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User Guide

User Guide

Jab alua Usuario



EL68644301 (1.0) ME

LG *Transpyre*™



Before you begin

Before reading this user guide and getting started, please review the separate Product Safety and Warranty Information guide for important product safety and warranty information about your device.

Important Customer Intormation	
Table of Contents	2
The Basics	4
Phone overview	4
Installing the battery	7
Charging the phone	8
The memory card	10
Locking and unlocking the screen	11
Touch screen tips	14
Home screen	16
Google Account Setup	26
Connecting to Networks and Devices	28
Wi-Fi	
Bluetooth	29
Connecting to Virtual Private Networks	30
USB Connection	31
Calls	32
Making a call	32
Calling your contacts	32
Call settings	35
Communication	36
Contacts	36
Messaging	39
Email	
Entertainment	44
Camera	44
Gallery	48

Tools	50
Clock	50
Calendar	50
Google+	53
Voice Search	54
Voice Command	54
Downloads	54
Web	55
Chrome	55
Settings	58
Phone Software Update	80
FAQ	81
Safety	87
Consumer Information About Radio Frequency Emissions	
Consumer Information on SAR	93
FCC Hearing-Aid Compatibility (HAC) Regulations for Wireless D	Devices95
Caution: Avoid potential hearing loss.	97
TIA Safety Information	98
Safety Information	101
FDA Consumer Update	106
LIMITED WARRANTY STATEMENT	117
Index	121

Phone overview



NOTES · All screen shots in this guide are simulated. Actual displays may vary.

- Instructions to perform tasks in this guide are based on the default settings and may change depending on the mode and software version on your phone.
- QuickTap Bar Provides icons for quick, one-touch access to the Applications screen and the apps you use most often.
 - NOTE You can change the icons in the QuickTap bar to suit your needs. To reposition, add, or remove an icon, see page 16.
- Back Key Tap this Touch Key to return to the previous screen or close pop-up items (such as menus, dialog boxes, and the on-screen keyboard).
- Home Key Tap this Touch Key to return to the Home screen or your default Home screen panel from any of the Home screen extension panels. Touch and hold it to access Google now.
- 4. Recent Apps Key Tap this Touch Key to display recently used apps. Touch and hold it to open an Options menu with options that affect the current screen or app. This only applies when available, depending on the screen or app.

5. Home Screen Displays all of the items needed to operate your phone including icons for app access, widgets, and the Status Bar (with status icons) allowing simple touch access to all of its functions and features.

WARNING! Placing a heavy object on the phone or sitting on it can damage the LCD and touchscreen functions.

- Front Camera Use to take pictures and record videos of yourself. You can also use this for video chatting. Keep it clean for optimal performance.
- Proximity Sensor Senses proximity toward other objects (such as your head) so that tap commands are not accidentally activated (during a call, when inside a pocket, etc.).

NOTE Don't block the sensor or near the sensor to avoid problems with the touchscreen.

8. Earpiece Lets you hear callers and automated prompts.

Side Views



- Volume Keys Press to adjust the ringer, the media volumes, or the in-call volume during a call.
- 10. Power/Lock Key Press to turn off the screen backlight and lock the screen, or turn the screen backlight back on. Press and hold to turn the phone on/off, restart it, activate/deactivate Airplane mode, and change the sound settings.

Top and Bottom View



- 11. 3.5mm Headset Jack Allows you to plug in an optional headset for convenient, hands-free conversations. You can also plug in headphones to listen to music.
- USB/Charging Port Allows you to connect the phone and the USB Cable for use with the Charger Adapter, or other compatible accessories.
 - NOTE You may purchase a separate fast data cable from LG for higher data transfer speed with compatible devices (e.g. laptop).
- Microphone Transmits your voice to the other caller. It's also used for voice-activated functions and voice recorder functions.

NOTE Please be careful not to block the microphone with your hand during calls.

Rear View



- Back Camera Use to take photos and record videos. Keep it clean for optimal performance.
- 15. Flash Brightens up the captured image or recorded video when you turn on the flash
- MicroSD Card Slot Use for additional storage space of items, such as pictures, videos, music, etc.
- Speaker Use to listen to the audio from the selected function (e.g., music, videos, sound clips, etc.).
- Battery Fully charge the battery before initial use to optimize your battery life.
- Back Cover Protects the battery and internal antenna. Keep it from getting scratched or damaged.

Installing the battery

Before you can start using your new phone, you'll need to do a little set up such as installing and charging the battery.

 To remove the back cover, hold the phone firmly in one hand. With your other hand, place your thumbnail in the cutout at the bottom of the phone as shown in the illustration below.

NOTE Make sure to turn the phone off before removing the battery.



2. Insert the battery into the opening on the back on the phone, making sure the connectors align 1 and press down until it clicks into place 2.



3. Align the back cover over the battery compartment 1 and press down along the outer edge of phone 2.



Charging the phone

Your phone comes with a USB Cable and a Charger Adapter which connect together to charge your phone. Fully charge the battery before using your phone for the first time to improve your battery lifetime.

The USB/Charging port is at the bottom of the phone. Insert one end of the USB Cable into the port and plug the Charger Adapter into an electrical outlet.



WARNING! To avoid damage to your phone's port and cable plug, orient the plug with the port before inserting it.

NOTE Do not open the back cover while your phone is charging.

NOTE Only use approved charging accessories to charge your LG phone. Improper handling of the USB/Charging Port, as well as the use of an incompatible charger, may cause damage to your phone and void the warranty.

Optimizing Battery Life

Extend your battery's life between charges by turning off features that you don't need to have running constantly in the background.

Extending your phone's battery life:

- ▶ Reduce the screen brightness setting and set a shorter screen timeout.
- ➤ Turn off radio communications (such as Wi-Fi, Bluetooth, GPS, etc.) that you're not actively using.
- ▶ Turn off automatic syncing for Gmail, Calendar, Contacts, and other apps.
- Monitor the battery use screen to identify if apps you've downloaded are consuming a large percentage of your battery power.

NOTE Allowing other devices to use your phone's hotspot connection will also drain your battery more quickly.

To check the battery power level:

From the Home screen, touch and hold the Recent Apps Key => Settings > About phone > Battery.

The battery status (charging or discharging) and battery level (percentage charged) are displayed.

To monitor and control how battery power is being used:

▶ From the Home screen, touch and hold the Recent Apps Key □ > Settings > About phone > Battery > Battery use.

A battery usage graph is displayed along with battery usage time, estimated time remaining, and last 3 hours usage. The screen also lists the apps or services using battery power, listed in order from the greatest to the least amount used.

Battery saver mode

Battery saver mode changes certain settings to conserve battery power until you can recharge your phone. If you turn Battery saver mode on, it will automatically activate when the battery charge level drops to the level you set. If Battery saver mode is off, you will be prompted to turn on Battery saver mode when the battery reaches low levels.

- 1. From the Home screen, touch and hold the Recent Apps Key > Settings > Battery > Battery saver > Turn Battery saver on.
- Select the option you want. Choose from Immediately, 10% battery, 20% battery, 30% battery, and 50% battery.
- 3. Tap the switch at the top of the screen to turn the feature on.

The memory card

WARNING! Unmount the microSD card before removing it from the phone to avoid damaging it. From the Home screen, touch and hold the Recent Apps Key ☐ > Settings > Storage > Unmount SD card.

- 1. Remove the back cover.
- Insert the memory card into the slot with the gold contact area facing downward.



Turning the Phone On and Off

- ➤ To turn on your phone, press and hold the Power/Lock key (on the right side of the phone) for a couple of seconds until the screen lights up.
- ➤ To turn off the phone, press and hold the Power/Lock key (on the right side of the phone), tap Power off in the menu that appears, then tap OK to confirm.

Locking and unlocking the screen

Using a Screen Lock

Set a screen lock to secure your phone and prevent unauthorized use.

▶ From the Home screen, touch and hold the Recent Apps Key □ > Settings > Lock screen > Select screen lock, then select your lock type (None, Swipe, Face Unlock, Knock Code, Pattern, PIN, or Password).

NOTE If you choose Pattern, you'll be prompted to create a Backup PIN as a safety measure in case you forget your unlock pattern.

CAUTION Sign in to (or create) a Google Account before setting a screen lock (and remember the Backup PIN you created when creating your screen lock) to reduce the risk of needing to perform a Hard Reset which erases all of your data.

WARNING It's very important to remember the screen lock you set. After five incorrect attempts you'll be prompted to enter a phrase to verify that you're trying to unlock your phone. The phone will automatically reset itself and erase all of the phone's data after ten incorrect attempts.

Performing a Hard Reset (Factory Reset)

If your phone does not restore to its original condition after an error or you forgot your screen lock, perform a Hard Reset (Factory Reset) to initialize it.

WARNING If you perform a Hard Reset, all user apps, user data, and DRM licenses will be deleted. Please remember to backup any important data before performing a Hard Reset.

- 1. Turn the phone off.
- Press and hold the Power/Lock key (on the right side of the phone) and the Down Volume key (on the left side of the phone) at the same time
- 3. When the System recovery screen appears, release both of the keys.
- 4. Use the Volume keys to highlight Factory data reset, then press the Power/Lock key to confirm.
- Use the Volume keys to highlight Yes, then press the Power/Lock key to confirm one more time.
- 6. Your phone will perform a factory reset.

To unlock the phone

If you don't use the phone for a while, the screen backlight will turn off to conserve battery power. To wake up the phone and unlock the screen:

- 1 Turn the screen on
 - ▶ Press the Power/Lock key on the right side of the phone.
- 2. The default Lock screen will appear.
 - ➤ To unlock the screen, swipe your finger across the screen in any direction.
 - To use a Swipe Lock screen shortcut, swipe the shortcut icon (at the bottom of the screen) in any direction. The screen will unlock and launch the app.

NOTE The default Lock screen simply locks the screen to prevent unintentional actions. For more security to guard against unauthorized use, you can set an unlock requirement (such as a pattern, PIN, or password) that will need to be entered to unlock it. Please refer to Using a Screen Lock on page 11 for more information.

TIP

If the Widgets option is enabled under the Lock screen settings menu, swiping from the left edge of the Lock screen towards the right will allow you to add a widget to your lock screen.

Automatic timeout

If you'ren't actively using your phone, it will automatically timeout by turning off the backlight and locking the screen. This helps to prevent accidental taps and saves battery power.

Changing the screen timeout

From the Home screen, touch and hold the Recent Apps Key => Settings > Display > Screen timeout.

To manually turn off and lock the screen:

Press the Power/Lock key (on the right side of the phone).

Apps do not stop running when you lock the screen. It's recommended that you exit or stop all apps before entering Lock mode to avoid unnecessary charges (e.g. phone calls, web access, and data communications).

To exit or stop apps:

From the Home screen, touch and hold the Recent Apps Key => Settings > Application manager > Running tab > tap an app > Stop > OK

Camera shortcuts

- When the screen backlight is off, press and hold either of the Volume keys (on the left side of the phone) to automatically open the Camera app.
- ▶ From the Swipe Lock screen, swipe the Camera icon in any direction.

Swipe Lock screen shortcuts

There are four shortcut icons displayed at the bottom of the Swipe Lock screen. Swipe across any of the icons to open and use that app without unlocking the screen first.

When your phone is set to the Swipe Lock screen, you can change its shortcuts. From the Home screen, touch and hold the Recent Apps Key \square > Lock screen settings > Shortcuts. Tap the icon you want to change, tap the application you want, then tap Save.

Global access shortcuts

You can access the Google Now Global access shortcut from any screen. To access the shortcut, drag your finger upward from the main touch key area (Back, Home, Recent Apps), move your finger over the Google Now icon then lift your finger.

Phone sounds off

You can quickly silence your phone.

OR

▶ Press the Down Volume key (on the left side of the phone) until vibration is set, then press it again to turn off all sounds.

Turn off data communications

Airplane mode turns off all data communications.

▶ From the Home screen, press and hold the Power/Lock key (on the right side of the phone), then tap Turn on Airplane mode.

OR

Swipe the Status Bar downward to open the Notifications panel, then tap the Airplane mode icon (a) (blue is on and gray is off).

To wake up your phone

▶ Press the Power/Lock key — (on the right side of the phone).

Touch screen tips

Here are some tips on how to navigate on your phone.

Touch or tap – A single finger tap selects items, links, shortcuts, and letters on the on-screen keyboard.

NOTES • To select an item, tap the center of the icon.

- Don't press too hard on the touchscreen. It's sensitive enough to pick up a light, yet firm tap.
- Use the tip of your finger to tap the option you want. Be careful not to tap any other keys

Touch and hold – Touch and hold an item on the screen by touching it and not lifting your finger until an action occurs. For example, to open a contact's available options, touch and hold the contact in the Contacts list until the Context menu opens.

Drag – Touch and hold an item for a moment and then, without lifting your finger, move your finger on the screen until you reach the target position. For example, you can drag items on the Home screen to reposition them.

Swipe, slide, or flick – Move your finger quickly across the surface of the screen, without pausing when you first touch it (so you don't drag an item instead). For example, you can browse through the different Home screens by swiping to the left or right, slide the screen up or down to scroll through a list, or remove an application from the Recent Apps screen by flicking its graphic off the screen.

Double-tap – Tap the screen twice quickly to zoom, highlight text, or turn the screen off. For example, quickly double-tap a section of a webpage to adjust that section to fit the width of the screen and zoom in and out when viewing a picture and when using Maps. Double-tap a word to highlight it. Double-tap on the Lock screen, the Status Bar, or an empty spot on the Home screen to turn the screen off.

Pinch-to-zoom – Use your index finger and thumb in a pinching motion (to zoom out) or spreading motion (to zoom in) when using Chrome, a map, photos, the Contacts list, the Favorites list, and the Groups list. Spread apart to make screen information larger (easier to see and read), or pinch together to view more area and information. The pinch gesture also changes the Home screen. Pinch in on the Home screen to change to mini canvas view, then spread apart to return to the normal Home screen view.

Spread apart on the normal Home screen to hide all of your Home screen items, then pinch in to redisplay them.

Rotate the screen – From many apps and menus, the orientation of the screen adjusts to the device's physical orientation. You can deactivate this function in the Display settings menu.

Home screen

The Home screen is the starting point to access all of your phone's features using simple motions on the touchscreen. It's comprised of multiple panels you can customize with shortcuts.

Simply swipe your finger to the left or right to view the Home screen panels. Tap any icon to open, access, and use it.

The QuickTap Bar is at the bottom of all of the Home screen panels. The icons displayed in this bar provide easy and one-tap access to the functions you use the most.

