

USER GUIDE

**LG G8X ThinQ™**

**LM-G850UM**

# About this user guide

Thank you for choosing this LG product. Please carefully read this user guide before using the device for the first time to ensure safe and proper use.

- Always use genuine LG accessories. The supplied items are designed only for this device and may not be compatible with other devices.
- Descriptions are based on the device default settings.
- Default apps on the device are subject to updates, and support for these apps may be withdrawn without prior notice. If you have any questions about an app provided with the device, please contact an LG Service Center. For user-installed apps, please contact the relevant service provider.
- Modifying the device's operating system or installing software from unofficial sources may damage the device and lead to data corruption or data loss. Such actions will violate your LG licence agreement and void your warranty.
- Some content and illustrations may differ from your device, depending on the area, service provider, software version, or OS version, and are subject to change without prior notice.
- Software, audio, wallpaper, images, and other media supplied with your device are licenced for limited use. If you extract and use these materials for commercial or other purposes, you may be infringing copyright laws. As a user, you are fully responsible for the illegal use of media.
- Additional charges may incur for data services, such as messaging, uploading, downloading, auto-syncing and location services. To avoid additional charges, select a data plan suitable to your needs. Contact your service provider to obtain additional details.
- Failure to follow the instructions in this guide and improper use may damage the device.

## Instructional notices



**WARNING:** Situations that could cause injury to the user and third parties.



**CAUTION:** Situations that may cause minor injury or damage to the device.



**NOTE:** Notices or additional information.

# Table of contents

## 01

---

### Custom-designed Features

- 7 Camera features
- 10 Gallery features
- 15 Sound quality and effects
- 16 Floating Bar
- 19 Google Assistant
- 21 HD Audio Recorder
- 23 Fingerprint recognition
- 27 Multi-tasking feature
- 28 AOD (always-on display)
- 29 Notes on Water Resistant Properties

## 02

---

### Basic Functions

- 33 Product components and accessories
- 34 Parts overview
- 38 Turning the power on or off
- 39 Installing the SIM card and memory card
- 41 Removing the memory card
- 41 Battery
- 45 Touch screen
- 49 Home screen
- 59 Screen lock
- 63 Memory card encryption
- 65 Entering text
- 72 Content sharing
- 74 Do not disturb



## 03

---

### Useful Apps

76	Installing and uninstalling apps
78	App Shortcuts
79	Phone
84	Messaging
91	Camera
120	Gallery
124	Chrome
124	Google apps
127	Contacts
130	QuickMemo+
132	Clock
133	Music
134	Calculator
134	Game Launcher
135	LG Health
137	FM Radio
137	LG Mobile Switch
138	App trash
138	SmartWorld

## 04

---

### Settings

140	Settings
140	Network & internet
148	Connected devices
153	Sound
155	Display
157	Lock screen & security
159	Extensions
163	Digital Wellbeing
163	Apps & notifications
163	Battery
164	Storage
164	Accounts
165	Google
168	Accessibility

# 05

## Appendix

- 172 LG Language Settings
- 172 LG Bridge
- 173 Phone software update
- 175 Anti-Theft Guide
- 176 Open Source Software Notice Information
- 176 Regulatory information (FCC ID number, etc.)
- 177 Trademarks
- 178 Laser safety statement
- 179 More information
- 181 FAQ

# 06

## For Your Safety

# 07

## LIMITED WARRANTY STATEMENT

# 08

## LG Dual Screen (LM-V515N)

- 220 Getting to Know LG Dual Screen
- 226 Product components and accessories
- 227 Parts overview
- 228 Inserting the mobile phone to Dual Screen
- 230 Removing the mobile phone from Dual Screen
- 233 Using Charging Adapter
- 235 Using the Dual Screen
- 256 More Dual Screen information
- 257 Trademarks



01

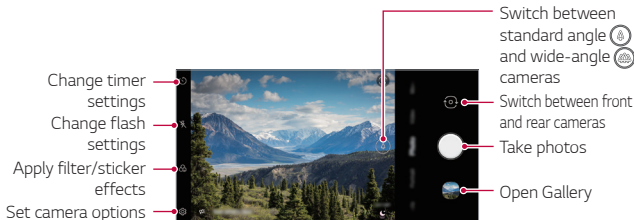
## **Custom-designed Features**

# Camera features

## Main features

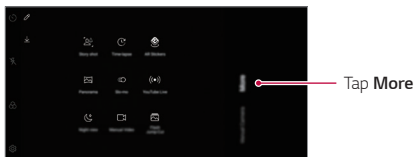
This chapter describes the main features that the camera app provides. Open the camera and explore various features.

1 Tap  .






2 Tap **More** on the camera screen to view various camera modes.

- Select a desired mode from **Night view, Panorama, Story shot, Manual Video, Slo-mo, Time-lapse, Jump-Cut, YouTube Live** and **AR Stickers**.



## Dual cameras

The dual cameras, which are located on the back of the device, allow you to take photos or record videos with two different angles of view.

Tap  > , and select  /  while taking photos or recording videos with the rear camera.



Rear Camera

## Steady recording





Use Steady recording to prevent the camera from shaking when recording a video while walking or making large movements.

Activate Anti-shake to reduce or eliminate motion blur in videos.

- 1 Tap  >  > **Video**.
- 2 Tap > .
- 3 Tap  to record a video.

## Recording ASMR

With the high-sensitivity microphone installed on the device, you can pick up even the softest sound to record an ASMR video with vivid and clear sound quality.

- 1 Tap  >  > **Video**.
- 2 Tap  to activate the function.
- 3 Tap  to start recording an ASMR video.

## Portrait

You can create an artistic portrait photo, whereby the subject is in focus and the background is blurred. You can also edit the image by applying lighting or color effect to the background.



- While taking a photo, keep the distance to your subject to 1.3 ~ 5 feet.
- This feature is not available if the surroundings are too dark.

- 1 Tap > and tap **Portrait**.
- 2 Drag the slide bar to the left or right to adjust the blur strength.




- 3 When **Portrait is available.** appears on the screen, tap or to take a photo.
  - The Portrait feature may not work if the camera cannot recognize the subject.


# Gallery features

## Related content

You can edit and customize related content in the Gallery.

- 1 While viewing a picture preview, tap .
- 2 When the date or location icon appears with related contents, tap the desired icon.



- A video clip is automatically created with related contents selected according to your choice.
- Tap  to access additional options.

## Making a GIF

You can create a GIF file from Gallery.

- 1 While viewing an album, tap  > **Create GIF**.

- 2 Select the desired photos and videos to create a GIF file and then tap **NEXT**.
  - You can also add/delete a photograph, adjust the speed or screen ratio, set the photograph order, etc.
- 3 Tap **SAVE**.



- A maximum of 100 images can be used to create a GIF file.

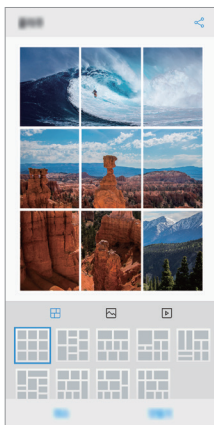
## Making a collage

You can make a collage from the associated content.

- 1 While viewing an album, tap **:** > **Make collage**.
- 2 Select the desired images to add to the a collage and then tap **NEXT**.
  - Select the desired layout from the bottom of the screen.
- 3 Tap **MAKE**.



- A maximum of 9 images can be used to create a collage.

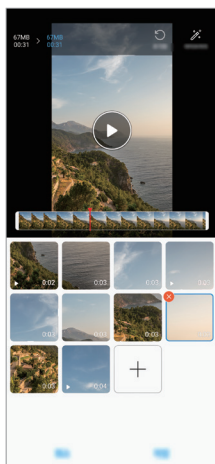





## Creating a movie

You can create a new movie by putting images and videos together.


- 1 While viewing an album, tap **:** > **Create movie**.
- 2 Select images or videos for your movie and tap **Next**.
- 3 Edit the selected images and videos and then tap **Save**.



## Deleting files

You can select images or videos to delete from your video by tapping  at the top left corner of its thumbnail.

## Adding files

You can select images or videos to add after tapping  at the bottom of the screen. You can also select the images or videos you have already previously added.



- Touch and hold a file, and then tap another file for multiple selection.

## Rearranging files

To rearrange the images and videos, touch and hold the file you want to move, then dragging it to the desired location.


## Adding file effects

Tap  to add a theme or background music, or change the font.

## Resetting the movie edits

You can reset the edits made to the movie (e.g. play time) by tapping .

## Previewing a file

Check your new video before saving it by tapping . After the playback time elapses, the next file is played automatically.




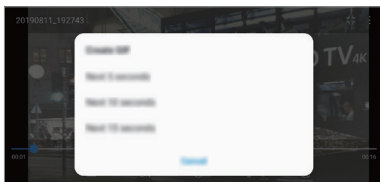
- A maximum of 50 images and videos can be used to create a video.
- The playback time for an image is 3 seconds by default and it cannot be changed. Videos can be trimmed down to a minimum of 1 second.
- This feature may not support some image or video formats.

# Making a GIF


You can easily make a GIF file using recorded video.

## Creating video

- 1 At the desired starting point while watching a video, tap .
- 2 Select the length of the GIF you want to create.
  - GIF is generated for the time selected from the current time.
  - For videos less than 5 seconds, GIF images are automatically generated for the remaining time.



## Creating GIF Photographs

- 1 In the photograph list in the gallery, tap  > **Create GIF**.
  - Or, tap  under the **Play** tab in the gallery.
- 2 Select a picture to turn into a GIF photograph, and then tap **Next**.
  - You can add/delete a photograph, adjust the speed or screen ratio, and set the photograph order.





- Creating GIF photographs is a function provided for the user to produce creative images. Violating rights such as intellectual property right or defaming the reputation of another person by using the creating GIF photographs function may lead to a civil or criminal liability in accordance with the related laws. Be cautious not to copy or transmit another person's work without authorization. LG Electronics is not liable in any way for such acts by users.
- You can select up to 100 copies to produce when you create a GIF photograph.

# Sound quality and effects

## DTS:X 3D Surround

You can play a song or video in three-dimensional, immersive and vivid sound. To use this feature, connect earphones, speaker or other external audio devices to your device.

Tap  > **Settings** > **Sound** > **Sound quality and effects**, then tap **DTS:X 3D Surround**  to activate this feature.


- You can also bring down the status bar from the top of the screen and tap the icon for **DTS:X 3D Surround** to activate the function.

If you connect external sound devices such as earphones and speakers to your device, a pop up appears where you can turn on the **DTS:X 3D Surround** or **Hi-Fi Quad DAC** function.





# Floating Bar

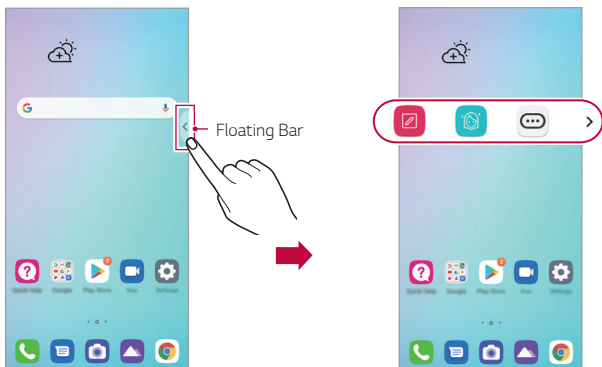
## Floating Bar overview

You can access frequently used features, including shortcuts, screen capture, music player, and quick contacts, by touching and then swiping Floating Bar on the screen.

To enable the Floating Bar feature, tap  > **Settings** > **Extensions** > **Floating Bar** .

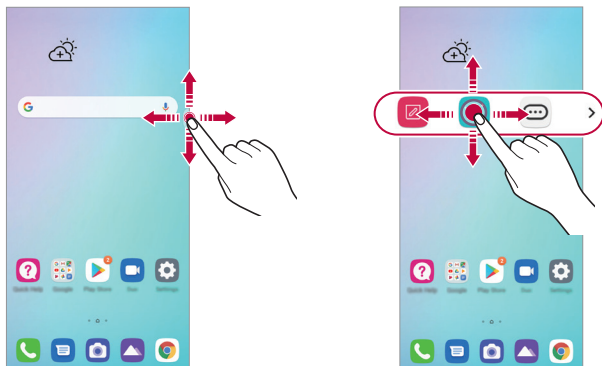
## Opening and closing Floating Bar

- To open Floating Bar: Tap  or .
- To close Floating Bar: Tap  or .







## Moving the Floating Bar position

Touch and hold Floating Bar, then drag it to a desired location.





## Disabling Floating Bar








You can disable Floating Bar by using one of the following methods:

- Touch and hold < or > on Floating Bar and then drag it to the **Hide** area at the top of the screen.
- Tap < or > to open Floating Bar, then tap  > .
- Tap  > **Settings** > **Extensions** > **Floating Bar** .


# Setting Floating Bar

You can select features to display on Floating Bar and change their display order. Tap  from Floating Bar or tap  > **Settings** > **Extensions** > **Floating Bar**.

- **Position:** You can set an area within which you can move the floating bar.
- **Shortcuts:** Quickly access frequently used apps or features.
- **Screen capture:** Capture the screen to crop the desired part or to create a GIF file.

	You can use Capture+ on the desired screen.
	You can capture a scrolling screenshot and use it for Q Memo+ or save it in the gallery.
	You can capture a desired area and use it for Q Memo+ or save it in the gallery.
	<div>Save a current screen as a GIF file. You can adjust the size of the image you want to capture.</div> <ul style="list-style-type: none"><li>• To move to the desired location, drag .</li><li>• To start recording a GIF, tap .</li><li>• To stop recording a GIF, tap .</li></ul>

- **Music player:** Control the music you are listening to.
- **Quick contacts:** Call or message people set as quick contacts.



- A maximum of 5 apps or features can be added to the shortcuts.
- A maximum of 5 contacts can be added as quick contacts.
- GIF capture is a function provided for the user to produce creative images. Violating rights such as intellectual property right or defaming the reputation of another person by using the GIF capture function may lead to a civil or criminal liability in accordance with the related laws. Be cautious not to copy or transmit another person's work without authorization. LG Electronics is not liable in any way for such acts by users.
- A GIF can be created up to 15 seconds long.

# Google Assistant


## Google Assistant overview

Your device has the built-in Google Assistant feature. Find answers and get things done while on-the-go.





- To use this feature, first connect to the network and sign in to your Google Account.

## Launching Google Assistant

- 1 Touch and hold  from the Home screen to launch **Google Assistant** or press the Google Assistant key on the left side of the device.
- 2 Tap **GET STARTED**.
- 3 Follow the on-screen instructions and say **"Ok Google"** or **"Hey Google"**.
  - The device saves your voice data for recognition.
- 4 Set whether to use the voice match unlock function.
  - If you use the voice match unlock function, you can unlock the device even when the device screen is turned off or the device is charging by saying **"OK Google"** or **"Hey Google"**.







- This feature may be more vulnerable to security than the other screen locks, such as Pattern, PIN, and Password.  
When a similar voice or your recorded voice is used, the screen may be unlocked.
- To use this feature, tap  > **Settings > Lock screen & security > Secure lock settings > Smart Lock**, and then use the screen lock method you set to unlock the device. Tap **Voice Match**, then tap **Access with Voice Match** , then enter the currently used unlock method again. Note that Swipe is excluded.
- You need to unlock the device by using the specified method if you fail to unlock the device with voice recognition. See [Setting a screen lock](#) for details.

## 5 Tap **Save**.

## Accessing by Voice

- 1 When the home screen is turned off or locked, say “OK Google” or “Hey Google.”.
- 2 When the Google Assistant screen appears, say a command or ask a question.

## Accessing from Home Screen

- 1 Touch and hold  on the Home screen.
- 2 Say a command or question when you see  on the bottom of the screen.



- In an environment where wireless performance of Wi-Fi or mobile data is poor, the Google Assistant function may be restricted and the speech recognition accuracy rate may be lowered.
- If the speech is ambiguous, the microphone is covered, a media player is playing, or the surrounding is loud, the speech recognition accuracy rate may be lowered. When you are using the product via voice commands, say with accurate pronunciation in a quiet environment for better speech recognition accuracy rate.

# HD Audio Recorder

The HD Audio Recorder allows you to configure the audio settings manually so that you can record audio based on your environment.

## Recording modes

You can record a high definition audio file by selecting and configuring the desired audio mode to suit the recording environment.

Tap  > **Essentials** > **HD Audio Recorder** > .

### Normal

You can record audio without extra settings.

### ASMR

You can use a highly sensitive microphone to record minute details of the sound vividly.

### Concert






You can record audio in a concert or other music event.

### Custom

You can manually configure the desired settings to record audio.

## Studio Mode

With Studio mode, you can play an audio file or music and record your voice at the same time, create a chord by recording your voice multiple times, and record your comments over the presenter's or speaker's original audio file.

- 1 Tap  > **Essentials** > **HD Audio Recorder** >  > **Custom**.
- 2 Tap .
- 3 Select an audio file to use as background music.
- 4 Tap  to record voice.
- 5 Tap  to save the recorded file.



- Background music can only be played through earphones. Make sure to plug in earphones before using this feature.

## Other useful features of the HD Audio Recorder app

### GAIN

You can adjust the sensitivity of the sound recorded by the microphone. The higher the GAIN value is set, the more sensitively the sound is recorded.

### LCF

You can filter any low-pitched noises such as the low hum of the air conditioner.



The higher the LCF (Low Cut Filter) value is set, the better high-frequency noises are filtered.

### LMT

It can prevent clipping of the recorded sound.

The higher the LMT (Limiter) value is set, the more low frequency sounds that will not get clipped.



- To change additional settings, tap **> Settings**, then customize the file type, bit depth, sampling rate and other settings.
- When you select the Concert or Custom mode with earphones connected,  appears. Tap  and then select the microphone to use.
- You can monitor the the sound quality with the connected earpiece while recording audio. While recording audio in Studio mode, sound monitoring is not supported. You can hear only the background music.

# Fingerprint recognition

## Fingerprint recognition overview

You must register your fingerprint on your device first before using the fingerprint recognition function.

You can use the fingerprint recognition function in the following cases:

- To unlock the screen.
- To access locked contents in **Gallery** or **QuickMemo+**.
- Confirm a purchase by signing in to an app or identifying yourself with your fingerprint.



- You can use fingerprint data for user authentication. There is a possibility that the fingerprint sensor might recognize a different but very similar fingerprint as the same registered fingerprint. To strengthen security, it is recommended that you use the pattern, PIN, or password method for unlocking the screen.
- If the device cannot detect your fingerprint, or you forgot the value specified for registration, visit the nearest LG Customer Service Center with your device and ID card.

## Precautions for fingerprint recognition


Fingerprint recognition accuracy may decrease due to a number of reasons. To maximize the recognition accuracy, check the following before using the device.

- At the bottom center of the product's screen, there is a built-in sensor that recognizes fingerprints. Be careful not to scratch or damage the fingerprint sensor with metal objects such as coins or keys.
- If you replace the protective film on the product with a polarized film that diffuses the light or a film that is too thick, it may decrease the fingerprint recognition rate.

- If there are foreign substances (sweat, lotion, water, dirt, grease, etc.) on the fingerprint sensor or on the finger to be put on the sensor, fingerprint recognition may not work properly. Wipe the sensor and the finger clean and remove all moisture before putting the finger on the sensor.
- If the finger's surface is rough due to it being scarred or pruned from water, the sensor may not be able to recognize the fingerprint. In such a case, register another finger's fingerprint.
- If you bend your finger or use the fingertip only, your fingerprint may not be recognized. Make sure that your finger covers the entire surface of the fingerprint sensor.
- Scan only one finger for each registration. Scanning more than one finger may affect fingerprint registration and recognition.
- The device may generate static electricity if the surrounding air is dry. If the surrounding air is dry, avoid scanning fingerprints, or touch a metallic object such as a coin or a key before scanning fingerprints to remove static electricity.

## Registering fingerprints

You can register and save your fingerprint on the device to use fingerprint identification.

- 1 Tap  > **Settings** > **Lock screen & security** > **Fingerprints**.

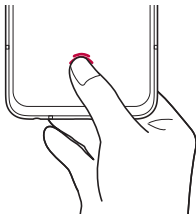


- A lock screen must be set in order to be able to use this feature.
- If the screen lock is not active, configure the lock screen by following the on-screen instructions. See [Setting a screen lock](#) for details.

- 2 Check the location of the fingerprint sensor at the bottom center of the screen, and lightly place your finger on the sensor.





- Make sure that the finger fully covers the fingerprint sensor.



- 3 Follow the on-screen instructions.
  - Place your finger on the sensor and hold it until you feel a vibration.
  - Move the same finger around on the sensor a little by little until the fingerprint registration is complete.
- 4 When the fingerprint registration is done, tap **OK**.
  - Tap **ADD MORE** to register another fingerprint. Since the fingerprint recognition success rate depends on the condition of the registered fingerprint, it is recommended that you register several different fingerprints.


## Managing fingerprints

You can edit or delete registered fingerprints.

- 1 Tap  > **Settings** > **Lock screen & security** > **Fingerprints**.
- 2 Unlock according to the specified lock method.
- 3 From the fingerprint list, tap a fingerprint to rename it. To delete it, tap .


## Displaying the fingerprint icon when the screen is off

You can set to display the fingerprint sensor location on the screen when the screen is off.

- 1 Tap  > **Settings** > **Lock screen & security** > **Fingerprints**.
- 2 Unlock according to the specified lock method.
- 3 Tap **Tap to show icon when screen is off** to enable the option.

## Unlocking the screen with a fingerprint



You can unlock the screen or view locked contents by using your fingerprint. Activate the desired function:

- 1 Tap  > **Settings** > **Lock screen & security** > **Fingerprints**.
- 2 Unlock according to the specified lock method.
- 3 On the fingerprint settings screen, activate the desired function:
  - **Screen lock:** Unlock the screen with a fingerprint.
  - **Content lock:** Unlock contents you have locked in Gallery and QuickMemo+ with a fingerprint.

# Multi-tasking feature


## Multi window

You can use two apps at the same time by separating the screen into the multiple windows.

- 1 Tap  from the Home touch buttons.
  - Recently-used apps appear.
- 2 Tap  at the top of the desired app to use the Multi window feature.
  - The selected app appears at the top half of the screen.

## Recent Uses Screen

You can view the app screens that you used recently by using the overview function.

To view the list of apps that you used recently, tap  of the home touch buttons.

You can also swipe the Home button upward to view the recent use history if you enable the option by tapping  > **Settings > Display > Home touch buttons > Gesture and buttons.**





# AOD (always-on display)



You can view the date, time or signature when the main screen is turned off.

Swipe the bottom of the AOD (always-on display) screen to activate features including Camera, Capture+, Wi-Fi, sound settings, **Bluetooth®**, Flash, Music and more.

Tap  > **Settings** > **Display** > **AOD (always-on display)**.

- Tap the desired image among Digital clock, Analog clock, Dual clock, Signature or Image, configure its settings as desired, then tap **Save**.
- Tap **Quick tools & music player**  to swipe over the status icons for Quick tools and the music player.
- Tap **AI Pick**  to see useful information provided based on Context Awareness.
- To set a daily time to turn off the AOD (always-on display) feature, tap **Night time**.
- To enhance brightness for the AOD (always-on display) feature, tap **Brighter display**.



- The battery may drain faster when you use AOD (always-on display). Turn this feature off to save battery power.
- To deactivate AOD (always-on display) feature, tap  > **Settings** > **Display** > **AOD (always-on display)**, and then tap .

# 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, 86-106kPa, 1.5 meter, 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.) other than water.



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.
- If the device is wet, the LDI located inside the device changes in color. In this case, the device is ineligible for any free-of-charge repair services provided under the device's limited warranty.
- Despite a rating of IP68, your device is not completely impervious to water in any situation.



02

## **Basic Functions**

# Product components and accessories

The following items are included with your device.

