

T-Mobile

Welcome

Start Guide

T-Mobile

LG V60 ThinQ™



TABLE OF CONTENTS

Introduction	2
Your Device	4
Setup.....	6
Installing the SIM Card.....	8
Notes on Water Resistant Properties.....	10
Making a Call	13
Adding New Contacts	13
Sending a Message.....	14
Home Screen Mode.....	14
Wi-Fi Calling.....	15
T-Mobile Applications.....	16
Accessories	17
Approved Firmware Versions.....	18
Safety Tips.....	18
Information About Safeguarding Handsets..	19
Emergency Dialing	20
Caring For Your Device.....	21
Additional Information	21
For Your Safety	23
Anti-Theft Guide	47
Open Source Software Notice Information..	48
Laser Safety Statement.....	49
Regulatory Information (FCC ID number, etc.).....	50
Trademarks	50

Introduction

Support

This guide provides you with the information you need to get started.

For the detailed User Guide, please access **Quick Help** on the device.

- Tap  > **Quick Help** .

For more information and additional support, please visit **www.t-mobile.com/support** where you can:

- Review your device's User Guide and troubleshooting FAQs.
- View the latest troubleshooting solutions in the Support Forums or ask a question of your own.

Account Information

Be sure to access your account at **My.T-Mobile.com** to check your minutes, pay your bill, upgrade your device, change your rate plan, and contact customer service.

You can also access this account information from your device with the T-Mobile app.

- Tap  > **T-Mobile** .



- Some content and illustrations may differ from your device depending on the region, service provider, software version, or OS version, and are subject to change without prior notice.

Service

If you are a new T-Mobile® customer and your service has not yet been activated, call Customer Care at 1-800-937-8997 and a T-Mobile Activations representative will assist you.

You will need the following information when activating service:

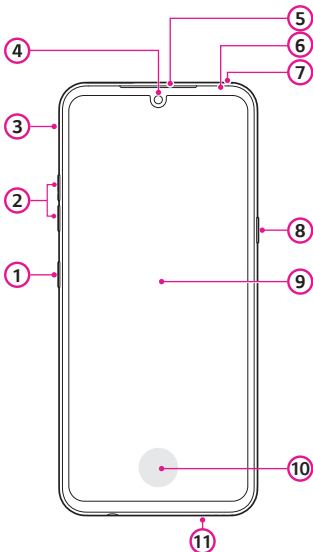
- Service Agreement and agent code on your Agreement.
- Your name, home address, home phone number, and billing address.
- Your Social Security number, current driver's license number, and date of birth for credit check purposes.
- Your choice of T-Mobile plan and services (see <http://www.t-mobile.com/> for latest plan information).
- Nano SIM serial number and IMEI number (located on the box barcode label).

Service or use is your agreement to T-Mobile's Terms and Conditions. **T-Mobile requires Arbitration of Disputes unless, for new customers, you opt-out within 30-days, or for existing customers, you previously opted-out.**

Failure to activate service within 30-days from purchase will also be considered acceptance.

For details, see T-Mobile's Terms and Conditions at www.T-Mobile.com/terms-conditions.

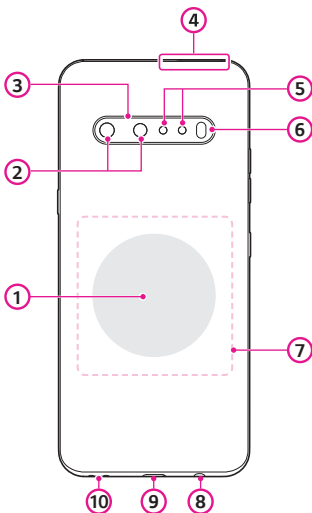
Your Device



- | | |
|----------------------------------|----------------------|
| ① Google Assistant key | ⑦ Microphone |
| ② Volume keys (+/-) | ⑧ Power/Lock key |
| ③ Microphone | ⑨ Touch screen |
| ④ Front camera lens | ⑩ Fingerprint sensor |
| ⑤ Earpiece | ⑪ Microphone |
| ⑥ Proximity/Ambient light sensor | |



Make sure not to cover the proximity/ambient light sensor with a screen protector or accessories.



- | | |
|------------------------|--------------------------|
| ① Wireless charging | ⑥ Flash |
| ② Rear camera lenses | ⑦ NFC/ LG Pay area |
| ③ Microphone | ⑧ Stereo headset jack |
| ④ SIM/Memory card tray | ⑨ Charger/USB cable port |
| ⑤ ToF* sensors | ⑩ Speaker |

* ToF: Time-of-Flight



Do NOT attempt to remove the back cover.

This device has a non-removable battery. Do not attempt to remove the back cover. Doing so may severely damage the battery and device, which could cause overheating, fire, and injury.

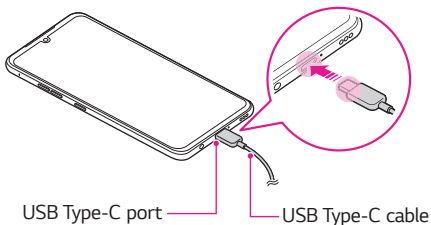
Setup

Turning the power on

When the power is turned off, press and hold the Power/Lock key.

Charging the device

Charge the device with the USB Type-C cable provided.



- The Charger/USB port is at the bottom of the device.
- To maximize battery life, make sure that the battery is fully charged before you use it the first time.
- A charging adapter that supports fast charging is included with the product.
- The fast charging feature may not work if a fast charging adapter other than the genuine adapter provided with the product is used.



- Do not charge while the device or charging cable is wet or contains moisture. This can cause fire, electric shock, injury or damage to the device.
- Make sure to use the USB cable provided; do not use third party USB cables or chargers with your device. The LG limited warranty does not cover damage caused by the use of third party accessories.
- Using the device when it is charging may cause electric shock. To use the device, stop charging it.

Failure to follow the instructions in this guide and improper use may damage the device.