- Tap the **Phone** icon to bring up the dialpad to make a call. The Dial tab is displayed, but this icon also provides access to other tabs (Recent, Contacts, Favorites, and Groups) at the top of the screen to make calls from information stored in your phone.
- Tap the Contacts icon to open your contacts. The Contacts tab is displayed, but this icon also provides access to other tabs (Dial, Recent, Favorites, and Groups) at the top of the screen to help you find information stored in your phone.
- Tap Apps to view all of your installed apps. Simply tap any icon to open and use it.
- Tap the **Chrome** app to browse the web.
- Tap the Messaging icon to access the Messaging app, where you can view and create text and multimedia messages.

Changing the QuickTap Bar:

▶ To add an icon, drag it into the QuickTap Bar and release it.

- To remove an icon, drag it out of the QuickTap Bar to the Remove icon that appears at the top of the screen) and release it.
- ▶ To change the order of the icons, drag an icon to the new position.

Customizing the Home screen

For more convenience using your phone, add your favorite apps, widgets, and downloads to the Home screen for quick access. You can also change the wallpaper to reflect your personal style.

To add items on your Home screen:

- 1. Touch and hold the empty part of any Home screen panel.
- 2. Tap the Apps or Widgets tab at the bottom of the screen.
- Tap the app icon you want to automatically place it on the Home screen panel.
- 4. To exit, tap the Back key \hookrightarrow or tap the Home screen panel.

NOTE You can also drag the app icon you want to any of the Home screen panels.

To remove an item from the Home screen:

Touch and hold the icon you want to remove, drag it to the **Remove** icon (that appears at the top of the screen), then release it.

NOTE To view the details of an app, drag the icon to the App info icon (that appears at the top of the screen).

Moving items and creating folders

Drag an icon or widget to move it to any of the other Home screen panels. Drag an icon onto another icon to create a folder with both of the icons in it. Drag another icon onto the folder to add it to the folder to help keep you organized.

Customizing app icons

You can create your own custom app icons using the images in your icon gallery and photo gallery. Your customized icons are only applied to the Home screen. The Apps screen isn't affected by your changes.

- Touch and hold the icon you want to customize, then release the icon.
 An editing icon appears in its upper-right corner.
- 2. Tap the icon.
- 3. Tap the image you want then tap OK.

OR

Tap Add new and select the desired size of the icon. Then choose and image from your Gallery and crop it as desired.

Changing an icon into a widget

Some app icons can be changed into a convenient widget to use on your Home screen.

- 1. Touch, hold, and release a Home screen icon.
 - A blue frame appears around the icon if it can be resized and changed into a widget (if it can't, only the Edit icon is displayed).
- Drag the corners of the frame to make it larger and change it into a widget.
 - ▶ Touch, hold, and release the widget again to change the size of the widget, if necessary.
 - You can also change it back into a normal icon by dragging the corners of the resizing frame back in.

Home screen Options menu

From the Home screen, touch and hold the Recent Apps Key 🗇 to access the following options:

- Add apps & widgets Allows you to customize your Home screen with apps, widgets, and wallpaper.
- Home screen settings Allows you to directly access the Home screen settings menu.
- Lock screen settings Allows you to directly access the Lock screen settings menu.
- ▶ Settings Opens the full Settings menu.

Mini panel view

Pinch in on the Home screen to change to mini panel view. Mini panel view allows you to manage your Home screen panels. You can add, delete, rearrange, and set your default panel.



- ▶ Drag a panel to the Remove icon that appears at the top of the screen to delete it
- ▶ Drag a panel to a new position to rearrange your panels.
- ➤ To set another panel as the default Home screen, tap the Default Home icon at the upper-right corner of the mini panel you want to be your default Home screen panel.

NOTE Tap any of the panels in mini panel view to go directly to that panel.

Hide view

Place two fingers on the Home screen and spread them apart to hide all of the items on your Home screen. In hide view, only your wallpaper and the Status Bar are seen.

To return to normal view, place two fingers on the Home screen and pinch them in. You can also press the **Home key** \hookrightarrow or the **Back key** \hookrightarrow .

Dual view

Dual view allows you to customize your Home screen panels by displaying your Home screen panels (on top) and the Apps screen (on the bottom) at the same time



▶ Touch and hold an empty spot on a Home screen panel.

OR

 From the Home screen, touch and hold the Recent Apps Key , then tap Add apps & widgets.

In dual view, the current Home screen is displayed above selection choices. Three tabs are displayed along the bottom. Tap Apps, Widgets, or Wallpapers.

The Apps screen

The Apps screen allows you to access all of the apps installed on your phone.

From the Home screen, tap Apps

Apps screen Options menu

While viewing the Apps screen, tap the **Menu** icon : to access the following options:

- View apps by: Tap to sort your apps either in alphabetical order, by downloaded date, or user customized.
- Show small/large icons: Tap to change the app icons to either small or large, then tap Yes to set your choice.

- ► Hide/Show apps: Tap to set which app icons will be displayed in your Applications screen. Checkmark the icons you want to hide, then tap the Done icon ✓ (at the upper-right corner of the screen).
- Edit/Uninstall apps: Tap to view app information, move apps on the screen, or uninstall apps from the Apps screen. Tap an app icon to view its information.
- ▶ Home screen settings: Tap to access the Home screen settings menu.

Opening, switching, and stopping apps

Multi-tasking is easy with Android because you can keep multiple apps running at the same time. Use and switch between several open apps. Android manages each running app to ensure that idle apps don't consume resources unnecessarily, but you can also manually stop apps from running.

Opening an app

▶ On the Home screen: Tap the app icon you want to open.

OR

► From the Home screen: Tap Apps (> the Apps tab (if necessary), then tap the icon you want to open.

Opening apps and switching apps

- 1. Open an app by tapping its icon.
- 2. Press the Home key
- 3. Open another app.
 - ▶ Tap another app icon (on the Home screen or in the QuickTap Bar).

OR

- ▶ Tap Apps (a) tap the Apps tab (if necessary), then tap the app icon you want.
- Tap the Recent Apps Key to open the Recent apps screen. Tap an open app to switch to it.

Stopping apps from running

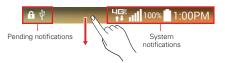
- From the Home screen, touch and hold the Recent Apps Key > Settings > Application manager.
- Scroll horizontally to display one of the tabs along the top, tap the desired app, then tap Stop (or Force stop) to stop it.

Notifications

Notifications alert you to the arrival of new messages, calendar events, and alarms, as well as to ongoing events, such as video and music downloads.

The Status Bar displays your phone's current status and pending notifications.

When a notification arrives, its icon appears at the top of the screen. Pending notification icons appear on the left and system icons (that indicate things like Wi-Fi or battery strength) are displayed on the right.



Accessing the Notifications Panel

Swipe the Status Bar downward to open the Notifications Panel. Tap a notification to open its associated app. To close the Notifications Panel, swipe the bar at the bottom of the screen upward or tap the Back key \subseteq .

Quick Settings

The Quick Settings allow you to easily toggle function settings like Wi-Fi, manage display brightness, and more. To access the Quick Settings, open the Notifications Panel. The Quick Settings bar is located at the top of the Notifications Panel.

To rearrange Quick Setting items on the Notification Panel

Swipe the Quick Settings bar to the left (if necessary), then tap the Edit icon to customize the Quick Settings bar. Checkmark the desired icons to display them (or remove the checkmark to hide). Drag an icon's handle move it to another position on the bar.

NOTE Changing the checkmark(s) also reorganizes the icons in the Quick Settings bar.

TIP Touch and hold an icon on the Quick Settings bar to directly access its settings menu.



Notification icons on the Status Bar

Notification icons appear on the Status Bar at the top of the screen to report missed calls, new messages, calendar events, device status, and more.

The following table lists some of the most common icons.

lcon	Description	lcon	Description
	No signal	36	3G connection
3G †+	3G in use	чв	4G LTE connection
44 14	4G LTE in use		Battery is fully charged
>	Airplane mode is on	<u> </u>	Battery is charging
♦	Connected to a Wi-Fi network	<u>+</u>	Downloading data
O	Wired headset (with microphone) is connected	<u>±</u>	Uploading data
6	Call is in progress	9	Acquiring GPS
9	Receiving location data from GPS	×	Missed call

lcon	Description	lcon	Description
0	Data is syncing	③	Bluetooth is on
	New Gmail message	A	System warning
Q	New Hangouts message	(C)	Alarm is set
	New text or multimedia message	90	New voicemail
	Song is playing	×	Ringer is silenced
Ψ	Phone is connected to PC via USB Cable	0	Battery saver is on
<u>.</u>	Content sharing is on		

NOTE The location of the icons in the Status Bar may differ depending on the functions, features, and apps being used.

On-screen keyboard

You can enter text using the on-screen keyboard. The on-screen keyboard appears automatically on the screen when you need to enter text. To manually display the keyboard, simply tap a text field where you want to enter text.

Using the keyboard and entering text

- Tap once to capitalize the next letter you type. Double-tap for all caps.
- Tap to switch to toggle between keyboards (normal letters and the numbers/symbols keyboard that also includes graphics, such as faces and images).
- Tap to enter text using your voice. This is only available when you activate Google voice typing in the keyboard settings. Touch and hold to access the LG Keyboard settings.
 - ☐ Tap to enter a space.
- Tap to create a new line in the message field.
- Tap to delete the previous character.

Entering special characters

The LG Keyboard allows you to enter special characters (e.g. "á") when entering text.

For example, to enter "á", touch and hold the "a" key. When the pop-up with its additional characters is displayed, slide your finger over the "á", then lift your finger to enter it.

NOTE A symbol at the top right corner of a key indicates that additional characters are available for that key.

Cut, copy, and paste text

You can highlight text to cut or copy it, then paste it into another text field.

- ▶ To highlight a word, double-tap it.
- ➤ To highlight a range of text, double-tap the word, then drag the blue highlight markers to encompass the text you want.
- ➤ To cut or copy highlighted text, tap Cut or Copy in the action box that appears.
- ➤ To paste text, tap the location where you want to place the text, then tap the marker . Tap Paste in the action box that appears.

The first time you open a Google app on your phone, you'll be required to sign in with your existing Google Account. If you don't have a Google Account, you'll be prompted to create one.

Your Google Account

You must sign into a Google Account to use Gmail, Hangouts, Google Calendar, and other Google apps; to download apps from Play Store; to back up your settings to Google servers; and to take advantage of other Google services on your phone.

IMPORTANT

- If you don't sign into a Google Account during setup, you're prompted to sign in or to create a Google Account the first time you start an app that requires one, such as Gmail or Play Store.
- When you sign in, you're prompted to enter your username and password using the on-screen keyboard.
- After you sign in, your contacts, Gmail messages, Calendar events, and other information from these apps and services on the web are synchronized with your phone.
- If you've an enterprise account through your company or other organization, your IT department may have special instructions on how to sign into that account.

Setting up your Google Account

If you use Setup Wizard to set up your Google Account, it guides you through the following steps.

- At the Google Account setup screen, tap Existing if you already have a Google Account, or tap New if you want to create a new account.

NOTE Tap the Back Key (in the Touch Keys bar) to close the on-screen keyboard.

- 3. On the Google Services screen, checkmark the services you want to use (Backup & Restore, Location, and Communication), then tap the Continue icon (at the lower-right corner of the screen).
- On the payment info screen, choose whether or not to set up a payment method for future purchases. You can choose to skip this step as well.

Your Gmail, Google Contacts, and Google Calendar events will all be synchronized with your phone automatically.

NOTE This is automatic for the first Google Account you add. When adding additional Google accounts, you've to select which options to synchronize.

You can use the area below to record your Google Account information for future reference.

Username:_	
Password:	

Wi-Fi

By connecting with Wi-Fi, you can use high-speed Internet access within the coverage of the wireless access point (AP). Enjoy wireless Internet using Wi-Fi, without extra charges.

Connecting to Wi-Fi networks

To use Wi-Fi on your phone, you need to access a wireless access point or 'hotspot'. Some access points are open and you can simply connect to them. Others are hidden or use security features, you must configure your phone to be able to connect to them.

Turn off Wi-Fi when you're not using it to extend the life of your battery.

NOTE If you're out of the Wi-Fi zone or have set Wi-Fi to off, additional charges may be applied by your mobile service provider for mobile data use.

Turning Wi-Fi on and connecting to a Wi-Fi network

- From the Home screen, touch and hold the Recent Apps Key > Settings > Wi-Fi.
- Tap the Wi-Fi switch p to turn it on and start scanning for available Wi-Fi networks.
 - Secured networks are indicated by a lock icon \(\begin{aligned}
 \exists \\
 \exists \\
- 3. Tap a network to connect to it.
 - If the network is secured, you're prompted to enter a password or other credentials. (Ask your network administrator for details).

NOTE The Status Bar displays a Wi-Fi icon to indicate its status.

Adding a Wi-Fi network

- 1. Turn on Wi-Fi and enter the Wi-Fi settings menu.
- 2. Tap the Menu icon : > Add network.
- 3. Enter the Wi-Fi name (SSID).
 - Tap Security and select the network security type, if the network is secured.

- ▶ Enter the required passwords and security credentials.
- 4. Tap Connect to save the network information.

Removing a Wi-Fi network

- 1. Turn on Wi-Fi, then tap Wi-Fi to access its settings.
- 2. Touch and hold the network that you want to remove from your phone's memory.
- 3. Tap Forget network in the Context menu that appears.

Bluetooth

Bluetooth allows you to share data with other Bluetooth-enabled devices and connect to Bluetooth headsets

- NOTES . LG is not responsible for the loss, interception, or misuse of data sent or received via the Bluetooth wireless feature.
 - Always ensure that you share and receive data with devices that are trusted and properly secured. If there are obstacles between the devices, the operating distance may be reduced.
 - · Some devices, especially those that are not tested or approved by Bluetooth SIG, may be incompatible with your phone.

Turning on Bluetooth and pairing your phone with a Bluetooth device

You must pair your phone with another device before you connect to it.

- 1. From the Home screen, touch and hold the Recent Apps Key = > Settings > Bluetooth.
- 2. Tap the Bluetooth switch on to turn it on.
- 3. Tap the check box next to your phone's name to make your phone visible to other Bluetooth devices.
- 4. A list of available devices will be displayed. Tap the device you want to pair with from the list.

NOTE Depending on the type of device, you may have to enter matching codes, confirm matching codes, or the devices may automatically pair.

Once pairing is successful, your phone will connect to the other device.

NOTE Some devices, especially headsets or hands-free car kits, may have a fixed Bluetooth PIN, such as 0000. If the other device has a PIN, you will be asked to enter it.