- G8X ThinQ
- USB Type C Cable
- Energy Efficient Charger
- Important Information Booklet
- SIM Tray Tool

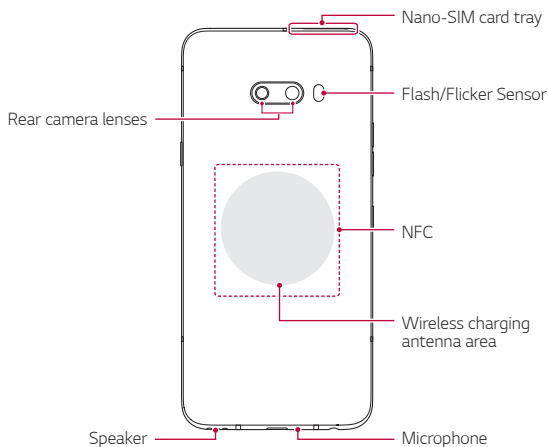
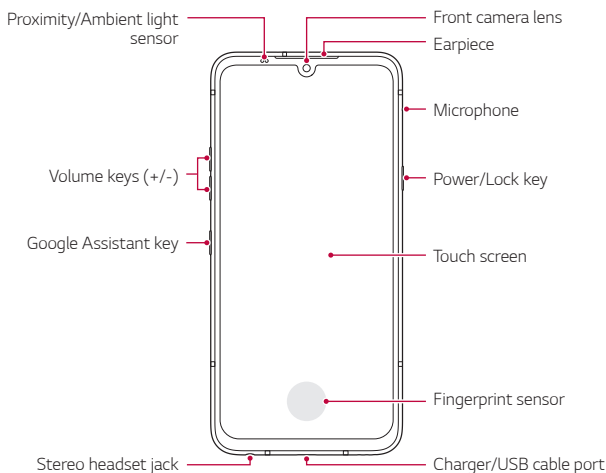


- The items supplied with the device and any available accessories may vary depending on the area and service provider.
- Do not use unapproved USB cables or chargers with your device. The LG limited warranty does not cover damage caused by the use of third party accessories.
- Some of the device parts are made of tempered glass. If you drop your device on a hard surface or subject it to severe impact, the tempered glass may be damaged. If this happens, stop using your device immediately and contact an LG Customer Service Center.



- If any of these basic items are missing, contact the dealer from which you purchased your device.
- To purchase additional basic items, contact an LG Customer Service Center.
- To purchase optional items, contact an LG Customer Service Center for available dealers.
- Some items in the product box are subject to change without notice.
- The appearance and specifications of your device are subject to change without notice.
- Device specifications may vary depending on the area or service provider.
- Be sure to use authentic accessories provided by LG Electronics. Using third-party accessories may damage the device or cause malfunctions.
- Remove the protective film from the Fingerprint sensor before using the fingerprint recognition feature.

# Parts overview





### **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.



- Press and hold the volume down key and Power/Lock key at the same time for a second to take a screenshot.

- Proximity/Ambient light sensor
  - Proximity sensor: During a call, the proximity sensor turns off the screen and disables touch functionality when the device is in close proximity to the human body. It turns the screen back on and enables touch functionality when the device is outside a specific range.
  - Ambient light sensor: The ambient light sensor analyzes the ambient light intensity when the auto-brightness control mode is turned on.
- Volume keys
  - Adjust the volume for ringtones, calls or notifications.
  - While using the Camera, gently press a Volume key to take a photo. To take continuous photos, press and hold the Volume key.
  - Press the Volume Down key twice to launch the Camera app when the screen is locked or turned off. Press the Volume Up key twice to launch Capture+.
- Power/Lock key
  - Briefly press the key when you want to turn the screen on or off.
  - Press and hold the key when you want to select a power control option.
- Google Assistant key
  - Press the key to run Google Assistant.
  - See *Google Assistant* for details.



- Fingerprint sensor
  - You can use the fingerprint sensor at the bottom center of the screen to use the fingerprint recognition function. See *Fingerprint recognition overview* for details.

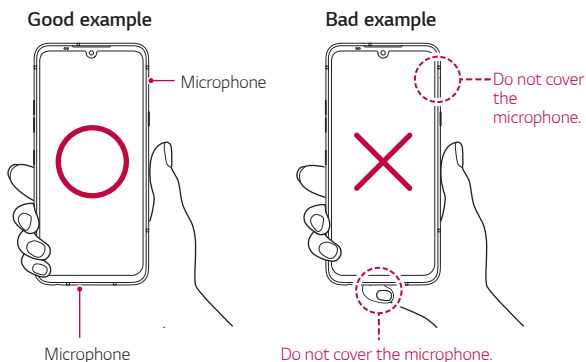


- Some functions may be restricted depending on the region and product specifications of different telecommunications providers.
- There are NFC chip and wireless charging antennas built into the rear part of the product. Be careful not to damage or cover the NFC chip or wireless charging antennas.
- Do not put heavy objects on the device or sit on it. Failure to do so may damage the touch screen.
- Screen-protective film or accessories may interfere with the proximity sensor.
- If your device is wet or is being used in a humid place, the touch screen or buttons may not function properly.

There are two microphones built into this product. Be careful not to cover the microphones. While you are talking on the phone, do not cover the microphone with your hand or fingers.

Do not use a phone case that is not a genuine product or cover the microphone with accessories, tape, etc.

Hold the product correctly as shown in the image when you are using it.



# Turning the power on or off

## Turning the power on

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



- When the device is turned on for the first time, initial configuration takes place. The first booting time for the smart phone may be longer than usual.

## Turning the power off

Press and hold the Power/Lock key, then select **Power off**.

## Restarting the device

When the device is not working properly or does not respond, restart it by following the instructions below.

- 1 Press and hold the Power/Lock key and the Volume Down key at the same time until the power is turned off.
- 2 When the device restarts, release the key.

## Power control options

Press and hold the Power/Lock key, then select an option.

- **Power off:** Turn the device off.
- **Power off and restart:** Restart the device.

# Installing the SIM card and memory card

Insert the SIM (Subscriber Identity Module) card provided by your service provider to start using your device.

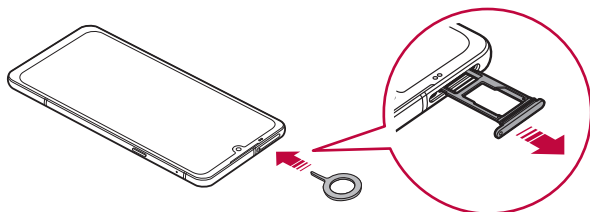


- Be careful with the ejection pin since it has a sharp edge.

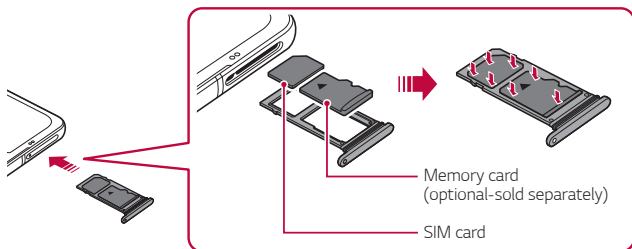


- In order for the water-resistant and dust-resistant features to work effectively, the card tray must be inserted correctly.

- 1 Insert the ejection pin into the hole in the card tray and then pull out the card tray from the device.



- 2 Place the SIM card or memory card on the card tray and then insert the card tray into the device in the direction of the arrow.





- This device supports only Nano SIM cards.



Micro





Standard



- For problem-free performance, it is recommended to use the phone 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 is 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.
- When you insert the SIM card or memory card, place it on the card tray correctly.
- When you insert the card tray back into the device, insert it horizontally in the direction of arrow as shown in the figure. Make sure that the card placed on the card tray does not move out of its position.
- Insert the SIM card with the gold-colored contacts facing downwards.
- Be sure to insert the SIM card into the device by following the instructions in the user manual.
- If you insert to or remove the card tray from the device, be careful not to let water or other liquids enter into the card tray. If a wet card tray or card is inserted into the device, your device may get damaged.
- Memory card is an optional item.
- Frequent writing and erasing of data may shorten the memory card lifespan.
- Some memory cards may not be fully compatible with the device. If you use an incompatible card, it may damage the device or the memory card, or corrupt the data stored in it.

# Removing the memory card

Unmount the memory card before removing it for safety.

- 1 Tap  > **Settings** > **Storage** > .
- 2 Insert the ejection pin into the hole in the card tray and then pull out the card tray from the device.
- 3 Remove the memory card from the card tray.
- 4 Insert the card tray back into the slot.



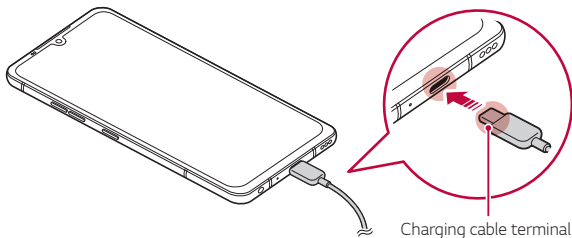
- Do not remove the memory card while the device is transferring or accessing information. This may cause data to be lost or corrupted, or may damage the memory card or the device. LG is not responsible for losses that result from the abuse or improper use of memory cards, including the loss of data.

## Battery

### Charging the battery

Before using the device, fully charge the battery.

Charge the device with the USB Type-C cable.





- Ensure that the inside of the device does not make contact with a metallic object or water.
- Do not charge while the device or charging cable is wet or contains moisture. This can cause fire, electric shock, injury or damage to device. If there is moisture, stop using the device immediately and remove the moisture completely.
- Do not use unapproved 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.



- Remove the charger from the power socket after the device is fully charged. This prevents unnecessary power consumption.
- 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.
- 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.
- When you are visiting the Service Center with a battery issue, bring the product and the charger with you. Since the battery is a consumable, the battery life may be shortened as times goes.

## Precautions when using 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 the use of third party accessories.
- Failure to follow the instructions in this guide and improper use may damage the device.

## Wireless charging

This device supports wireless charging feature. Charge the device with a Qi certified wireless charger (optional, sold separately).

### Charging the battery with a wireless charger

- 1 Place your device on the center of the wireless charger aligned with the wireless charging antenna on the back of the device.
  - To check the wireless charging antenna area, see [Parts overview](#).
- 2 When the battery is fully charged, remove the device from the charger.



- When you charge the battery with a wireless charger, do not put a magnetic, metallic or conductive materials between the device and the charger. This may disturb charging or the device and the charger may become heated. In this case, the device, charger or SIM/Memory cards may be damaged.





- If the battery temperature exceeds a certain level while charging the device, charging may be stopped.
- If magnetic, metallic or conductive materials are attached on the back of the device or a protective case is inserted, the device may not charge properly.
- If you charge the battery with a wireless charger in areas where the network signal strength is weak, the network performance of your device may be further degraded.
- Charge the device with a Qi certified wireless charger (optional, sold separately). Because the LG limited warranty does not cover the use of third party accessories, contact the third party manufacturer.
- This product supports wireless charging. Use a 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.
- LG Electronics is not responsible for any issues concerning accessories of other brands. For such issues, contact the manufacturer of the accessory product.

## Using the battery efficiently

Battery lifespan may decrease if you keep many apps and functions running simultaneously and continuously.

Cancel background operations to increase battery life.

To minimize battery consumption, follow these tips:

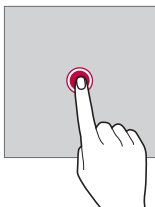
- Turn off the Bluetooth or Wi-Fi network function when not using them.
- Set the screen timeout to as short a time as possible.
- Minimize the screen brightness.
- Set a screen lock when the device is not in use.
- Check the battery level while using any downloaded apps.

# Touch screen

You can familiarize yourself with how to control your device by using touch screen gestures.

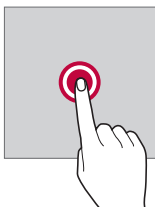
## Tapping

Lightly tap with your fingertip to select or run an app or option.



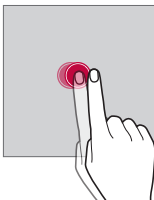
## Touching and holding

Touch and hold for several seconds to display a menu with available options.



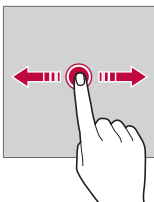
## Double-tapping

Tap twice quickly to zoom in or out on a web page or map.



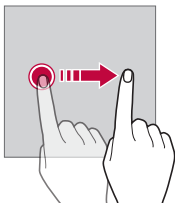
## Dragging

Touch and hold an item, such as an app or widget, then move your finger to another location in a controlled motion. You can use this gesture to move an item.



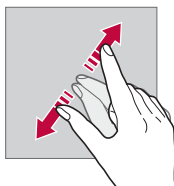
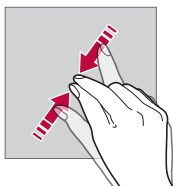
## Swiping

Touch the screen with your finger and move it quickly without pausing. You can use this gesture to scroll through a list, a web page, photos, screens, and more.



## Pinching and spreading

Pinch two fingers to zoom out such as on a photo or map. To zoom in, spread your fingers apart.




- Do not expose the touch screen to excessive physical shock. You might damage the touch sensor.



- A touch screen failure may occur if you use the device near a magnetic, metallic or conductive material.
- If you use the device under bright lights, such as direct sunlight, the screen may not be visible, depending on your position. Use the device in a shady location or a location with an ambient light that is not too bright and bright enough to read books.
- Do not press the screen with excessive force.
- Gently tap with your fingertip on the desired option.
- Touch control may not work properly if you tap while wearing a glove or by using the tip of your fingernail.
- Touch control may not work properly if the screen is moist or wet.
- The touch screen may not function properly if a screen-protective film or accessory purchased from a third party store is attached to the device.
- Displaying a static image for extended periods of time may result in after-images or screen burn-in. Turn off the screen or avoid displaying the same image for a long time when you do not use the device.

# Home screen

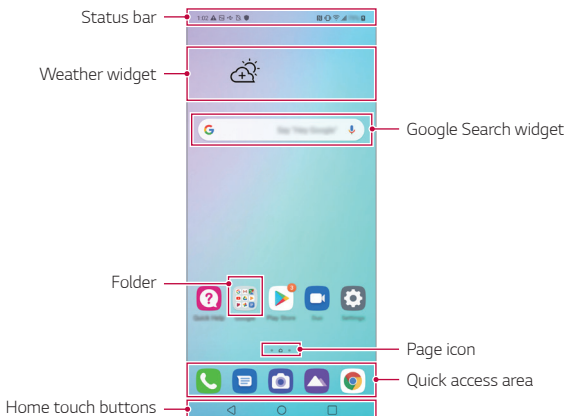
## Home screen overview

The Home screen is the starting point for accessing various functions and apps on your device. Tap  on any screen to directly go to the Home screen.




You can manage all apps and widgets on the Home screen. Swipe the screen left or right to view all installed apps at a glance.

## Home screen layout

You can view all apps and organize widgets and folders on the Home screen.











- The Home screen may differ depending on the manufacturer policy, user settings, software version or service provider.

- **Status bar:** View status icons, the time and the battery level.
- **Weather widget:** View the information of weather and time for a specific area.
- **Google Search widget:** Type or speak to open Google Search.
- **Folder:** You can create folders to classify the app based on desired criteria.
- **Page icon:** Display the total number of Home screen canvases. You can tap the desired page icon to go to the page. The icon reflecting the current canvas will be highlighted.
- **Quick access area:** Fix main apps at the bottom of the screen so that they can be accessed from any Home screen canvas.
- **Home touch buttons**
  - : Return to the previous screen. Close the keypad or pop-up windows.
  - : Tap to go to the Home screen. To launch Google Assistant, touch and hold.
  - : Tap to view a list of recently used apps or run an app from the list. To delete all the recently used apps, tap **CLEAR ALL**. To use two apps at the same time with the Multi window feature, touch and hold the button while using an app.


## Changing the style of the Home touch buttons

You can change the style of the Home touch buttons.

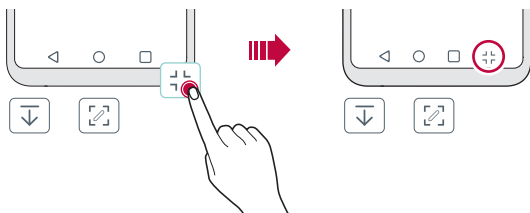
- 1 Tap  > **Settings** > **Display** > **Home touch buttons**.
- 2 Under **STYLE**, select **Gesture and buttons** or **Buttons only** to suit your preferences.
  - **Gesture and buttons**: Back button  and Home button  are available. To see recent apps, swipe the Home button  up.
  - **Buttons only**:  /  /  are available. Tap  to see recent apps.

## Editing the Home touch buttons

You can rearrange the Home touch buttons or add frequently used functions to the Home touch buttons area.

Tap  > **Settings** > **Display** > **Home touch buttons** > **Button combination** and customize the settings.


- Several functions, including QSlide, Notification and Capture+, are provided. A maximum of two additional items can be added.








## Lock/hide icon

The icon to lock or hide the Home touch buttons appears at the bottom left of the screen.

If you want to lock the Home touch buttons while shown, tap  on the left of the Home touch buttons.

To hide the Home touch buttons again, double-tap .



To deactivate the Lock/hide buttons feature, tap  > **Settings** > **Display** > **Home touch buttons** > **Show lock/hide icon**, then tap .



- Some features may not be supported while the Home touch buttons are hidden.
















## Hiding the Home touch buttons

You can hide the Home touch buttons to view in a larger screen while using an app.

- 1 Tap  > **Settings** > **Display** > **Home touch buttons** > **Hide Home touch buttons**.
- 2 Select apps you want to use with the Home touch buttons hidden, and tap .
  - The Home touch buttons disappear 3 seconds after the last touch.
  - To view the Home touch buttons again, drag the bottom of the screen upwards.

## Status icons

When there is a notification for an unread message, calendar event or alarm, the status bar displays the corresponding notification icon. Check your device's status by viewing notification icons displayed on the status bar.


	No signal
	Data is being transmitted over the network
	Alarm is set
	Vibrate mode is on
	Bluetooth is on
	Connected to a computer via USB
	Battery level
	Airplane mode is on
	Missed calls
	Wi-Fi is connected
	Mute mode is on
	Checking the current location via GPS
	Hotspot is on
	No SIM card
	The NFC mode is on

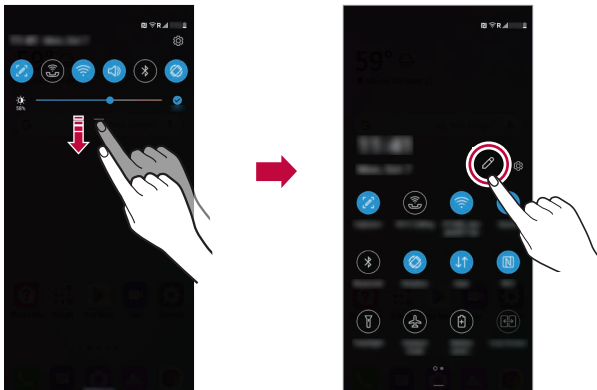


- Some of these icons may appear differently or may not appear at all, depending on the device's status. Refer to the icons according to the actual environment and area in which you are using the device and your service provider.
- Displayed icons may vary, depending on the area or service provider.

## Notifications panel

You can open the notifications panel by dragging the status bar downward on the main screen.

- You can drag down the notice window or tap the arrow icon to open the list of quick setting icons.
- You can tap  to add, delete or arrange icons in the notice window.
- If you touch and hold the icon, the settings screen for the corresponding function appears.



- You can use the notifications panel even on the lock screen. Drag the notifications panel while the screen is locked to quickly access the desired features.

## Switching the screen orientation

You can set the screen orientation to automatically switch according to the device's physical orientation.

On the notification panel, tap **Rotation** from the quick access icon list.


You can also tap  > **Settings** > **Display** and activate **Auto-rotate screen**.




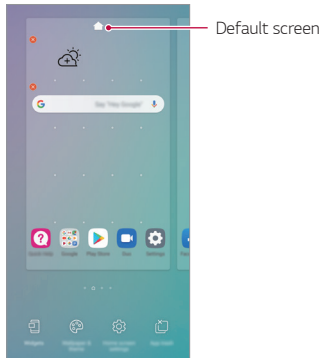
## Editing the Home screen

On the Home screen, touch and hold on an empty space, then select the desired action from below.

- To rearrange the Home screen canvases, touch and hold on a canvas, then drag it to a desired location.
- To add a widget to the Home screen, touch and hold on a blank area of the Home screen, then select **Widgets**.
- To change wallpapers, themes, icon styles and AOD options, touch and hold on a blank area of the Home screen, then select **Wallpaper & theme**.

You can also tap  > **Settings** > **Display** > **Wallpaper & theme**, then select desired options from Wallpaper, Theme, Icon and AOD to apply to the device.

- To configure the Home screen settings, touch and hold on a blank area of the Home screen, then select **Home screen settings**. See *Home screen settings* for details.
- To view or reinstall the uninstalled apps, touch and hold on a blank area of the Home screen, then select **App trash**. See *App trash* for details.
- To change the default screen, touch and hold on a blank area of the Home screen, move to desired screen, tap , then tap the screen once more.

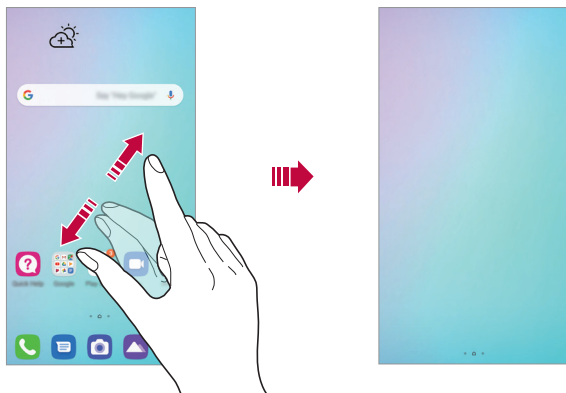


## Viewing the background theme

You can view only the background image by hiding the apps and widgets on the Home screen.

Spread two fingers apart on the Home screen.

- To return to the original screen, which displays apps and widgets, pinch your fingers on the Home screen or tap ◀.



## Moving apps on the Home screen

On the Home screen, touch and hold an app, then drag it to a desired location.

- To keep frequently used apps at the bottom of the Home screen, touch and hold an app, then drag it to the quick access area at the bottom.
- To remove an icon from the quick access area, drag the icon to the Home screen.

# Using folders from the Home screen


## Creating folders

On the Home screen, touch and hold an app, then drag it over another app.

- A new folder is created and the apps are added to the folder.

## Editing folders

On the Home screen, tap a folder and do one of the following actions.


- To edit the folder name and color, tap the folder name.
- To add apps, touch and hold an app, then drag it over the folder and release it.
- To remove an app from the folder, touch and hold the app and drag it to outside the folder. If the removed app is the only one app that existed in the folder, the folder is removed automatically.
- You can also add or remove apps after tapping  in the folder.



- You cannot change the folder color while using downloaded theme.

## Home screen settings

You can customize the Home screen settings.

- 1 Tap  > **Settings** > **Display** > **Home screen**.
- 2 Customize the following settings:
  - **Select Home:** Select a Home screen mode.
  - **Wallpaper:** Change the Home screen background wallpaper.
  - **Screen swipe effect:** Select an effect to apply when the Home screen canvas switches.
  - **Icon shape:** Choose a desired shape for icons from the options provided.

- **Left Home screen:** Select what to display on the screen located left to the main Home screen.
- **Sort apps by:** Set how apps are sorted on the Home screen.
- **Grid:** Change the app arrangement mode for the Home screen.
- **Hide apps:** Select apps you want to hide from the Home screen.
- **Loop Home screen:** Enable to allow continuous Home screen scrolling (loop back to the first screen after the last screen).



- This function is not available when Google feed is selected for Left Home screen.

- **Search:** Search by swiping down on the Home screen.
- **Home screen lock:** Enable to prevent apps and widgets from being rearranged or removed.

## Screen lock

### Screen lock overview

Your device's screen turns off and locks itself if you press the Power/Lock key. This also happens after the device is left idle for a specified period of time.

If you press the Power/Lock key when a screen lock is not set, the Home screen appears immediately.

To ensure security and prevent unwanted access to your device, set a screen lock.




- A screen lock also prevents unnecessary touch input on the device screen and reduces battery consumption. We recommend that you activate the screen lock while not using the device.



## Setting a screen lock

There are several options available for configuring the screen lock settings.