- Remove the charger from the power socket after the device is fully charged. This prevents unnecessary power consumption.
- Another way to charge the battery is by connecting a USB cable between the device and a desktop or laptop computer. This may take a longer time than plugging the adapter to a wall outlet.
- Do not charge the battery by using a USB hub that is unable to maintain the rated voltage. Charging may fail or unintentionally stop.



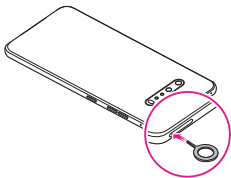
Restarting the device

When the device is not working properly or does not respond, press and hold the **Volume Down** and **Power/Lock** keys until the device restarts.

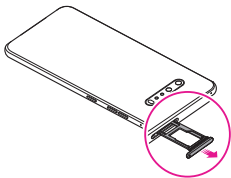
Installing the SIM Card

Insert the SIM (Subscriber Identity Module) card provided to start using the device.

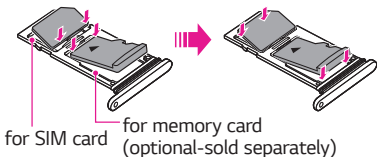
- 1 Insert the ejection pin into the hole on the card tray.



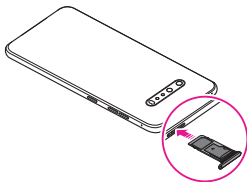
- 2 Pull out the card tray.



- 3 Put the SIM card (and a memory card) on the card tray with the gold-colored contacts facing downwards.



4 Insert the card tray back into the slot.



- In order for the water-resistant and dust-resistant features to work effectively, the card tray must be inserted correctly.
- This device supports only Nano SIM cards.



- For problem-free performance, it is recommended to use the device with the correct type of SIM card. Always use a factory-made SIM card supplied by the service provider.
- Do not lose your SIM card. LG and T-Mobile are not responsible for damage and other issues caused by loss or transfer of a SIM card.
- Be careful not to damage the SIM card when you insert or remove it.

Notes on Water Resistant Properties

This product is water and dust resistant in compliance with the Ingress Protection rating IP68.

Your product has undergone testing in a controlled environment and is proven to be water and dust resistant in certain circumstances (meets the requirements of classification IP68 as described by the international standard IEC 60529 - Degrees of Protection provided by Enclosures [IP Code]; test conditions: 15-35°C/59-95 °F, 86-106kPa, 1.5 meters, for 30 minutes). Do not expose the device in conditions that are different from the test conditions. Results may vary in actual use.

WARNING

Despite a rating of IP68, your device is not impervious to conditions not tested in LG's controlled environment. Please note that any damages that occur due to such causes changes the color of the LDI (Liquid Damage Indicator). If the color of LDI located inside the product changes, the product may be considered ineligible for any free-of-charge repair services provided under the product's limited warranty.

Avoid excessive dust or moisture as it may cause damages to the LDI or other internally sealed components and therefore may render

your product ineligible for repair services provided under the product's limited warranty. Do not use the product in the following environments:



Do not immerse the product in any liquid chemicals (soap, etc.).



Do not immerse the product in salt water, including seawater.



Do not immerse the product in a hot spring.



Do not swim with this product.



Do not place the product directly on sand (such as at a beach) or mud.



Do not immerse your product in water deeper than approximately 1.5 meters.

Do not immerse your product in water for longer than 30 minutes.

If your product becomes wet, be sure to wipe the microphone, speaker, and stereo jack with a dry cloth before use.

- Should your product or your hands become wet, dry them before handling the product.
- Do not use the product in places where it may be sprayed with high pressure water (e.g. near a faucet or shower head) or submerge it in water for extended periods of time, as the product is not designed to withstand high water pressure.
- This product is not resistant to shock. Do not drop the product or subject it to shock. Doing so might damage or deform the main unit, causing water leakage.

- The product's water and dust resistant features may be damaged by dropping or receiving an impact.
- If the product gets wet, use a clean, soft cloth to dry it thoroughly.
- The touch screen and other features may not work properly if the device is used while wet.
- Your product is water resistant only when the SIM/Memory card tray is properly inserted into the product.
- Do not open or close the SIM/Memory card tray while the product is wet or immersed in water. Exposing the open tray to water or moisture may damage the product.
- The SIM/Memory card tray contains rubber [packing] to help prevent dust, water, or moisture from entering the product. Do not damage the rubber [packing] as this may allow dust, water, or moisture to enter your product and cause damage.



- Failure to follow the provided instructions may invalidate your device's limited warranty.

Making a Call

- 1 Tap  >  > **Dial**.
- 2 Make a call by using a method of your choice:
 - Enter a phone number and tap .
 - Touch and hold a speed dial number.
 - Search for a contact by tapping the initial letter of a contact name in the contact list, and then tap .



- To enter “+” when making an international call, touch and hold number 0.

Adding New Contacts

- 1 Tap  > **Essentials** > **Contacts**.
- 2 On the contact list screen, tap .
- 3 Select the location to save the contact between **Phone** and **SIM card**.
- 4 Enter the contact's details and tap **Save**.

Sending a Message

You can create and send messages to your contacts using the Messaging app.

- 1 Tap  > .
- 2 Tap .
- 3 Specify a recipient and create a message.
 - To attach files, tap .
 - To access optional menu items, tap .
- 4 Tap  to send the message.

Home Screen Mode

You can select one of 3 modes.

- 1 Tap  > **Settings** > **Display** > **Home screen** > **Select Home**.
- 2 Choose the mode you want to use.
 -  **Home** (default): Provides the standard layout showing all apps.
 -  **Home & app drawer**: Provides a separate layout for the Home screen and apps list.
 -  **EasyHome**: Provides a simple layout with a large font size.

Wi-Fi Calling

Wi-Fi Calling can improve your coverage by allowing you to make phone calls over a Wi-Fi network (when a Wi-Fi network is available). To use Wi-Fi Calling, please use the SIM card shipped with your device. Using a different SIM card may not work with the Wi-Fi Calling feature.

Important!

You must also have a 9-1-1 emergency address registered with your account. Log into your account at <http://www.t-mobile.com/>. Go to your profile, click Line Settings and select to edit your E911 Address. Check periodically to ensure your address is always up to date.