Send data using the Bluetooth wireless feature

- Select a file or item (such as a contact, calendar event, or media file) from an its app or from the Downloads app.
- 2. Tap Bluetooth in the sharing options list.

NOTE The method for selecting an item may vary by data type.

3. Search for and pair with a Bluetooth-enabled device.

Receive data using the Bluetooth wireless feature

- From the Home screen, touch and hold the Recent Apps Key > Settings > Bluetooth.
- 2. Tap the Bluetooth switch on to turn it on.
- 3. Tap the check box next to your phone's name to make your phone visible to other Bluetooth devices.

NOTE To select the length of time that your phone will be visible, tap the Menu icon Visibility timeout.

4. Tap Accept to confirm that you're willing to receive data from the device.

Connecting to Virtual Private Networks

Virtual private networks (VPNs) allow you to connect to resources inside a secure local network, from outside that network.

To add a VPN

- From the Home screen, touch and hold the Recent Apps Key => Settings > More... > VPN.
- 2. Tap the type of VPN you want to add. Choose Basic VPN or LG VPN.

NOTE You must configure a screen lock to use VPN.

3. Tap Add Basic VPN network or Add LG VPN network.

- In the screen that opens, follow the instructions from your network administrator to configure each component of the VPN settings.
- 5. Tap Save. The VPN will be added to the list on the VPN settings screen.

USB Connection

USB connection is a feature that allows your phone to connect to a PC using a USB Cable.

To select a USB mode for a connection

- From the Home screen, touch and hold the Recent Apps Key (in the Touch Keys bar) > Settings > Storage > Menu icon : > USB PC connection
- 2. Tap Media sync (MTP) or Camera (PTP) to connect to the PC.

NOTE The MTP driver may not be installed on your PC by default. The driver is dependent on the PC's versions of Windows® and Windows Media Player (WMP).

Using the Status Bar to change the connection mode setting

The Status Bar displays the USB connection icon.

When connected via USB, the current USB connection mode appears on the Notifications panel. Tap USB connected to display a screen where you can change the USB connection mode.

Making a call

Dialing a number

- From the Home screen, tap the Phone icon to open the dial pad in the Phone app.
- 2. Enter the number using the dial pad. To delete a digit, tap the **Delete key**
- 3. Tap the Call button to call the number you entered.

```
TIP To enter "+" to make international calls, touch and hold 0 +.
```

Calling your contacts

From your Contacts list

- From the Home screen, tap the Contacts icon to open your contact list.
- Scroll through the contact list or tap the Search contacts box and enter the contact's name. You can also scroll the alphabet bar along the right side of the screen.
- 3. In the list, tap the Call icon on next to the desired contact to call that number.

Using Speed dial

Designate Speed dial numbers to your contact entries to use this calling feature.

- 1. From the Home screen, tap the Phone icon .
- 2. Touch and hold the Speed dial number you set.

NOTE For 2-digit speed dials, tap the first number, then touch and hold the second number until the phone begins dialing the number.

Using Direct dial

Place a Direct dial widget on one of your Home screen panels (or even in the QuickTap Bar) to use this calling feature.

 Tap the Direct dial widget on the Home screen to call the number with a single tap.

To end a call

▶ Tap the End button on the Call screen to end the call.

If you accessed other apps while the call was in progress, there are several ways to return to the Call screen to end the call.

- ▶ Press the Home key △, tap the Phone icon ☑, then tap the End button on the Call screen.
- Drag the Notifications panel down and tap End call _____.

NOTE You can also press the Power/Lock key (on the right side of the phone) to end the call, if you activated this feature in the Call settings menu.

Answering and rejecting a call

When the screen is locked

- ▶ Swipe the Answer icon in any direction to answer the incoming call.
- ▶ Swipe the Ignore icon in any direction to decline an incoming call.

When the screen is unlocked

- ▶ Tap the Answer icon to answer the incoming call.
- ▶ Tap the **Ignore** icon to decline the incoming call.

TIP Ignore with message

You can send a message quickly using the Ignore with message function. This is useful if you need to reject a call with message during a meeting.

Adjusting the in-call volume

To adjust the in-call volume during a call, press the Volume Up and Volume Down keys on the left-hand side of the phone.

Making a second call

- During your first call, tap Add call the number. You can also use the recently dialed numbers list by tapping the Recent tab or search your contacts by tapping the Contacts tab and selecting the contact you want to call.
- 2. Tap the Call icon to make the call.
- 3. Your initial call is placed on hold.
- 4. Tap the Merge calls icon 1 if you want to start a conference call.
- To end active calls, tap the End icon .
 NOTE You're charged for each call you make.

Viewing your call logs

From the Home screen, tap the **Phone** icon, then tap the **Recent** tab. A complete list of all dialed, received, and missed calls is displayed.

Viewing call entries

Open the **Recent** tab in the **Phone** app, then tap an entry to view all of the entries for that phone number. Calls are listed chronologically and each one includes the call type (received \leftarrow , dialed \rightarrow), and missed \triangleright), the date, and the time of the call. Tap any entry to view its details.

Filtering your list of calls

To view a specific call list, from the Recent tab, tap the Menu icon : then tap Filter. Select the call type you want to view. Tap the Back key to return to the Recent tab screen.

Clearing Recent call entries

You can delete the entire list of recent calls all at once, or selectively delete entries.

- 1. Open the Recent tab in the Phone app.
- 2. Tap the Menu icon :
 - Tap Clear to select entries to remove from the list. Checkmark the entries to delete, tap Clear, then Yes.
 - Tap Clear all to remove all of the entries from the list. Tap Yes to confirm.

NOTE You can also select a specific number to be deleted. Touch and hold an entry in the Recent tab to open its Context menu. Tap Clear all logs of this number, then tap Yes to confirm.

Call settings

You can configure phone call settings such as call forwarding, as well as other special features offered by your carrier.

- 1. From the Home screen, tap the Phone icon <a> .
- 2. Tap the Menu icon 🗓.
- 3. Tap Call settings and choose the options that you want to adjust.

Call Options menu

- 1. From the Home screen, tap the Phone icon > the Menu icon : to access the following options:
 - ▶ Speed dial Allows you to assign a speed dial to Contact entries.
 - Assisted dialing Checkmark to enable assisted dialing features (such as when you're traveling outside your home area).
 - Edit tabs Allows you to customize the tabs at the top of the Phone app screen.
 - Call settings Allows you to change your call settings. (These are the same settings as in the full Settings menu in the Call sub-menu.)

Contacts

Add contacts to your phone and synchronize them with the contacts in your Google Account or other accounts that support contact syncing.

Searching for a contact

- 1. From the Home screen, tap the **Contacts** icon 😩 to open your contact list.
- Tap the Search contacts box and enter the contact's name. You can also scroll the alphabet bar along the right side of the screen.

Adding a new contact

- From the Home screen, tap the Phone icon and enter the new contact's number.
- 2. Tap New contact (above the keypad).
- Tap the drop-down menu (at the top of the screen), then select the account you want to save the contact to.
- If you want to add a picture to the new contact, tap the Image icon .
 Choose Take photo or Select from Gallery.
- 5. Enter the contact's information by tapping each category of information and entering the details about your contact.
- 6. Tap Save.

Favorite contacts

You can classify frequently called contacts as favorites.

Adding a contact to your favorites

- 1. From the Home screen, tap the **Contacts** icon **a** to open your contact list.
- 2. Tap a contact to view its details.
- Tap the gray star in the upper-right corner of the screen. The star changes to yellow.

Removing a contact from your favorites list

- 1. From the Home screen, tap the Contacts icon 2 to open your contact list.
- 2. Tap the Favorites tab, then tap a contact to view its details.
- 3. Tap the yellow star in the upper-right corner of the screen. The star changes to gray and the contact is removed from your favorites.

Creating a group

- 1. From the Home screen, tap the Contacts icon 😩 to open your contact list.
- 2. Tap the **Groups** tab, then tap the **Menu** icon : > **New group**.
- 3. Enter a name for the new group.
 - ▶ Tap Add members to add contact entries to your new group.
 - ▶ Tap the GROUP RINGTONE field to set a ringtone when any of the group members call your phone.
 - ▶ Tap the ACCOUNT field to change the account(s) you want to save the new group to.
- 4. Tap Save to save the group.

NOTE If you delete a group, the contacts assigned to that group won't be lost. They will remain in your contacts.

Contacts settings

From the Home screen, tap the **Contacts** icon (2) > the **Menu** icon (1) > **Settings** to access the settings specific to the Contacts app. These settings are not found in the full settings menu.

- Contacts to display Sets which account(s) to use to display your contacts.
- Sort search result by Sets how to display your search results. Choose Frequency of contact or Alphabetical order.
- Sort list by Sets how to display your Contacts list. Choose First name or Last name.

- View contact names as Sets how to display your contact names.
 Choose First name first or Last name first
- Only contacts with phones Checkmark to display only entries that include a phone number.
- ▶ Sync now Allows you to manually sync your Contacts accounts.
- Accounts & sync Allows you to set your Contacts to automatically sync on the schedule you set and displays your accounts list so you can also manage your account(s).
- Online search Checkmark to allow you to search online directory accounts for your contacts.
- Transfer type Sets how to transfer your Contacts files. Choose Send as one file or Send separately.

Contacts Options menu

From the **Contacts** app, tap the **Menu** icon : (at the upper-right corner of the screen) to access the Options menus:

- ▶ From the Contacts: Delete, Share, Send message, Send email, Speed dial, Manage contacts (Copy contacts, Import/Export, and Join contacts), Edit tabs, and Settings.
- ▶ From the Favorites: Add favorites, Remove favorites, Share, Send message, Send email, List/Grid view, Edit tabs, and Settings.
- From the Groups: New group, Delete, Share, Change order, Edit tabs, and Settings.

Joining and separating contacts

When you have two or more entries for the same contact, you can join them into a single entry. You can also separate contacts that were joined.

- Open the Contacts app, then tap the contact entry you want to join with another entry.
- 2. Tap the **Menu** icon [1] (at the upper-right corner of the screen).
- 3. Tap Join.

4. Tap the entry to join with the first entry.

Once entries have been joined, **Separate** is included in the Options menu to allow you to separate the joined entries.

- 1. Open the Contacts app, then tap the contact entry you want to separate.
- 2. Tap the **Menu** icon : (at the upper-right corner of the screen).
- 3. Tap Separate.
- 4. Tap Yes (in the dialog box).

Communicating With Your Contacts

The Contacts app shares information with many other apps allowing you to quickly and easily initiate communication with your saved entries.

General communication

The communication icons displayed depend on the types of information you have saved for individual contacts.

- Tap a contact to view the entry details (from Contacts, Favorites, Groups, or Recent).
- Tap the icon corresponding to the type of communication you want to start.
 - ▶ The Dial icon Soplaces a call to the number.

 - ▶ The Mail icon ostarts an email.

NOTE You can also tap the contact's picture on the left side of the entry to display the Quick Contact icons.

Messaging

Your phone combines text and multimedia messages into one intuitive, easy-to-use menu.

NOTE You must set the Messaging app as the default messaging app in order to use it. From the Home screen, touch and hold the Recent Apps Key > Settings > More... > Default message app > Messaging.

Sending a message

- 2. Enter the recipient(s) in the To field.
 - ▶ Tap the Contacts icon ! (to the right of the To field) to easily select one or more entries from your contacts.
 - Manually enter a name or number. Matching contact entries will appear (below the To field). Tap one to enter it, or continue entering the number.

NOTE Enter a comma to separate manual number entries.

- Tap the text field and enter your message.
- Tap the Menu icon to access messaging options including Add to Contacts, Insert smiley, Add subject, Discard, and Priority.
 - TIP Tap the Attach icon on the right side of the screen) to attach a file you want to share.
- 5. Tap Send (or Send MMS) to send your message.

NOTE The 160-character limit may vary from country to country, depending on the language and how the text message is coded.

WARNING • If you enter multiple recipients to a text message, it's automatically converted into

- a multimedia message and you'll be charged for each person you send the message to.
- If an image, video, or audio file is added to a text message, it's automatically converted into a multimedia message and you're charged accordingly.

View mode

Unread messages are located at the top of the screen. Opened messages that you've exchanged with others are displayed in threads in chronological order making it easy to see an overview of your conversation.

Changing your message settings

Your phone message settings are pre-defined so you can send messages with less hassle, but you can change these settings according to your preferences.

▶ Open the Messaging app and tap the Menu icon : > Settings.

Message settings include: Storage (sets limits, signature, and callback number), Text message (sets delivery reports and priority), Multimedia message (sets delivery reports, auto-retrieve, and priority), Group Conversation, Conversation theme, Notification, and Send message with Enter key.

Messaging Options menu

Open the **Messaging** app and tap the **Menu** icon : to access the following options:

- ▶ Search Allows you to search for a message or text in a message.
- ▶ Delete Allows you to select one (or more) messages to delete.
- ➤ Settings Allow you to change the settings specific to the Messaging app.

Email

You can use the Email app to send, receive, and read emails from a variety of email providers. The Email app supports the following account types: POP3, IMAP, and Exchange.

Your service provider or system administrator can provide you with the account settings you need to set up your account(s).

Managing an email account

Tap the Email icon on the Home screen. The first time you open the Email app, a set-up wizard opens to help you to set up your email account(s).

After the initial set-up, the Email app displays the contents of your Inbox.

To add another email account:

Open the Email app, then tap the Menu icon : > Settings > Add account.

Switching between accounts

If you've added more than one account, you can easily switch between them. From any email folder, tap the current account (at the top of the screen), then tap the account you want to access.

To change an email account's settings:

Open the Email app, then tap the Menu icon : > Settings. Tap General settings to configure settings that apply to all of your accounts. Tap an individual account to configure settings only for that particular account.

To delete an email account:

Open the Email app and tap the Menu icon : > Settings. Tap the Menu icon : again, then tap Remove account > tap an account > Remove > Yes

Working with account folders

Open the Email app, then tap the Menu icon : > Folders.

Each account has an Inbox, Outbox, Sent, and Drafts folder. Depending on the features supported by your account's service provider, you may have additional folders.

Composing and sending email

- From the Home screen, tap the Email icon , then tap the Compose icon (in the upper-right corner of the screen).
- 2. Enter the recipient(s) in the To field (and the Cc/Bcc field, if necessary).
 - ▶ Tap the Contact icon ▲ (to the right of the field) to easily select one or more entries from your contacts.
 - Manually enter a name or email address. Matching contact entries will appear (below the field). Tap one to enter it, or continue entering the address.

NOTE Enter a semicolon to separate manual email entries.