- 1 Tap  > **Settings** > **Lock screen & security** > **Select screen lock** and then select the method you prefer.
- 2 Customize the following settings:
  - **None**: Deactivate the screen lock function.
  - **Swipe**: Swipe on the screen to unlock the screen.
  - **Pattern**: Draw a pattern to unlock the screen.
  - **PIN**: Enter a numeric password to unlock the screen.
  - **Password**: Enter an alphanumeric password to unlock the screen.
  - **Fingerprints**: Unlock the screen by using your fingerprint.



- If you incorrectly attempt to unlock the device 5 times, the screen is blocked for 30 seconds.

## Secure start-up settings

When you select Pattern, PIN or Password as a screen lock method, you can configure your device to be locked whenever turning on the device in order to secure your data.


- You cannot use all functions, except for emergency calls until you unlock the device.
- If you forget your decryption password, you cannot restore encrypted data and personal information.

## Precautions for the secure start-up feature

- If you forget your decryption password, you cannot restore encrypted data and personal information.
- Be sure to keep your screen lock passwords separately.
- If you enter the screen lock passwords incorrectly more than the specified times, the device automatically resets itself and the encrypted data and your personal information are deleted automatically and they cannot be restored.
- Be cautious not to enter incorrect screen lock passwords more than the specified times.
- When you turn on the device right after the device resets, encryption also starts. If you stop the encryption arbitrarily, the data may be damaged. Be sure to wait until the reset is completed.


## Customize Lock screen

You can customize lock screen.

- 1 Tap  > **Settings** > **Lock screen & security** > **Customize Lock screen**.
- 2 Select a function you want to set.
  - **Wallpaper**: Allow you to set the background for your Lock screen.
  - **Clock**: Allow you to set where to position the clock on the Lock screen.
  - **Shortcuts**: Allow you to choose apps to run on your Lock screen. This setting appears only when a screen lock is set.
  - **Weather animation**: Enable this option to display weather animations for the current location on the Lock screen.
  - **Contact info for lost phone**: Allow you to set text to be displayed on the Lock screen to identify the phone's owner.

## Secure lock settings

You can set secure lock settings.


- 1 Tap  > **Settings** > **Lock screen & security** > **Secure lock settings**.
- 2 Select a function you want to set.
  - **Make pattern visible** (shown only when Pattern is set as a screen lock): Turn on to make pattern visible.
  - **Lock timer**: Allows you to set the amount of time before the screen automatically locks after the backlight turns off (time-out due to inactivity).
  - **Power key instantly locks**: Enable this option to instantly lock the screen when the Power/Lock button is pressed. This setting overrides the Security Lock timer setting.
  - **Show lockdown option** (shown only when a screen lock is set): Enable this option to display the Lockdown icon when you press and hold the Power/Lock button. Tap the Lockdown icon to turn off Smart Lock, biometric unlocking, and notifications on the lock screen.
  - **Smart Lock**: Allows you to set trusted devices, places, voice, and/or on-body detection that will allow your phone to remain unlocked.



- Available menu options may vary depending on the lock screen method selected.

## KnockON

You can turn the screen on or off by double-tapping the screen.

Tap  > **Settings** > **Extensions** > **KnockON** to enable the option.



- This option is available only on the Home screen provided by LG. It may not function properly on a custom launcher or on the Home screen installed by the user.
- When tapping the screen, use your fingertip. Do not use a fingernail.
- To use the KnockON feature, make sure that the proximity/light sensor is not blocked by a sticker or any other foreign substance.

## Turning the screen on

Double-tap the middle of the screen.

- Tapping the top or bottom of the screen may decrease the recognition rate.


## Turning the screen off

Double-tap on an empty space on the Home screen and Lock screen.

You can also double-tap an empty space on the status bar.

# Memory card encryption

You can encrypt and protect data saved on the memory card. The encrypted data in the memory card cannot be accessed from another device.

- 1 Tap  > **Settings** > **Lock screen & security** > **Encryption & credentials** > **Encrypt SD card**.
- 2 Read the on-screen overview of memory card encryption and then tap **Continue** to continue.
- 3 Select an option and tap **Encrypt now**.
  - **New data encryption**: Encrypt only data that is saved on the memory card after encryption.
  - **Full encryption**: Encrypt all the data currently saved on the memory card.
  - **Exclude media files**: Encrypt all files, except for media files such as music, photos and videos.



- Once memory card encryption starts, some functions are not available.
- If the device is turned off while encryption is underway, the encryption process will fail, and some data may be damaged. Therefore, be sure to check if the battery level is sufficient before starting encryption.
- Encrypted files are accessible only from the device where the files were encrypted.
- The encrypted memory card cannot be used on another device. To use the encrypted memory card on another mobile device, format the card.
- You can activate memory card encryption even when no memory card is installed into the device. Any memory card that is installed after encryption will automatically be encrypted.

## Taking screenshots


You can take screenshots of the current screen you are viewing.

### Via a shortcut


Press and hold the Power/Lock key and the Volume Down key at the same time for at least two seconds.

- Screenshots can be viewed from the **Screenshots** folder in **Gallery**.

### Via Capture+

On the screen where you want to take a screenshot, drag the status bar downwards, then tap .




- When the screen is turned off or locked, you can access **Capture+** by pressing the Volume Up key twice. To use this feature, tap  > **Settings** > **Extensions** > **Shortcuts** and turn on **Open Capture+**.
- See *Writing notes on a screenshot* for details.

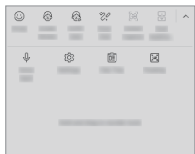
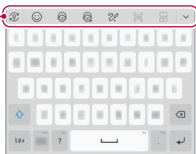
# Entering text


## Using the Smart toolbar







You can use various keyboard input methods in one place. You can select the desired input method from the top of the keyboard.







- 1 Select the desired keyboard input method from the Smart toolbar.
- 2 Tap , then touch and drag each tool to reorganize as desired.

Smart toolbar



- You can add up to 6 tools to Smart Tools.
- Some supporting input methods may differ depending on the device you have.
- You can turn on or off the Smart tool feature from the keyboard settings.
- You can also configure the keyboard input methods by tapping .

-  : Add emojis.
-  : Add avatar stickers.
-  : Add ani-stickers.
-  : Open Draw chat.
-  : Access keyboard settings.
-  : Take an instant screenshot.
  - When the phone is connected to LG Dual Screen (LM-V515N), it captures the screen of LG Dual Screen and attaches to the message instantly. For more details, refer to *Using Dual Keyboard on Dual Screen*.



-  : Tap  to enter text with your voice.
  - To maximize the voice command recognition, speak clearly.
  - To enter text with your voice, make sure that your device is connected to a network.
  - To select the language for voice recognition, tap  > **Languages** on the voice recognition screen.
  - This function may not be supported, or the supported languages may differ depending on the service area.
-  : Open the clip tray. See *Clip Tray* for details
-  : Activate floating keyboard when you use the Multi-window feature. You can also move the keyboard to the desired location.
-  : Use the dual keyboard.
  - If the phone is connected to LG Dual Screen (LM-V51 5N), you can expand the keyboard vertically and use the upper screen as an app screen and the bottom screen as a keyboard screen. For more details, refer to *Using Dual Keyboard on Dual Screen*.

## Clip Tray

If you copy or cut an image or text, it is automatically saved to the clip tray and can be pasted to any space at any time.

- 1 On the Smart tool, select .

You can also touch and hold the text input window, then select **Clip Tray**.

- 2 Select and paste an item from the clip tray.
  - A maximum of 20 items can be saved to the clip tray.
  - Tap  to lock saved items in order not to delete them, even when the maximum quantity is exceeded. A maximum of ten items can be locked. To delete locked items, unlock them first.
  - Tap  to delete the items saved to the clip tray.



- The clip tray may not be supported by some downloaded apps.
- Deleted clipboard items cannot be restored.

## Using the Smart keyboard

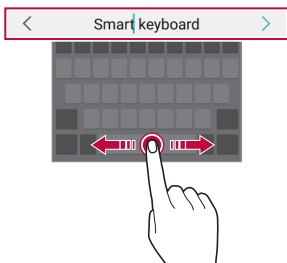
You can use the Smart keyboard to enter and edit text.

With the Smart keyboard, you can view text as you type without bothering to alternate between the screen and a conventional keyboard. This allows you to easily find and correct errors when typing.

### Moving the cursor

With the Smart keyboard, you can move the cursor to the exact position you want. When typing text, touch and hold on the space bar and then drag left or right.





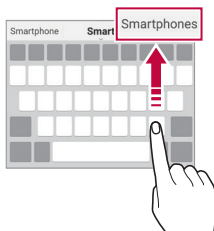
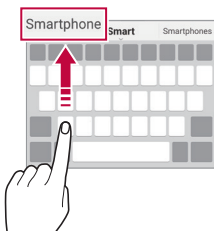
- This option is available only on the QWERTY keyboard.

## Suggesting words

Smart keyboard automatically analyzes your usage patterns to suggest frequently used words as you type. The longer you use your device, the more precise the suggestions are.


Enter text, then tap a suggested word or gently drag the left or right side of the keyboard upwards.

- The selected word is automatically entered. You do not need to manually type every letter of the word.



## Changing the QWERTY keyboard layout

You can add, delete or rearrange keys on the bottom row of the keyboard.


- 1 Tap  > **Settings** > **System** > **Language & keyboard** > **Manage Keyboards** > **LG Keyboard** > **Keyboard height and layout** > **QWERTY Keyboard layout**.
- 2 You can select and organize frequently used symbols.

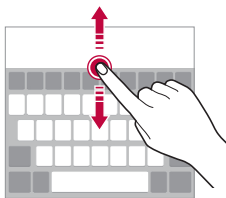


• Some languages may have a different layout.

## Customizing the keyboard height


You can customize the keyboard height to maximize hand comfort when typing.

- 1 Tap  > **Settings** > **System** > **Language & keyboard** > **Manage Keyboards** > **LG Keyboard** > **Keyboard height and layout** > **Keyboard height**.
- 2 Adjust the keyboard height.



## Selecting a landscape keyboard mode

You can select a landscape keyboard mode from several choices.

- 1 Tap  > **Settings** > **System** > **Language & keyboard** > **Manage Keyboards** > **LG Keyboard** > **Keyboard height and layout** > **Keyboard type in landscape**.

- 2 Select a keyboard mode.

## Splitting the keyboard

You can split the keyboard in half and place each piece on either side of the screen when the screen is in landscape mode.

To split the keyboard, turn the device horizontally and spread it apart on the keyboard with two fingers. To attach the keyboard, close it by pinching two fingers.

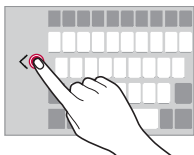


- Even if QWERTY keyboard is not in use, it switches to QWERTY keyboard for horizontal screen view.

## One-handed operation mode


You can move the keyboard to one side of the screen so that you can use the keyboard with one hand.

- 1 Tap **○ > Settings > System > Language & keyboard > Manage Keyboards > LG Keyboard > Keyboard height and layout > One-handed operation.**
- 2 Tap the arrow displayed next to the keyboard to move the keyboard in the desired direction.





## Adding languages to the keyboard

You can make additional languages available for keyboard input.

- 1 Tap  > **Settings** > **System** > **Language & keyboard** > **Manage Keyboards** > **LG Keyboard** > **Language & Keyboard layout** > **Select languages**.
- 2 Select the languages you want to use on the keyboard.

## Copy and Paste

You can cut or copy text from an app, and then paste the text into the same app. Or, you can run other apps and paste the text into them.

- 1 Touch and hold around the text you want to copy or cut.
- 2 Drag  /  to specify the area to copy or cut.
- 3 Select either **Cut** or **Copy**.
  - Cut or copied text is automatically added to the clip tray.
- 4 Touch and hold the text input window, then select **Paste**.







- If there is no item that has been copied or cut, the **Paste** option will not appear.

# Content sharing

## Playing content from another device

You can play photos, videos or songs saved on your device from a TV.

- 1 Connect the TV and your device to the same Wi-Fi network.
- 2 While viewing the items from the **Gallery** or **Music** app, tap  or  > **Play on other device**.  
Or tap  > **Settings** > **Connected devices** > **Screen sharing** and then tap  to activate it.
- 3 Select the TV you want to connect to.



• For use with Chromecast, Google Play services should be up to date.

## Viewing content from nearby devices

You can view content from various devices, such as a computer, NAS or mobile device, by using the Gallery or Music app.

Tap  > **Settings** > **Connected devices** > **Media server**, then tap **Content sharing**  to activate it.


## Connecting the devices

Connect both your device and a device that supports DLNA function to the same wireless network.



• Make sure that File sharing (DLNA) is activated on both devices.

## Searching for nearby devices



You can view a list of DLNA devices on the same network by selecting the  > **Nearby devices** menu in each app.

Use content from nearby devices as if you were using it on your device.

## Sending or receiving files



You can share files between your device and another LG device, tablet or computer.

### Sending files

From the **Gallery** or **File Manager** app, tap  > **Share** or , then select a device on the file sharing list.

### Receiving files

Drag the status bar downward and then tap **File sharing**.

If your device does not support the file sharing feature, tap  > **Settings** > **Connected devices** > **File sharing** > **SmartShare Beam** .



- You can share files with certain devices that support DLNA.

# Do not disturb

You can limit or mute notifications to avoid disturbances for a specific period of time.

Tap  > **Settings** > **Sound** > **Do not disturb**.

- **Mode** and select the mode you want:
  - **Priority only**: Receive sound or vibrate notifications for the selected apps. Even when Priority only is turned on, alarms still sound.
  - **Total silence**: Disable both the sound and vibration.
- **Select priorities**: Receive alarms and the notifications for the selected apps.
  - **App notifications**: Select apps to receive the notifications.
  - **Calls from**: Set up a range of notifications when receiving a call.



- **Repeated calls**: Second call from same caller within 15 min is not silenced.

- **Messages from**: Set up a range of notifications when receiving a message.
- **Use Do not disturb**: Turn on the Do not disturb feature.
- **SCHEDULE**: Set the schedule for which you want to turn on the Do not disturb feature.
- **Help**: View the help for Do not disturb.



03

## Useful Apps



# Installing and uninstalling apps

## Installing apps

Access an app store to search and download apps.

- You can use SmartWorld, Play Store or the app store provided by your service provider.




- Some app stores may require you to create an account and sign in.
- Some apps may charge fees.
- If you use mobile data, you may be charged for data usage, depending on your pricing plan.
- SmartWorld may not be supported depending on the area or service provider.

## Uninstalling apps


Uninstall apps that you no longer use from your device.

### Uninstalling with the touch and hold gesture

Touch and hold any empty area of the Home screen, and then tap  of the app you want to delete.

- Uninstalled apps can be reinstalled within 24 hours of uninstallation.  
See *App trash* for details.

### Uninstalling by using the settings menu

Tap  > **Settings** > **Apps & notifications** > **App info**, select an app, then tap **Uninstall**.



- Some apps cannot be uninstalled by users.

## Uninstalling apps from the app store

To uninstall an app, access the app store from which you downloaded the app and uninstall it.

## Installing and uninstalling apps during the setup

When you turn on the device for the first time, you can download recommended apps.

You can skip to the next step without installation.


## App trash

You can view the uninstalled apps on the Home screen. You can also reinstall apps within 24 hours of uninstallation.

### 1 Tap > **Management** > **App trash**.

You can also touch and hold an empty area of the Home screen, then tap **App trash**.

### 2 Choose the desired option.



- **Restore**: Restore the selected app.
-  : Remove the uninstalled apps permanently from the device.

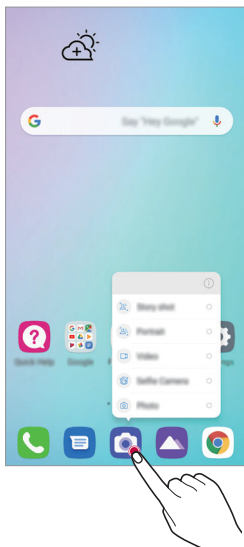


- Uninstalled apps are automatically removed from the device 24 hours after they were uninstalled. If you want to reinstall the uninstalled apps, you must download them again from the app store.
- This feature is activated on the default Home screen only. If you uninstall apps while using the EasyHome screen or other launcher, they are immediately and permanently removed from the device.

# App Shortcuts

On the Home screen, touch and hold an app icon such as Phone, Messages, Camera, Gallery and Settings to display a quick access menu. Use apps more easily through App Shortcuts.

- Tap  to set a widget for the app.
- Tap  to check the app information.







- This feature is available only on some apps.

# Phone

## Voice call

Make a phone call by using one of the available methods, such as manually entering a phone number and making a call from the contact list or the list of recent calls.




### Making a call from the keypad

- 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.
- See [Adding contacts](#) for details on how to add phone numbers to the speed dial list.

### Making Calls from Contacts

- 1  >  > **Contacts**.
- 2 After selecting the number you want to call from the list of contacts, tap .



## Answering/Ending a call

To answer a call, drag  on the incoming call screen.

- When the stereo headset is connected, you can make calls by using the call/end button on the headset.
- To end a call with the Power key, tap  > **Settings > Network & internet > Call > Answer and end calls** and then activate **End call with the Power key**.

## Rejecting a call


To reject an incoming call, drag  across the incoming call screen.

- To send a rejection message, drag the rejection message option  across the screen.
- To add or edit a rejection message, tap  > **Settings > Network & internet > Call > Call blocking & Decline with message > Decline with message**.
- When a call is coming in, press the Volume Up, Volume Down or Power/Lock key to mute ringtone or vibration, or to hold the call.




## Checking an incoming call while using an app

When a call comes in while using an app, a pop-up notification can be displayed at the top of the screen. You can receive the call, reject the call, or send message from the pop-up screen.




- Tap  > **Settings > Network & internet > Call > Additional settings > Show voice calls while in an app** and then select the desired way you would like to display the incoming call while using an app.
- Floating bar must be enabled if you want to check the calls received using the floating bar while using an app. For more details, refer to *Floating Bar overview*.

## Viewing missed calls

If there is a missed call, the status bar at the top of the screen displays . To view missed call details, drag the status bar downwards. You can also tap  >  > **Call logs**.

## Functions accessible during a call

During a call, you can access a variety of functions by tapping the on-screen buttons:


- **Add call:** Allows you to add a call to the current conversation.
- **Contacts:** Allows access to your contacts list.
- **Dialpad:** Display or hide the dial pad.
- **Speaker:** Turn on the speakerphone function.
- **Mute:** Block your voice so that the other party cannot hear your voice.
- **Bluetooth:** Switch the call to a Bluetooth device that is paired and connected.
-  : End a call.



- Some functions are not available during a video call.
- Available setting items may vary depending on the area or service provider.

## Making a three-way calling

You can make a call to another contact during a call.



- 1 During a call, tap **Add call**.
- 2 Enter a phone number and tap .
- The two calls are displayed on the screen at the same time, and the first call is put on hold.
- 3 To start a conference call, tap **Merge calls**.



- You may be charged a fee for each call. Consult with your service provider for more information.

## Viewing call records

To view recent call records, tap  > **Call logs**. Then, you can use the following functions:




- To view detailed call records, select a contact. To make a call to the selected contact, tap .
- To delete call records, tap  > **Delete**.



- The displayed call duration may differ from the call charge. Consult with your service provider for more information.
- The deleted call history can not be restored.
- Pinch two fingers or spread your fingers apart to adjust the font size of call logs or contacts.

## Configuring call options

You can configure various call options.

- 1 Tap  >  > **Dial** or **Call logs**.
- 2 Tap  > **Call settings** and then configure the options to suit your preferences.



# Messages

## Sending a text message

Quickly compose and send text messages (SMS) on your phone.



- See your service plan for applicable charges for text messaging.

- 1 Tap > .
- 2 Tap **Start chat**.
- 3 Tap the **To** field and enter a contact's names, phone numbers, or email addresses that you'd like to message. You can also pick from your top contacts or your whole contact list.
- 4 Tap the desired number or contact.
- 5 Tap the text field and enter your message.
  - To enter a emoji, tap and tap . Select a category and make a selection from the list to insert it into your current message.
- 6 Review your message and tap .





## Sending a multimedia message (MMS)

When you need to add a little more to a text message, you can send a multimedia message (MMS) with the contents such as images, videos, etc.





- See your service plan for applicable charges for multimedia messaging.

## Compose multimedia messages


- 1 Tap  .
- 2 Tap **Start chat**.
- 3 Tap the **To** field and enter a contact's names, phone numbers, or email addresses that you'd like to message. You can also pick from your top contacts or your whole contact list.
- 4 Tap the desired number or contact.
- 5 Tap the text field and enter your message.
- 6 Tap  to attach photos or videos.
- 7 Tap  for other types of attachments.




- To remove or replace a picture or an audio attachment, on the Compose screen, tap  next to the attachment.

- 8 When you are finished creating your new MMS message, tap .

## Saving and resuming a draft message



While composing a text or multimedia message, tap  to automatically save your message as a draft.

To resume composing the message:

- 1 On the screen with all message threads, tap the message. The Draft label is shown if a saved draft is available.
- 2 When you finish editing the message, tap .

## New messages notification

Depending on your notification settings, the phone will play a ringtone, vibrate, or display the message briefly in the status bar when you receive a new text or multimedia message. To change the notification for new text and multimedia messages, see *Text and Multimedia message options* for details.

A new message icon  also appears in the notifications area of the status bar to notify you of a new text or multimedia message. The Messages application icon (if shown on the home screen) also displays the number of new messages .

- To open the message, pull down the status bar to open the notification panel. Tap the new message to open and read it. For information on reading and replying to messages see *Managing message conversations*.



## Managing message conversations

Text and multimedia messages that are sent to and received from a contact (or a number) are grouped into conversations or message threads in the Messages screen. This allows you to see exchanged messages (similar to a chat program) with a contact on the same screen.

### Read a text message

- Do one of the following:
  - On the Messages screen, tap the message thread to open and read it.
  - If you have a new message notification, drag the status bar down to open the notification panel. Tap the new message to open and read it.

## View a multimedia message (MMS)

- 1 Tap  > .
- 2 On the Messages screen, tap a message thread to open it.
- 3 While viewing a message, tap the play icon (on the video or audio file) to playback the file or tap the image to view the picture.





### • Tip

The file attachment on the multimedia message can be saved to your phone's internal storage. To save the attachment, touch and hold the file and tap



- When Auto-download MMS is disabled, only the message header is downloaded. To download the entire message, tap the Download button in the message. For details, see *Text and Multimedia message options*.

## Reply to a message






- 1 Tap  > .
- 2 On the Messages screen, tap a message thread to open it.
- 3 While viewing a message, tap the text field and type your reply message.
- 4 Once completed, tap

To return to the Messages screen from a text message thread, tap .




- To view the details of a particular message, in the message thread, touch and hold the message to open the options menu, and then tap
- If a message contains a link to a web page, tap the link to open it in the web browser.
- If a message contains a phone number, tap the phone number to dial the number or add it to your contacts.

## Delete conversations


- 1 Tap  .
- 2 On the Messages screen, touch and hold a message thread to display .
- 3 To select multiple conversations, tap each conversation to delete.  will be shown.
- 4 Tap  and then tap **Delete** to confirm.



### • Tip


You can also delete a conversation while you're viewing it. While viewing a conversation, tap  > **Delete**.

## Delete a single message

- 1 While viewing a conversation, touch and hold the message that you want to delete.
- 2 Tap  and then tap **Delete** to confirm.

## Text and Multimedia message options

The Messages settings menu lets you control options for your text and multimedia messages including message limits, size settings, and notifications.

- 1 Tap .
- 2 On the Messages screen, tap **:** > **Settings**.
- 3 Adjust the following settings according to your needs:
  - **Chat features:** Configure the chat features (available when the mobile network allows).
  - **Default SMS app:** To change your default messaging app.
  - **Notifications:** Set various options for notifications.
    - **On:** Turn on to get notifications when a new message arrives.
    - **Importance:** Select Importance options.
    - **Sound:** Select the desired notification sound.
    - **Sound with vibration:** Turn this on to hear the sound with vibration
    - **Icon badge:** Turn this on to indicate new message notifications with a colored "badge" on the Messages app launcher icon.
    - **Override Do not Disturb:** Turn this on if you still want to receive notifications even when Do not disturb is on with the Priority only mode.
    - **Additional settings:** Set additional settings such as **Hear outgoing message sounds** and **Your current country**, etc.
  - **Hear outgoing message sounds:** Enable to play sounds when you send a message.
  - **Your current country:** Allows you to set your current country.
  - **Suggestions in chat:** Select whether to show suggestions when available.
  - **Automatic previews:** Select whether to show previews in messages.