- Corporate accounts may require administrator assistance for 9-1-1 Address registration.

To enable/disable Wi-Fi Calling

- 1 Tap  > **Settings** > **Network & internet** > **Call**.
- 2 Tap the **Wi-Fi Calling** switch  to activate/deactivate the feature.

To change the connection preference for Wi-Fi Calling

- 1 Tap  > **Settings** > **Network & internet** > **Call**.
- 2 Tap **Wi-Fi Calling**.
- 3 Tap the desired Wi-Fi Calling preference.

T-Mobile Applications

Visual Voicemail

Visual Voicemail allows users to view, listen and save all voicemails in any order directly from the device, without the need of calling the voicemail system.

- 1 Tap  > **T-Mobile** > .
- 2 The inbox with all voicemail messages will be displayed.

Important!

If this is the first time accessing Visual Voicemail, you may be prompted to enter a new PIN code and tap **Next** to activate Visual Voicemail.

- 3 Tap on a voicemail to listen to it.

T-Mobile Name ID

T-Mobile Name ID identifies callers, displaying Name, City and State even if the caller is not in your contacts list. It is an optional add-on feature that can be purchased directly from your device for an additional monthly charge. A one time 30 day trial is included with the device.

- 1 Tap  > **T-Mobile** > .
- 2 Choose an on-screen option.

Accessories

Whether you want a fashionable carrying case, a **Bluetooth®** headset, or you just want to browse for fun extras, T-Mobile is the place to shop for all your device accessories. Here are a few examples...



LG TONE Free



LG Ultra®



T-Mobile protective case

To purchase accessories for your device, visit [T-Mobile.com](https://www.t-mobile.com), call 1.800.204.2449, or visit your nearest T-Mobile store.

Accessory selection subject to change and may vary by location.

The LG limited warranty does not cover damage caused by the use of third party accessories.

Approved Firmware Versions

This device will only operate with firmware versions that have been approved for use by T-Mobile and the device manufacturer. If unauthorized firmware is placed on the device it may not function.

Safety Tips

Consider device compatibility

If you have a pacemaker or hearing aid, check with your doctor to make sure it is safe for you to use a cell phone. In some cases, cellular radio frequencies can disrupt the performance of other electronic equipment. If you have questions about the interaction between your device and any other piece of electronic equipment, ask the equipment manufacturer.

Drive safely

When you are driving, T-Mobile encourages you to use your device in a safe and sensible manner. Here are a few tips:

- Assess road conditions before answering your device. Your safety is more important than any call.
- Prepare your hands-free headset, if you have one, or turn on your speakerphone, before you start moving.

- Keep your device close. If it rings and you discover it's in the back seat, do NOT crawl over the seat to answer it while driving.
- Pre-program frequently used numbers into your device for easy, one-touch dialing.
- Remember that laws prohibiting or restricting the use of a cell phone while driving may apply in your area.

Information About Safeguarding Handsets

T-Mobile encourages customers to take appropriate measures to secure their handsets and invites them to take advantage of the features available on this handset to help secure it from theft and/or other unauthorized access and use. This handset has a locking function (e.g., user-defined codes or patterns) that can serve as a first line of defense against unauthorized use or access to stored information. Preloaded security applications that allow customers to track or locate misplaced devices can be found on several T-Mobile devices. Lost or stolen devices should be immediately reported to T-Mobile so that proper measures can be taken to protect accounts.

For additional information, visit: www.t-mobile.com/devicesecurity and <https://www.t-mobile.com/responsibility/privacy/privacy-choice/protecting-your-privacy>.

Emergency Dialing

Although all devices are equipped with 9-1-1 emergency calling, this device may or may not permit its location to be approximated during a 9-1-1 call.*

* Availability of this feature depends on upgrades to the (a) wireless network and (b) 9-1-1 calling system that are required to be installed by the local 9-1-1 response agency or public safety answering point (PSAP); these upgrades may not be available everywhere within our wireless coverage area or your roaming area. This approximation of the device's location and the transmittal of location information are subject to emergency situations, transmission limits, network problems/limitations, interconnecting carrier problems, your device, buildings/tunnels, signal strength and atmospheric/topographical conditions, and may be curtailed, interrupted, dropped or refused. The device's approximate location is transmitted to the local 9-1-1 response agency or PSAP while the call is in progress; this approximation is intended solely to aid the PSAP in dispatching emergency assistance or to limit the search area for emergency services personnel. You should not rely solely on a device for essential communications (such as a medical or other emergency). Please see T-Mobile's Terms and Conditions and Privacy Policy for additional service restrictions and details.

Caring For Your Device

Your device is a complex electronic device; think of it as a mini-computer. Here are some tips to help you extend the life of your new device:

Protect your device's touch screen. Your device's touch screen is delicate. Help guard against scratches by using a screen protector or by keeping it in a protective case.

Use the original manufacturer's batteries and accessories. Non-approved batteries and accessories can harm you and damage your device.

Do not use damaged accessories. Do not attempt to charge your device if the charger has received a sharp blow, been dropped, or is otherwise damaged; doing so may damage your device. If your charger or any other accessory is damaged, replace it or take it to a qualified service dealer.

Additional Information

Use of some content or features may require qualifying service, or access to a Wi-Fi connection.

5G: Devices operating on T-Mobile's nationwide 5G network currently use multi-band dual connectivity; and receive service via both T-Mobile's 4G LTE network and its 5G network to support their connectivity. Dual connectivity could result in instances where the phone's network indicator shows "5G" in a 5G coverage area, but the device is connected to the 4G LTE.

Wi-Fi: Device will not transition data sessions between Wi-Fi and the cellular network.

Devices using wireless connections may be vulnerable to unauthorized attempts to access data and software stored on the device. Plan data allotment applies to use by connected devices sharing Wi-Fi. Use of connected devices subject to T-Mobile Terms and Conditions.

Wi-Fi Calling: Wi-Fi connection required for Wi-Fi Calling. Device will transition most calls between the Wi-Fi and cellular network. May decrement plan minutes. See your selected service for details.