3. Tap the message field and enter your message.

- Tap the Attach icon (at the top of the screen) to attach files, if needed
- 5. Tap the Send button (at the top of the screen) to send the email.
 If you'ren't connected to a network, for example, if you're working in Airplane mode, the messages that you send will be stored in your Outbox folder until you connect to a network again.

Receiving emails

When a new email arrives in your Inbox, you'll be notified by a sound or vibration (depending on your sound and vibration settings) and its notification icon appears on the Status Bar.

Email Options menu

From the Home screen, tap **Email** icon **ONE > Menu** icon to access the following options:

- ▶ Refresh Updates your email Inbox.
- Folders Allows you to access your email folders including Drafts, Outbox. Sent. and Trash.
- ▶ Sort by Allows you to change the order of your email list. In case of IMAP, POP3 protocol, choose from Date (Most recent), Date (Oldest), Sender (A to Z), Sender (Z to A), Size, Subject, Read/Unread, Attachment, Priority, and Star. In case of Microsoft Exchange protocol, choose from Date (Most recent), Date (Oldest), Sender (A to Z), Sender (Z to A), Size, Subject, Read/
- ▶ Downloads Allows you to access your downloaded email files.

Unread, Attachment, Priority, Flag, and Meeting request.

▶ Settings – Allow you to change the settings specific to the Email app.

Camera

You can use the Camera app to take and share pictures and videos. Your phone comes with a 5 megapixel camera that lets you capture sharp pictures and videos. It has many state-of-the-art features that will allow you to easily and creatively capture your world.

NOTE Be sure to clean the protective lens cover with a microfiber cloth before taking pictures.

A lens cover with smudges from fingers can cause blurry pictures with a "halo" effect.

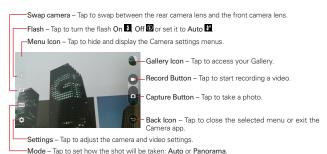
To open the Camera app

▶ From the Home screen, tap Camera (in the QuickTap bar).

OR

 With the backlight off, press and hold either of the Volume Keys (on the left of the phone).

Getting to know the viewfinder



Taking Pictures

Taking pictures with your phone's built-in camera is as simple as choosing a subject, pointing the lens, and tapping an icon. When you take a picture, the Multi-point Auto Focus (AF) function operates automatically to allow you to see a clear image.

To take a picture:

- 1. From the Home screen, tap Camera (in the QuickTap bar).
- 2. Frame your subject on the screen.
 - Tap the screen to choose the focus point. A square around the subject indicates that the camera has focused.
 - Place two fingers on the screen and spread them apart to zoom in (a zoom bar indicates the zoom level) and pinch in to zoom back out.
- Tap the Capture button, or tap the screen where you want the camera to focus. You'll hear the shutter sound and your picture will be automatically saved to the Gallery.

Record Videos

In addition to taking pictures, you can record, view, and send videos with your phone's built-in video camera.

- 1. From the Home screen, tap Camera (in the QuickTap bar).
- 2. Frame your subject on the screen.
- 3. Tap the Menu icon !! (if necessary) and tap the Record button to start recording the video.
 - ▶ The length of the recording is displayed at the top of the screen.
 - You can use the pinch gesture to use the dynamic zoom feature while you're recording video. Spread your fingers on the screen to zoom in and pinch to zoom back out.
 - ▶ You can tap the Capture icon o to take pictures while recording.
 - ➤ You can tap the Pause button to pause recording video, then resume recording again by tapping the Record button ■.
- Tap the Stop button to stop recording. Your video will be automatically saved to the Gallery.

Camera and Video Settings

When you open the Camera app, the Camera menu settings are displayed on the viewfinder: The icons displayed depend on the current lens (rear camera lens or front camera lens).

NOTE Some settings will display an information pop-up the first time you select its icon.

Tap the **Menu** icon : (at the top corner of the viewfinder to display the Camera settings. Tap it again to hide the settings icons. Tap each icon to adjust the settings.

- Flash (3): Sets the flash mode. Choose from On (4), Off (3) and Auto (4).
- ▶ Swap camera Swaps between the rear camera lens and the front camera lens.
- ▶ Mode Mode: Allows you to change the camera mode.
 - Auto : Takes a picture using automatic settings.
 - Panorama : Creates a wide panoramic view shot. Hold the phone horizontally, press the Capture button to start and slowly sweep the camera across the scene.
- ▶ Settings ☼: Allows you to access the following settings.
 - Image/Video size : Sets the file size of your pictures and video.
 Choose from 5M(2560x1920), W4M(2560x1536), 3M(1920x1920), and 1M(1280x960) for photos. Choose FHD(1920x1080) or HD(1280x720) for videos.
 - Voice shutter : Allows you to take pictures with voice commands. When on, you just say "Cheese", "Smile", "Whiskey", "Kimchi" or "LG" to take a picture. Choose On or Off
 - Timer Sets your camera's timer. This is ideal if you want to be a part of the picture or video. Choose from Off 3 seconds and 10 seconds

• Storage in sol: Allows you to choose where to save your images and videos.

NOTE This menu is displayed only when a microSD card is inserted.

• Help ②: Displays a quick guide so you can learn how each Camera function works

Switch camera

Swipe to switch front and rear cameras, and take photos, including selfies.



Gesture shot

Allows you to take a picture with hand gesture. This is ideal for taking selfies because there's no awkward movement to tap the Capture button.

To take a photo with a gesture

- Activate the front camera lens.
- 2. Raise your hand, with an open palm, until the front camera detects it (a box appears on the screen).
- 3. Make a fist to start a countdown before the shot is taken (allowing you time to position yourself).



Gallery

Open the Gallery app to view albums of your pictures and videos.

To open the Gallery app

View Your Pictures

The Gallery is where you can access all of your stored camera images. You can view them in a slideshow, share them with your friends, as well as delete and edit them.

- From the Home screen, tap the Apps icon (in the QuickTap bar) > the Apps tab (if necessary) > Gallery ...
- 2. Tap an image to view your picture.

Assign Pictures

After taking a picture, assign it as a picture ID for a Contacts entry or as your wallpaper (the background for your Home screen or Lock screen).

- From the Home screen, tap the Apps icon (in the QuickTap bar) > the Apps tab (if necessary) > Gallery ...
- 2. Tap an image to view it.
- 3. With the picture displayed, tap the Menu icon (at the upper-right corner of the screen) > Set image as.
- 4. Select an option.
 - Contact photo to assign the picture to a Contact entry as a picture ID. Tap an entry from Contacts, crop the image, then tap **OK**.
 - Home screen wallpaper to set the image as the wallpaper for your Home screen. Crop the image, then tap OK.
 - Lock screen wallpaper to assign the picture as a background image, crop the image, then tap OK.

 Wallpaper to assign the picture as a background image, crop the image, then tap SET WALLPAPER (at the upper-left corner of the screen) to assign the picture.

Working with Photos

Use the Gallery app to view pictures that you've taken with the Camera app or downloaded

To view and browse photos

- From the Home screen, tap the Apps icon (in the QuickTap bar) > the Apps tab (if necessary) > Gallery ...
- Tap a picture or a video, then tap the screen to display the available controls and options.
- Tap the screen to display the icon bar (at the top of the screen) and the Touch Keys bar (at the bottom of the screen). The following options are available.
 - ▶ Tap the Edit icon to edit the photo.
 - ▶ Tap the Camera icon o to start the camera.
 - ▶ Tap the Share icon tap the sharing method, then complete as necessary.
 - ▶ Tap the **Delete** icon 🝵 to delete the picture.

Clock

Setting your alarm

- 2. Set the time and select AM or PM.
- Set Repeat, Snooze duration, Vibration, Alarm sound, Alarm volume, Auto app starter, Puzzle lock, and Memo, as necessary.
- 4. Tap Save to save the alarm and automatically enable it.

Alarm settings

To change the alarm settings, tap the Menu icon in the Alarms screen, then tap Settings. The Alarm settings include Alarm in silent mode, Volume button behavior, and Puzzle lock.

Managing your alarms

After you create one (or more alarms):

- ▶ Tap the Alarm icon ((to the right of the alarm) to switch between enable (blue) and disable (gray).
- ▶ Tap the alarm time to change any of that alarm's settings and save it.

NOTE The Clock app has four tabs across the top of the screen giving you access to a variety of time functions. You can tap Alarms, Timer, World clock, or Stopwatch, or swipe horizontally to scroll through and access these functions.

Calendar

Viewing Your Calendar and Events

The Calendar app allows you to track your schedule of events (that you created or that you've been invited to), organized by day, week, month, year, or agenda.

When you first set up your phone, you configured it to use an existing Google Account or you created a new account. The first time you open the Calendar app on your phone, it displays any existing calendar events from your Google Account on the web.

To open the Calendar app

▶ From the Home screen, tap the Apps icon (in the QuickTap bar) > the Apps tab (if necessary) > Calendar

Events from each account you've added to your phone and configured to synchronize calendars is displayed in your Calendar.

Events from each calendar account are displayed in a different color.

To change your calendar view

No matter where you are in the Calendar app, you can easily switch calendar views. Simply tap the current view mode (at the upper-left corner of the screen) to display a drop-down list of your calendar views. Tap Day, Week, Month, Year, or Agenda.

Calendar title bar icons

- ▶ Tap the Calendar menu icon to change the calendar view or change your account view.
- ▶ Tap the Current date icon to immediately jump back to the current date in the calendar you're viewing.
- ► Tap the Add icon (at the top right of the screen) to add a new event to any of your accounts.
- ► Tap the Menu icon to access Go to date, Search, Sync now, Calendars to sync, Delete, and Settings.

Adding an event to your calendar

- From the Home screen, tap the Apps icon (in the QuickTap bar) > the Apps tab (if necessary) > Calendar 2.
- Tap the current view mode (at the upper-left corner of the screen), then tap the calendar view that you want to use.

- Choose the date to create a new calendar event.
 - ► Tap the Add icon (at the top right of the screen) from any of the calendar views, and manually enter the event date.

NOTE From the Day, Week, or Month calendar view, you can touch and hold the date to quickly save an event.

- 4. Tap the necessary fields to enter the event details.
 - ▶ Event name identifies the event.
 - ▶ Graphic (a) (to the right of the event name) sets an image to easily identify the event in your Calendar.
 - Location identifies where the event takes place.
 - ▶ Graphic (to the right of the location) allows you to attach a map for the event location
 - ▶ FROM Date/Time sets when the event starts
 - ▶ TO Date/Time sets when the event ends
 - All day checkmark to set it as an all-day event.
 - Time zone sets which time zone to use for the event.
 - ▶ REPEAT sets if the event will repeat.
 - ▶ Repeat until sets when to stop displaying the event in your Calendar.
 - ▶ Guests allows you to invite others to your event.
 - Description sets additional detailed information or notes about the event.
 - ▶ REMINDERS sets the reminder notification for the event.
 - ▶ SHOW ME AS sets your Google status during the event.
 - ▶ PRIVACY sets the event as Calendar default, private, or public.
- 5. Tap Save (at the bottom of the screen) to save the event in the calendar.

Viewing Event Details

You can view more information about an event in a number of ways, depending on the current calendar view.

To view information about an event

Days with saved calendar event(s) are indicated with text and color within the selected calendar.

- ▶ In Day, Week, or Agenda view, tap an event to view its details.
- ▶ In Month view, tap a day to display the event(s) in a pop-up dialog box. Tap an event to view its details.

While viewing an event's Details view:

Tap the **Reminders** fields to change the reminder settings, tap **Add** reminder \oplus to add another reminder, or tap the **Remove reminder** icon \otimes (to the right of the reminder) to remove the reminder.

If you have permission to change the event, you can tap the Edit icon \mathbb{Z} (at the top of the screen) to edit the event or tap the **Delete** icon \mathbb{T} (at the top right of the screen) to delete the event.

To share an event, from the event's details screen, tap the Menu icon { : (at the upper-right corner of the screen), then tap Share in the Options menu. Choose the method for sharing and complete as necessary. You can also create a copy of the event and choose an event color to distinguish it from other events

Google+

Use the Google+ app to stay connected with people via Google's social network service

From the Home screen, tap Apps > the Apps tab (if necessary) > Google+ ₹.

NOTE This app may not be available depending on the region or service provider.

Voice Search

The Voice Search app allows you to search webpages using your voice instead of typing.

- From the Home screen, tap Apps () > the Apps tab (if necessary) > Voice Search ().
- Say a keyword or phrase when Speak now appears on the screen.Select one of the suggested keywords that appear.

NOTE This app may not be available depending on the region or service provider.

Voice Command

The Voice Command app allows you to verbally activate phone functions.

- 2. Say the voice command you want to execute.
 - For example, the voice command "Call Home" will automatically dial the number stored in your "Home" Contacts entry.

Downloads

Use the Downloads app to view and access the files you've downloaded through your various apps.

► From the Home screen, tap Apps (> the Apps tab (if necessary) > Downloads ...

Chrome

Use the Chrome app to search for information and browse webpages. Access and selections within this feature are dependent upon your service provider.

From the Home screen, tap Chrome .



Viewing webpages

Tap the address field (at the top of the screen), enter a web address or search criteria, and tap Go on the keyboard.

NOTE You can also tap any of the search results that appear below the address bar.

Opening a page

The Chrome app displays webpages in a tab format allowing you to open and browse several webpages simultaneously.

To open a new webpage tab, tap the Tabs icon in the upper-right corner of the screen) > + New tab (in the upper-left corner of the screen).

When you create a new webpage tab, icons appear at the bottom of the screen help you to quickly open the page you want.

- ▶ Most visited Displays snapshots of the webpages that you visit the most. Tap one to open it. Touch and hold a snapshot to access Open in new tab. Open in incognito tab, and Remove.
- ▶ Bookmarks ★ Displays icons for sites that you've bookmarked (tap the filepath above the displayed bookmarks, if necessary). Tap one to open it. Touch and hold the icon to access Open in new tab, Open in incognito tab, Edit bookmark, and Delete bookmark.
- Recent tabs Displays Chrome tabs that are opened on your other devices. You must be signed into Chrome to sync your open tabs across devices. Tap one to open it on your phone.

To go to an open webpage, tap the Tabs icon [2] (in the upper-right corner of the screen), scroll up or down and tap the page to select and open it.

Searching the web by voice

Tap the address field in the Chrome app, tap the **Microphone** icon Ψ (on the right side of the address field), say a keyword, then tap one of the displayed results.

NOTE This feature may not be available depending on the region or service provider.

Syncing with other devices

The Chrome app allows you to sync all of your open tabs and bookmarks when you're logged into the same Google Account on your phone and on the other devices.

To view open tabs on your other devices, open the **Chrome** app, tap the **Menu** icon **Property** Second Tabs. Tap a webpage to open it.