- **Advanced**
  - **Group messaging:** Select the group messaging option between **Send an SMS reply to all recipients and get individual replies (mass text)** and **Send an MMS reply to all recipients (group MMS)**.
  - **Auto-download MMS:** Enable this option to automatically retrieve the entire content of your multimedia message. When enabled, the multimedia message header, message body, and any attachments will automatically download to your phone when the message is received. If you disable this option, only the multimedia message header will be retrieved and displayed.
  - **Auto-download MMS when roaming:** Disable this option if you only desire the multimedia message headers to download while roaming. Enable this option to automatically download your complete multimedia messages even while roaming.
  - **Use simple characters:** Convert special characters in your text messages.
  - **Service messages:** Enable this option to receive service messages.
  - **SIM card messages:** You can view SIM card messages.
  - **Phone number:** Tap this to change the phone number you use to send messages.
- **About, terms & privacy:** You can check the version info, privacy policy, and terms of service.



- The settings may vary depending on the version being used.

# Camera

## Starting the camera

You can take a photo or record a video to cherish all of your memorable moments.

Tap  > .






- Before taking a photo or recording a video, wipe the camera lens with a soft cloth.
- Be careful not to stain the camera lens with your fingers or other foreign substance.
- Even when the phone is on vibrate or silent, shutter sound is activated when taking photos.
- Images included in this user guide may be different from the actual device.
- Photos and videos can be viewed or edited in Gallery. See [Gallery overview](#) for details.
- Refrain from using the product for a purpose that may violate someone else's privacy or rights.



## Auto mode



You can take photos or record videos by selecting a variety of camera modes and options.

- 1 Tap .
- 2 To take a photo, tap **Photo**, then tap . To record a video, tap **Video**, then tap .




Rear Camera







## Taking a photo

- 1 Select a camera mode and tap the subject to focus the camera on.
- 2 Tap  to take a photo.
  - You can also press the Volume Down or Volume Up key to take a photo.
  - You can take a photo while recording a video by tapping  on the screen.



- When the screen is turned off or locked, start the camera by pressing the Power or Volume Down key twice. Tap  > **Settings** > **Extensions** > **Shortcuts** and enable **Open Camera** under **POWER** and/or **VOLUME** to use this feature.

## Recording a video

- 1 Select a camera mode and tap the subject to focus the camera on.
- 2 Tap .
  - To take a photo while recording a video, tap .
  - To pause the video recording, tap . To resume the video recording, tap .
  - While recording a video, you may spread or pinch two fingers to zoom in or out.
  - While recording a video, you may tap the desired area to adjust the brightness.
  - You can switch between the front camera and rear camera while recording a video by tapping .
- 3 Tap  to end the video recording.



## Customizing the camera options

You can customize a variety of camera options to suit your preferences.

Tap  on the camera screen.




- Available options vary depending on the selected camera (front or rear camera) and the selected camera mode.


- : Take a photo in FullVision.
- : Select values for aspect ratio and size for taking photos.

<b>Auto scene optimizer</b>	Recognizes the scene that is being recorded and applies the optimal resolution setting automatically.
<b>Action shot</b>	Freezes a moving subject.
<b>AI Composition</b>	Recognizes the human figure when taking a portrait and recommends the optimal composition.
<b>Tips</b>	Notifies the user when the subject's eyes were closed or the picture is blurry for an optimal result.
<b>HDR</b>	Obtain photos in vivid color and get compensated effects even when they are taken against the light. These functions are provided by the High Dynamic Range (HDR) technology equipped in the camera.
<b>Live photo</b>	Record the action before and after you take a photo.
<b>Cheese shutter</b>	Take photos with voice commands.
<b>Tracking focus</b>	Enables the camera to remain focused on the subject you touch on the screen, even if the subject is moving. (Available when the Standard camera is in use.)
<b>Tag locations</b>	Save the image with GPS location data.
<b>Grid</b>	Displays guide grids so that you can take photos or record videos based on the horizontal and vertical reference lines.
<b>Add signature</b>	Displays a personalized signature on the photos.
<b>Storage</b>	Select if you want to store the pictures and videos in the Internal storage or SD card. (Available when a memory card is inserted.)
<b>Help</b>	Provides the help information for each camera menu.

# Additional options on the front camera



Selfie shot	Take a selfie by selecting its option between <b>Gesture shot</b> and <b>Auto shot</b> .
Save as flipped	Save as flipped images after taking selfies.




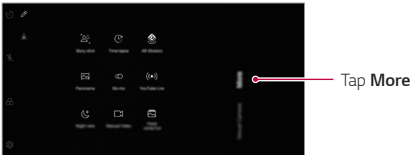
- You can apply a make-up effect when taking a selfie using the front camera by tapping .

## Various camera modes

You can conveniently select from the modes provided based on your need.

Tap  > , then tap **More**.

- You can rearrange the camera modes by dragging mode icons.
- You can download various camera modes from the **SmartWorld** app by tapping .



## Story Shot

You can immediately composite photos taken from the rear camera and the front camera.






- 1 Tap > , then tap **More** > .
- 2 Tap to take photos.
  - Take a photo that will serve as the background of the composite image.
  - After a short while, the front camera will automatically take a photo.



- You can also tap and then select a photo from Gallery to use as the background of the composite image.

## Panorama

You can create a panoramic photo by moving the camera in one direction to photograph and stitch continuous shots of a wide view.

- 1 Tap  > , then tap **More** > .
- 2 Tap  and then slowly move the camera in one direction.
  - Move the device by following the direction of the arrow in the guideline.
- 3 Tap  to stop capturing the panoramic.



## Slo-mo

You can create an entertaining video by changing the moving speeds of subjects in your video. This feature allows you to record a video at a faster rate of speed and then play it at the standard speed so that the video appears to be slowed down.



- Slow motion for the entire video
  - The slow motion effect is applied to the entire video.
- Slow motion for sections
  - The slow motion effect is applied to certain sections of the video.

- 1 Tap > then tap **More** > .
- 2 Tap to select between **Part** and **All**.
- 3 Tap to shoot a video.
  - If you selected **All**, the slow motion effect will be applied to the entire video.
  - If you selected **Part**, the slow motion effect will be applied only to the sections where was tapped.
    - Tap at the moment where you want the slow motion effect to be applied.  
: With a short-touch, the slow motion effect will be applied for 0.5 second.  
: With a long-touch, the slow motion effect will be applied until you release your finger.
    - You can tap up to five times.
- 4 If you want to finish shooting, tap .



## YouTube Live

You can record a video and directly upload to YouTube.

To use this feature, you need to verify your phone number.

Tap  > , then tap **More** > .



- YouTube Live is available only when your device is connected to the Internet. If you use mobile data, you may be charged for data usage, depending on your pricing plan.

## Night view

You can take vivid and clear night photos.

While taking a photo, hold the device steady.

You can adjust the brightness by dragging the slider left and right.



Tap  > , then tap **More** > .

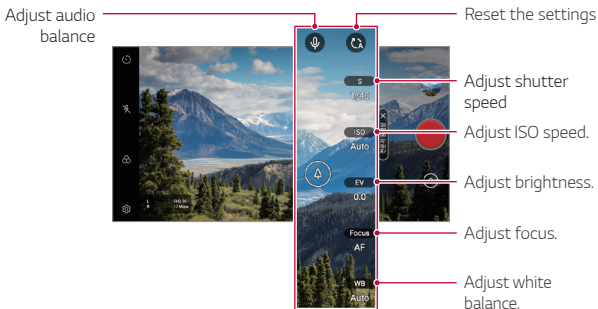




## Manual Video

You can manually customize various options to record a video. Adjust the audio, white balance, focus, brightness, ISO, shutter speed, and more.

- 1 Tap , then tap **More** > .
- 2 Manually adjust the camera settings as desired.





- 3 Tap  to start recording.

## Customizing the camera options

You can customize a variety of camera options to suit your preferences.

Tap  on the camera screen.







- : Directly switch over to FullVision
- : Select video resolution and size.

<b>Frame rate</b>	Select the frames per second value.
<b>Bit rate</b>	Select the image quality for videos.
<b>Hi-Fi</b>	Record a video with Hi-Fi quality sound.
<b>Save as HDR10</b>	Save a video in the HDR10 format for high definition and vivid color.

<b>Steady recording</b>	Minimizes motion blur while recording a video.
<b>Tracking focus</b>	Enables the camera to remain focused on the subject you touch on the screen, even if the subject is moving. (Available when the Standard camera is in use.)
<b>Tag locations</b>	Save the image with GPS location data.
<b>Grid</b>	Displays guide grids so that you can take photos or record videos based on the horizontal and vertical reference lines.
<b>Storage</b>	Select if you want to store the pictures and videos in the Internal storage or SD card. (Available when a memory card is inserted.)
<b>Help</b>	Provides the help information for each camera menu.

## Flash Jump-Cut

You can take photos at a regular interval and save as a GIF file.


- 1 Tap  > , then tap **More** > .
- 2 Tap  to select the number of photos you want to take.
  - You can select one among 4, 8, 12, 16 and 20 copies.
- 3 Tap  to take a photo.
  - Photos are taken every 3 seconds and saved as a GIF file.
  - You can tap  before taking the prescribed number of photos to stop shooting.
    - Photos taken are saved as a GIF file in Gallery.

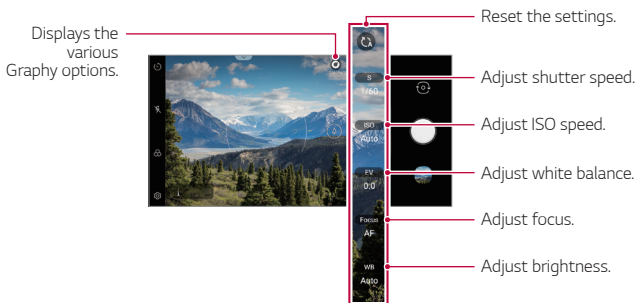


- At the moment when the camera takes the photograph, a flash comes on.
- The current shot and the total number of shots are displayed at the bottom of the screen.
- The photographs taken are saved in the GIF format only.

## Manual Camera

You can create professional level photos using a variety of advanced features. Adjust the white balance, focus, brightness, ISO, shutter speed and other options.

- 1 Tap  > , then tap **Manual Camera**.
- 2 Customize the following camera settings.




- 3 Tap  to take a photo.





- Selecting the Graphy effects allows you to shoot using the white balance, shutter speed, and ISO setting values applied to the recommended photo.
- You can see a variety of recommended photos if you download the Graphy app from Google Play Store.

## Customizing the camera options

You can customize a variety of camera options to suit your preferences.



Tap  on the camera screen.

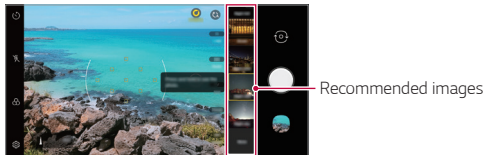
-  : Take a photo in FullVision.
-  : Select values for aspect ratio and size for taking photos.


<b>Graphy photos</b>	Adjust the white balance, ISO and shutter speed for the recommended photo. See <i>Graphy</i> for details.
<b>Save as RAW</b>	The image is stored as a RAW file format so that you can modify it. The DNG and JPEG files are created while taking a photo, then saved as a non-compressed high resolution image.
<b>Tracking focus</b>	Enables the camera to remain focused on the subject you touch on the screen, even if the subject is moving. (Available when the Standard camera is in use.)
<b>Tag locations</b>	Save the image with GPS location data.
<b>Guide</b>	Displays guide grids so that you can take photos based on the horizontal and vertical reference lines.
<b>Add signature</b>	Displays a personalized signature on the photos.
<b>Storage</b>	Select if you want to store the pictures and videos in the Internal storage or SD card. (Available when a memory card is inserted.)
<b>Help</b>	Provides the help information for each camera menu.

## Graphy



You can select one of recommended images and apply the same values for the white balance, ISO and shutter speed to obtain professional level photos.

- 1 Tap  then tap **Manual Camera**.
- 2 Tap  and select the desired scene from the recommended images.



- 3 Tap  to take a photo.
  - Photographs are taken under the same photograph settings selected in Graphy.





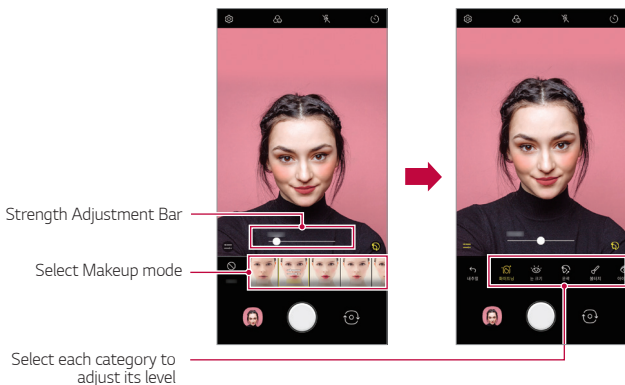
- This feature is available only in Manual Camera mode.
- Tap , then tap **Graphy photos**  to deactivate this feature.

## Makeup Pro

While taking selfies, you can apply various makeup techniques.

When using the front camera, adjust the skin tone and apply eye and lip makeups.

- 1 Tap  switch to the front camera, then tap .
- 2 Select a desired makeup option, then drag the slide bar to the left or right to adjust the effect.
  - When you select **None**, the slide bar disappears.
- 3 Select various makeup effects as desired.
  - Tap a desired makeup mode to apply the preset makeup. Tap once more to apply more detailed makeup effects.
  - Move the Strength adjustment bar to adjust the intensity of the effect selected.






- 4 Tap  to take a photo.

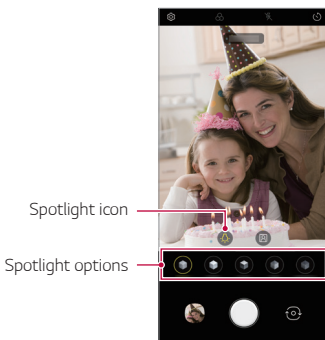
# Studio


You can create studio level photos by using Spotlight and Backdrop features in the camera.

## Spotlight

You can apply various lighting effects while taking photos.



- 1 Tap  > , then tap **Studio**.
- 2 Tap  to select a lighting effect.
  - Various lighting effects appear at the bottom of the screen.

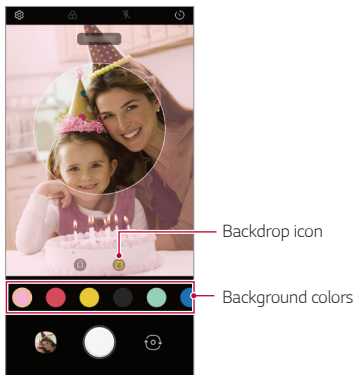



- 3 Tap the desired lighting effect icon.
- 4 When **Studio effect is available.** appears on the screen, tap  to take a photo.
  - The Studio feature may not work if the camera cannot recognize the subject.

## Backdrop

You can apply various effects for background while taking portrait photos.

- 1 Tap , then tap **Studio**.
- 2 Tap  to select a backdrop effect.
  - Various background colors appear at the bottom of the screen.
- 3 Select a background color you want to apply.



- 4 When **Studio effect is available** appears on the screen, tap  to take a photo.



- If the surrounding is dark, the camera may not apply the studio effects.

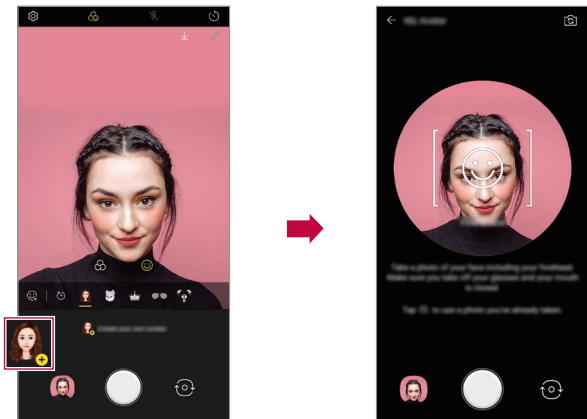


## AR features

You can use various AR (Augmented Reality) features with the Camera app. You can create your own My Avatar, AR Emoji, or AR Sticker for rich content. My Avatar helps you create a cartoon version of yourself and customize it. AR Emoji helps you create 3D animated animal emojis that mimic facial expression. AR Sticker allows you to choose from several different stickers to use on a photo or video.

### Creating My Avatar




- 1 Tap > > .
  - You can use this function only in Auto Mode.
- 2 Tap > to take a photo.
  - Follow the on-screen instructions to align your face on the screen.
  - To make My Avatar by using one of the saved photos from Gallery, tap .



- 3 Select My Avatar's gender and select details including avatar type, skin tone, hairstyle, and clothes, then tap **OK**.
- Taken photos are saved in Gallery.

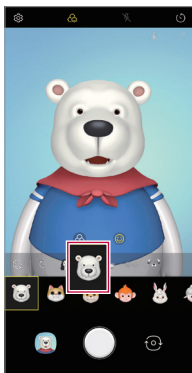


## Using My Avatar, AR Emoji, AR Sticker

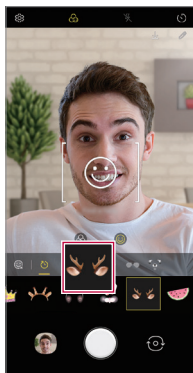
- 1 Tap  switch to the front camera, then tap  > .
- 2 Select an option you want to record.







My Avatar





AR Emoji

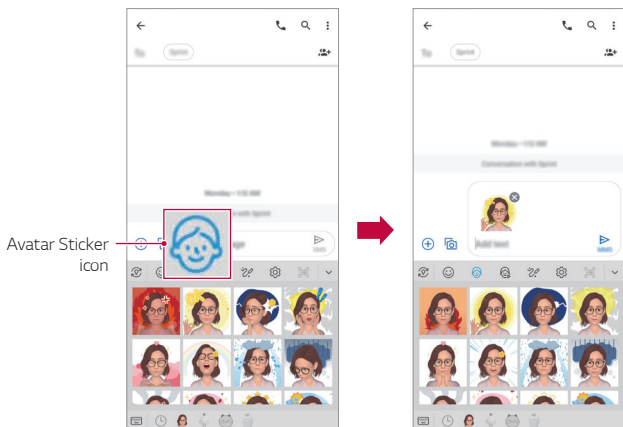


AR Sticker






- 3 To take a photo, tap .  
To record a video using My Avatar, AR Emojis or AR Stickers, select the video recording menu, and then tap  >  to select the desired item, and tap  to start shooting the video.
  - Taken photos are saved in Gallery.

## Using Avatar Stickers

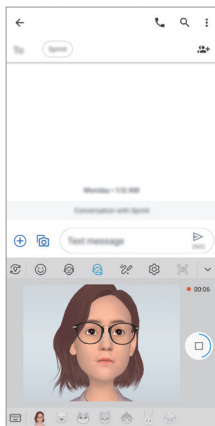
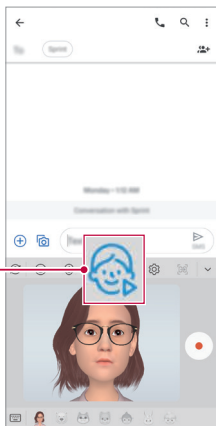
- 1 Tap  on the LG Keyboard.
- 2 Select an avatar sticker you want among the self-created My Avatars, etc., then select  to send it.



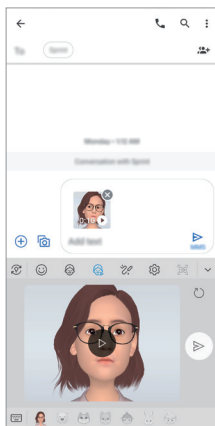
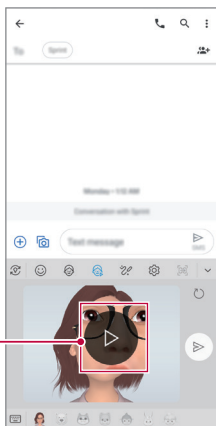
## Using Ani Sticker

- 1 Tap  on the LG Keyboard.
- 2 Select the desired My Avatar.
- 3 Tap  to record voice and video, and then tap  to save.
  - Ani Stickers with various facial expressions, motions, and voices are created.
- 4 Tap  to upload Ani Sticker.
  - Tap  to preview the created Ani Sticker.

Select an  
Ani Sticker



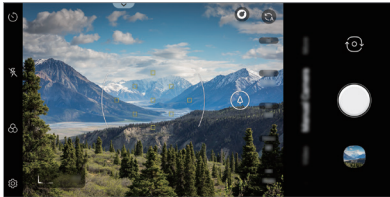
Preview icon



## Other useful features in the Camera app

### Auto-Exposure/Auto-Focus lock





You can fix the current exposure level and focus position by touching and holding the screen in the Auto mode. To turn off the feature, tap a blank area on the screen.



- This feature is available only in specific modes.

### Burst Shot

You can take continuous shots to create an illusion of moving pictures.

- 1 Tap  > , then tap **Photo**.
- 2 Touch and hold .
  - Continuous shots are taken at a fast speed while  is held down.



- This feature is available only in specific modes.

## Zoom in or out

You can zoom in or out on the camera screen to take a photo or record a video.

- On the camera screen, spread out or pinch two fingers to zoom in or out. It also allows to switch between standard angle and ultra-wide angle.



- The zoom feature is not available when using the front camera.
- This function is not supported in certain modes.

## Focus peaking

You can adjust the focus on the subject with the Focus peaking feature.


Access Focus peaking by tapping the Manual Focus (MF) button. When Focus peaking is enabled, the subject you focus on appears yellow. Move the toggle wheel up and down to focus on the desired area, then take the photo.



- Tap Focus once again to disable this function.
- This function can be used only with the standard angle.
- It is only available in Manual Camera and Manual Video modes.

## Switching between cameras

You can switch between the front and rear cameras to suit your environment.

On the camera screen, tap  or swipe the screen up or down to switch between the front and rear cameras.



- Use the front camera to take selfies. See *Selfie shot* for details.



## Selfie shot

You can use the front camera to view your face on the screen and take selfies.

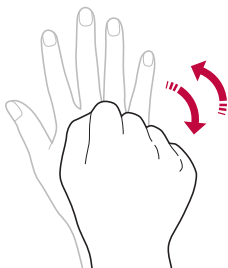
## Gesture shot


You can take selfies by using gestures.

Show your palm to the front camera and then clench your fist.

You can also clench your fist and then open it towards the front camera.

- In three seconds, a photo is taken.

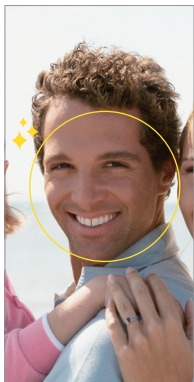


- To use this feature, switch to the front camera mode, then tap  > **Selfie shot > Gesture shot**.
- Make sure that your palm and fist are within the reference line so that the camera can detect them.
- This feature may not be available while using some of the camera features.

## Auto shot

You can use the face detection feature to take selfies easily and conveniently. You can set the device so that, when you look at the screen, the front camera detects your face and takes a selfie automatically.

- The white colored guide frame appears when the front camera detects your face. If the subject within the guide frame stops moving, the guide frame color turns yellow, then the camera takes a photo.



• Tap  > **Selfie shot** > **Auto shot** to enable the Auto shot feature.


## Interval shot

You can take selfies at an interval.

While using the front camera, you can show your palm to the camera, then clench your fist twice quickly.

- Four photos are taken at regular intervals after a timer delay of three seconds.

## Save as flipped

Before taking a photo with the front camera, tap  > **Save as flipped**. The image is flipped horizontally.



- When using the front camera, you can change the selfie shot settings in the camera options. See *Customizing the camera options* for details.