Device, screen and accessory images simulated. **Coverage** not available in some areas. See **Terms and Conditions (including arbitration provision)** at T-Mobile.com, for rate plan information, charges for features and services, and restrictions and details, **including important limitations on availability and reliability of 9-1-1 emergency service when using Wi-Fi calling.**

For Your Safety

Important Information

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

HAC Statement

This device 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 device that have not been tested yet for use with hearing aids. It is important to try the different features of this device 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 device for information on hearing aid compatibility. If you have questions about return or exchange policies, consult your service provider or device retailer.

This mobile phone has a Hearing Aid Mode that, when activated, may reduce interference with some hearing aid models.

FCC RF Exposure Information

WARNING! Read this information before operating the device.

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 device complies with the FCC guidelines and these international standards.

Body-worn Operation

This device was tested for typical use with the back of the device 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 device. Any 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 device and have not been tested for compliance with FCC RF exposure limits.

Consumer Information about Radio Frequency Emissions

Your wireless device, 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 devices.

Are wireless devices safe?

Scientific research on the subject of wireless devices 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 devices. 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 device 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/cgb/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 devices in the United States. Before a wireless device 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 device transmitting at its highest power level in all tested frequency bands. Since 1996, the FCC has required that the SAR of handheld wireless devices 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 device 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 device to the body while in use, and the use of hands-free devices. For more information about SARs, visit the FCC website at <https://www.fcc.gov/consumers/guides/specific-absorption-rate-sar-cell-phones-what-it-means-you>. You may also wish to contact the manufacturer of your device.

Can I minimize my RF exposure?

If you are 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 devices for convenience and comfort. These systems reduce the absorption of RF energy in the head because the device, which is the source of the RF emissions, will not be placed against the head. On the other hand, if the device 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 devices 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 device while in a car, you can use a device with an antenna on the outside of the vehicle. You should also read and follow your wireless device manufacturer’s instructions for the safe operation of your device.

Do wireless devices 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 devices 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 0RQ, United Kingdom. Copies of the UK’s annual reports on mobile phones and RF are available online at <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 device use.

Where can I get further information about RF emissions?

U.S. Food and Drug Administration

<http://www.fda.gov>

U.S. Federal Communications Commission

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

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

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

World Health Organization

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

International Commission on Non-Ionizing Radiation Protection

<https://www.icnirp.org>

American National Standards Institute

<http://www.ansi.org>

National Council on Radiation Protection and Measurements

<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/>

(websites current as of November 2018)

Consumer Information on SAR

(Specific Absorption Rate)

This model device meets the government's requirements for exposure to radio waves. Your wireless device 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 device 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 device while operating can be well below the maximum value. Because the device is designed to operate at multiple power levels to use only the power required to reach the network, in general, the closer you are to a wireless base station antenna, the lower the power output.

Before a device 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.

While there may be differences between SAR levels of various devices and at various positions, they all meet the government requirement for safe exposure.

The FCC has granted an Equipment Authorization for this model device with all reported SAR levels evaluated as in compliance with the FCC RF emission guidelines. SAR information on this model device is on file with the FCC and can be found under the Display Grant section of <http://www.fcc.gov/oet/fccid> after searching on FCC ID ZNFV600TM.

Additionally, the highest SAR values can also be found on the LG website: <https://www.lg.com/global/support/sar/sar>.

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 devices under the Hearing Aid Compatibility Act of 1988 (HAC Act) to require digital wireless devices 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 devices 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 devices also vary in the amount of interference they generate.

The wireless telephone industry has developed a rating system for wireless devices, to assist hearing device users to find devices that may be compatible with their hearing devices. Not all devices have been rated. Devices that are rated have the

rating on their box or a label located on the box.

The ratings are not guaranteed. 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 device successfully. Trying out the device with your hearing device is the best way to evaluate it for your personal needs.

M-Ratings: Devices rated M3 or M4 meet FCC requirements and are likely to generate less interference to hearing devices than devices that are not labeled. M4 is the better/higher of the two ratings.

T-Ratings: Devices rated T3 or T4 meet FCC requirements and are likely to generate less interference to hearing devices than devices 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 device 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 device 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 device. "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.

To ensure that the Hearing Aid Compatibility rating for your device is maintained, secondary transmitters such as

Bluetooth® and WLAN components must be disabled during a call.

For information about hearing aids and digital wireless devices: Wireless Devices and Hearing Aid Accessibility

<http://www.accesswireless.org/>

Gallaudet University, RERC

<http://tap.gallaudet.edu/Voice/>

FCC Hearing Aid Compatibility and Volume Control

<https://www.fcc.gov/general/hearing-aid-compatibility-and-volume-control>

The Hearing Aid Compatibility FCC Order

http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-03-168A1.pdf

Hearing Loss Association of America [HLAA]

<http://hearingloss.org/content/telephones-and-mobile-devices>

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 common sense 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 are listening to.

- Do not turn the volume up to block out noisy surroundings. If you choose to listen to your portable device in a noisy environment, use noise-cancelling headphones to block out background environmental noise.
- Limit the amount of time you listen. As the volume increases, less time is required before your hearing could be affected.
- Avoid using headphones after exposure to extremely loud noises, such as rock concerts, that might cause temporary hearing loss. Temporary hearing loss might cause unsafe volumes to sound normal.
- Do not listen at any volume that causes you discomfort. If you experience ringing in your ears, hear muffled speech or experience any temporary hearing difficulty after listening to your portable audio device, discontinue use and consult your doctor.

TIA Safety Information

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

Exposure to Radio Frequency Signal

Your wireless handheld portable device 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 devices. 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 device complies with the FCC guidelines (and those standards).

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 device.

Pacemakers

The Health Industry Manufacturers Association recommends that a minimum separation of six (6) inches be maintained between a handheld wireless device 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 device more than six (6) inches from their pacemaker when the device is turned ON;
- Should not carry the device in a breast pocket;
- Should use the ear opposite the pacemaker to minimize the potential for interference;
- Should turn the device OFF immediately if there is any reason to suspect that interference is taking place.

