatible with hearing-aids. The intent of the HAC Act is to ensure reasonable access to telecommunications services for persons with hearing disabilities.

While some wireless phones are used near some hearing devices (hearing aids and cochlear implants), users may detect a buzzing, humming, or whining noise. Some hearing devices are more immune than others to this interference noise, and phones also vary in the amount of interference they generate.

The wireless telephone industry has developed a rating system for wireless phones, to assist hearing device users to find phones that may be compatible with their hearing devices. Not all phones have been rated. Phones that are rated have the rating on their box or a label located on the box.

The ratings are not guarantees. Results will vary depending on the user's hearing device and hearing loss. If your hearing device happens to be vulnerable to interference, you may not be able to use a rated phone successfully. Trying out the phone with your hearing device is the best way to evaluate it for your personal needs.

M-Ratings: Phones rated M3 or M4 meet FCC requirements and are likely to generate less interference to hearing devices than phones that are not labeled. M4 is the better/higher of the two ratings.

T-Ratings: Phones rated T3 or T4 meet FCC requirements and are likely to generate less interference to hearing devices than phones that are not labeled. T4 is the better/ higher of the two ratings.

Hearing devices may also be rated. Your hearing device manufacturer or hearing health professional may help you find this rating. Higher ratings mean that the hearing device is relatively immune to interference noise. The hearing aid and wireless phone rating values are then added together. A sum of 5 is considered acceptable for normal use. A sum of 6 is considered for best use.

In the above example, if a hearing aid meets the M2 level rating and the wireless phone meets the M3 level rating, the sum of the two values equal M5. This should provide the hearing aid user with "normal usage" while using their hearing aid with the particular wireless phone. "Normal usage" in this context is defined as a signal quality that's acceptable for normal operation.

The M mark is intended to be synonymous with the U mark. The T mark is intended to be synonymous with the UT mark. The M and T marks are recommended by the Alliance for Telecommunications Industries Solutions (ATIS). The U and UT marks are referenced in Section 20.19 of the FCC Rules. The HAC rating and measurement procedure are described in the American National Standards Institute (ANSI) C63.19 standard.

When you're talking on a cell phone, it's recommended that you turn the BT (Bluetooth) mode off for HAC.

For information about hearing aids and digital wireless phones

Wireless Phones and Hearing Aid Accessibility

http://www.accesswireless.org/Home.aspx

FCC Hearing Aid Compatibility and Volume Control

http://www.fcc.gov/cgb/consumerfacts/hac_wireless.html

Glossary

To help you understand the main technical terms and abbreviations used in this booklet and to take full advantage of the features on your mobile phone, here are a few definitions.

Call Reject

The ability to restrict incoming calls.

Call Forwarding

The ability to reroute calls to another number.

Call Waiting

The ability to inform users that they have an incoming call when engaged on another call.

GPRS (General Packet Radio Service)

GPRS guarantees continuous connection to the Internet for mobile phone and computer users. It is based on the Global System for Mobile Communication (GSM) circuit-switched cellular phone connections and the Short Message Service (SMS).

GSM (Global System for Mobile Communication)

International standard for cellular communication, guaranteeing compatibility between the various network operators. GSM covers most European countries and many other parts of the world.

Java

Programming language generating applications that can run on many hardware platforms, whether small, medium or large, without modification.

It has been promoted for and geared heavily towards the Web, both for public Web sites and Intranets. When a Java program runs from a Web page, it is called a Java applet. When it is run on a mobile phone or pager, it is called a MIDlet.

Line Identification Services (Caller ID)

Service allowing subscribers to view or block the telephone numbers of callers.

Conference Calls

Ability to establish a conference call involving up to five additional parties.

Roaming

Use of your phone when you are outside your home area (for example, when traveling).

SDN (Service Dial Number)

Telephone numbers supplied by your network provider and giving access to special services such as voice mail, directory inquiries, customer support and emergency services.

Security Code

Security code used to unlock the phone when you have selected the option to lock it automatically each time it switches on.

SIM card

Card containing a chip with all the information required to operate the phone (network and memory information, as well as the subscriber's personal data). The SIM card fits into a small slot on the back of the phone and is protected by the battery.

SMS (Short Message Service)

Network service sending and receiving text messages to and from another subscriber, without the need to speak to the correspondent. The message created or received (up to 160 characters long) can be displayed, received, edited or sent.