Bookmarks

To view your bookmarks, open a new tab, then tap the **Bookmark** icon \bigstar at the bottom of the screen. Tap one to select and open it.

NOTE To find the bookmark you're looking for, you can tap the filepath (above the displayed bookmarks) to change the displayed bookmark folder.

Chrome Options menu

Open the **Chrome** app, then tap the **Menu** icon to access its Options menu. Besides the options, there are three icons in a bar at the top of the menu.

- ▶ ← Displays the previously accessed page.
- ▶ → Displays the page accessed before the Back icon was tapped.
- ▶ New tab Tap to open a new webpage tab.
- ▶ New incognito tab Tap to open a new incognito tab.

- ▶ Bookmarks Displays your bookmarked webpages.
- ▶ Recent tabs Displays your open webpages on other devices.
- ▶ History Displays your web browsing history.
- Share... Allows you send the web address (URL) of the web page to others.
- ▶ Print... Allows you to use the Cloud print function.
- ▶ Find in page Allows you to search for text on the current webpage.
- ▶ Add to homescreen Allows you to add a shortcut to the current web page on your Home screen.
- ▶ Request desktop site Checkmark to access the desktop site when you view webpages on your phone.
- ▶ Settings Allows you to change the settings specific to the Chrome app.
- ▶ Help & feedback Displays information about using the Chrome app on your phone.

Settings

The Settings app contains most of the tools for customizing and configuring your phone. All of the settings in the Settings app are described in this section

To open the Settings app

▶ From the Home screen, tap the Apps icon (in the QuickTap bar) > the Apps tab (if necessary) > Settings (...).

OR

▶ From the Home screen, touch and hold the Recent Apps Key ☐ (in the Touch Keys bar) > Settings.

WIRELESS NETWORKS

The Wireless and Networks category allows you to configure and manage your device's wireless radio communications.

Airplane mode

Tap the Airplane mode switch on to toggle it On or Off. On disables all wireless connections.

Wi-Fi

Tap the **Wi-Fi** switch on to toggle it On or Off. On connects to a Wi-Fi network (from your list of available, detected networks). Tap **Wi-Fi** to access the following settings to manage your Wi-Fi connection(s):

Show Wi-Fi pop-up: Checkmark to be notified when a Wi-Fi network is in range when you launch an app.

WI-FI NETWORKS

The list of all of the Wi-Fi networks that are within access range. Tap one to access it.

NOTE Tap Search (at the bottom of the screen) to scan for available Wi-Fi networks.

Tap the **Menu** icon (at the upper-right corner of the Wi-Fi menu screen) to access the following options.

Connect by WPS button: Allows you to connect to a secured Wi-Fi network with a WPS button.

Connect by WPS PIN: Allows you to connect to a secured Wi-Fi network with a WPS PIN.

Add network: Tap to enter a Wi-Fi name (SSID), choose the Security and enter the Password to manually add Wi-Fi networks.

Wi-Fi Direct: Allows direct connection with Wi-Fi devices without any access point.

Advanced Wi-Fi: Accesses the following advanced Wi-Fi settings.

NOTIFICATIONS

Wi-Fi notifications: Checkmark to notify if Wi-Fi networks are available nearby or when your device is connected to a Wi-Fi network.

Avoid unstable connections: Checkmark to disconnect the Wi-Fi router automatically when the Internet is unavailable.

USEFUL SETTINGS

Manage networks: Allows you to specify the order in which your Wi-Fi networks will be detected.

Sort list by: Sets how your Wi-Fi networks are listed. Choose Signal strength or Alphabetical order.

Keep Wi-Fi on when screen is off: Allows you to keep Wi-Fi on when the screen backlight is off (asleep). Choose from Yes, Only when plugged in, and No.

Allow Wi-Fi scanning: Checkmark to let Google's location service and other apps scan for networks, even when Wi-Fi is off.

Wi-Fi signal weak: Checkmark to disconnect Wi-Fi automatically when the Wi-Fi signal is weak.

Battery saving for Wi-Fi: Checkmark to minimize battery usage when Wi-Fi is on

PERSONAL

Install certificates: Opens a screen to install certificates from storage.

INFORMATION

MAC address: Displays your phone's MAC address (which may need to be entered in the router to connect to some wireless networks with MAC filters).

IP address: Displays your phone's IP address.

Help: Displays Wi-Fi help information.

Bluetooth

Tap the **Bluetooth** switch of to toggle it On or Off. On allows you to pair and connect with other Bluetooth devices. Turn it on and tap **Bluetooth** to use and manage your Bluetooth devices.

NOTE Tap Search for devices (at the bottom of the screen) to search for in-range Bluetooth devices.

MAKE PHONE VISIBLE

VS810PP: Checkmark to allow other Bluetooth devices to see your phone for pairing and connection.

AVAILABLE DEVICES

The list of all of the available in-range Bluetooth devices.

Tap the **Menu** icon : (at the upper-right corner of the screen) in the Bluetooth menu to access the following options.

Edit phone name: Changes your phone name for easy identification when pairing and connecting. Enter your new phone name, then tap Save.

Visibility timeout: Sets the amount of time other Bluetooth devices can see your phone for pairing and connection.

Show received files: Displays a list of your Bluetooth received files.

Help: Displays information about Bluetooth features.

Mobile data

Tap the Mobile data switch end to toggle it On or Off. Off disconnects you from the mobile network so you can't use the Internet unless you use a

Wi-Fi connection. This allows you to manage your mobile data usage. Tap **Mobile data** to access the following settings to manage your mobile data usage:

Limit mobile data usage: Checkmark to limit your mobile data. Your mobile data connection will be disabled when you reach the limit you set. Set your data usage limit by dragging the red line on the graph provided.

Alert me about data usage: Checkmark to set your phone to alert you when your mobile data usage reaches the warning amount you set. Set your warning amount by dragging the orange line on the graph provided.

Data usage cycle: Displays your current data usage cycle. Tap the date (at the top of the graph) to change the cycle date.

Data usage graph: Displays your data usage on a graph.

Data usage applications: Apps are displayed with their data usage on a bar graph. Tap one to see more detailed information.

Tap the **Menu** icon : (at the upper-right corner of the screen) to access the following advanced options.

Display in MB/GB: Displays data usage in MB or GB.

Data roaming: Checkmark to allow you to use a mobile data connection when you're roaming outside your home network area.

Restrict background data: Checkmark to disable syncing in the background while using a mobile network.

Auto-sync data: Checkmark to set your phone to sync contact, calendar, email, bookmark, and social network image data automatically.

Show Wi-Fi usage: Displays a Wi-Fi tab (at the top of the Mobile data screen) to display your Wi-Fi usage information.

Mobile hotspots: Displays a list to select and use another device's mobile network as a mobile hotspot for mobile data usage. Turn on Wi-Fi and search for mobile hotspots, if necessary. Apps can be restricted from using these networks when in the background. Apps may also warn before using these networks for large downloads.

Help: Displays information about Mobile data features.

Call

Voice mail: Sets up your standard voicemail settings.

OUTGOING CALL

Auto retry: Sets the amount of time to wait before automatically redialing a call that failed to connect. Choose from Off, 10 sec, 30 sec, and 60 sec.

Assisted dialing: Configures the Assisted dialing options when you're traveling outside of your home country.

INCOMING CALL

Incoming voice call pop-up: Checkmark to display an incoming call pop-up when an app is in use. Use the Answer, Ignore, or Ignore with message options during an incoming call.

Allow ignore with message: Checkmark to enable the Ignore with message icon on the Incoming Call screen which allows you to ignore an incoming call and respond to the caller with a specified Quick text message instead. Tap the Settings icon to manage your Quick text messages. Tap the New message icon to create a new quick message, tap a message to edit it, or tap the Delete message icon to delete a message.

Privacy keeper: Sets whether the phone displays the caller's information when you receive a call. Choose from Hide all info, Show number only, and Show caller info.

Call forwarding: Configures call forwarding options.

Auto answer: Sets the time before a connected hands-free device automatically answers an incoming call. Choose from Off, 1 sec, 3 sec, and 5 sec.

ONGOING CALL

Show Keypad: Sets which types of calls will automatically display the dialpad. Choose from Voice mail / Toll-Free, All calls, and Customized number.

TTY mode: Sets the TTY mode to communicate with other TTY devices.

Hearing aids: Checkmark to turn on hearing aid compatibility.

Voice privacy: Checkmark to turn on enhanced privacy mode.

FND CALL

Power key ends call: Checkmark to allow you to end voice calls by pressing the Power/Lock Key (on the right side of the phone) instead of returning to the Call screen to end the call.

OTHERS

DTMF tones: Sets the length of the DTMF tones. Choose **Normal** or **Long**.

Share & connect

Media server

NOTE Tap the Menu icon : (at the upper-right corner of the the Media server screen) to access Use DLNA feature.

Content sharing: Checkmark to allow nearby devices to access content on your phone.

YOUR PHONE

VS810PP: Allows you to change your phone name for easy identification when connecting with other devices. Tap the **Image** icon to set your phone image.

Content to share: Sets the types of content your phone is allowed to share. Checkmark Photos. Videos or/and Music.

Receive content: Checkmark to allow nearby devices to send content to your phone.

NEARBY DEVICES

Sharing request: Sets when to accept sharing requests from nearby devices. Choose Always allow or Always ask.

Allowed devices: Displays nearby devices accessible to your phone.

Not-allowed devices: Displays nearby devices not accessible to your phone.

More...

TETHERING

Tethering allows you to connect other devices to your phone's Internet connection and select your connection method.

Mobile Broadband Connect: Tap the Mobile Broadband Connect switch to toggle it On or Off. On allows you to share your phone's mobile data connection using a USB connection. This setting is gray if not connected via USB.

Mobile Hotspot: Tap the Mobile Hotspot switch end to toggle it On or Off. On allows you to use your phone as a Mobile Hotspot for other devices to use your mobile network connection. Tap Mobile Hotspot to manage access to your mobile hotspot.

Set Up: Sets the name and password for your Mobile Hotspot.

Manage connections: Allows you to add devices and control which devices can connect.

Connected devices are listed at the bottom of the screen.

NOTE Tap the Menu icon : (at the upper-right corner of the screen), then tap Advanced to access additional settings including Power Management. Tap Help to display Mobile Hotspot help information.

Bluetooth tethering: Tap the Bluetooth tethering switch ele to toggle it On or Off. On shares the phone's Internet connection with other Bluetooth devices

Help: Displays information regarding mobile broadband connection, mobile hotspot, and Bluetooth tethering.

NFTWORK

Mobile networks: Sets up options for data roaming, networks, and APNs (Access Point Names).

Default message app: Sets your default messaging app. Choose from **Messaging, Hangouts, Message+**, or any other available apps.

VPN: Sets up and manages Virtual Private Networks (VPNs).

Basic VPN: Sets your phone to use the built-in Android VPN client supporting basic features.

LG VPN: Sets your phone to use an advanced LG VPN client supporting full IP Security features and interoperability. You can add an LG VPN network or select from your list of VPN connections.

NOTE Tap the Menu icon : (at the upper-right corner of the screen) to access additional settings. From the Basic VPN setting, it accesses Always on VPN and from the LG VPN screen it access Import certificates, Settings, and About.

DFVICE

The Device category allows you to configure and manage the general device functions such as sound and display options.

Sound

BASIC

Silent mode: Sets the Silent mode to Off, Vibrate, or On.

Volumes: Sets individual volume levels for phone Ringtone, Notification sound, Touch feedback & system, and Music, video, games & other media. Move the slider button on each volume bar to set its volume.

RINGTONES & VIBRATIONS

Ringtone: Sets the ringtone for calls.

Notification sound: Sets the sound for notifications.

Ringtone with vibration: Checkmark to play a ringtone and vibrate for notifications.

Vibration type: Allows you to set the vibration type for incoming calls. Choose from Long Lasting, Rapid, Short repeated, Standard, and Ticktock. Tap the Add icon (at the upper-right corner of the screen) to create your own vibration pattern.

ADVANCED SETTINGS

Vibrate on tap: Checkmark to vibrate when you touch the screen (e.g., touch keys, selections, etc.).

Sound effects: Tap to set dial pad touch tones, touch sounds, screen lock sound, sound when roaming, or emergency tone.

Dial pad touch tones: Checkmark to play tones when you use dial pad.

Touch sounds: Checkmark to play a sound when you make screen selections.

Screen lock sound: Checkmark to play a sound when you lock and unlock the screen.

Sound when roaming: Checkmark to play a sound when roaming.

Emergency tone: Sets the behavior when an emergency call is placed. Choose from Off, Alert, and Vibrate.

Message/call voice notifications: Tap the switch on to toggle it On or Off. On allows your phone to automatically read your incoming calls and/or messages out loud. Checkmark Calls for caller information, Messages for sender information, and Read messages for message content. You can also set the Voice notifications language.

Display

SCREEN

Brightness: Sets the brightness of the screen. You can choose automatic adjustment, or you can manually set the brightness percentage. For best battery performance, use the dimmest comfortable brightness.

Screen timeout: Sets the amount of time before the screen turns off due to inactivity.

Screen-off effect: Sets the effect seen when you turn off the screen. Choose from Retro TV, Black hole, and Fade out.

Auto-rotate screen: Checkmark to set the phone to automatically rotate the screen based on the phone orientation (portrait or landscape).

Daydream: Tap the Daydream switch eto toggle it On or Off. On allows the set screensaver to be displayed when the phone is sleeping while docked and/or charging. Choose from Clock or Google Photos.

FONT

Font type: Sets the type of font used for the phone and menus.

Font size: Sets the size of the font displayed in the phone and menus.

Home screen

SCREEN

Wallpaper: Sets the wallpaper to use on your Home screen. Select it from Gallery, Live wallpapers, Photos, or Wallpaper gallery.

Screen swipe effect: Sets the effect when you swipe to change screens. Choose from Slide, Breeze, Accordion, Panorama, Carousel, Layer, and Domino.

Allow Home screen looping: Checkmark to allow continuous Home screen scrolling (loop back to first screen after the last screen).

Allow apps list looping: Checkmark to allow continuous scrolling on the apps list (loop back to first screen after the last screen).

TIPS

Help: Displays information regarding the Home screen items and functions.

Lock screen

SCREEN SECURITY

Select screen lock: Sets how to secure your phone from unintentional and/or unauthorized use. Choose from None, Swipe, Face Unlock, Knock Code, Pattern, PIN, and Password.

Quick unlock: Set this option to bypass lock screen security for selected Wi-Fi and Bluetooth connection.