Hearing Aids

Some digital wireless devices 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 device 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 device OFF in any facility where posted notices so require.

Aircraft

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

Blasting Areas

To avoid interfering with blasting operations, turn your device 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 device 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.

Part 15.19 Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (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 for compliance 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 to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Safety Information

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

CAUTION

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

- Do not disassemble, open, crush, bend or deform, puncture or shred the device.
- Do not modify or re-manufacture the device. Do not insert foreign objects into the device or battery, or expose to fire, explosion or other hazard.
- Only use the device with an LG charging system that has been qualified with the device, per CTIA Certification Requirements for Battery System Compliance to IEEE1725. Use of an unqualified charger may present a risk of fire, explosion, leakage, or other hazard.

- Avoid dropping the device. If the device is dropped, especially on a hard surface, and you suspect damage, take it to a service center for inspection.
- The entire device should be recycled in compliance with Lithium-Ion battery recycling standards because of the internal battery. To dispose of properly, call (800) 822-8837 or visit www.call2recycle.org.
- Always unplug the charger from the wall socket after the device is fully charged to save unnecessary power consumption.
- Use and store your device in temperatures between 0 °C/32 °F and 35 °C/95 °F, if possible. Exposing your device to extremely low or high temperatures may result in damage, malfunction, or even explosion.
- A mobile device requires proper air circulation in order to dissipate heat. Direct skin contact and inadequate circulation of air flow to the device may cause the device to overheat. The device must be at least 1.0 cm from between the user's body.
- Prevent dust of any other foreign substances from getting into the Charger/USB cable port. It may cause heat or fire.

Charger and Adapter Safety

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

Wireless Charging

- This product supports wireless charging. Use a WPC (Qi) certified wireless charger (sold separately) to charge the product.
- Some coiled wireless chargers may not support wireless charging. Wireless chargers that support EPP (Extended Power Profile) allow high-speed wireless charging.

Battery Information and Care

- Always unplug the charger from the wall socket after the device is fully charged to save unnecessary power consumption of the charger.
- 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 device, and wipe the power plug pin with a clean dry cloth 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 device in a pocket or bag without covering the receptacle of the device (power plug pin), metallic articles (such as a coin, paperclip or pen) may short-circuit the device. Always cover the receptacle when not in use.
- Recharge the device after long periods of non-use to maximize battery life. Battery life will vary due to usage pattern and environmental conditions.
- Improper handling of the charging port, as well as the use of an incompatible charger, may cause damage or defect to your device.
- Do not use or leave the device in direct sunlight or in a car heated by sunshine. The device may generate excessive heat, smoke, or flame. It also might cause deterioration of device's characteristics or cycle life.
- If the skin or clothes are smeared with liquid from the battery, wash with fresh water. It may cause skin inflammation.
- Please take your device to an authorized service center immediately if this occurs.
- Do not handle the device with wet hands while it is being charged. It may cause an electric shock or seriously damage your device.
- Do not charge while the device or charging cable is wet or contains moisture. This can cause fire, electric shock, injury or damage to the device.
- Do not place or answer calls while charging the device as it may short-circuit the device and/or cause electric shock or fire.

WARNING! Notice for Battery Replacement

- Do not remove the back cover.
- Your device has an internal battery. For your safety, do not remove the battery incorporated in the product. If you need to replace the battery, take it to the nearest authorized LG Electronics service point or dealer for assistance.
- The Li-Ion Battery is a hazardous component which can cause injury.
- Battery replacement by a non-qualified professional can cause damage to your device.

Explosion, Shock, and Fire Hazards

- Do not put your device 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 device, 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 device in a pocket or bag without covering the receptacle of the device (power plug pin), metallic articles (such as a coin, paperclip or pen) may short-circuit the device and may cause an explosion. Always cover the receptacle when not in use.
- Do not charge while the device or charging cable is wet or contains moisture. This can cause fire, electric shock, injury or damage to the device.

General Notice

- Do not place items containing magnetic components such as a credit card, phone card, bank book, or subway ticket near your device. The magnetism of the device may damage the data stored in the magnetic strip.
- Talking on your device for a long period of time may reduce call quality due to heat generated during use.
- When the device is not used for a long period time, store it in a safe place with the power cord unplugged.
- Using the device in proximity to receiving equipment (i.e., TV or radio) may cause interference to the device.

- Conform device use to IP68 capabilities. Do not immerse in water deeper than approximately 1.5 meters. Do not immerse your product in water for longer than 30 minutes, or liquids other than water. Immediately, take it to an LG Authorized Service Center.
- Do not paint your device.
- The data saved in your device might be deleted due to careless use, repair of the device, 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 device in public places, set the ringtone to vibration so you don't disturb others.
- Do not turn your device 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.

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 devices pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless devices. There is no proof, however, that wireless devices are absolutely safe. Wireless devices 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 devices?

Under the law, the FDA does not review the safety of radiation-emitting consumer products such as wireless devices

before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless devices 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 devices to notify users of the health hazard and to repair, replace, or recall the devices so that the hazard no longer exists.

Although the existing scientific data do not justify FDA regulatory actions, the FDA has urged the wireless device 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 devices;
- Design wireless devices 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 devices with the best possible information on possible effects of wireless device 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 devices with the Federal Communications Commission (FCC). All devices 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 devices.

The FCC also regulates the base stations that the wireless device networks rely upon. While these base stations operate at higher power than do the wireless devices themselves, the RF exposures that people get from these base stations are typically thousands of times lower than those they can get from wireless devices. Base stations are thus not the subject of the safety questions discussed in this document.

3. What kinds of devices are the subject of this update?

The term “wireless device” refers here to handheld wireless devices with built-in antennas, often called “cell,” “mobile,” or “PCS” devices. These types of wireless devices can expose the user to measurable Radio Frequency (RF) energy because of the short distance between the device 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 device 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 devices,” 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 devices 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 devices, 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 devices 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 device RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of device use in these studies was around three years.

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

A combination of laboratory studies and epidemiological studies of people actually using wireless devices 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 devices. Many factors affect this measurement, such as the angle at which the device is held, or which model of device is used.