## Signature

You can personalize photos by adding your signature.


- 1 Tap  > , then tap  > **Add signature**.
- 2 Enter the signature as desired and tap **Add**.

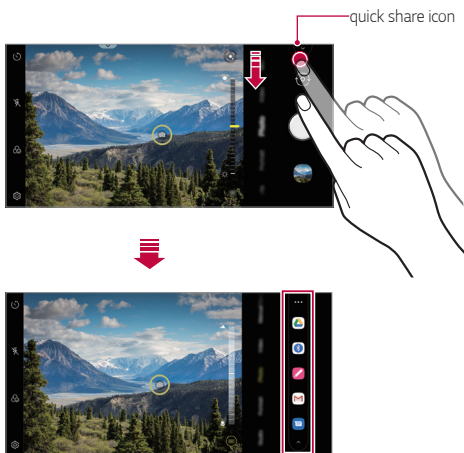


- This feature is available only in specific modes.

## quick share

You can share a photo or video using a desired app immediately after taking it.

- 1 Tap  then take a photo or record a video.
- 2 Tap the app icon that appears on the screen to share it using that app. You can also swipe the icon towards the opposite direction to see other available apps you can use to share your photos and videos.









- The app displayed by the quick share icon may vary, depending on the type and frequency of access to the apps installed on the device.
- This feature is available only in specific modes.

# Gallery

## Gallery overview

You can view and manage photos and videos saved on your device.

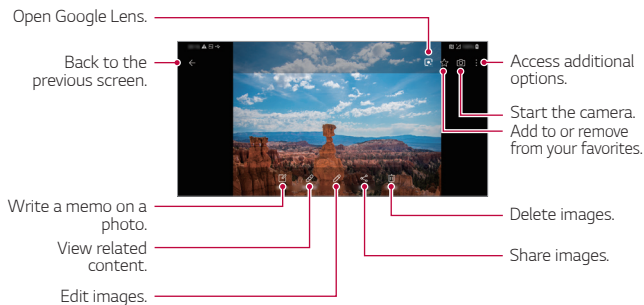
- 1 Tap  > .
  - Saved photos and videos are displayed by folder.
- 2 Tap a folder and select a file.
  - View the selected file in full-screen mode.
  - While viewing a photo, swipe left or right to view the previous or next photo.
  - While viewing a video, swipe left or right to rewind or fast-forward the video.
  - If you save the location information or use a scene mode when shooting, a sub folder is generated for each video.
  - To view photos by location at which the photo was taken, tap  >  >  > **Tag locations**, then tap . The photos are automatically grouped by location under the Memory tab of the Gallery app.



- Some file formats may not be supported, depending on the installed software.
- Some files may not be opened due to encoding.
- Files that exceed the size limit may cause an error.
- You need to activate the GPS feature to create Memory albums.


## Viewing photos

You can view photos saved in Gallery.




- To display the menu items, gently tap the screen. To hide the menu items, tap the screen again.

## Writing memos on photos

- 1 While viewing a photo, tap .
- 2 Write a memo on the photo screen and tap **Save**.
  - The memo is applied to the photo.




- Memo function may not be available in some photo files.
- You can search for memos that have been added by tapping  of the Gallery app.

## View related contents

You can freely edit or configure the related photos in Gallery.

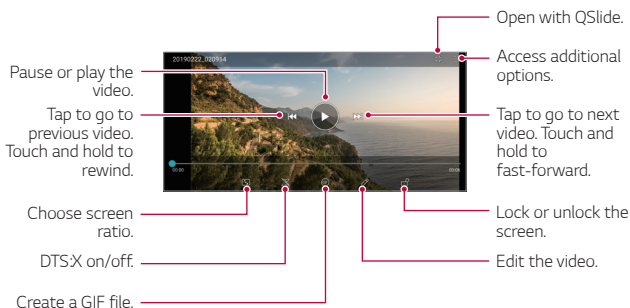
For more details, refer to *Related content*.

## Edit photos

- 1 While viewing a photo, tap .
- 2 Edit your photos using various effects and editing tools.
- 3 Once finished editing, tap **Save**.

## Playing a video

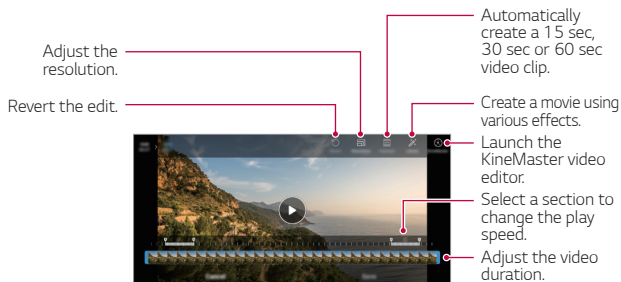
You can view videos saved in Gallery. The following options are available while playing a video.



- To adjust the sound volume, drag the right side of the video screen up or down.
- To adjust the screen brightness, drag the left side of the screen up or down.
- Dragging the screen to the left while playing a video allows you to rewind (REW) and dragging to the right allows you to fast forward (FF).

## Editing videos

- 1 While viewing a video, tap .
- 2 Use a variety of effects and edit tools to edit the video.



- 3 Tap **SAVE** to save changes.

## Creating Video

You can create a movie by putting images and videos together.

For more details, refer to *Creating a movie*.

## Creating GIF




You can create a GIF using photos and videos in Gallery.

For more details, refer to *Making a GIF*.






## Deleting files

You can delete files by using one of the following options:

- Touch and hold a file from the file list, then tap **Delete**.
- Tap  from the file list, select files you want to delete, then tap **Delete**.
- Deleted files are automatically moved to **Trash** and they can be restored to Gallery within 7 days.
- Tap  > **Trash**, then tap  to permanently delete the files. In this case, the files cannot be restored.

## Sharing files

You can share files by using one of the following options:

- While viewing a photo, tap  to share the file by using the desired method.
- While viewing a video, tap  > **Share** to share the file by using the desired method.
- Tap  from the file list to select files and share them using the desired method.

## Chrome

Sign in to Chrome and import opened tabs, bookmarks and address bar data from a computer to your device.

Tap  > .

## Google apps

You can use Google apps by setting a Google account. The Google account registration window appears automatically when you use a Google app for the first time. If you do not have a Google account, create one from your device. For details on how to use an app, see Help in the app.



• Some apps may not work depending on the area or service provider.

## **Google**

Use Google to search for web pages, images, news and more by entering or speaking keywords.

## **Gmail**

Gmail is an easy to use mail app that keeps your messages safe, makes your inbox smarter, and helps you stay organized.

## **Maps**

Find your location or the location of a place on the map. View geographical information.

## **YouTube**

Search and play videos. Upload videos on YouTube to share them with people around the world.

## **Drive**

Upload, save, open, share and organize files from your device. Files accessible from apps can be accessed from anywhere, including online and offline environments.

## **Play Music**

Purchase music files from Play Store. Play music files saved on your device.

## **Play Movies & TV**

Use your Google account to rent or purchase movies. Purchased contents can be played anywhere.

## **Photos**

View or share photos or albums saved on your device.

## **Docs**

Create documents or edit documents created online or from another device. Share and edit documents together with others.

## **Sheets**

Create spreadsheets or edit spreadsheets created online or from another device. Share and edit spreadsheets together with others.

## **Slides**

Create presentation material or edit presentation material created online or from another device. Share and edit presentation material together with others.

## **Keep Notes**

Create, edit, and share you text and photo notes with Google Account.

## **News**

Access the comprehensive up-to-date news coverage, aggregated from sources all over the world by Google News.

## **Calendar**

You can use the calendar to manage events and tasks.

## **Files**

Helps you free up space on your phone.

## **Duo**

Make a video call with your family, friends and anyone else who uses the app.

# Contacts


## Contacts overview

You can save and manage contacts.

Tap  > **Essentials** > **Contacts**.


## Adding contacts

### Adding new contacts


- 1 On the contact list screen, tap .
  - A pop-up appears for selecting the saving location for contact. Select the desired location.
- 2 Enter contact details and tap **Save**.

### Importing contacts


You can import contacts from another storage device.

- 1 On the contact list screen, tap  > **Manage contacts** > **Import**.
- 2 Select the source and target locations of the contact you want to import, and then tap **OK**.
- 3 Select the contacts and tap **Import**.

### Adding contacts to the speed dial list

- 1 On the contact list screen, tap  > **Speed dial**.
- 2 Tap **Add contact** from a speed dial number.
- 3 Select a contact.



• While adding a new contact, tap  to add a speed dial number.

## Searching for contacts

You can search for contacts by using one of the following options:


- Tap the search bar at the top of the Contacts screen and enter the contact or phone number you want to search for.
- Scroll the contact list up or down.
- From the index of the contact list screen, tap the initial letter of a contact.



- Once you start typing numbers in the search bar, it brings up the integrated search results from the call history and contact list saved.

## Contact list

### Editing contacts

- 1 On the contact list screen, select a contact.
- 2 On the contact detail screen, tap  and edit details.
- 3 Tap **Save** to save changes.

### Deleting contacts

You can delete contacts by using one of the following options:

- On the contact list screen, touch and hold a contact you want to delete, tap **Delete contact**, then tap **Delete** to confirm.
- Tap **:> Delete** on the contact list screen, select contacts you want to delete, then tap **Delete**.



- Deleted contacts may not be restored.

## Adding favorites

You can register frequently used contacts as favorites.

- 1 On the contact list screen, select a contact.
- 2 On the contact detail screen, tap ☆.

## Creating groups











- 1 On the contacts group list, tap +.
- 2 Enter a new group name.
- 3 Tap **Add members**, select contacts, then tap **ADD**.
- 4 Tap **Save** to save the new group.

# QuickMemo+



## QuickMemo+ overview

You can make creative notes by using a variety of options on this advanced notepad feature, such as image management and screenshots, which are not supported by the conventional notepad.

## Creating a note


- 1 Tap  > **Essentials** > **QuickMemo+**.
- 2 Tap  to create a note.
  -  : Save a note.
  -  : Undo the previous edit.
  -  : Redo the recently deleted edits.
  - **T** : Enter a note by using the keypad.
  -  : Write notes by hand.
  -  : Erase handwritten notes.
  -  : Zoom in or out, rotate or erase the parts of a handwritten note.
  -  : Access additional options.
- 3 Tap  to save the note.

## Writing notes on a screenshot

- 1 While viewing the screen you want to capture, drag the status bar downwards and then tap .
  - The screenshot appears as the notepad background theme. Memo tools appear at the top of the screen.
- 2 Crop the image (if necessary) and take notes as desired.
  - Write notes by hand on the photo.
- 3 Tap  and save the notes to the desired location.
  - Saved notes can be viewed in either **QuickMemo+** or **Gallery**.




- To save notes in the same location all the time, select the **Use as default app** checkbox before selecting an app.



- You can capture the entire screen by using the scroll capture feature.
- While using an app such as Messages and Chrome, drag the notifications panel downwards and then tap  > **Extended** to capture the entire screen you are currently viewing as a single file.
- This feature is available only on some apps that support the scroll capture feature.
- Pinch two fingers or spread your fingers apart to change the memo layout.

## Managing folders

You can organize and view memos according to the memo type.

- 1 Select  > **Essentials** > **QuickMemo+**.
- 2 Tap  on the top part of the screen and then select the desired function.
  - **All Memos:** You can collectively view all memos save in Qmemo+.
  - **My Memos:** You can view the memos created in Qmemo+.
  - **Capture+:** You can view the memos created using Capture+.
  - **Trash:** You can view the deleted memos.
  - **New category:** You can add folders.
  -  : You can rearrange folders or add/delete folders. Touch and hold a folder to change its name.





- Some folders do not appear when the app initially started. Folders are displayed only when relevant memos exist.
- Deleted memos are moved to the trash bin and can be restored within 7 days from the day they were deleted.




# Clock

## Alarm

You can set an alarm to trigger it at a specified time.



- 1 Tap  > **Essentials** > **Clock** > **Alarm**.
- 2 Tap  to add a new alarm.
- 3 Configure the alarm settings and tap **Save**.



- If you select a previously set alarm, you can edit the alarm.
- To delete an alarm, tap  at the top of the screen. You can also touch and hold the alarm.


## World clock

You can view the current time in cities around the world.

- 1 Tap  > **Essentials** > **Clock** > **World clock**.
- 2 Tap  and add a city.


## Timer

You can set the timer to trigger an alarm after a specified period of time.

- 1 Tap  > **Essentials** > **Clock** > **Timer**.
- 2 Set the time and tap **Start**.
  - To suspend the timer, tap **Pause**. To resume the timer, tap **Resume**.
- 3 Tap **Stop** to stop the timer alarm.

## Stopwatch

You can use the stopwatch to record a lap time.

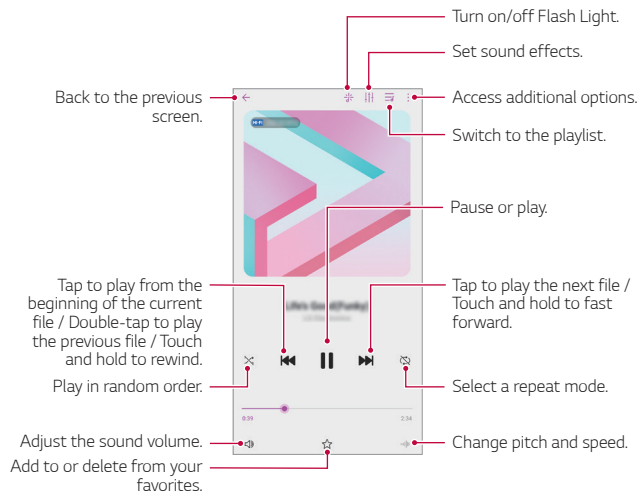
- 1 Tap  > **Essentials** > **Clock** > **Stopwatch**.

- 2 Tap **Start** to initiate the stopwatch.
  - To record a lap time, tap **Lap**.
- 3 Tap **Pause** to suspend the stopwatch.
  - To resume the stopwatch, tap **Resume**.
  - To clear all the records and restart the stopwatch, tap **Reset**.

## Music

You can play and manage songs or music albums.

- 1 Tap **○ > Essentials > Music**.
- 2 Select a category.
- 3 Select a music file.







- Some file formats may not be supported, depending on the installed software.
- Files that exceed the size limit may cause an error.
- Music files may be protected by international copyright owners or copyright laws. You may have to obtain legal permission before copying a music file. To download or copy a music file, first check the copyright law for the relevant country.
- This model supports Hi-Fi audio playback. Hi-Fi audio files display the Hi-Fi icon.
- If you set the flashlight, flashlight blinks to fit the music being played.


## Calculator

You can use two types of calculators: the simple calculator and the scientific calculator.

- 1 Tap  > **Essentials** > **Calculator**.
- 2 Use the keypad to make a calculation.
  - If you want to calculate from the beginning, tap and hold .

## Game Launcher

You can set whether to use the game launcher where you can view the list of games installed on the product and select game settings such as muting media volume, limiting alerts, etc.

- 1 Tap  > **Essentials** > **Game Launcher**.
- 2 Select the desired option..


# LG Health

## LG Health overview

You can manage your health and maintain good exercise habits by keeping track of the exercises you do.


## Getting started with LG Health

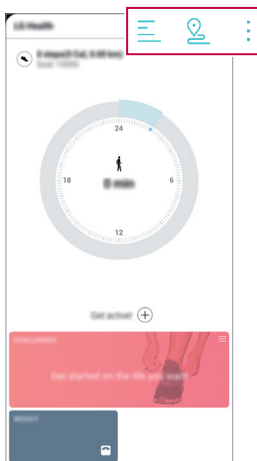
You can configure LG Health when launching the app for the first time or after resetting it.




- 1 Tap  > **Essentials** > **LG Health**.
- 2 Follow the on-screen instructions to complete configuration.

## Using LG Health

You can view main information on LG Health and manage the amount of physical exercise and health information.

- 1 Tap  > **Essentials** > **LG Health**.
- 2 The following options are available.



-  : View your exercise log on the day you want to check.
-  : Begin tracking an exercise. The route and amount of your physical exercise are recorded for each exercise type.
-  : Set your daily exercise goals including calories and steps, or set various LG Health settings.



- Health-related information provided by LG Health is designed for user convenience and cannot be used for purposes of disease prevention, treatment, diagnosis or other medical issues.
- LG Health may vary or may not be available, depending on the country and service provider. LG Health functions that are available and apps that can be added to LG Health may vary, depending on the country. This is due to differing laws and regulations.

# FM Radio

You can listen to FM Radio.

Tap  > **Essentials** > **FM Radio**.




- To use this app, first connect earphones to the device. The earphones function as the radio antenna.
- This function may not be supported depending on the area.

# LG Mobile Switch

You can easily transfer data from your old LG device to a new LG device.

1 Tap  > **Management** > **LG Mobile Switch**.

You can also tap  > **Settings** > **System** > **Backup** > **LG Mobile Switch**.

- If the app is not installed on your device, download and install the LG Mobile Switch app from Google Play Store.

2 Follow the on-screen instructions to select a desired method for transfer.



- Data in a Google Account will not be backed up. When you synchronize your Google Account, Google apps, Google contacts, Google Calendar, Google memo app data and apps downloaded from Play Store are stored on the Drive app automatically.
- Fully charge the battery before transferring data to avoid unintentional powering off during the process.

# App trash

You can see the list of apps deleted on the home screen. The app that was deleted within the last 24 hours can be recovered.

Tap  > **Management** > **App trash**.



For more details, refer to [App trash](#).

# SmartWorld

You can download a variety of games, audio content, apps and fonts provided by LG Electronics. Customize your device to suit your preferences by using Home themes and fonts.



- If you use mobile data, you may be charged for data usage depending on your pricing plan.
- This feature may not be supported depending on the area or service provider.

- 1 Tap  > **Management** > **SmartWorld**.
- 2 Tap  > **LG Account**, then sign in.
- 3 Select and download the desired content items.




04

**Settings**



# Settings

You can customize the device settings in accordance with your preferences.

Tap  > **Settings**.



- If you enter a keyword on the search window at the top of the screen, you can conveniently access the option that needs to be set.

## Network & internet

### Airplane mode

You can turn off the call and mobile data functions. When this mode is on, functions that do not involve data, such as games and music playback, remain available.

- 1 On the settings screen, tap **Network & internet** > **Airplane mode**.
- 2 Tap **TURN ON** in the confirmation screen.

### Voice networks

#### VoLTE calls

Use high-quality voice calls and communication services on LTE.

On the settings screen, tap **Network & internet** > **Voice networks** > **VoLTE calls**.

#### Wi-Fi Calling


You can use Wi-Fi calling to improve your coverage and to make phone calls over a Wi-Fi network when the network is available.

On the settings screen, tap **Network & internet** > **Voice networks** > **Wi-Fi Calling**.

## Wi-Fi

You can connect to nearby devices over a Wi-Fi network.

### Connecting to a Wi-Fi network

- 1 On the settings screen, tap **Network & internet** > **Wi-Fi**.
- 2 Tap  to activate it.
  - Available Wi-Fi networks appear automatically.
- 3 Select a network.
  - You may need to enter the network's Wi-Fi password.
  - The device skips this process for previously accessed Wi-Fi networks. If you do not want to automatically connect to a certain Wi-Fi network, tap the network and then tap **Forget**.

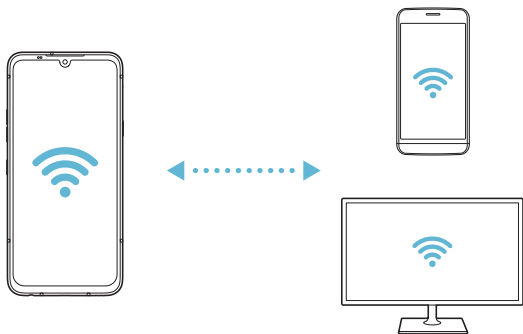
### Wi-Fi Direct

You can connect your device to other devices that support Wi-Fi Direct to share data directly with them. You do not need an access point. You can connect with more than two devices by using Wi-Fi Direct.

- 1 On the settings screen, tap **Network & internet** > **Wi-Fi** >  > **Advanced Wi-Fi** > **Wi-Fi Direct**.
  - Nearby devices that support Wi-Fi Direct automatically appear.
- 2 Select a device.
  - Connection occurs when the device accepts the connection request.



- The battery may drain faster when using Wi-Fi Direct.




## Mobile data

You can turn mobile data on and off. You can also manage mobile data usage.

### Turning on mobile data

- 1 On the settings screen, tap **Network & internet** > **Mobile data**.
- 2 Tap  to activate it.

### Customizing mobile data settings

- 1 On the settings screen, tap **Network & internet** > **Mobile data**.
- 2 Customize the following settings:
  - **On:** Enable to use data connections on mobile networks.
  - **Limit mobile data usage:** Set a limit for mobile data usage to block mobile data if the limit is reached.
  -  :Customize mobile data settings.

## Call

You can customize call settings, such as voice call and international call options.



- Some features may not be supported depending on the area or service provider.

1 On the settings screen, tap **Network & internet > Call**.


2 Customize the settings.

## Tethering

### USB tethering

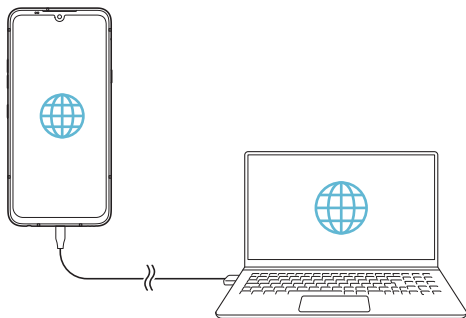
You can connect the device to another device via USB and share mobile data.

1 Connect your device and other devices via USB cable.

2 On the settings screen, tap **Network & internet > Tethering > USB tethering** and then tap  to activate it.




- This option uses mobile data and may incur data usage fees, depending on your pricing plan. Consult with your service provider for more information.
- When connecting to a computer, download the USB driver from [www.lg.com](http://www.lg.com) and install it on the computer.
- You cannot send or receive files between your device and a computer while USB tethering is turned on. Turn off USB tethering to send or receive files.
- Operating systems that support tethering are Window XP or higher, or Linux.



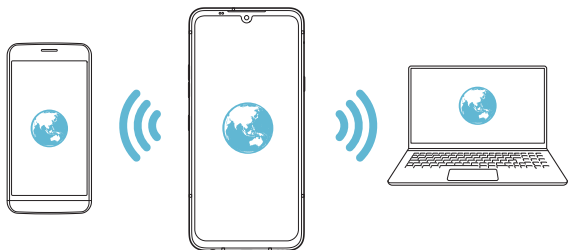
## Wi-Fi Hotspot

You can set the device as a wireless router so that other devices can connect to the Internet by using your device's mobile data.

- 1 On the settings screen, tap **Network & internet > Tethering > Wi-Fi hotspot** and then tap  to activate it.
- 2 Tap **Set up Wi-Fi hotspot**, and enter the Wi-Fi name (SSID) and password.
- 3 Turn on Wi-Fi on the other device, and select the name of the device network on the Wi-Fi list.
- 4 Enter the network password.



- This option uses mobile data and may incur data usage fees, depending on your pricing plan. Consult with your service provider for more information.
- More information is available at this web site:  
<http://www.android.com/tether#wifi>



## Timeout


When the Wi-Fi hotspot has not been used for a specific period of time, it is automatically disconnected. You can set the time for automatic disconnection.

## Wi-Fi Sharing

When you activate this feature with the device connected via Wi-Fi, the shared devices are connected to the network by using your device's Wi-Fi. If this feature is deactivated, the mobile data is used for network connection.

## Bluetooth tethering

A Bluetooth-connected device can connect to the Internet by using your device's mobile data.

- 1 On the settings screen, tap **Network & internet > Tethering > Bluetooth tethering** and then tap  to activate it.
- 2 Turn on Bluetooth on both devices and pair them.



- This option uses mobile data and may incur data usage fees, depending on your pricing plan. Consult with your service provider for more information.
- More information is available at this web site:  
[http://www.android.com/tether#Bluetooth\\_tethering](http://www.android.com/tether#Bluetooth_tethering)

## Help

You can view help on using tethering and hotspots.