CUSTOMIZE

Wallpaper: Sets your Lock screen wallpaper.

Widgets: Checkmark to show widgets on your Lock screen. To add widgets on the Lock screen, swipe the Lock screen from the left edge towards the right and tap the Add icon.

Missed calls & new messages: Show notifications of missed calls and new messages on Lock screen.

Shortcuts: Allows you to change the shortcuts on the Swipe Lock screen.

Owner info: Show owner info on Lock screen in the event your phone is lost.

LOCK TIME

Security lock timer: Sets the amount of time before the screen automatically locks after the screen backlight turns off (times-out due to inactivity).

Power button instantly locks: Checkmark to instantly lock the screen when the Power/Lock Key is pressed. This setting overrides the Security lock timer setting.

Gestures

Silence incoming calls: Checkmark to enable you to turn the phone over to silence the incoming call ringtone.

Snooze or stop alarm: Checkmark to enable you to turn the phone over to snooze or stop the alarm.

Pause video: Checkmark to enable you to turn the phone over to pause the currently playing video.

Help: Opens a help guide on how to use the Gestures features of your device

SENSOR

Motion sensor calibration: Allows you to improve the accuracy of the tilt and speed of the sensor.

Storage

Use the Storage menu to monitor the used and available space in your phone.

INTERNAL STORAGE

Total space: Displays the total amount of space in the phone's memory. It's listed in Gigabytes and also on a colored bar graph with a color-coordinated list of the apps as well as the amount of space they use. Remaining memory space is gray.

SD CARD

Total space: Displays the total amount of your external memory.

Available: Displays the amount of space available in your external memory.

Mount/Unmount SD card: Allows your phone to recognize your microSD card and release it to safely remove your microSD card.

Erase SD card: Erases all of the data stored on your microSD card.

NOTE Tap the Menu icon : (at the upper-right corner of the Storage screen) to access Display in MB (or GB) and USB PC connection.

Battery

BATTERY INFORMATION

The Battery charge information is displayed on a battery graphic along with the percentage of the remaining charge and its status.

Touch the Battery charge icon to display the Battery use screen to see the battery usage level and battery use details. It displays which components and apps are using the most battery power. Tap one of the entries to see more detailed information.

Battery percentage on Status Bar: Checkmark to display the battery level percentage on the Status Bar next to the battery icon.

BATTERY SAVER

Tap the **Battery saver** switch end to toggle it On or Off. Tap **Battery saver** to access the following settings:

Turn Battery saver on: Sets the battery charge percent level that will automatically turn on Battery saver. Choose from Immediately, 10% battery, 20% battery, 30% battery, and 50% battery.

BATTERY SAVING ITEMS

Auto-sync: Checkmark to turn off Auto-sync when Battery saver is activated.

Wi-Fi: Checkmark to turn Wi-Fi off when data is not being used while Battery saver is activated.

Bluetooth: Checkmark to turn Bluetooth off when not connected while Battery saver is activated.

Vibrate on tap: Checkmark to turn off touch feedback when Battery saver is activated.

Brightness: Checkmark to reduce the screen brightness when Battery saver is activated. Tap the **Settings** icon 🌣 to change the setting.

Screen timeout: Checkmark to reduce the screen timeout when Battery saver is activated. Tap the Settings icon 🌣 to change the setting.

Help: Displays tips for using the Battery saver function.

Application manager

Use the Application manager menu to view details about the apps installed on your phone, manage their data, and force them to stop.

Swipe left and right to select one of the three tabs across the top of the screen to view detailed information for DOWNLOADED, ON SD CARD, RUNNING, and ALL apps. Tap an entry to view more information, tap Stop (or Force stop), then OK to stop an app from running.

Tap the **Menu** icon : (at the upper-right corner of the screen) to access Sort by, Reset app preferences, Reset default apps, and Uninstall apps.

PERSONAL

The Personal category allows you to configure and manage your personal information

Location

Use the Location access menu to set your preferences for using and sharing your location when you search for information and use location-based apps, such as Maps.

Tap the Location switch of (at the upper-right corner of the screen) to toggle it On or Off. On enables sharing of your location.

E911 Location: E911 Location cannot be turned off on any mobile celluar phone.

Mode: Tap location mode to choose from High accuracy (GPS and networks), Battery saving (Networks only), and Device sensors only (GPS only).

RECENT LOCATION REQUEST

Displays information about apps that have requested your location information.

LOCATION SERVICES

Camera: Checkmark to tag photos or videos with their locations.

Google Location Reporting: Tap to check Location Reporting and Location History. Allows Google to periodically store and use your phone's most recent location data in connection with your Google Account.

Security

Use the Security menu to configure how to help secure your phone and its data.

ENCRYPTION

Encrypt phone: Allows you to encrypt data on the phone for security. Each time you turn on your phone, a PIN or password will be required to decrypt your data.

Encrypt SD card storage: Allows you to encrypt or decrypt external SD card data. Encrypted data is not accessible to other devices.

SIM CARD LOCK

Set up SIM card lock: Set up Micro SIM card lock or change the SIM card PIN.

PASSWORDS

Password typing visible: Checkmark to briefly show each character of the password as you type so that you can see what you enter.

PHONE ADMINISTRATION

Phone administrators: Displays the list of administrators, allowing you to deactivate device administrators.

Unknown sources: Checkmark to allow installation of non-Play Store apps.

Verify apps: Checkmark to disallow or warn before installation of apps that may cause harm to your phone.

Notification access: Allows you to set what apps can read notifications.

CREDENTIAL STORAGE

Storage type: Displays the current storage type for credentials (e.g., Hardware-backed).

Trusted credentials: Allows apps to access your phone's encrypted store of secure certificates, related passwords, and other credentials. The screen has a **System** tab and a **User** tab. Credential storage is used to establish some kinds of VPN and Wi-Fi connections.

Install from storage: Allows you to install a secure certificate from storage.

Clear credentials: Deletes all secure certificates and related credentials and erases the secure storage's own password. you're prompted to confirm you want to clear this data.

This setting is dimmed if you haven't set a password to secure your credential storage.

Language & input

Use the Language & input menu to select the language for the text on your phone and for configuring the on-screen keyboard. You can also manage your language dictionary for personal words that you've added.

Language: Sets the language to use on your device.

KEYBOARD & INPUT METHODS

Default: Sets the default on-screen keyboard to use when entering text.

LG Keyboard: Checkmark to select the LG Keyboard to enter data. Tap the Settings icon 🌣 to change the following settings:

MY KEYBOARD

Input language and keyboard layout: Sets the keyboard language and layout (QWERTY and Phone).

Keyboard height and layout: Allows you to adjust various height and layout options for your keyboard to make it easier to use.

Bottom row keys: Sets the default keys to display on either side of the Space Key (on the bottom row of the keyboard).

Keyboard height: Sets the height of the keyboard in comparison to the screen you're typing on.

SMART INPUT

Path input: Checkmark to enter a word by drawing a path through all of the letters.

Show word suggestions: Checkmark to show words through text prediction.

Auto-correction: Sets your level for automatic word correction. Choose from Off, Mild, Moderate, and Aggressive.

Update word suggestions: Uses Swype Connect to provide more word suggestions. To use this feature, accept the Agreement Rights.

Additional settings: Sets advanced settings including:

Vibrate on keypress: Checkmark to vibrate when you tap each key.

Sound on keypress: Checkmark to play a sound when you tap each key.

Pop-up on keypress: Checkmark to show an expanded bubble when you tap each key.

INPUT TOOLS

Auto-capitalization: Checkmark to automatically capitalize the first letter of each sentence.

Auto-punctuation: Checkmark to insert a period when the space key is double-tapped.

Spell checker: Checkmark to alert you to possible spelling errors.

Clear word suggestion history: Allows you to clear your prediction word history.

Personal dictionary: Allows you to add words to your personal dictionary to assist you in entering text quickly and accurately.

Help: Displays additional keyboard help information.

Google voice typing: Checkmark to select Google voice typing to enter data. Tap the Settings icon ♣ to change the Google voice settings.

Choose input languages: Sets the languages supported with Google voice typing.

GENERAL

Block offensive words: Checkmark to hide recognized offensive text.

Offline speech recognition: Enables voice input while offline.

SPEECH

Voice Search: Sets voice search options.

Text-to-speech output: Sets the preferred speech engine and speech rate (very slow to very fast). Also plays a short demonstration of speech synthesis and displays the language status.

MOUSE/TRACKPAD

Pointer speed: Sets the pointer speed on a slide bar.

Backup & reset

This menu allows you to back up and/or erase your data.

BACKUP & RESTORE

Back up my data: Checkmark to backup app data, Wi-Fi passwords, and other settings to Google servers.

Backup account: Sets the account to backup.

Automatic restore: Checkmark to allow your phone to automatically restore backed up settings and data when an app is reinstalled on the phone.

PERSONAL DATA

Factory data reset: Allows you to erase all of the data on the phone. Read the warning, then tap **Reset phone** at the bottom of the screen, then tap **Erase everything** to confirm.

Reset settings: Tap to restore the default system settings.

ACCOUNTS

Add account: Allows you to add accounts to your phone.

SYSTEM

The System category allows you to view your phone's system information, as well as manage various system settings.

Shortcut key

Tap the Shortcut key switch equal (at the upper-right corner of the screen) to toggle it On or Off. On allows you to enable the Volume Keys equal (on the left side of the phone) to access shortcuts when the screen is off or locked. When enabled, the Volume Keys open the Camera app.

Date & time

Automatic date & time: Checkmark to use the network-provided date and time.

Automatic time zone: Checkmark to use the network-provided time zone

Set date: Tap to manually set the date to use for your phone. This setting is grayed-out when the **Automatic date & time** setting is checkmarked.

Set time: Tap to manually set the time to use for your phone. This setting is grayed-out when the **Automatic date & time** setting is checkmarked.

Select time zone: Tap to select select a time zone other than the one provided by the network. This setting is grayed-out when the Automatic time zone setting is checkmarked.

Use 24-hour format: Checkmark to display the time using the 24-hour time format (for example, 13:00 instead of 1:00 pm).

Select date format: Sets the format for displaying dates.

Accessibility

Improves accessibility for users who have impaired vision, hearing, or reduced dexterity.

VISION

TalkBack: Tap the TalkBack switch [eq] (at the upper-right corner of the screen) to toggle it On or Off. On allows you to set up the TalkBack function which assists people with impaired vision by providing verbal feedback. Tap Settings (at the bottom of the screen) to adjust the TalkBack settings.

When TalkBack is turned on, the touchscreen settings require the user to first tap an item they want to select, and then double tap the item again in order to access this feature.

NOTE Passwords can be heard as they are entered when headsets are connected to the phone unless settings are changed to read passwords aloud without a headset.

Font size: Sets the font size. Choose from Minimum, Small, Medium, Large, Very large, and Maximum.

Invert colors: Checkmark to invert the screen color contrast for people with difficulty perceiving colors.

Color adjustment: Tap the Color adjustment switch eq (at the upper-right corner of the screen) to toggle it On or Off. On allows you to adjust the screen colors by dragging your finger across the screen to define the hue and contrast for easier viewing of screen content.

Touch zoom: Tap the Touch zoom switch equal (at the upper-right corner of the screen) to toggle it On or Off. On allows you to zoom in and out by triple-tapping the screen.

Message/call voice notifications: Tap the Message/call voice notifications switch [eq] (at the upper-right corner of the screen) to toggle it On or Off. On allows you to hear automatic spoken alerts for incoming calls and messages.

Lower screen brightness: Checkmark to dim the screen's backlight for less contrast.

Accessibility shortcut: Open accessibility options quickly on any screen.

Text-to-speech output: Tap to customize text-to-speech (TTS) settings.

HEARING

Audio type: Sets the audio type. Choose Mono or Stereo.

Sound balance: Routes the sound through both the right and left channel when a headset is connected. To manually set the audio route, move the slider on the sound balance slide bar to set it.

Flash alerts: Checkmark to set the LED (at the upper-left of the phone) to flash (or blink) for incoming calls and notifications.

Turn off all sounds: Checkmark to turn off all device sounds.

Captions: Tap the Captions switch [] (at the upper-right corner of the screen) to toggle it On or Off. On customizes caption settings for those with hearing impairments. Set Language, Font size, and Caption style.

PHYSICAL AND MOTOR

Touch feedback time: Sets the touch feedback. Choose from **Short**, **Medium**, and **Long**.

Touch assistant: Tap the Touch assistant switch end to toggle it On or Off. On allows you to replace the hardware keys with a Touch assistant board end to tap its Power button, and the total button, Volume down button, Volume up button, and the 1/2 button (Screen capture button, Accessibility button and Pinch button). Draw a "C" ("call") on the board to automatically display the Dial tab. Draw an "M" on the board to automatically display the Messaging application.

Draw a "W" ("web") on the board to automatically launch the Chrome app. Draw an "S" ("Settings") on the board to automatically display the settings app. Draw an "L" ("Lock screen") on the board to go directly to the Lock screen.

Screen timeout: Sets the screen timeout.

RECOGNITION

Touch control areas: Tap the Touch control areas switch (eq.) (at the upper-right corner of the screen) to toggle it On or Off. On allows you to select an area of the screen to limit touch activation to just that area of the screen. Press the Volume Down Key and tap the Home Key at the same time to activate and deactivate this feature.

SYSTEM

Auto-rotate screen: Checkmark to allow the phone to rotate the screen depending on the phone orientation (portrait or landscape).

Password voice confirmation: Checkmark so that your phone can read passwords you touch.

Power key ends call: Checkmark so that you can end voice calls by pressing the Power/Lock Key (on the right side of the phone). When enabled, pressing the Power/Lock Key during a call won't lock the screen.

Accessibility settings shortcut: Sets quick, easy access to selected features when you triple-tap the Home Key (a) (in the Touch Keys bar). Choose from Off, Show all, TalkBack, Invert colors, Touch assistant, and Accessibility settings.

One-touch input: Checkmark to enable one-touch input. It allows each finger touch to enter a letter or character on the LG keyboard.

SFRVICES

Displays the list of accessibility services installed on your phone.

Printing

Cloud Print: Tap the Cloud Print switch [eq] (at the top right corner of the Cloud print screen) to toggle it On or Off. On allows you to select a printer via the Cloud feature.

About phone

This menu allows you to manage your software updates and view various information relating to your device.

Phone name: Tap to edit your phone name.

Network: Displays your Network, Network type and strength, Service state, Roaming state, Mobile network state, and IP address.

Status: Displays your phone number, IMEI, IMEISV, PRL Version, IMS registration status, ERI version, ICCID, and Last factory data reset.

Battery: Displays Battery status, Battery level, and Battery use.