6. What is the FDA doing to find out more about the possible health effects of wireless device 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 device 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 device 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 device?

All devices 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 devices 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 device and is set well below levels known to have effects. Manufacturers of wireless devices must report the RF exposure level for each model of device to the FCC. The FCC website (<http://www.fcc.gov/oet/rfsafety>) gives directions for locating the FCC identification number on your device so you can find your device's RF exposure level in the online listing.

8. What has the FDA done to measure the Radio Frequency energy coming from wireless devices?

The Institute of Electrical and Electronic Engineers (IEEE) is developing a technical standard for measuring the Radio Frequency (RF) energy exposure from wireless devices 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 device 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 device. 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 device complies with safety guidelines.

9. What steps can I take to reduce my exposure to Radio Frequency energy from my wireless device?

If there is a risk from these products — and at this point we do not know that there is — it is probably very small. But if you are concerned about avoiding even potential risks, you can take a few simple steps to minimize your exposure to Radio Frequency (RF) energy. Since time is a key factor in how much exposure a person receives, reducing the amount of time spent using a wireless device will reduce RF exposure. If you must conduct extended conversations by wireless device 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 device away from your body or use a wireless device connected to a remote antenna. Again, the scientific data does not demonstrate that wireless devices are harmful. But if you are concerned about the RF exposure from these products, you can use measures like those described above to reduce your RF exposure from wireless device use.

10. What about children using wireless devices?

The scientific evidence does not show a danger to users of wireless devices, 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 devices. Reducing the time of wireless device 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 devices 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 device causes brain tumors or other ill effects. Their recommendation to limit wireless device use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists.

11. What about wireless device interference with medical equipment?

Radio Frequency (RF) energy from wireless devices 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 device EMI.

The FDA has tested hearing aids for interference from handheld wireless devices 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 devices so that no interference occurs when a person uses a "compatible" device 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 devices 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 devices
<http://www.fda.gov/Radiation-EmittingProducts/RadiationEmittingProductsandProcedures/HomeBusinessandEntertainment/CellPhones/default.htm>
- Federal Communications Commission (FCC) RF Safety Program
<http://www.fcc.gov/oet/rfsafety>
- International Commission on Non-Ionizing Radiation Protection
<http://www.icnirp.org>
- 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 devices in the areas where you drive and always obey them. Also, if using your device 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 device gives you the powerful ability to communicate by voice almost anywhere, anytime. An important responsibility accompanies the benefits of wireless devices, one that every user must uphold.

When operating a car, driving is your first responsibility. When using your wireless device behind the wheel of a car, practice good common sense and remember the following tips:

- 1 Get to know your wireless device and its features, such as speed dial and redial. Carefully read your instruction manual and learn to take advantage of valuable features most devices offer, including automatic redial and memory. Also, work to memorize the device 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 device accessories are readily available today. Whether you choose an installed mounted device for your wireless device or a speaker phone accessory, take advantage of these devices if available to you.
- 3 Make sure you place your wireless device within easy reach and where you can reach it without removing your eyes from the road. If you get an incoming call at an inconvenient time, if possible, let your voicemail answer it for you.
- 4 Suspend conversations during hazardous driving conditions or situations. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow, and ice can be hazardous, but so is heavy traffic. As a driver, your first responsibility is to pay attention to the road.

- 5 Don't take notes or look up phone numbers while driving. If you are reading an address book or business card, or writing a "to-do" list while driving a car, you are not watching where you are going. It is common sense. Do not get caught in a dangerous situation because you are reading or writing and not paying attention to the road or nearby vehicles.
- 6 Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan your calls before you begin your trip or attempt to coincide your calls with times you may be stopped at a stop sign, red light, or otherwise stationary. But if you need to dial while driving, follow this simple tip -- dial only a few numbers, check the road and your mirrors, then continue.
- 7 Do not engage in stressful or emotional conversations that may be distracting. Stressful or emotional conversations and driving do not mix; they are distracting and even dangerous when you are behind the wheel of a car. Make people you are talking with aware you are driving and if necessary, suspend conversations which have the potential to divert your attention from the road.
- 8 Use your wireless device to call for help. Your wireless device is one of the greatest tools you can own to protect yourself and your family in dangerous situations -- with your device at your side, help is only three numbers away. Dial 911 or another local emergency number in the case of fire, traffic accident, road hazard, or medical emergency. Remember, it's a free call on your wireless device!
- 9 Use your wireless device to help others in emergencies. Your wireless device 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 another 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 device 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 device while operating a vehicle.

Anti-Theft Guide

You can set up your device to prevent other people from using it if it's been reset to factory settings without your permission. For example, if your device is lost, stolen, or wiped, only someone with your Google account or screen lock information can use the device.

All you need to make sure your device is protected is:

- **Set a screen lock:** If your device is lost or stolen but you have a screen lock set, the device can't be erased using the Settings menu unless your screen is unlocked.
- **Add your Google account on your device:**
If your device is wiped but you have your Google account on it, the device can't finish the setup process until your Google account information is entered again.

After your device is protected, you'll need to either unlock your screen or enter your Google account password if you need to do a factory reset. This ensures that you or someone you trust is doing the reset.



- Do not forget your Google account and password you had added to your device prior to performing a factory reset. If you can't provide the account information during the setup process, you won't be able to use the device at all after performing the factory reset.

Open Source Software Notice Information

To obtain the source code under GPL, LGPL, MPL, and other open source licenses, that is contained in this product, please visit <http://opensource.lge.com>.

In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping, and handling) upon email request to opensource@lge.com.

This offer is valid for a period of three years after our last shipment of this product. This offer is valid to anyone in receipt of this information.

Laser Safety Statement

[FDA Notice]

Complies with 21 CFR 1040.10 and 1040.11 except for conformance with IEC 60825-1 Ed. 3., as described in Laser Notice No. 56, dated May 8, 2019

Caution!

This product employs a Laser system. To ensure proper use of this product, please read this owner's manual carefully and retain for future reference. Should the unit require maintenance, contact an authorized service center.

Use of controls, adjustments, or the performance of procedures other than those specified herein may result in hazardous radiation exposure.