On the settings screen, tap **Network & internet** > **Tethering** > **Help**.

## Mobile networks

You can customize mobile data settings.

- 1 On the settings screen, tap **Network & internet** > **Mobile networks**.
- 2 Customize the following settings:
  - **Roaming**: Browse the web, use emails, multimedia messages and other data services overseas.
  - **4G settings**: Allows you to view the network operator and IP address.
  - **Network mode**: Select your preferred network mode.
  - **Access Point Names**: View or change the access point for using mobile data services. To change the access point, select a choice from the access point list.

## VPN

You can connect to a safe virtual network, such as an intranet. You can also manage connected virtual private networks.

### Adding VPN

- 1 On the settings screen, tap **Network & internet** > **VPN**.
- 2 Tap **Basic VPN** or **LG VPN**, then tap **+**.



- This feature is available only when the screen lock is activated. If the screen lock is deactivated, a notification screen appears. Tap **Change** from the notification screen to activate the screen lock. See [Setting a screen lock](#) for details.

- 3 Enter VPN details and tap **Save**.

### Configuring VPN settings

- 1 Tap a VPN from the **VPNS** list.
- 2 Enter the VPN user account details and tap **Connect**.
  - To save the account details, select the **Save account information** checkbox.

## Private DNS

You can configure the Private DNS (Domain Name System) options.

- 1 On the settings screen, tap **Network & internet** > **Private DNS**.
- 2 Select the desired option and tap **Save**.





# Connected devices

## Bluetooth

You can connect your device to nearby devices that support Bluetooth to exchange data with them. Connect your device to a Bluetooth headset and a keyboard. This makes it easier to control the device.

### Pairing with another device

- 1 On the settings screen, tap **Connected devices** > **Bluetooth**.
- 2 Tap  to activate it.
  - Available devices appear automatically.
  - To refresh the device list, tap .




• Only devices set as visible are displayed on the list.

- 3 Select a device from the list.
- 4 Follow the on-screen instructions to perform authentication.



• This step is skipped for previously accessed devices.

### Sending data via Bluetooth


- 1 Select a file.
  - You can send multimedia files or contacts.
- 2 Tap  > **Bluetooth**.
- 3 Select a target device for the file.
  - The file is sent as soon as the target device accepts it.



• File sharing processes may differ, depending on the file.

## Screen sharing

You can play the screen and sound of the device on a different device, such as a TV, that supports the Miracast function.


- 1 On the settings screen, tap **Connected devices** > **Screen sharing**.
- 2 Tap  to activate it.
- 3 Select a device from the list of nearby devices.
  - If the desired device does not appear, tap **Search** to refresh the list.
  - After connecting to the device, the device displays the screen of your device.



- Screen sharing turns off automatically if there is no sharing-compatible device in the vicinity.

## NFC

You can use the device as a transportation card or credit card. You can also share data with the other device.

- 1 On the settings screen, tap **Connected devices** > **NFC**.
- 2 Tap  to activate it.
  - Touch your device with other device that supports NFC to allow sharing data.



- The NFC antenna location may vary depending on the device type. See [Parts overview](#) for details about the NFC antenna area.

## Android Beam

You can share files by touching the back of the device to other device. You can also share files including music, videos or contacts and open a web page or launch an app from the other device.


- 1 On the settings screen, tap **Connected devices** > **Android Beam**.
- 2 Touch the back of the device with another device.



- The NFC antenna location may vary depending on the device type. See [Parts overview](#) for details about the NFC antenna area.

## Sharing panel

You can share contents from Gallery, and File Manager with nearby devices. Also you can share the content with specific people in apps that work with Google Direct Share.

- 1 On the settings screen, tap **Connected devices** > **Sharing panel**.
- 2 Tap  to deactivate each option.
  - **Nearby devices:** Displays the nearby devices to which you can share contents on the Gallery, and File Manager apps.
  - **Direct share:** From an app which supports Google Direct Share, you can share contents to specific people.

## File sharing

You can send and receive files between your device and other LG devices.

- 1 On the settings screen, tap **Connected devices** > **File sharing**.
- 2 Customize the following settings:
  - **G8X ThinQ**: Change the device name.
  - **Save to**: Set the destination folder to save files sent from other devices in.
  - **File sharing**: Permit receipt of files sent from other devices.
  - **SmartShare Beam**: Share files with other devices via SmartShare Beam.
  - **Help**: You can view help on sharing files.

## Media server

You can share media content on your device with nearby devices that support DLNA.

- 1 On the settings screen, tap **Connected devices** > **Media server**.
- 2 Customize the following settings:
  - **Content sharing**: Share content on your device with nearby devices.
  - **G8X ThinQ**: Set your device's name.



- Depending on the user's product, the menu names may appear differently.

- **Content to share**: Select the type of media content to share with other devices.
- **Allowed devices**: View a list of devices permitted to access content on your device.
- **Not-allowed devices**: View a list of devices not permitted to access content on your device.

## LG AirDrive

You can use your LG account to manage files saved on the device from a computer. You do not need a USB connection.

- 1 On the settings screen, tap **Connected devices** > **LG AirDrive**.
- 2 Use a single LG account to sign in to LG Bridge on the computer and **LG AirDrive** on the device.
  - LG Bridge software can be downloaded from [www.lg.com](http://www.lg.com).
- 3 Manage files on the device from the computer.

## MirrorLink


You can connect the device to a car via USB to use the MirrorLink app installed on the device from the infotainment system or the head unit of the car.



- This app is available only in cars that support MirrorLink.
- Download the MirrorLink app from an app store or market. For more information, visit <https://mirrorlink.com/apps>.
- Some functions may be restricted for driver's safety while using the MirrorLink feature.

- 1 On the settings screen, tap **Connected devices** > **MirrorLink**.
- 2 Connect the device to an automobile using the USB cable and turn on **Connect via USB cable**.



- If your device is connected to a vehicle that supports automatic MirrorLink connection, connect via USB cable is automatically activated on your device.
- Tap  to configure MirrorLink USB auto-connect.

## Printing

You can connect your device to a Bluetooth printer and print photos or documents saved on the device.

On the settings screen, tap **Connected devices > Printing**.

- Tap **Default Print Service** to search for printers you can connect to. Or, tap **⋮ > Add printer** to manually add a printer.
- Tap **⊕ Add Service** to download a printer app.



- This is available only when the mobile network or the Bluetooth function is turned on.
- To download a printer app in **⊕ Add Service**, first log on to your Google account.

## Sound

You can customize sound, vibration and notification settings.

On the settings screen, tap **Sound** and customize the following settings:

- **Sound profile**: Change the sound mode to **Sound, Vibrate only**, or **Silent**.
- **Volume**: Adjust the sound volume for various items.
- **Ringtone**: Select a ringtone for incoming calls. Add or delete ringtones.
- **Notification sound**: Select a notification ringtone. Set music saved on the device as a notification ringtone.
- **Ring with vibration**: Set the device to vibrate and play a ringtone simultaneously.
- **Ringtone ID**: Create a ringtone for an incoming call from a particular contact.
- **Flash alert for incoming call**: Set the flash to blink according to LG ringtone.

- **Do not disturb:** Set the time, range and app type to receive notification messages. Receive notification messages only on particular days of the week.
- **Sound quality and effects:** Use the function to set the sound quality and effects while playing a song or video.
  - **Volume:** Adjust the sound volume for various items.
  - **Normalize volume:** Use the function to normalize the volumes of different sound sources.
  - **Equalizer:** Use the function to adjust the equalizer settings.
  - **DTS:X 3D Surround:** Use the function to play music or video in three-dimensional, immersive and vivid sound when earphones, speaker or other external audio devices are connected. See *DTS:X 3D Surround* for details.
  - **Hi-Fi Quad DAC:** After connecting an external sound device such as earphones or speakers to the Stereo Ear Microphone outlet, you can use the device with 32-bit Hi-Fi Quad DAC.
    - **Sound preset:** You can select sound preset effects.
    - **Digital filter:** You can adjust the front and back vibration to produce the sound you want.
    - **Balance** (Left-Right Sound Adjustment): You can adjust the volume on the left and right earphones.
- **Vibration strength:** Adjust the vibration intensity.
- **Vibrate type:** You can select the type of vibration when receiving calls.
- **Vibrate on tap:** Set the device to vibrate when you tap certain items on the screen.
- **Dialing keypad sound:** Enable the keypad sound effect.
- **LG Keyboard sound:** Enable LG keyboard sound effect.
- **Touch sound:** Enable the sound effect to play when tapping an item.
- **Screen lock sound:** Enable the sound effect to play when the screen is locked or unlocked.
- **Emergency tone:** Select the tone option for emergency alerts.


# Display

You can customize detailed settings for each screen type.

On the settings screen, tap **Display** and customize the following settings:

- **Home screen:** Customize settings for the Home screen. See *Home screen settings* for details.
- **Wallpaper & theme:** Select a screen wallpaper, theme, icon style and AOD option for your device.
- **Font:** Change the font size, bold text or type.
- **New Second Screen:** Select how the status bar and app corners will look.
- **Home touch buttons:** Rearrange Home touch buttons or change their background colors.
- **AOD (always-on display):** Always display information, such as the date, time and notifications, even when the screen is turned off. For details, see *AOD (always-on display)*.
- **Comfort view:** Set the device to reduce amount of blue light on screen to reduce eye strain.
- **Night mode:** You can apply a dimmed screen theme to avoid glare on the screen at night time.
- **Screen color:** Adjust the color, color temperature, or RGB values for the desired screen.



• Tap  to reset the settings.


- **Video enhancement:** When playing back a video in full screen mode, you can change the settings for brighter and more dynamic color display.



- **App scaling:** Adjust the screen size of apps.



#### Aspect ratio

- This device uses 19.5:9 aspect ratio.
  - Some downloaded apps may not support 19.5:9 aspect ratio. In this case, select the most optimal screen ratio for the app or consult the app provider for more information.
  - You can select the aspect ratio for individual apps by tapping  **Settings > Display > App scaling**. Select an app, then select the desired aspect ratio from **Compatibility (16:9)**, **Standard (16.7:9)**, and **Full screen**.

- **Display size:** Set the items on the screen to a size easy for you to see. Some items may change position.
- **Brightness:** Use the slide bar to change the device's screen brightness. To automatically adjust screen brightness according to ambient light intensity, tap the **Auto** switch.
- **Screen timeout:** Automatically turn off the screen when the device is left idle for a specified period of time.
- **Auto-rotate screen:** Automatically rotate the screen according to the device's orientation.
- **Screen saver:** Display a screen saver when the device is connected to the holder or charger. Select a screen saver type to display.
- **Mini view:** Make the screen size smaller to conveniently use the device with one hand. Drag the Home touch button at the bottom of the screen to the left or right.

# Lock screen & security

You can customize lock screen and security settings.

- 1 On the settings screen, tap **Lock screen & security**.
- 2 Customize the settings.
  - **Google Play Protect:** Scans your device daily for potentially harmful apps.
  - **Find My Device:** Remotely track the device location. You can also protect your data securely if you lost your device.
  - **Security update:** Check for software update and configure automatic installation settings.
  - **Select screen lock:** Select the desired screen lock method. See *Setting a screen lock* for details.
  - **Customize Lock screen:** Change the information displayed on the locked screen.
  - **Secure lock settings:** Change the secure lock settings.
  - **Fingerprints:** Use your fingerprint to unlock the screen or content. See *Fingerprint recognition overview* for details.
  - **Content lock:** Allow you to set a lock type (password or pattern) for your QuickMemo+ and Gallery files.
  - **Location:** You can customize how your location information is used by particular apps.
  - **Encryption & credentials:** Configure the settings for SD card encryption and credentials.
    - **Encrypt SD card:** Encrypt the memory card to prevent use on another device. See *Memory card encryption* for details.
    - **Secure start-up:** Protect your device with a lock when it powers on. See *Secure start-up settings* for details.
    - **Credential protection:** View the type of the storage where the security certificate will be saved.

- **Trusted credentials:** View your system's root CA certificates and user-installed CA certificates.
- **User credentials:** View and change secure certificate information stored on your device.
- **Install from storage:** Install a secure certificate from a storage.
- **Clear credentials:** Delete user-installed secure certificates and related credentials.
- **Make passwords visible:** Enable this option to briefly show each character of the password as you type it so you can see what you've entered.
- **Phone administrators:** Allow privileges to restrict the control or use of the device to particular apps.
- **Trust agents:** View and use trust agents installed on the device.
- **Screen pin:** Fix the app screen so that only the currently active app can be used.
- **Usage access:** View details on usage of apps on the device.

# Extensions


## Smart cleaning

You can use Smart cleaning to diagnose the device's condition and optimize it.

On the settings screen, tap **Extensions > Smart cleaning**.

## Context Awareness

You can automatically change your device settings according to the usage pattern and location.


- 1 On the settings screen, tap **Extensions > Context Awareness**.
- 2 Activate items you want to automatically change settings for.
  - **Parking Assistant:** This option will store your parking locations. If you don't want to receive parking notifications around your home or work place, turn My places notifications off . The parking records are stored in QuickMemo+.
  - **AUTOMATED:** You can set the device to change the sound profile, Bluetooth and Wi-Fi options automatically in different environments, such as At home, Away from home, At work, and Off work. You can also set an app to open when earphones are plugged in or a Bluetooth device is connected.



- To use this feature, home or work location must be preset in My places. On the settings screen, tap **Lock screen & security > Location > My places** to set the locations.

## Gaming

You can configure settings for game tools, graphics and battery saving feature.


- 1 On the settings screen, tap **Extensions > Gaming**.
- 2 Customize the following settings:
  - **Game Launcher:** Tap  to use the game launcher.
  - **Game tools:** You can run the function while playing games by touching the game tools icon among the home touch buttons.
  - **Game graphics:** Adjust the game graphics.



- When you change the resolutions on some games, the screen display feature may not work properly.
  - This function may not be available in certain game apps.
- 
- **Break time:** Reduce the screen brightness and performance whenever you leave the game running for more than 5 minutes.



## Screen recording

You can configure the settings for screen recording.

- 1 On the settings screen, tap **Extensions > Screen recording**.
- 2 Customize the following settings:
  - **Include yourself in video by:** Select one from the following options and tap **SAVE**.
    - **Image:** Includes your profile image in video when recording. After selecting this, tap  to take a photo or select a profile image from Gallery. Then, adjust the size of the image using the slide bar.
    - **Front camera:** Includes yourself recorded using the front camera while recording the screen.
    - **Never:** Nothing is included.
  - **Audio source:** Choose the audio source between **Mic** and **Contents**.

- **Video resolution:** Select the resolution for screen recording.

## To record the screen:

- 1 Drag the status bar downward to open the Quick access icons list.
- 2 (If necessary, swipe left over the Quick access icons area.) Tap .
- 3 Read the disclaimer and tap **Start**. It will start recording in 3 seconds.
- 4 To stop recording, tap  located at the bottom right of the screen. The recorded video will be saved in Gallery.



- If you violate another person's rights such as portrait right or intellectual property right or defame another person's reputation by using the functions provided for the screen recording service, you may be held liable to civil, criminal or administrative charges in accordance with the relevant laws. LG Electronics is not legally responsible in any way for the acts of users.

## Dual App

You can install duplicate messenger apps on the product and use two accounts at the same time.

- 1 On the settings screen, tap **Extensions > Dual App**.
- 2 After reading the disclaimer, tap **Confirm**.
- 3 In the list of available apps, tap **Install** to install a copy of a desired app and follow the on-screen instructions.
  - On the screen, the list of available dual apps is shown. During installation, app icons are generated on the home screen.

## Floating Bar

You can access frequently used features including shortcuts, screenshots, Music, Contacts and more by touching and swiping Floating Bar on the screen. See [Floating Bar overview](#) for details.

## Shortcuts

You can use buttons such as the Lock/Power, Volume, and Google Assistant to run certain apps or functions right away.

- 1 On the settings screen, tap **Extensions > Shortcuts**.
- 2 Customize the following settings.
  - **Open Camera:** Press Power key twice to open Camera.
  - **Open Capture+:** Press Volume Up key twice to open Capture+ when the screen is locked or off.
  - **Open Camera:** Press Volume Down key twice to open Camera when the screen is locked or off.
  - **Open Google Assistant:** Press the Google Assistant key on the side of the phone.
  - **Talk to Google Assistant:** Press and hold the Google Assistant key to quickly talk to your Assistant.
  - **Show visual snapshot:** Press the Google Assistant key twice to see a snapshot of your day in the Google Assistant app.



• Google Assistant does not support certain languages.

## KnockON

Double-tap the screen to turn the screen on or off.

See *KnockON* for details.

## Increase touch sensitivity

You can set the touch screen to be more sensitive to your touch. It is recommended to turn this feature on when using a screen protector.

On the settings screen, tap **Extensions > Increase touch sensitivity**.

# Digital Wellbeing

You can get an overview of your device usage, set a timer for each app, and manage the screen time and notifications.

You can also set up parental controls.

On the settings screen, tap **Digital Wellbeing** and set the desired function.

## Apps & notifications

You can check a list of installed apps, and configure the settings for notifications, app permissions, and more.

- 1 On the settings screen, tap **Apps & notifications**.
- 2 Customize the settings.

## Battery

You can view the current battery information or turn on power-saving mode.


- 1 On the settings screen, tap **Battery**.
- 2 Customize the following settings:
  - **Battery usage**: View the battery usage details.
  - **Battery percentage on status bar**: Displays the remaining battery level as a percentage on the status bar.
  - **Optimized charging**: Automatically adjusts charging speed according to how you charge to reduce heat and extend lifespan of battery.
  - **Adaptive battery**: Allows you to save the battery by stopping apps running in the background.



- **Background restrictions:** Enable this option to restrict background apps to save the battery while using the device. Restricted apps for power saving may not work properly or may not send you notifications.
- **Battery saver:** Reduce battery consumption by cutting down some device settings, such as the display brightness, speed and vibration intensity.
- **Power saving exclusions:** Select apps to use without any functional limitation while in power saving or battery optimization mode.

## Storage

You can view and manage internal storage on the device or storage space of the memory card.

- 1 On the settings screen, tap **Storage**.
- 2 Customize the following settings:
  - **Internal storage:** View the total storage space and free space in the device's internal storage. View a list of apps in use and the storage capacity for each app.
  - **SD card:** View the total storage space and free space in the memory card. This option appears only when a memory card is inserted. To unmount the memory card, tap .

## Accounts

You can add users to share your device and register a cloud account.

- 1 On the settings screen, tap **Accounts**.
- 2 Customize the settings.

# Google

You can use Google settings to manage your Google apps and account settings.

On the settings screen, tap **Google**.

## System

### System updates

From time to time, updates may become available for your phone. You can download and apply updates through the Settings menu.

On the settings screen, tap **System > System updates**.

### Language & keyboard

You can customize language and keyboard settings for your device.

- 1 On the settings screen, tap **System > Language & keyboard**.
- 2 Customize the following settings:
  - **Language:** Select a language to apply for your device.
  - **Manage keyboards:** You can change the device's basic keyboard setting, set the use environments for LG Keyboard or other installed keyboards, and set the speech recognition function for Google Voice input. Also, you can set whether to display the keyboard button in the touch button area on the home screen so that you can quickly switch to another keyboard.
  - **Physical keyboard:** Select to use the physical keyboard, or check keyboard shortcut keys.
  - **Spelling correction:** Allows you to set various options for Google Spell Checker.
  - **Autofill service:** Enable this option to enter your information saved in your account such as password, address, or credit card number with a single tap. You can also disable this option, use Google Autocomplete, or add a new service account.

- **Text-to-speech output:** Configure the settings for text-to-speech output.
- **Pointer speed:** Adjust the pointer speed of a mouse or trackpad.
- **Reverse mouse buttons:** Reverse the right mouse button to perform primary direct-manipulation actions.

## Date & time

You can customize date and time settings for your device.

- 1 On the settings screen, tap **System > Date & time**.
- 2 Customize the settings.

## Memory

You can view the average amount of memory usage over a certain period of time and the memory occupied by an app.

- 1 On the settings screen, tap **System > Memory**.
- 2 Tap ▼ to set a time slot to retrieve data.

## Backup

You can back up data saved on your device to another device or account.

- 1 On the settings screen, tap **System > Backup**.
- 2 Customize the following settings:
  - **LG Mobile Switch:** Allows you to transfer data from an old LG device to your new LG device. See [LG Mobile Switch](#) for details.
  - **Backup & restore:** Back up your device data or restore data to your device from a backup.




- Resetting your device may delete backup files saved in storage. Make sure to copy and store the important backup files to your PC.

- **Google backup:** Change Google drive backup settings. You can also check the backup account currently used, or add a new backup account.

## Restart & reset

You can reset the device including network and app settings.

- 1 On the settings screen, tap **System > Restart & reset**.
- 2 Customize the following settings:
  - **Auto-restart:** Automatically restart and optimize the phone at a set time. Tap  to activate this feature. The device automatically restarts at a set time and optimize itself. Select a date and time for restart.



- You can set the device to restart itself once a week. The device automatically restarts in an hour from the preset time.
  - Once the device restarts, notifications and badges are erased. Save important data before the preset time.
  - The Auto-restart feature is not activated in the following situations:  
When the screen is turned on, when the device is in use, when the battery level is 30% or less, when the USIM card is locked, or when the device lock is activated while turning on the device.
    - Depending on the telecommunication provider, the auto-restart function may or may not be available.
- 
- **Network settings reset:** Reset Wi-Fi, Bluetooth and other network settings.
  - **Reset app preferences:** Reset the settings for an app. The data saved in the app will not be deleted.
  - **Factory data reset:** Reset all settings for the device and delete data.



- Restarting and resetting your device deletes all data on it. Enter your device name, Google Account and other initial information again.
- After data initialization, the data cannot be restored.

## About phone

You can view information about your device, such as the name, status, software details and legal information.

On the settings screen, tap **System > About phone** and view information.

## Regulatory & safety

You can view regulatory marks and related information on your device.


On the settings screen, tap **System > Regulatory & safety**.

## Accessibility

You can manage accessibility plug-ins installed on your device.

- 1 On the settings screen, tap **Accessibility**.
- 2 Customize the following settings:
  - **Vision > TalkBack**: Set the device to notify screen status or actions via voice.
  - **Vision > Voice notifications**: Set the device to read the caller information via voice.
  - **Vision > Font**: Change the font size, bold text or type.
  - **Vision > Display size**: Set the items on the screen to a size easy for you to see. Some items may change position.
  - **Vision > Touch zoom**: Zoom in or out by tapping the screen three times.
  - **Vision > Window zoom**: Zoom in or out within a window and invert the color.
  - **Vision > Large mouse pointer**: Magnify the mouse pointer.
  - **Vision > High contrast screen**: Turn the background color into black for a high contrast screen.
  - **Vision > Screen color inversion**: Increase the display color contrast for people with low vision.

- **Vision > Screen color adjustment:** Adjust the display color.
- **Vision > Monochrome:** Switch the screen to monochrome mode.
- **Vision > End call with the Power key:** End a call by pressing the Power/Lock key.
- **Hearing > Captions:** Turn on the subtitle service when playing videos for the hearing impaired.
- **Hearing > Flash alerts:** Set the device to notify you with a blinking light for incoming calls, messages and alarms.
- **Hearing > RTT call:** Turn on RTT(Real Time Text) feature and select the desired option.
- **Hearing > Mute all sounds:** Mute all sounds and lower volume on the receiver.
- **Hearing > Audio channel:** Select the audio type.
- **Hearing > Sound balance:** Adjust the audio output balance. Use the slide bar to change the balance.
- **Motor & cognition > Touch assistant:** Turn on the touch board to make buttons and gestures easier to use.
- **Motor & cognition > Touch input:** Set the desired delay time for touching and holding, or adjust the touch input to ignore repeated taps.
- **Motor & cognition > Physical keyboard:** Customize the keyboard settings.
- **Motor & cognition > Auto mouse click:** Automatically click the mouse pointer in case of no movement.
- **Motor & cognition > Touch and hold for calls:** Answer or decline calls by touching and holding the call button instead of dragging it.
- **Motor & cognition > Screen timeout:** Turn off the screen automatically when the device is left idle for a specified period of time.