Hardware information: Displays Model number, Hardware version, Up time, Lifetime calls, Warranty Date Code, Wi-Fi MAC address and Bluetooth address.

Software information: Displays Android version, Baseband version, Kernel version, Build number, and Software version and status.

Legal information: Displays the Terms of Use and Privacy Policy for LG Software, open source licenses and Google legal information.

Patent information: Displays LG patent information.

Update your smart phone without a PC (FOTA)

This feature allows you to conveniently update your phone's software to a newer version via Firmware Over-the-Air (FOTA), without connecting with a USB Cable.

NOTE Firmware is a specialized type of software embedded into your phone's hardware which allows it to run correctly (e.g., functions, speed, communication, etc.) and determines how it stores bits of information. The firmware on your phone comes from LG and is written specifically for it. On the other hand, software can come from a variety of sources and can be used on various compatible devices. For more information on firmware and software updates, please visit: http://www.lg.com

- From the Home screen, touch and hold the Recent Apps Key > Settings > System updates.
- 2. Tap your desired option.
 - Check system update status Displays the System update history.
 - Check for new system update Checks for any new software updates and conducts the update.

NOTES • After download, you can install the software immediately or select a later time for the installation.

- Each software version is updated sequentially. Even after the update is completed, check if there is any newer version available.
- LG reserves the right to make firmware updates available only for selected models at its own discretion and does not guarantee the availability of the newer version of the firmware for all phone models.

Notice: Open Source Software

To obtain the corresponding source code under GPL, LGPL, MPL and other open source licences, please visit http://opensource.lge.com/ All referred licence terms, disclaimers and notices are available for download with the source code.

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

CATEGORY	SUB-CATEGORY	QUESTION	ANSWER
Bluetooth	Bluetooth Devices	What are the functions available via Bluetooth?	Stereo/Mono Headset, Car Kit, and FTP connections are available. When your phone is connected to another phone via Bluetooth, you can receive Contacts data.
Data	Contacts Backup	How can I back up Contacts?	The Contacts data can be synchronized between your phone and Gmail™.
Data	Synchronization	Is it possible to set up one-way-sync with Gmail?	Only two-way synchronization is available.
Data	Synchronization	Is it possible to synchronize all of the Email folders?	All of your Email folders are synchronized. Tap the Menu icon [1] (at the upper-right corner of the screen), then tap Folders to view them.
Data	Synchronization	Is it possible to transfer Contacts data from a feature phone to an Android™ phone?	Yes, if your contacts can be extracted into a .CSV file. How to transfer: 1. Create ".CSV" file with the contacts on your current phone (you may be able to use the PC suite software provided by LGE). 2. Log into Gmail with your PC. 3. Click Contacts. 4. Click Import. 5. Attach the ".CSV" file. 6. Your contacts will then be synchronized between your Android phone and Gmail.
Google™ Service	Gmail Log-In	Should I have to log into Gmail whenever I want to access Gmail?	Once you log into Gmail, you don't need to log into Gmail again.
Google Service	Google Account	Is it possible to filter emails?	No, email filtering is not supported via the phone.

CATEGORY	SUB-CATEGORY	QUESTION	ANSWER
Phone Function	YouTube™	Is it possible to play YouTube videos?	Yes, YouTube videos are supported but may have to be viewed through the YouTube app (instead of the Chrome app).
Phone Function	Email	What happens when I access another app while writing an email?	Your email is automatically saved as a draft when you access another app. It's still displayed when you return to Email, until you close the Email app. When you open the Email app again, from your Inbox, tap the Menu icon [1] (at the upper-right corner of the screen), then Folders > Drafts to access it.
Phone Function	Navigation	Is it possible to install another navigation app on my phone?	Any app that's available on Play Store and is compatible with the hardware can be installed and used.
Phone Function	Synchronization	Is it possible to synchronize my contacts from all of my email accounts?	Only Gmail and MS Exchange server (Company Email Server) contacts can be synchronized.
Phone Function	Wait and Pause	Why don't my phone numbers with Wait and Pause work?	If you transferred a contact with the Wait and Pause functions saved into the number, you'll need to re-save each number to use these features. To re-save numbers with Wait and Pause 1. From the Home screen, tap the Phone icon

CATEGORY	SUB-CATEGORY	QUESTION	ANSWER
Phone Function	Security	What are the phone's security functions?	You can set the phone to require the entry of an unlock sequence (face recognition, Knock Code, pattern, PIN, or password) before the phone can be accessed or used.
Phone Function	Unlock Pattern	What should I do if I forget my Unlock Pattern?	After attempting the Unlock Pattern 5 times, you can tap the Forgot Pattern? option and use your Google Account information or Backup PIN to unlock your phone.
Phone Function	Unlock Pattern	How do I create the Unlock Pattern?	1. From the Home screen, touch and hold the Recent Apps Key (in the Touch Keys bar). 2. Tap Lock screen settings. 3. Tap Select screen lock. 4. Tap Pattern. The first time you do this, a short tutorial about creating an unlock pattern appears. 5. Set up by drawing your pattern once, tap Continue, draw it again, then tap Confirm.
Phone Function	Speed Dial	Is Speed Dialing supported?	Yes. You can set Speed Dials as well as save a contact directly on your Home screen. To set a Speed Dial: 1. Open the Contacts app. 2. Tap the Menu icon

CATEGORY	SUB-CATEGORY	QUESTION	ANSWER
Phone Function	Memory	Will I know when my memory is full?	Yes, you'll receive a notification.
Phone Function	Language Support	Is it possible to change the language?	The phone has multi-lingual capabilities. To change the language: 1. From the Home screen, touch and hold the Recent Apps Key ☐ (in the Touch Keys bar) > Settings. 2. Tap Language & input > Language. 3. Tap the desired language.
			NOTE: To set multiple languages for your on-screen keyboard, from the Language & input screen, tap the Settings icon (hext to LG Keyboard), tap Input language and keyboard layout, then checkmark the languages you want to be able to type.
Phone Function	Language Support	Which languages are supported when using Play Store?	The Play Store app supports English and Spanish. Third party apps may not support all languages.
Phone Function	VPN	How do I set up a VPN?	VPN access configuration is different according to each company. To configure VPN access from your phone, you must obtain the details from your company's network administrator.
Phone Function	Screen Timeout	My screen turns off after only 30 seconds. How can I change the amount of time for the backlight to turn off?	1. From the Home screen, touch and hold the Recent Apps Key (in the Touch Keys bar). 2. Tap Settings > Display > Screen timeout. 3. Tap the preferred screen backlight timeout time.

CATEGORY	SUB-CATEGORY	QUESTION	ANSWER
Phone Function	Wi-Fi and 4G	When Wi-Fi and 4G are both available, which service will my phone use?	When using data, your phone may default to the Wi-Fi connection (if Wi-Fi connectivity on your phone is set to On). However, there will be no notification when your phone switches from one to the other. To know which data connection is being used, use the 4G T or Wi-Fi icon in the Status Bar at the top of your screen.
Phone Function	Home Screen	Is it possible to remove an app from the Home screen?	Yes. Just touch and hold the icon until the Remove bar appears at the top of the screen. Then, without lifting your finger, drag the icon to the Remove bar, then lift your finger.
Phone Function	Application	I downloaded an app and it causes a lot of errors. How do I remove it?	1. From the Home screen, touch and hold the Recent Apps Key (in the Touch Keys bar). 2. Tap Settings > Application manager. 3. Tap the app > Uninstall.
Phone Function	Alarm	Will my alarm be audible or will it go off if the phone is turned off?	No, that functionality isn't supported.
Phone Function	Alarm	If my ringer volume is set to Off or Vibrate , will I hear my alarm?	Your alarm is programmed to be audible even in these scenarios.
Phone Spec	Battery Time	What is the maximum amount of time my phone's battery will last before I need to recharge it?	Talk time: Approx. 11 Hours Standby: Approx. 11 days
Phone Spec	Band	Which wireless bands are supported by the phone?	Your phone is able to operate on the 800MHz and 1900MHz bands.

CATEGORY	SUB-CATEGORY	QUESTION	ANSWER
Recovery	Factory Reset	How can I perform a factory reset if I can't access the phone's Settings menu?	How to perform a factory reset: Read ALL steps before attempting. 1. Turn the phone off. 2. Press and hold the following keys (on the side of the phone) at the same time: Volume Down Key + Power/Lock Key 3. Release both of the key when the System recovery screen is displayed. 4. Press either of the Volume Keys to highlight Factory data reset, then press the Power/Lock Key NOTE Select Continue Power up to simply restart your phone without performing a hard reset. 5. The Factory data reset screen is displayed. Press either of the Volume Keys to highlight Yes (or No to exit), then press the Power/Lock Key to to continue. 6. Your phone will perform a hard reset and erase all of your personal data. Attention: If a factory reset is performed, all installed apps and user data will be erased. Please remember to back up any important data before performing a factory reset.
	Power Reset	The phone is locked-up and doesn't function. How can I reset it?	In the case of a malfunction or lock up error, remove the battery and reinsert it and then turn on your phone.

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or reproductive harm.

Call (800) 243-0000 for more information.

Wash hands after handling.

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.

Any changes or modifications not expressly approved in this user guide could void your warranty for this equipment. Use only the supplied antenna.

Use of unauthorized antennas (or modifications to the antenna) could impair call quality, damage the phone, void your warranty and/or violate FCC regulations.

Don't use the phone with a damaged antenna. A damaged antenna could cause a minor skin burn. Contact your local dealer for a replacement antenna.

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.

Bodily Contact During Operation

This device was tested for typical use with the back of the phone kept 0.39 inches (1.0 cm) from the body. To comply with FCC RF exposure requirements, a minimum separation distance of 0.39 inches (1.0 cm) 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. Avoid the use of accessories that cannot maintain 0.39 inches (1.0 cm) distance between the user's body and the back of the phone and have not been tested for compliance with FCC RF exposure limits.

FCC Notice and Cautions

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

Any changes or modifications not expressly approved in this user guide could void your warranty for this equipment. Use only the supplied antenna. Use of unauthorized antennas (or modifications to the antenna) could impair call quality, damage the phone, void your warranty and/or violate FCC regulations.

Don't use the phone with a damaged antenna. A damaged antenna could cause a minor skin burn. Contact your local dealer for a replacement antenna

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 this equipment does cause harmful interference or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Consumer Information About Radio Frequency Emissions

Your wireless phone, which contains a radio transmitter and receiver, emits radio frequency energy during use. The following consumer information addresses commonly asked questions about the health effects of wireless phones.

Are wireless phones safe?

Scientific research on the subject of wireless phones and radio frequency ("RF") energy has been conducted worldwide for many years, and

continues. In the United States, the Food and Drug Administration ("FDA") and the Federal Communications Commission ("FCC") set policies and procedures for wireless phones. The FDA issued a website publication on health issues related to cell phone usage where it states, "The scientific community at large ... believes that the weight of scientific evidence does not show an association between exposure to radiofrequency (RF) from cell phones and adverse health outcomes. Still the scientific community does recommend conducting additional research to address gaps in knowledge. That research is being conducted around the world and FDA continues to monitor developments in this field. You can access the joint FDA/FCC website at http://www.fda.gov (under "c"in the subject index, select Cell Phones > Research). You can also contact the FDA toll-free at (888). 463-6332 or (888) INFO-FDA. In June 2000, the FDA entered into a cooperative research and development agreement through which additional scientific research is being conducted. The FCC issued its own website publication stating that "there is no scientific evidence that proves that wireless phone usage can lead to cancer or a variety of other problems, including headaches, dizziness or memory loss." This publication is available at http://www.fcc.gov/cqb/ cellular.html or through the FCC at (888) 225-5322 or (888) CALL-FCC.

What does "SAR" mean?

In 1996, the FCC, working with the FDA, the U.S. Environmental Protection Agency, and other agencies, established RF exposure safety guidelines for wireless phones in the United States. Before a wireless phone model is available for sale to the public, it must be tested by the manufacturer and certified to the FCC that it does not exceed limits established by the FCC. One of these limits is expressed as a Specific Absorption Rate, or "SAR." SAR is a measure of the rate of absorption of RF energy in the body. Tests for SAR are conducted with the phone transmitting at its highest power level in all tested frequency bands. Since 1996, the FCC has required that the SAR of handheld wireless phones not exceed 1.6 watts per kilogram, averaged over one gram of tissue.

Although the SAR is determined at the highest power level, the actual SAR value of a wireless phone while operating can be less than the reported

SAR value. This is because the SAR value may vary from call to call, depending on factors such as proximity to a cell site, the proximity of the phone to the body while in use, and the use of hands-free devices. For more information about SARs, see the FCC's OET Bulletins 56 and 65 at http://www.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins or visit the Cellular Telecommunications Industry Association website at http://www.ctia.org/consumer_info/index.cfm/AID/10371. You may also wish to contact the manufacturer of your phone.

Can I minimize my RF exposure?

If you're concerned about RF, there are several simple steps you can take to minimize your RF exposure. You can, of course, reduce your talk time. You can place more distance between your body and the source of the RF. as the exposure level drops off dramatically with distance. The FDA/FCC website states that "hands-free kits can be used with wireless phones for convenience and comfort. These systems reduce the absorption of RF energy in the head because the phone, which is the source of the RF emissions, will not be placed against the head. On the other hand, if the phone is mounted against the waist or other part of the body during use, then that part of the body will absorb more RF energy. Wireless phones marketed in the U.S. are required to meet safety requirements regardless of whether they are used against the head or against the body. Either configuration should result in compliance with the safety limit." Also, if you use your wireless phone while in a car, you can use a phone with an antenna on the outside of the vehicle. You should also read and follow your wireless phone manufacturer's instructions for the safe operation of your phone.

Do wireless phones pose any special risks to children?

The FDA/FCC website states that "the scientific evidence does not show a danger to users of wireless communication devices, including children." The FDA/FCC website further states that "some groups sponsored by other national governments have advised that children be discouraged from using wireless phones at all". For example, the Stewart Report from the United Kingdom ["UK"] made such a recommendation in December 2000. In this report a group of independent experts noted that no evidence exists

that using a cell phone causes brain tumors or other ill effects. [The UK's] recommendation to limit cell phone use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists. A copy of the UK's leaflet is available at http://www.dh.gov.uk (search "mobile"), or you can write to: NRPB, Chilton, Didcot, Oxon OX11 ORQ, United Kingdom. Copies of the UK's annual reports on mobile phones and RF are available online at www.iegmp.org.uk and http://www.hpa.org. uk/radiation/ (search "mobile"). Parents who wish to reduce their children's RF exposure may choose to restrict their children's wireless phone use.