To prevent direct exposure to laser beam, do not try to open the enclosure or make direct contact with the laser.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT
CLASSE 1	PRODUIT LASER

Regulatory Information (FCC ID number, etc.)

For regulatory details, go to **Settings > System > Regulatory & safety**.

Trademarks

- T-Mobile and the magenta color are registered trademarks of Deutsche Telekom AG. The Visual Voicemail and Name ID icons are trademarks of T-Mobile USA, Inc.
- LTE is a trademark of ETSI.
- Google is a trademark of Google LLC.
- Bluetooth® is a registered trademark of Bluetooth SIG, Inc. worldwide.
- Wi-Fi® and the Wi-Fi logo are registered trademarks of the Wi-Fi Alliance.
- V60 ThinQ is a trademark of LG Electronics, Inc.
- All other trademarks and copyrights are the property of their respective owners.

Limited Warranty – USA

ARBITRATION NOTICE: THIS LIMITED WARRANTY CONTAINS AN ARBITRATION PROVISION THAT REQUIRES YOU AND LG (as defined hereinafter in the Definitions) TO RESOLVE DISPUTES BY BINDING ARBITRATION INSTEAD OF IN COURT, UNLESS YOU CHOOSE TO OPT OUT. IN ARBITRATION, CLASS ACTIONS AND JURY TRIALS ARE NOT PERMITTED. PLEASE SEE THE SECTION TITLED "PROCEDURE FOR RESOLVING DISPUTES" BELOW.

Should your LG Mobile Phone ("Product") fail due to a defect in materials or workmanship under normal and proper use, during the warranty period set forth below, LG will, at its option, repair or replace the Product. This limited warranty is valid only to the original retail purchaser of the Product and applies only when purchased and used within the United States including U.S. Territories.

Warranty Period	Scope of Warranty
Twelve (12) months from date of original retail purchase (or absent valid proof of purchase, fifteen (15) months from manufacture date)	Parts and Labor (internal/ functional parts only)

- Replacement products and parts are warranted for the remaining portion of the original warranty period or ninety (90) days, whichever is greater.
- Replacement products and parts may be new, reconditioned, refurbished, or otherwise factory remanufactured.
- Replaced Products and parts will become the property of LG.

EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THE PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THE ABOVE LIMITED WARRANTY. UNDER NO CIRCUMSTANCES SHALL LG OR ITS U.S. DISTRIBUTORS/ DEALERS BE LIABLE FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL, OR PUNITIVE DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST GOODWILL,

LOST REVENUES OR PROFITS, WORK STOPPAGE, IMPAIRMENT OF OTHER GOODS, COST OF REMOVAL AND REINSTALLATION OF THE PRODUCT, LOSS OF USE, OR ANY OTHER DAMAGES WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. LG'S TOTAL LIABILITY, IF ANY, SHALL NOT EXCEED THE PURCHASE PRICE PAID BY YOU FOR THE PRODUCT. Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you. This limited warranty gives you specific legal rights and you may also have other rights that vary from state to state.

HOW SERVICE IS HANDLED:

The original sales receipt specifying the Product and date of purchase is required to obtain warranty service.

LG will not re-install or back-up any data, applications, or software that you have added to your Product. It is therefore recommended that you back-up any such data or information prior to sending the Product to LG to avoid permanent loss of such information

You shall bear the cost of shipping the Product to LG Customer Service. LG shall bear the cost of shipping the Product back to you after completion of service under this limited warranty.

THIS LIMITED WARRANTY DOES NOT COVER:

- (1) Damage or defects of the Product resulting from use of the Product in other than its normal and customary manner.
- (2) Damage or defects of the Product resulting from abnormal use, abnormal conditions, improper storage, exposure to moisture or dampness beyond IP68 tested use, unauthorized modifications/connection/repair, misuse, neglect, abuse, accident, alteration, improper installation, or other acts which are not the fault of LG, including damage or defects of the Product caused by shipping, blown fuses, spills of food or liquid.

- (3) Damage or defects of the Product caused by transportation and/or handling, including scratches, dents, chips, and/or other damage to the finish of your Product including the external housing and cosmetic parts, unless such damage results from defects in materials or workmanship and is reported within one (1) week of delivery (Call: 1-800-793-8896).
- (4) Damage or defects to antennas unless caused directly by defects in material or workmanship.
- (5) Damage or defects of the Product resulting from operating the Product contrary to the instructions outlined in the Product owner's manual.
- (6) That LG Customer Service was not notified by you of the alleged defect or malfunction of the Product during the applicable limited warranty period.
- (7) Products with original serial numbers that have been removed, altered, or cannot be readily determined.
- (8) Damage or defects of the Product or missing items to any Product sold "As Is," "With all Faults" or similar disclaimer.
- (9) Damage or defect of the Product caused by the use of accessories, parts, consumable cleaning products, or service not provided or approved by LG.
- (10) All plastic surfaces and all other externally exposed parts that are scratched or damaged.
- (11) Products operated outside published maximum ratings.
- (12) Replacement of any consumable parts (such as fuses).

The cost of repair or replacement under the above excluded circumstances shall be borne by you.

TO OBTAIN WARRANTY SERVICE AND ADDITIONAL INFORMATION:

Call **1-800-793-8896** and select the appropriate option from the menu.

Or visit our website at <http://www.lg.com>.

Or by mail: LG Electronics Customer Service P.O. Box 240007
Huntsville, AL 35813 ATTN: CIC – Mobile Handsets

DO NOT RETURN YOUR PRODUCT TO THE ABOVE ADDRESS. Please call or write for procedures for obtaining warranty service.

PROCEDURE FOR RESOLVING DISPUTES:

ALL DISPUTES BETWEEN YOU AND LG ARISING OUT OF OR RELATING IN ANY WAY TO THIS LIMITED WARRANTY OR THE PRODUCT SHALL BE RESOLVED EXCLUSIVELY THROUGH BINDING ARBITRATION, AND NOT IN A COURT OF GENERAL JURISDICTION. BINDING ARBITRATION MEANS THAT YOU AND LG ARE EACH WAIVING THE RIGHT TO A JURY TRIAL AND TO BRING OR PARTICIPATE IN A CLASS ACTION.