- **Motor & cognition > Touch control areas:** Limit the touch area so that only a particular portion of the screen can be controlled by touch input.
- **Accessibility features shortcut:** Quickly access a frequently used function by tapping  three times.
- **Persistent notification:** Provides repeated alerts when there are unread notifications for selected apps.
- **Auto-rotate screen:** Automatically change the screen orientation according to the physical position of the device.
- **Select to Speak:** Allow you to tap items to hear spoken feedback.
- **Switch Access:** Create key combinations to control your device.





05

## **Appendix**



# LG Language Settings

Select a language to use on your device.

- Tap  > **Settings** > **System** > **Language & keyboard** > **Language** > **Add language**, and select a language.
  - Touch and hold  and drag it to the top of the language list to set it as a default language.

## LG Bridge

### LG Bridge overview

LG Bridge is an app that helps you manage the photos, music, videos and documents saved on your LG smartphone from your computer conveniently.



- The supported features may vary depending on the device.
- LG USB driver is a necessary program to connect your LG smartphone with the computer and is installed when you install LG Bridge.

### LG Bridge functions

- Manage the files on the device from a computer via Wi-Fi connection or mobile data connection.

## Installing LG Bridge on a computer

- 1 Go to [www.lg.com/us](http://www.lg.com/us) from your computer.
- 2 In the search bar, enter the name of your device.
- 3 Click **Support > Manuals and Downloads**.
- 4 Click the **Software & Firmware** tab, then click **LG BRIDGE - COPY FILES, AND BACKUP YOUR DEVICE** and download the setup file.

## Phone software update

### LG Mobile phone software update from the Internet

For more information about using this function, please visit <http://www.lg.com/common/index.jsp>, select your country and language.

This feature allows you to conveniently update the firmware on your phone to a newer version from the Internet without needing to visit a service center. This feature will only be available if and when LG makes a newer firmware version available for your device.

Because the mobile phone firmware update requires the user's full attention for the duration of the update process, please make sure you check all instructions and notes that appear at each step before proceeding. Please note that removing the USB cable during the upgrade may seriously damage your mobile phone.



- 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 handset models.

## LG Mobile Phone software update via Over-the-Air (OTA)

This feature allows you to conveniently update your phone's software to a newer version via OTA, without connecting a USB cable. This feature will only be available if and when LG makes a newer firmware version available for your device.

To perform the phone software update, tap **Settings > System > System updates > Update LG software**.



- Your personal data from internal phone storage—including information about your Google account and any other accounts, your system/application data and settings, any downloaded applications and your DRM license—might be lost in the process of updating your phone's software. Therefore, LG recommends that you backup your personal data before updating your phone's software. LG does not take responsibility for any loss of personal data.
- This feature depends on the area or service provider.

# 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 the 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](mailto: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.

## Regulatory information (FCC ID number, etc.)

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

# Trademarks

- For DTS patents, see <http://patents.dts.com>. Manufactured under license from DTS Licensing Limited. DTS, the Symbol, & DTS and the Symbol together, DTS 2.0 Channel, DTS 2.0+Digital Out, DTS-HD, and DTS Virtual:X are registered trademarks or trademarks of DTS, Inc. in the United States and/or other countries. © DTS, Inc. All Rights Reserved.



- Copyright © 2019 LG Electronics Inc. All rights reserved. LG and the LG logo are registered trademarks of LG Group and its related entities.
- G8X ThinQ is a trademark of LG Electronics, Inc.
- Google, Google Map, Gmail, YouTube, Google Duo, Google Play, Android, Chrome, Google Photos, Google Play Protect, Google Calendar, Google Docs, Google Drive, Google Sheets and other related marks and logos are trademarks 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.
- All other trademarks and copyrights are the property of their respective owners.



# Laser safety statement

## FDA Notice

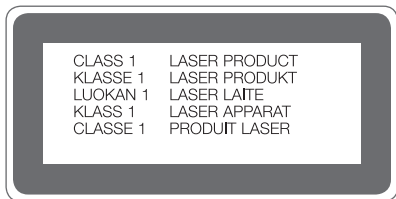
Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007

## 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.



# More information

## Tempered glass parts

Tempered glass parts of this device are not permanent and they may wear out over time.

- If you drop your device on a hard surface or subject it to severe impact, the tempered glass may be damaged.

If this happens, stop using your device immediately and contact an LG Customer Service Center.

- You can purchase protective cases to protect your device from damage on the market.

Note that these protective cases are not covered under the warranty service provided by LG Electronics and safety is not guaranteed.

## Aspect ratio

This device uses a 19.5:9 aspect ratio.

- Some downloaded apps may not support the 19.5:9 aspect ratio.
- In this case, select the most optimal screen ratio for the app or consult the app provider for more information.



# Guide to data transfers

For the data that can be exchange between LG devices or between the LG device and a third party device, see the following table.

Type	Item details	LG device → LG device	Third party Android device → LG device	iOS device → LG device
Personal data	Contacts, messages, dial logs, calendar, voice recordings	Supported	Supported	Supported
	Memos	Supported	Not supported	Supported
	Alarms	Supported	Not supported	Not supported
Media data	Photos, videos, songs, documents	Supported	Supported	Supported
Screen settings	Home screen settings (folders and widgets)	Supported	Not supported	Not supported
	Lock screen settings (screen lock settings excluded)	Supported	Not supported	Not supported
Apps	Downloaded apps	Supported	Supported	-
	Personal data of the downloaded app	Supported	Not supported	
Others	Public certificate	Supported	Supported	Not supported
	Settings (Wi-Fi, Bluetooth, Calls, sound & notification, accessibility, battery)	Supported	Not supported	Not supported



• Some data may not be transmitted depending on the software version, app version, operating system, manufacturer or service provider's policy.

# FAQ

This chapter lists some problems you might encounter when using your device. Some problems require you to call your service provider, but most are easy to fix yourself.

## Device overheats

### Device overheats while it is in use.

In the following cases, the battery consumption increases and the device may overheat:

- When you turn on the device for the first time or back up the data
- When running multiple apps simultaneously
  - When multiple apps are running in the background
  - When downloading large files while making a video call or recording a video
- When using features that require high power
  - When watching video streaming on the internet, or recording a long video
  - When playing high-end games for long time
  - When using the device with maximum screen brightness for a long time
- When using lots of mobile data
  - When using Wi-Fi hotspot or tethering
  - When synchronizing the data for multiple accounts simultaneously

- Other cases
  - When roaming overseas
  - When using the device in areas with weak signals or no reception
  - When charging the device with the charger/USB cable port that is damaged or contaminated with foreign substance



- Some of the above cases may not apply depending on the features and apps.

## Device overheats while charging.

- The device and the charger may become hot while charging. During wireless charging or fast charging (if supported), the device may become even hotter. If the battery temperature rises above a certain level, the device may stop charging.
  - Disconnect the charger from the device and close any running apps. Let the device cool down before charging the device or running an app again.
  - Stop charging if the charger/USB cable port at the lower part of the device overheats, and visit the nearest LG Customer Service Center.

## How to solve overheating of the device

- Close any running apps or features, and let the device cool down.
- Always update the software to the latest version.
- Turn off Wi-Fi, Bluetooth, or GPS features while not using them.
- Close apps you don't use.
- If you are using the device with maximum screen brightness, decrease the brightness.
- If the device overheats for a prolonged period, stop using it for a while. If the device continues to overheat, visit the LG Customer Service Center.

## Usage limitations when the device overheats

If the device overheats while using it or charging, some features, apps, or even the device may be turned off.

This is a normal operation for the devices that support this feature.

- If the device temperature rises above a certain level, a warning message appears.
  - If you play high-end games, record videos, or upload large files, the device may overheat for a prolonged period. In this case, a warning message may appear to notify automatic shutdown.  
Turn off the device or close any running apps or features, and let the device cool down.
- The screen brightness and the operating speed may be limited to cool down the device. Any running apps or features may slow down or stop. The device may stop charging.

## SIM card error

Make sure the SIM card is correctly inserted.

## No network connection or dropped network

Signal is weak. Move to a window or an open area.

You are outside the carrier network area. Move and check the network.

## Calls are not available

New network not authorized.

Make sure you have not set call barring for the incoming number.

Make sure you have not set call barring for the number you are dialing.

## Device cannot be turned on

When the battery is completely discharged, your device will not turn on.

Fully charge the battery before turning on the device.

## **Charging error**

Make sure the device is charging at a moderate temperature.

Check the charger and its connection to the device.

Use only in-box accessories which are authorized by LG.

## **The battery depletes faster than when first purchased**

When you expose the device or the battery to very cold or hot temperatures, the battery life may be reduced.

Battery consumption will increase when you use certain features or apps, such as GPS, games or the Internet.

The battery is consumable and the battery life will get shorter over time.

## **Error messages appear when launching the camera**

Charge the battery.

Free some memory by transferring files to a computer or deleting files from your device.

Restart the device.

If you are still having trouble with the camera app after trying these tips, contact a LG Electronics Service Center.

## **The photo quality is poor**

The quality of your photos may vary, depending on the surroundings and the photography techniques you use.

When you take photos and videos, keep in mind that the image quality with standard angle is better than that with wide-angle.

If you take photos in dark areas, at night or indoors, image noise may occur or images may be out of focus.

If you have any problems, reset the options.

## The touch screen responds slowly or incorrectly

If you attach a screen protector or optional accessories to the touch screen, the touch screen may not function properly.

If you are wearing gloves, if your hands are not clean while touching the touch screen or if you tap the screen with sharp objects or your fingertips, the touch screen may malfunction.

The touch screen may malfunction in humid conditions or when exposed to water.

Restart your device to clear any temporary software bugs.

If the touch screen is scratched or damaged, visit a LG Electronics Service Center.

## Hangs or freezes

### Restart the device

- If your device freezes or hangs, you may need to close apps or turn the device off and then on again.

### Perform a boot-up

- Press and hold the Power/Lock key and the Volume Down key until the device restarts.

### Reset the device

- If the methods above do not solve your problem, perform a factory data reset.
- On the settings screen, tap **General > Restart & reset > Factory data reset**.
  - Reset all settings for the device and delete data. Before performing the factory data reset, remember to make backup copies of all important data stored in the device.
  - If you have registered a Google account to the device, you must sign in to the same Google account after resetting the device.

## **Bluetooth device is not located**

Make sure the Bluetooth wireless feature is activated on your device.

Make sure the Bluetooth wireless feature is activated on the device you wish to connect to.

Make sure your device and the other Bluetooth device are within the maximum Bluetooth range (10 m).

If the tips above do not solve your problem, contact a LG Electronics Service Center.

## **A connection is not established when you connect the device to a computer**

Make sure the USB cable you are using is compatible with your device.

Make sure you have the proper driver installed and updated on your computer.

## **Downloaded application causes a lot of errors**

Application has problems.

Remove and reinstall the application.



06

**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?

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>

### 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](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 für Strahlenschutz Ingolstaedter Landstr. 1 85764

Oberschleissheim Germany

Telephone: 011 49 1888 333 2156

<http://www.icnirp.de>

## **American National Standards Institute**

1819 L Street, NW, 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 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 ZNFG850UM.

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.

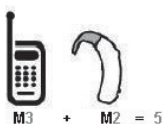
The wireless telephone industry has developed a rating system for wireless devices, to assist hearing device users to find devices that may be compatible with their hearing devices. Not all devices have been rated. Devices that are rated have the rating on their box or a label located on the box.

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](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-canceling 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).

## 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](http://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.
- Please read the manual of the specified charger for information about its charging method.
- Do not damage the power cord by bending, twisting, or heating. Do not use the plug if it is loose as it may cause electric shock or fire.
- Do not place any heavy items on the power cord. Do not allow the power cord to be crimped as it may cause electric shock or fire.
- Unplug the power cord prior to cleaning your 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.
- Please use only an approved charging accessory to charge your LG device. Improper handling of the charging port, as well as the use of an incompatible charger, may cause damage to your device and void the warranty.
- 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 cloth is 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.
- Do not immerse your device in water, liquid chemicals, or expose to high humidity. 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](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.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 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.





07

**LIMITED  
WARRANTY  
STATEMENT**

## 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](http://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](mailto: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.



08

**LG Dual Screen  
(LM-V515N)**



# Getting to Know LG Dual Screen

- You can connect an LG Dual Screen (LM-V515N) to your phone for use.
- Note that, if you attach a protective film, protective glass, or other accessories to the phone or Dual Screen, the folder of the Dual Screen may not close fully.
- If you attach a protective film, thick stickers, or other accessories on the phone's rear side or the connection area of Dual Screen, the Dual Screen may not operate normally due to poor communication, faulty connection of the power terminal, etc.

## Before use

### Guide on product use

- Depending on the performance of the G8X, some features of Dual Screen may be limited.
- The product may not support other mobile devices.
- This product cannot be used alone.
- Do not use or charge the product when there is moisture in the communication and power terminal of the product.
  - This may cause fire, electric shock, injury, or device malfunction.
  - If there is moisture, stop using the device immediately and remove the moisture completely.
- Please note that, if you attach a protective film or protective glass on the product or the screen of the mobile phone, the product may not fold completely.
- If you attached a protective film or thick sticker on the surface of the product or the back of the mobile phone, the product may not function properly due to the contact failure of the communication/power terminal.

- If you use the product connected to your mobile phone, the wireless charging function or the NFC function may not work properly.
- Your device has a dedicated receiver (57~66GHz) built-in for the LG G8X.



- This product is not water resistant. Do not expose the device to liquid or moisture.
- If the device is wet, the LDI located inside the device changes in color. In this case, the device is ineligible for any free-of-charge repair services provided under the device's limited warranty.

## Guidelines for safe and efficient use

Please read these simple guidelines. Not following these guidelines may be dangerous or illegal.

Should a fault occur, a software tool is built into your device that will gather a fault log. This tool gathers only data specific to the fault, such as signal strength, cell ID position in sudden call drop and applications loaded. The log is used only to help determine the cause of the fault. These logs are encrypted and can only be accessed by an authorized LG Repair center should you need to return your device for repair.

## Exposure to radio frequency energy

Radio wave exposure and Specific Absorption Rate (SAR) information.

This device has been designed to comply with applicable safety requirements for exposure to radio waves. These requirements are based on scientific guidelines that include safety margins designed to assure the safety of all persons, regardless of age and health.

- The radio wave exposure guidelines employ a unit of measurement known as the Specific Absorption Rate, or SAR. Tests for SAR are conducted using standardized methods with the device transmitting at its highest certified power level in all used frequency bands.
- While there may be differences between the SAR levels of various LG device models, they are all designed to meet the relevant guidelines for exposure to radio waves.

- The SAR limit recommended by the International Commission on Non-ionizing Radiation Protection (ICNIRP) is 2 W/kg averaged over 10 g of tissue.
- This device meets RF exposure guidelines when used either in the normal use position against the ear or when positioned at least 5 mm away from the body. When a carry case, belt clip or holder is used for body-worn operation, it should not contain metal and should position the product at least 5 mm away from your body. In order to transmit data files or messages, this device requires a quality connection to the network. In some cases, transmission of data files or messages may be delayed until such a connection is available. Ensure the above separation distance instructions are followed until the transmission is completed.

## Product care and maintenance

- Use only in-box accessories which are authorized by LG. LG does not guarantee any damage or failure which is caused by third party accessories.
- Some contents and illustrations may differ from your device without prior notice.
- Do not disassemble this unit. Take it to a qualified service technician when repair work is required.
- Repairs under warranty, at LG's discretion, may include replacement parts or boards that are either new or reconditioned, provided that they have functionality equal to that of the parts being replaced.
- Keep away from electrical appliances such as TVs, radios and personal computers.
- The unit should be kept away from heat sources such as radiators or cookers.
- Do not drop.
- Do not subject this unit to mechanical vibration or shock.
- Switch off the device in any area where you are required to by special regulations. For example, do not use your device in hospitals as it may affect sensitive medical equipment.
- Do not handle the device with wet hands while it is being charged. It may cause an electric shock and can seriously damage your device.
- Use a dry cloth to clean the exterior of the unit (do not use solvents such as benzene, thinner or alcohol).
- Do not subject this unit to excessive smoke or dust.

- Do not keep the device next to credit cards or transport tickets; it can affect the information on the magnetic strips.
- Do not tap the screen with a sharp object as it may damage the device.
- Do not expose the device to liquid or moisture.
- Use accessories like earphones cautiously. Do not touch the antenna unnecessarily.
- Do not use, touch or attempt to remove or fix broken, chipped or cracked glass. Damage to the glass display due to abuse or misuse is not covered under the warranty.
- Your device is an electronic device that generates heat during normal operation. Extremely prolonged, direct skin contact in the absence of adequate ventilation may result in discomfort or minor burns. Therefore, use care when handling your device during or immediately after operation.
- If your device gets wet, immediately unplug it to dry off completely. Do not attempt to accelerate the drying process with an external heating source, such as an oven, microwave or hair dryer.
- The liquid in your wet device, changes the color of the product label inside your device. Damage to your device as a result of exposure to liquid is not covered under your warranty.
- A product 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 1.0cm from between the user's body.
- Please ensure that the product does not get in contact with liquid. Do not use or recharge the product if it is wet. Once the product becomes wet, the liquid damage indicator changes color. Please note that this will limit you from receiving any free-of-charge repair services provided under warranty.

# Efficient device operation

## Electronics devices

All devices may receive interference, which could affect performance.

- Do not use your device near medical equipment without requesting permission. Please consult your doctor to determine if operation of your device may interfere with the operation of your medical device.
- Pacemaker manufacturers recommend that you leave at least 15 cm of space between other devices and a pacemaker to avoid potential interference with the pacemaker.
- This device may produce a bright or flashing light.
- Some hearing aids might be disturbed by devices.
- Minor interference may affect TVs, radios, PCs etc.
- Use your device in temperatures between 0 °C and 35 °C, if possible. Exposing your device to extremely low or high temperatures may result in damage, malfunction, or even explosion.

## Road safety

Check the laws and regulations on the use of devices in the area when you drive.

- Do not use a hand-held device while driving.
- Give full attention to driving.
- Pull off the road and park before making or answering a call if driving conditions so require.
- RF energy may affect some electronic systems in your vehicle such as car stereos and safety equipment.
- When your vehicle is equipped with an air bag, do not obstruct with installed or portable wireless equipment. It can cause the air bag to fail or cause serious injury due to improper performance.
- If you are listening to music whilst out and about, please ensure that the volume is at a reasonable level so that you are aware of your surroundings. This is of particular importance when near roads.

## Glass Parts

Some parts of your device are made of glass. This glass could break if your device is dropped on a hard surface or receives a substantial impact. If the glass breaks, do not touch or attempt to remove it. Stop using your device until the glass is replaced by an authorized service provider.

## Blasting area

Do not use the device where blasting is in progress. Observe restrictions and follow any regulations or rules.

## Potentially explosive atmospheres

- Do not use your device at a refueling point.
- Do not use near fuel or chemicals.
- Do not transport or store flammable gas, liquid or explosives in the same compartment of your vehicle as your device or accessories.

## In aircraft

Wireless devices can cause interference in aircraft.

- Turn your device off before boarding any aircraft.
- Do not use it on the ground without permission from the crew.

## Children

Keep the device in a safe place out of the reach of small children. It includes small parts which may cause a choking hazard if detached.

# Product components and accessories

Product components and accessories The following items are included with your product.

- Product
- Quick Start Guide
- Charging Adapter

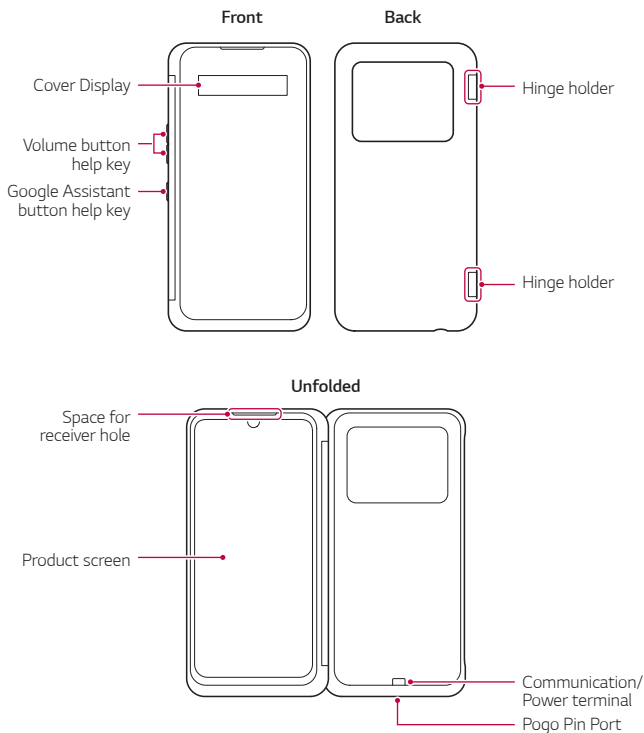


- Make sure to use the authentic accessories provided by LG Electronics. Using products that are not authentic may cause deterioration of phone call quality, device malfunction, etc. In such a case, you may not be able to receive service provided by LG Electronics.
- Some of the product parts are made of tempered glass. If you drop your product on a hard surface or subject it to severe impact, the tempered glass may be damaged. If this happens, stop using your product immediately and contact an LG Customer Service Center.



- The appearance and specifications of your product are subject to change without notice.
- The exterior and specifications of the product may be changed without prior notification to improve its performance.

# Parts overview



- Do not subject the product to strong impact such as dropping, pressing or bending it. Pressing the product with excessive force may damage the product.

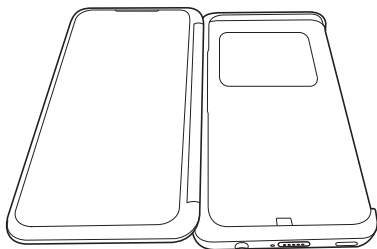




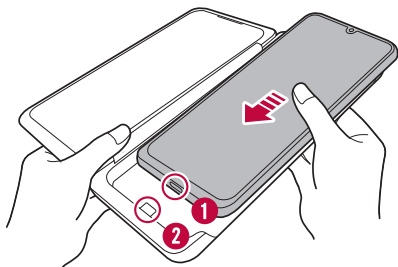
- The assistant keys and spaces in this product do not work independently. Be sure to connect the product with designated LG mobile phone.

## Inserting the mobile phone to Dual Screen

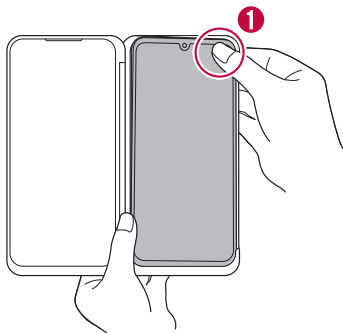
- 1 Completely unfold the product so that it is parallel to the floor.



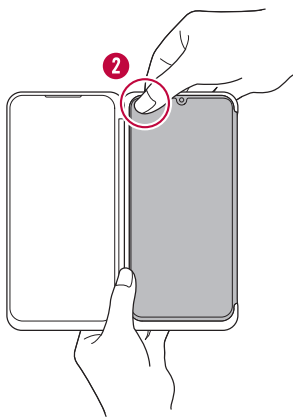
- 2 Slide the bottom of your phone into the bottom of the product as shown in the figure. At this time, make sure that **1** of the phone fits **2** of the product correctly.



- 3 Press **1** of the phone with your finger to engage the edge of phone with that of the product.



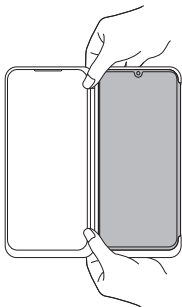
- 4 Press **2** of the phone to fully engage the product with the phone.



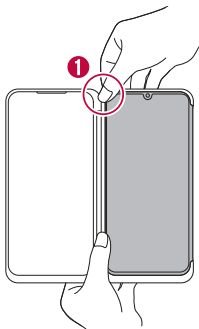
- Please make sure your phone is fully inserted into the product before use.