Where can I get further information about RF emissions?

For further information, see the following additional resources (websites current as of April 2005):

U.S. Food and Drug Administration

FDA Consumer magazine November-December 2000

Telephone: (888) INFO-FDA

http://www.fda.gov (Under "c" in the subject index, select Cell Phones > Research)

U.S. Federal Communications Commission

445 12th Street, S.W. Washington, D.C. 20554

Telephone: (888) 225-5322

http://www.fcc.gov/oet/rfsafety

Independent Expert Group on Mobile Phones

http://www.iegmp.org.uk

Royal Society of Canada Expert Panels on Potential Health Risks of Radio Frequency Fields from Wireless Telecommunication Devices

283 Sparks Street Ottawa, Ontario K1R 7X9 Canada

Telephone: (613) 991-6990

http://www.rsc.ca/index.php?page=Expert_Panels_RF&Lang_id=120

World Health Organization

Avenue Appia 20 1211 Geneva 27 Switzerland

Telephone: 011 41 22 791 21 11

http://www.who.int/mediacentre/factsheets/fs193/en/

International Commission on Non-Ionizing Radiation Protection

c/o Bundesamt fur Strahlenschutz Ingolstaedter Landstr. 1 85764

Oberschleissheim Germany

Telephone: 011 49 1888 333 2156

http://www.icnirp.de

American National Standards Institute

1819 L Street, N.W., 6th Floor Washington, D.C. 20036 Telephone: (202)

293-8020

http://www.ansi.org

National Council on Radiation Protection and Measurements

7910 Woodmont Avenue, Suite 800 Bethesda, MD 20814-3095

Telephone: (301) 657-2652 http://www.ncrponline.org

Engineering in Medicine and Biology Society, Committee on Man and Radiation (COMAR) of the Institute of Electrical and Electronics Engineers

http://ewh.ieee.org/soc/embs/comar/

Consumer Information on SAR

(Specific Absorption Rate)

This model phone meets the government's requirements for exposure to radio waves. Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to Radio Frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of

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

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 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're to a wireless base station antenna, the lower the power output.

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

The highest SAR value for this model phone when tested for use at the ear is 0.83 W/kg and when worn on the body, as described in this user guide, is 1.02 W/kg (body-worn measurements differ among phone models, depending upon available accessories and FCC requirements). While there may be differences between SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF emission guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/oet/ea/fccid/ after searching on FCC ID ZNFVS810PP. 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 over the cell phone, it's recommended you'd turn the BT (Bluetooth) or WLAN mode off for HAC.

FCC Hearing Aid Compatibility and Volume Control http://www.fcc.gov/cgb/consumerfacts/hac_wireless.html

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:

- 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're 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 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.

TIA Safety Information

The following is the complete TIA Safety Information for wireless handheld phones.

Exposure to Radio Frequency Signal

Your wireless handheld portable phone is a low power radio transmitter and receiver. When ON, it receives and 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)

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

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

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

Antenna Care

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

Phone Operation

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

Tips on Efficient Operation

For your phone to operate most efficiently:

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.

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 your service provider (or call the customer service line to discuss alternatives).

Other Medical Devices

If you use any other personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information

Health Care Facilities

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

Vehicles

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

Posted Facilities

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

Aircraft

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

Blasting Areas

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

Potentially Explosive Atmosphere

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

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

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

For Vehicles Equipped with an Air Bag

An air bag inflates with great force. DO NOT place objects, including either installed or portable wireless equipment, in the area over the air bag or in the air bag deployment area. If in-vehicle wireless equipment is improperly installed and the air bag inflates, serious injury could result.

Safety Information

Please read and observe the following information for safe and proper use of your phone and to prevent damage.

∧ Caution

Violation of the instructions may cause minor or serious damage to the product.

- 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 CTIA Certification Requirements for Battery System Compliance to IEEE1725. Use of an unqualified battery or charger may present a risk of fire, explosion, leakage, or other hazard.
- Do not short circuit a battery or allow metallic conductive objects to contact battery terminals.
- Replace the battery only with another battery that has been qualified with the system per this standard, IEEE-Std-1725. Use of an unqualified battery may present a risk of fire, explosion, leakage or other hazard. Only

authorized service providers shall replace battery (If the battery is non-user replaceable).

- Promptly dispose of used batteries in accordance with local regulations.
- Battery usage by children should be supervised.
- Avoid dropping the phone or battery. If the phone or battery 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.

Charger and Adapter Safety

- The charger and adapter are intended for indoor use only.
- Insert the battery pack charger vertically into the wall power socket.
- Only use the approved battery charger. Otherwise, you may cause serious damage to your phone.
- Use the correct adapter for your phone when using the battery pack charger abroad.

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 proper installation and removal of the battery.
- 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.
- Please use only an approved charging accessory to charge your LG phone. Improper handling of the charging port, as well as the use of an incompatible charger, may cause damage to your phone and void the warrantv.
- Charging temperature range is regulated between 32°F (0°C) and 113°F (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 a protection circuit to prevent danger. Do not use anywhere near a place that generates static electricity more than 100V which could damage the protection circuit. If the protection circuit were to be broken, the battery could potentially smoke, rupture or flame.
- When there is rust on the battery or if it gives off a bad or unusual odor the first time you use it, do not use the equipment and bring the battery to the shop where it was purchased.
- If your skin or clothing comes into contact with liquid from the battery, wash your skin or clothing off with water, as the liquid may cause skin inflammation. Remove the battery from the device and do not use it.
- Do not handle the phone with wet hands while charging. It may cause an electric shock or seriously damage your phone.
- Do not place or answer calls while charging the phone as it may shortcircuit the phone and/or cause electric shock or fire.
- The charger and adapter are intended for indoor use only.
- Insert the battery pack charger vertically into the wall power socket.

- Talking on your phone for an extended period of time may reduce call quality due to heat generated during use.
- Do not use harsh chemicals (such as alcohol, benzene, thinners, etc.) or detergents to clean your phone as this could cause a fire.
- Do not place or answer calls while charging the phone as it may shortcircuit the phone and/or cause electric shock or fire.
- 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) and may damage the battery and cause an explosion.
- Never use an unapproved battery since this could potentially damage the
 phone and/or battery and cause the battery to explode. Only use the
 batteries and chargers provided by LG. The warranty will not be applied to
 products provided by other suppliers. Only authorized personnel should
 service the phone and its accessories. Faulty installation or service may
 result in accidents and consequently invalidate the warranty.

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'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 and may cause an explosion. Always
 cover the receptacle when not in use.
- Don't short-circuit the battery. Metallic articles such as a coin, paperclip or pen in your pocket or bag or contact with sharp objects including animal bites 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 or animal's mouth may cause serious injury including a fire or explosion.
- 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, liquid, or expose to high humidity. If this happens, turn it off immediately and remove the battery. Immediately, 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. (Ringtones, 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 ringtone to vibration so you don't disturb others.
- Do not turn your phone on or off when putting it to your ear.

 Use accessories, such as earphones and headsets, with caution. Ensure that cables are tucked away safely and do not touch the antenna unnecessarily.

FDA Consumer Update



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

1. Do wireless phones pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless phones. There is no proof, however, that wireless phones are absolutely safe. Wireless phones emit low levels of Radio Frequency (RF) energy in the microwave range while being used. They also emit very low levels of RF when in standby mode. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low level RF that does not produce heating effects causes no known adverse health effects. Many studies of low level RF exposures have not found any biological effects. Some studies have suggested that some biological effects may occur, but such findings have not been confirmed by additional research. In some cases, other researchers have had difficulty in reproducing those studies, or in determining the reasons for inconsistent results.

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

Under the law, the FDA does not review the safety of radiation-emitting consumer products such as wireless phones before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless phones are shown to emit Radio Frequency (RF) energy 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 Radio Frequency (RF) energy 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 Radio Frequency (RF) energy exposures characteristic of wireless phones have yielded conflicting results that often cannot be repeated in other laboratories. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. However, many of the studies that showed increased tumor development used animals that had been genetically engineered or treated with cancer-causing chemicals so as to be pre-disposed to develop cancer in the absence of RF exposure. Other studies exposed the animals to RF for up to 22 hours per day. These conditions are not similar to the conditions under which people use wireless phones, so we do not know with certainty what the results of such studies mean for human health. Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, glioma, meningioma, or acoustic neuroma, tumors of the brain or salivary gland, leukemia, or other cancers. None of the studies demonstrated the existence of any harmful health effects from wireless phone RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of phone use in these studies was around three years.

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

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 ten 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 Radio Frequency (RF) energy.

The FDA has been a leading participant in the World Health Organization International Electro Magnetic 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 (RF) energy 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 phones 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 (RF) energy exposure from wireless phones and other wireless handsets with the participation and leadership of FDA scientists and engineers. The standard, "Recommended Practice for Determining the Spatial-Peak Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques", sets forth the first consistent test methodology for measuring the rate at which RF is deposited in the heads of wireless phone users. The test method uses a tissue-simulating model of the human 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 Radio Frequency energy from my wireless phone?

If there is a risk from these products — and at this point we do not know that there is — it is probably very small. But if you're concerned about avoiding even potential risks, you can take a few simple steps to minimize your exposure to Radio Frequency (RF) energy. 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 does not demonstrate that wireless phones are harmful. But if you're 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 Radio Frequency (RF) energy, 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 (RF) energy from wireless phones can interact with some electronic devices. For this reason, the FDA helped develop a detailed test method to measure Electro Magnetic 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/cellphones/)

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/)

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.

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:

 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.
- 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're speaking with know you're 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. Don't take notes or look up phone numbers while driving. If you're reading an address book or business card, or writing a "to-do" list while driving a car, you're not watching where you're going. It is common sense. Do not get caught in a dangerous situation because you're 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're 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're behind the wheel of a car. Make people you're talking with aware you're driving and if necessary, suspend conversations which have the potential to divert your attention from the road.
- Use your wireless phone to call for help. Your wireless phone is one of the greatest tools you can own to protect yourself and your family in dangerous situations – with your phone at your side, help is only three

- numbers away. Dial 911 or other local emergency number in the case of fire, traffic accident, road hazard, or medical emergency. Remember, it's 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.

Cautions

- ▶ The user interface of Google applications (Google Search, Google Maps, Navigation, etc.) can vary depending on its software version.
- ▶ Locations are inaccurate when GPS and Wi-Fi are not set.
- With the Android operating system, some available Play Store applications only operate correctly with phones that have a specific screen resolution.
 - Please be advised that some of the applications on the Play Store may not be available for your phone due to LCD resolution requirement that does not match your phone. In addition, please be aware that third party applications with programming defects may cause issues with your phone, including lock ups and resets.
- All of the contents, including content which you create or download, will be deleted after a factory reset.

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 option, either repair, replace or refund the purchase price of any unit that does not conform to this limited warranty. LG may choose at its option to use functionally equivalent re-conditioned, 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 express 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 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 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:

If you experience any problems with either the Bluetooth headset or the mobile handset, in each case as may be covered by this limited warranty, you need only return the affected device. For example, if a problem exists with the Bluetooth headset, please DO NOT return your mobile handset with the headset. Likewise, if a problem exists with the mobile handset, please DO NOT return the Bluetooth Headset with the handset.

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 http://us.lgservice.com. Correspondence may also be mailed to:

LG Electronics Service- Mobile Handsets, P.O. Box 240007, 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.

7.11 Warranty Laws

The following laws govern warranties that arise in retail sales of consumer goods:

- The California Song-Beverly Consumer Warranty Act [CC §§1790 et seq],
- The California Uniform Commercial Code, Division Two [Com C §§2101 et seq], and
- The federal Magnuson-Moss Warranty Federal Trade Commission Improvement Act [15 USC §§2301 et seq; 16 CFR Parts 701–703]. A typical Magnuson-Moss Act warranty is a written promise that the product is free of defects or a written promise to refund, repair, or replace defective goods. [See 15 USC §2301(6).] Remedies include damages for failing to honor a written warranty or service contract or for violating disclosure provisions. [See 15 USC §2310(d).] Except for some labeling and disclosure requirements, the federal Act does not preempt state law. [See 15 USC §2311.]

The Consumer Warranty Act does not affect the rights and obligations of parties under the state Uniform Commercial Code, except the provisions of the Act prevail over provisions of the Commercial Code when they conflict. [CC §1790.3.]

For purposes of small claims actions, this course will focus on rights and duties under the state laws.

Numbers

10 Driver Safety Tips 113

Α

Adding an event to your calendar 51

Adding a new contact 36

Adjusting the in-call volume 34

Alarm/Clock 50

Answering and rejecting a call 33

Automatic timeout 13

Avoid potential hearing loss 97

В

Bluetooth 29 Bookmarks 56

С

Calendar 50

Calling your contacts 32

Call settings 35

Camera 44 Cautions 116

Changing the screen timeout 13

Changing your message settings 40

Charging the phone 8

Chrome 55

Composing and sending email 42 Connecting to Virtual Private Networks 30

Consumer Information About Radio Frequency Emissions 89

Consumer Information on SAR 93

Contacts 36

Creating a group 37

Customizing the Home screen 17

D

Dialing a number 32 Downloads 54

Drivina 113

Fmail 41

Ε

Email Options menu 43
Entering special characters
25

F

Favorite contacts 36 FCC Hearing-Aid Compatibility (HAC) Regulations for Wireless Devices 95

FDA Consumer Update 106
From your Contacts list 32

Front View 4

G

Gallery 48

Google+ 53

н

Home screen 16

1

Installing the battery 7

L

Locking and unlocking the screen 11

М

Making a call 32

Making a second call 34

Managing an email account 41

Messaging 39

Messaging Options menu 41

N

Notifications 22

U

On-screen keyboard 24 Opening a page 55 Optimizing Battery Life 9

г

Performing a Hard Reset (Factory Reset) 12 Phone overview 4

п

Rear View 6

Receiving emails 43

Record Videos 45

S

Safety Information 101

Searching for a contact 36

Searching the web by voice 56

Sending a message 40

Settings 58

Setting up your Google

Account 26

Setting your alarm 50

Side Views 5

Switching between accounts 42

Syncing with other devices 56

Т

Taking Pictures 44

The memory card 10
TIA Safety Information 98

Top 6

Touchscreen tips 14

U

USB Connection 31

Using a Screen Lock 11

٧

Viewing Event Details 53

Viewing webpages 55

Viewing Your Calendar and Events 50

Viewing your call logs 34

View mode 40

Voice Command 54

Voice Search 54

W

Wi-Fi 28

WIRELESS NETWORKS 58

Working with account

folders 42

Working with Photos 49

Υ

Your Google Account 26