Definitions. For the purposes of this section, references to "LG" mean LG Electronics U.S.A., Inc., its parents, subsidiaries and affiliates, and each of their officers, directors, employees, agents, beneficiaries, predecessors in interest, successors, assigns and suppliers; references to "dispute" or "claim" shall include any dispute, claim or controversy of any kind whatsoever (whether based in contract, tort, statute, regulation, ordinance, fraud, misrepresentation or any other legal or equitable theory) arising out of or relating in any way to the sale, condition or performance of the product or this Limited Warranty.

Notice of Dispute. In the event you intend to commence an arbitration proceeding, you must first notify LG in writing at least 30 days in advance of initiating the arbitration by sending a letter to LG at LG Electronics U.S.A., Inc. Attn: Legal Department- Arbitration 1000 Sylvan Avenue Englewood Cliffs, NJ 07632. You and LG agree to engage in good faith discussions in an attempt to amicably resolve your claim. The notice must provide your name, address, and telephone number; identify the product that is the subject of the claim; and describe the nature of the claim and the relief being sought. If you and LG are unable to resolve the dispute within 30 days, either party may proceed to file a claim for arbitration.

Agreement to Binding Arbitration and Class Action Waiver. Upon failure to resolve the dispute during the 30 day period after sending written notice to LG, you and LG agree to resolve any claims between us only by binding arbitration on an individual basis, unless you opt out as provided below. Any dispute between you and LG shall not be combined or consolidated with a dispute involving any other person's or entity's product or claim. More specifically, without limitation of the foregoing, any dispute between you and LG shall not under any circumstances proceed as part of a class or representative action. Instead of arbitration, either party may bring an individual action in small claims court, but that small claims

court action may not be brought on a class or representative basis.

Arbitration Rules and Procedures. To begin arbitration of a claim, either you or LG must make a written demand for arbitration. The arbitration will be administered by the American Arbitration Association ("AAA") and will be conducted before a single arbitrator under the AAA's Consumer Arbitration Rules that are in effect at the time the arbitration is initiated (referred to as the "AAA Rules") and under the procedures set forth in this section. The AAA Rules are available online at www.adr.org/consumer. Send a copy of your written demand for arbitration, as well as a copy of this provision, to the AAA in the manner described in the AAA Rules. You must also send a copy of your written demand to LG at LG Electronics, U.S.A., Inc. Attn: Legal Department- Arbitration 1000 Sylvan Avenue Englewood Cliffs, NJ 07632. If there is a conflict between the AAA Rules and the rules set forth in this section, the rules set forth in this section will govern. This arbitration provision is governed by the Federal Arbitration Act. Judgment may be entered on the arbitrator's award in any court of competent jurisdiction. All issues are for the arbitrator to decide, except that issues relating to the scope and enforceability of the arbitration provision and to the arbitrability of the dispute are for the court to decide. The arbitrator is bound by the terms of this provision.

Governing Law. The law of the state of your residence shall govern this Limited Warranty and any disputes between us except to the extent that such law is preempted by or inconsistent with applicable federal law.

Fees/Costs. You do not need to pay any fee to begin an arbitration. Upon receipt of your written demand for arbitration, LG will promptly pay all arbitration filing fees to the AAA unless you seek more than \$25,000 in damages, in which case the payment of these fees will be governed by the AAA Rules. Except as otherwise provided for herein, LG will pay all AAA filing, administration and arbitrator fees for any arbitration initiated in accordance with the AAA Rules and this arbitration provision. If you prevail in the arbitration, LG will pay your attorneys' fees and expenses as long as they are reasonable, by considering factors including, but not limited to, the purchase amount and claim amount. Notwithstanding the foregoing, if applicable law allows for an award of reasonable attorneys' fees and expenses, an arbitrator can award them to the same extent that a court would. If the arbitrator finds either the substance of your claim or the relief sought in the demand is frivolous or

brought for an improper purpose (as measured by the standards set forth in Federal Rule of Civil Procedure 11(b)), then the payment of all arbitration fees will be governed by the AAA Rules. In such a situation, you agree to reimburse LG for all monies previously disbursed by it that are otherwise your obligation to pay under the AAA Rules. Except as otherwise provided for, LG waives any rights it may have to seek attorneys' fees and expenses from you if LG prevails in the arbitration.

Hearings and Location. If your claim is for \$25,000 or less, you may choose to have the arbitration conducted solely on the basis of (1) documents submitted to the arbitrator, (2) through a telephonic hearing, or (3) by an in-person hearing as established by the AAA Rules. If your claim exceeds \$25,000, the right to a hearing will be determined by the AAA Rules. Any in-person arbitration hearings will be held at a location within the federal judicial district in which you reside unless we both agree to another location or we agree to a telephonic arbitration.

Opt Out. You may opt out of this dispute resolution procedure. If you opt out, neither you nor LG can require the other to participate in an arbitration proceeding. To opt out, you must send notice to LG no later than 30 calendar days from the date of the first consumer purchaser's purchase of the product by either: (i) sending an e-mail to optout@lge.com, with the subject line: "Arbitration Opt Out" or (ii) calling 1-800-980-2973. You must include in the opt out e-mail or provide by telephone: (a) your name and address; (b) the date on which the product was purchased; (c) the product model name or model number; and (d) the IMEI or MEID or Serial Number, as applicable (the IMEI or MEID or Serial Number can be found (i) on the product box; (ii) on a label on the back of the product beneath the battery, if the battery is removable; or (iii) from the settings menu via the following path: Settings > System > About phone > Status).

You may only opt out of the dispute resolution procedure in the manner described above (that is, by e-mail or telephone); no other form of notice will be effective to opt out of this dispute resolution procedure. Opting out of this dispute resolution procedure will not affect the coverage of the Limited Warranty in any way, and you will continue to enjoy the full benefits of the Limited Warranty. If you keep this product and do not opt out, then you accept all terms and conditions of the arbitration provision described above.