# Removing the mobile phone from Dual Screen

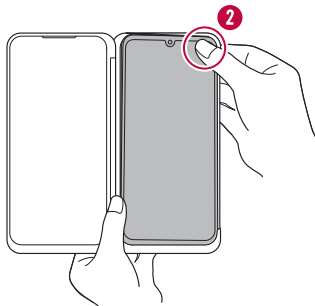
- 1 Unfold the product completely and hold it firmly with both hands as shown in the figure.



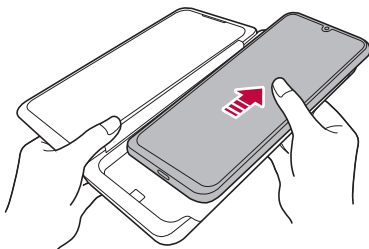
- 2 Press **1** of the product with your finger while simultaneously pressing the back of the phone with your other finger to pull the edge of the phone out of the product.



- 3 Pull **2** of the phone out of the product in the same.



- 4 Hold the product with both hands and slide the phone in the direction of the arrow to remove it. Be careful not to twist the phone left or right or push it up at an excessive angle.



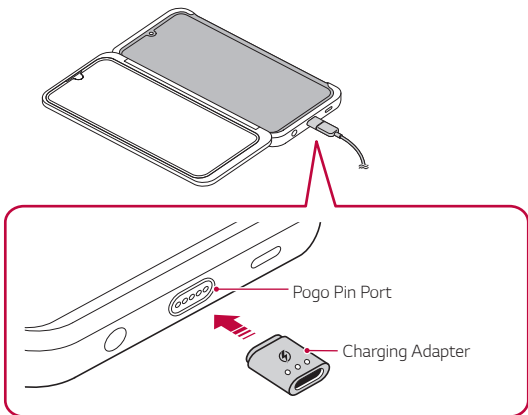


- If you pull the phone from the product at an excessive angle or with excessive force when removing the phone, you may damage the Communication/Power terminal on the bottom of the product or the USB data communication and charger port on the phone. Be sure to push up the phone in the direction of the arrow as shown in the figure when removing it.
- Be careful not to drop the product or the mobile phone while inserting or removing the phone.
- When you insert or pull out your mobile phone from the product, be cautious not to use excessive force. Doing so may damage the product.
- Some of the product parts are made of tempered glass. Dropping the product on a hard surface or subjecting it to a strong impact may cause the tempered glass to crack or wear, damaging the product or causing injury. If this happens, stop using the product immediately and visit your nearest LG Customer Service Center for repair.
- In the following situations, the product's folder may not close fully or the product may not operate normally due to poor communication or faulty connection of the power terminal.
  - If you attach a protective film, protective glass, or other accessories on the product or the screen of your mobile phone
  - If you attached a protective film or thick stickers on the product's connection area or the rear side of your mobile phone
  - If you insert sheets of paper or cards between the product and your mobile phone
- If you use the wireless charging or NFC function while your mobile phone is inserted into the product, charging may not work properly.

# Using Charging Adapter

You can use the charging adapter to charge your phone or transfer data while your phone is inserted into the product.

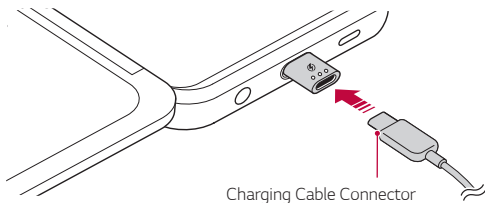
- 1 With the mobile phone mounted on the product, connect the charging adapter to the charging port at the bottom of the product as shown in the figure below. When doing so, pay special attention to the direction of the gender.



- Pogo Pin will not function if it is connected in a reverse direction.
- The USB connection via Pogo Pin does not support OTG, PD quick charging, audio or USB 3.0.

## 2 Connect a USB Type-C cable.

- You can charge the mobile phone or transfer the data.



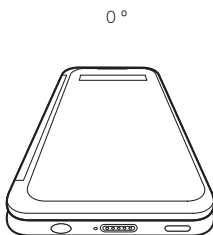
- When connecting the charging adapter to the port, pay special attention to the direction of the gender. Otherwise, you cannot use the fast charging function or cannot transfer the data.
- Make sure that you always use the charging adapter provided with the product. If you lose the charging adapter or want to purchase a new one, call the LG Electronics Customer Service Center for Consumable Shop.
- The charging adapter and the charging port at the bottom of the product are connected magnetically. Do not shake or pull out the charging adapter while using it.

# Using the Dual Screen

## When making a phone call

When making a phone call, you can fold the product outward to 360 ° or fold it inward to 0 °.

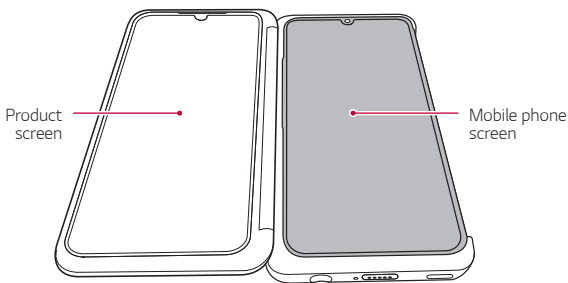
- If you are using the product by folding it 360 °, make sure that the front and back of the product are in full contact. In this case, the screen of the product automatically turns off to save the power.





## Using the Dual Screen

Unfold the product to put the two screens side by side.



When using the product screen and the phone screen at the same time, a color difference may occur between the two screens.

- Try adjusting the color temperature or RGB levels in **○ > Settings > Display > Screen Color** on your phone to minimize the difference.
- Colors may look different depending on the viewing angle, so adjust the colors in a fully unfolded state.

## Using Dual Screen Home

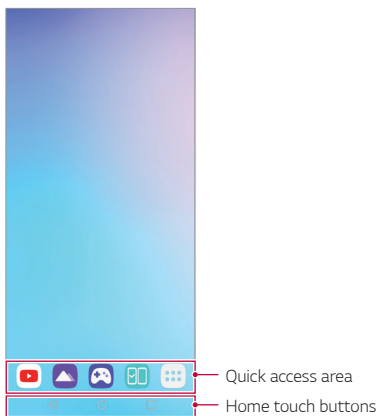
### Getting to Know Dual Screen Home

The dual screen home can operate independently of the product's screen.

- It provides quick launch icons and a home touch bar.
- You can change the background and set up widgets.
- On the home screen, you can also run different apps from the apps drawer and generate or delete folders.

## Getting to know Dual Screen Home layout

You can use various functions by running the icons provided on the home screen.




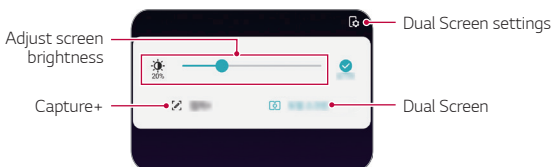
- The background of the dual screen may differ from the figure depending on the manufacturer's policies, user settings, software versions, services provided by telecommunication providers, etc.

- **Quick access area:** Fix main apps at the bottom of the screen so that they can be accessed from any Home screen canvases.
- **Home touch buttons:** You can swipe the bottom of the Home screen upwards to see the hidden Home Touch buttons.
  - ◀: Return to the previous screen. Close the keypad or pop-up windows.
  - ○: Tap to go to the Home screen.
  - □: Tap to view a list of recently used apps or run an app from the list. To delete all the recently used apps, tap **CLEAR ALL**.

## Using the Dual Screen Panel


You can open the **Dual Screen** panel by dragging down the top of the screen.

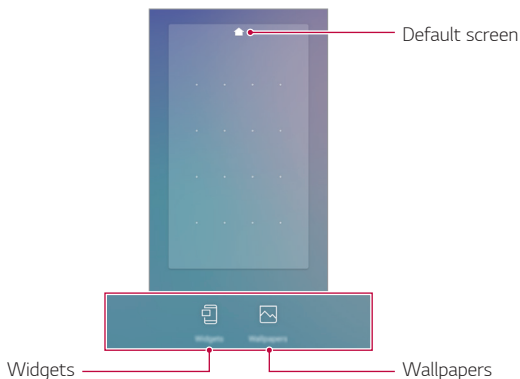
- You can adjust the screen brightness on the **Dual Screen** panel.
  - If you activate synchronization by selecting **Sync**, the screen brightness of the dual screen comes in sync with that of the connected product.
- You can tap **Capture+** to capture the product screen.
  - You can save the captured image using **QuickMemo+** or save it in **Gallery**.
- You can turn off the product screen by tapping **Dual Screen**.
  - The dual screen and the connected mobile phone are disconnected.
- You can tap  to enter the settings menu of the dual screen.



## Making Changes to Dual Screen Home

Touch and hold an empty area on the dual screen home and run a desired function.

- To add a widget to the Home screen, touch and hold on a blank area of the Home screen, then select **Widgets**.
- To change wallpapers, touch and hold on a blank area of the Home screen, then select **Wallpapers**.
- To change the default screen, touch and hold on a blank area of the Home screen, move to desired screen, tap , then tap the screen once more.

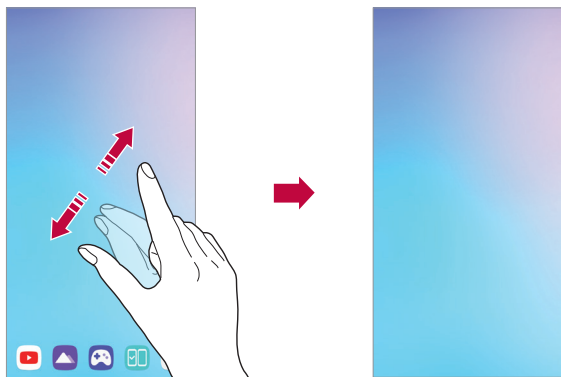


## Viewing the Dual Screen background

You can view only the background image by hiding the apps and widgets on the Home screen.


Spread two fingers apart on the Home screen.

- To return to the original screen, which displays apps and widgets, pinch your fingers on the Home screen or tap ◀.



## Setting Dual Screen environment

You can set the dual screen environment on the mobile phone connected to the dual screen.

- 1 Select  > **Settings** > **Display** > **Dual Screen**.



- You must connect your mobile phone to the dual screen to see the menu item for dual screen environment setting.

- 2 Select and set the desired functions.


- **Cover Display:** You can set whether to use cover display on the front of the dual screen.
- **Use both screens at the same time:** You can set whether to use both screens at the same time.
- **Dual Screen Tool:** If you connect your mobile phone to the dual screen, the dual screen tools appear on the screen. The brightness level is synchronized with that of the product.
- **Use Dual Screen:** You can turn on and off the dual screen, switch screens between the mobile phone and the dual screen.
- **Brightness:** You can adjust the screen brightness by moving the control bar to the left or right.
- **Keep the same as main screen:** You can synchronize the brightness level with that of the connected mobile phone.
- **Wallpaper:** You can select the wallpaper for the Home screen.
- **App drawer Icon:** You can show or hide the App drawer on your product.
- **My Pick App:** You can select apps to run automatically every time you turn on the dual screen.




- The list of apps that appear on the screen may differ depending on the installed apps.




# Using Dual Screen Capture+

## Capturing screen using Dual Screen Capture+


Pull down the status bar on the screen that you want to capture, and tap  **Capture+**.


- To save the captured image, tap  and save it to the desired location.
  - You can save the captured image using **QuickMemo+** or save it in **Gallery**.
- To always save data in the same location, check **Use as default app** before selecting a desired app.








## Writing notes on screen using Dual Screen Capture+

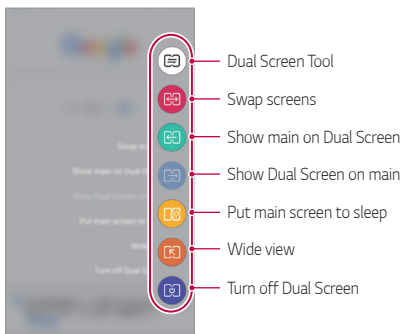
- 1 Pull down the status bar on the screen that you want, and tap  **Capture+**.
  - The captured image appears as the memo desktop, and the memo tool appears at the top of the screen.
- 2 Take notes freely on the captured image.
  - Tap **T** to make a note on the screen with handwriting.
  - Tap  to enter text at the bottom of the screen.
- 3 To save the memo, tap  and save it to the desired location.
  - You can save the memo using **QuickMemo+** or save it in **Gallery**.
    - If you enter text only, it is automatically saved in QuickMemo+.

## Dual Screen Tool

If you connect your mobile phone to the dual screen and turn on the dual screen, the **Dual Screen Tools** menu icon  appears on the side of the mobile phone screen.

Tap  to open the **Dual Screen Tools** menu and access the options shown below.

	You can tap it lightly to show or hide the Dual Screen Tools menu.
	You can switch the screens between the dual screen and the mobile phone.
	You can send the screen from the mobile phone to the dual screen.
	You can bring the screen from the dual screen to the mobile phone.
	If you use the dual screen only, you can lower the brightness level of the mobile phone screen (main screen) to save battery. If you do not want to use this function, swipe the main screen.
	You can have a web browser screen extended to the dual screen to use in Wide view.
	You can turn off the dual screen.







- If you turn off your mobile phone, the dual screen also turns off. However, if you turn off the dual screen, the mobile phone stays on.
- This feature is not available on the lock screen and is activated when you unlock the screen.
- The Wide view icon appears among the dual screen tools only when you are running the Chrome or Naver app.

## Using Multi-Page Mode


You can extend the use of an app to the main screen and the dual screen for convenience.

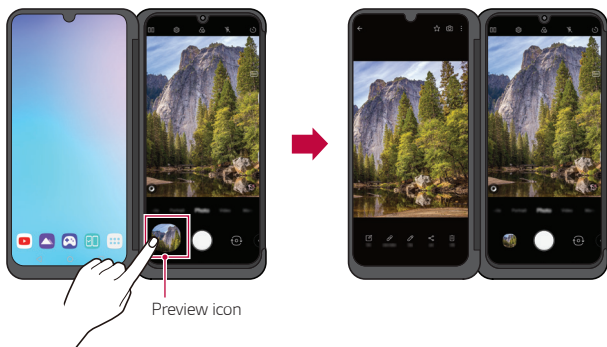


- This function is also available in partner apps in addition to the Camera and Gallery apps.
- The UI may differ depending on the app used.

## Using Multi-Page Mode in Camera


You can shoot a photo or video on the phone or dual screen and view the result on the other screen.





- 1 Tap  on the phone or dual screen and shoot a photo or video.
- 2 After shooting a photo or video, select the Preview icon.
  - You can view the photo or video you have taken on the other screen where the camera is not running.



- Once you tap the Preview icon to view a photo or video, the preview screen stays on and automatically displays the last photo or video taken as you shoot more photos and videos.
- This function does not remain active if you close the Camera app and open again.

## Using Multi-Page Mode in Gallery


Tap  in a folder in Gallery on the dual screen or mobile phone to view enlarged photo or video on the opposite screen.

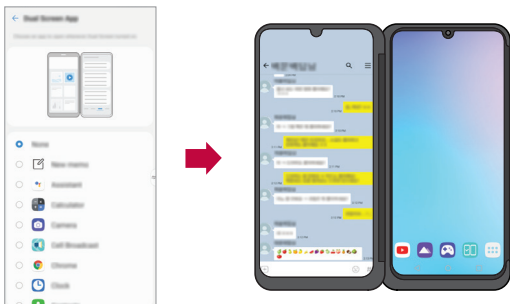
- 1 Tap   on the phone or dual screen.
- 2 Select an album folder and then tap .
  - The photo or video will be displayed in an enlarged view on the opposite screen.
  - Tap  to quit this function.



## Using Dual Screen app

Each time you turn on the dual screen, the preset dual screen apps run automatically.



- 1 Select  > **Settings** > **Display** > **Dual Screen** > **My Pick App**.
- 2 Select the apps that will run automatically each time you turn on the dual screen.



- Some apps cannot be run as dual screen apps.
- The list of apps that appear on the screen may vary depending on the installed apps.

## Using Dual Screen Wide View

When you are using the Chrome or Naver Whale app, you can use the Wide view mode to make a screen to be extended to both screens for a wider view.

- 1 While the mobile phone is connected to the dual screen, open the Chrome or Naver app.
- 2 Tap , then tap **Wide view** .
- 3 You can extend the screen horizontally or vertically.



- When you use the Wide view mode, you can also extend the keyboard input field in either portrait or landscape mode.

## Moving between App Screens on Dual Screen

You can swipe the screen with three fingers to move an app screen between the dual screen and the mobile phone.

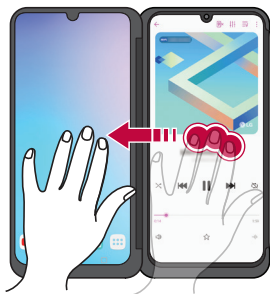
- Swipe the app screen left or right with three fingers to move freely between the main screen and the dual screen.



Swipe the app screen with three fingers



Move the app screen to the main screen



Swipe the app screen with three fingers





Move the app screen to the dual screen

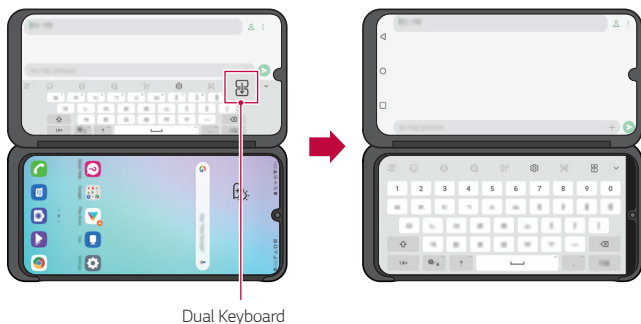


- To use this feature, three fingers must touch the screen at the same time.

## Using Dual Keyboard on Dual Screen

While using the keyboard in landscape mode, you can expand the keyboard to use the top screen as an app screen and the bottom screen as a keyboard screen.



- 1 Switch the dual screen to landscape mode on the keyboard input screen.
- 2 Tap  in the keyboard input window of the dual screen.
  - You can type on the keyboard on the bottom screen while viewing the text entered on the top screen.
  - Tap  in the expanded state to return the bottom keyboard to its original position.

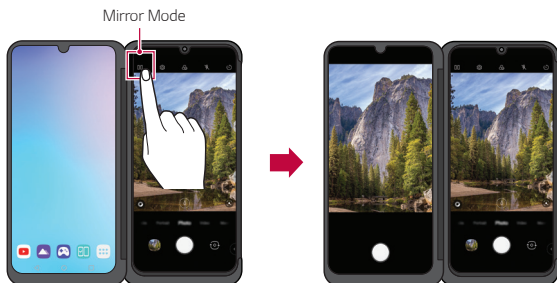


- To move the app screen up or down, touch the screen with three fingers at the same time to move it up or down. See [Moving between App Screens on Dual Screen](#) for details.

## Using Mirror Mode on Dual Screen

When taking photos using the camera, you can preview the photos on the dual screen.

- 1 Tap .
- 2 Tap  on the top of the camera screen.
  - **Mirror Mode** appears on the dual screen.



- You can also take pictures or videos directly from the dual screen.

Use the dual screen to adjust the angle for various situations as listed below.

- High angle shot: Use when capturing an image of a crowd at a concert or festival or when capturing an image of a large space.
- Low angle shot: Use when capturing an image of your child at the child's eye level or when capturing an image of high buildings, etc.



High angle shooting




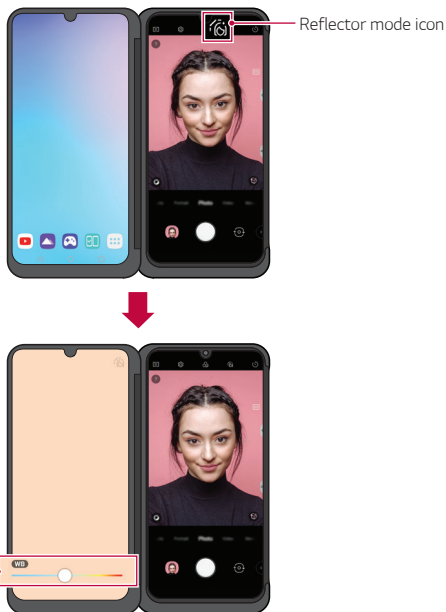
Low angle shooting



## Using Reflector Mode on Dual Screen


When taking a selfie, you can use the dual screen as a reflector.

- 1 Tap , and take a picture with the front camera.
- 2 Tap the Flash button at the upper right corner twice.
  - The dual screen illuminates and functions as a reflector.



- Move the WB adjustment bar to adjust the color of the reflector.

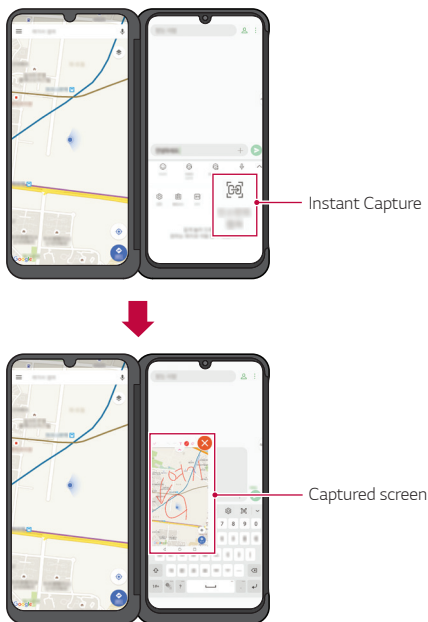
## Using Instant Capture on Dual Screen

When the mobile phone is connected to the dual screen, the **Instant Capture**  function is enabled on the LG Keyboard.

You can use the keyboard on the main screen, capture the screen on the dual screen, and insert it directly into the keyboard input window.

Tap  on the LG Keyboard input screen.

- The screen on the dual screen is captured and automatically attached to the keyboard input window.

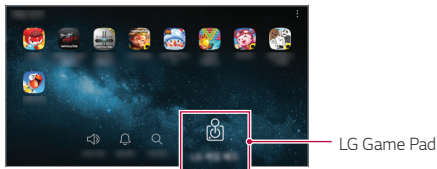


- You cannot extend the keyboard to both screens with this feature enabled.

## LG Game Pad


You can use virtual controllers on the dual screen to play games on the mobile phone. When playing the game, separate the main screen and the dual screen so that the controller does not block the game screen.

- 1 Tap  > **Essentials** > **Game Launcher** and select **LG Game Pad** .



- **LG Game Pad** appears on the product screen.



- 2 Tap  and then swipe it left and right to select your preferred style of **LG Game Pad**.



You can play the game by holding the product as shown below.



- **LG Game Pad** is only available for games that support hardware game pads.
- Depending on the game, some apps or buttons may not support **LG Game Pad**.

# More Dual Screen information

## Precautions on product handling

- You can connect the LG Dual Screen (hereinafter “product”) to a dedicated mobile device (hereinafter “mobile phone”), to use the product.
- Depending on the performance of the a dedicated mobile phone, some features of Dual Screen may be limited. Also, the product may not support other mobile devices.
- This product cannot be used alone.
- Please note that, if you attach a protective film or protective glass on the product or the screen of the mobile phone, the product may not fold completely.
- If you attached a protective film or thick sticker on the surface of the product or the back of the mobile phone, the product may not function properly due to the contact failure of the communication/power terminal.
- If you use the product connected to your mobile phone, the wireless charging function or the NFC function may not work properly.
- Do not use or charge the product when there is moisture in the communication and power terminal of the product.
  - This may cause fire, electric shock, injury, or device malfunction.
  - If there is moisture, stop using the device immediately and remove the moisture completely.
- The liquid in your wet device, changes the color of the product label inside your device. Damage to your device as a result of exposure to liquid is not covered under your warranty.

## Using the battery

- This product does not have its own battery.
- If the product is mounted with a mobile phone, it uses the battery of the mobile phone.

## Trademarks

- Copyright ©2019 LG Electronics, Inc. All rights reserved. LG and the LG logo are registered trademarks of LG Group and its related entities.
- Google, Google Maps, Gmail, YouTube, Google Duo, Google Play, Android, Chrome, Google Photos, Google Play Protect, Google Calendar, Google Docs, Google Drive, Google Sheets and other related marks and logos are trademarks of Google LLC.
- All other trademarks and copyrights are the property of their respective owners.

