

Tech Time at HTPL Smartphone Photography Basics



Disclaimer: Why Does My Camera Look Different?!

Android operating systems present differently on everyone's phone. This is because companies have the ability to change the features and layouts of their phones as they wish. For example, someone with a Samsung phone may have a different camera layout than someone with a Motorola phone. While many of the features we discuss may apply to you, be aware that they might look slightly different depending on your phone type/operating system.

Apple devices should all have the exact same camera layout.

Commonly Used Terms

Resolution & Megapixels: "The resolution of a smartphone camera is measured in megapixels, with each megapixel equating to one million pixels. Camera resolution tells us the level of detail cameras can provide, however, megapixels are not a measure of camera quality." For most everyday phone photography, a camera resolution of 12 to 16 megapixels is sufficient. Higher resolutions, like 20 to 40 megapixels, offer more detail and are better for editing and printing large photos Viewfinder: What the camera sees **Shutter:** Button at bottom of screen that takes photo **FPS:** "Frames Per Second" or the speed at which a camera can capture photos Focus: Tapping on the screen to highlight a subject

Common Symbols

Flash on/off: Usually a lightning bolt. If crossed out, flash is off. If it's a plain lightning bolt, flash is on.

Timer: Set a countdown so that the phone will take a photo for you once Sountdown ends.

Live Photo: Captures what happens 1.5 seconds before and after you take a photo. The icon varies on Androids, but on iPhone it's a circle icon:

Exposure Adjustment: Usually an icon that looks like a sun. If you tap the screen to focus on a subject, you can drag to adjust exposure.

Android Cameras

To open the camera app on your Android phone, double-tap the power button or swipe up from the bottom of the screen to open the app drawer and then tap on the camera app icon.

To take a picture, simply tap the shutter button (the big circle at the bottom of the screen). To switch between the front-facing and rear-facing cameras, tap the arrows icon in the bottom left corner of the screen.

To zoom in or out, use the pinch-to-zoom gesture on the screen. To focus on a specific object, tap on it on the screen.

To record a video, tap the video camera icon in the bottom left corner of the screen. To stop recording, tap the red square button.

Common Android Features

- Portrait mode: Allows you to take photos with a blurred background, which can help to make your subject stand out.
- wide-angle lens, a telephoto lens, and a macro lens. You can switch between these lenses to get different perspectives on your shots. used to optimize the camera settings for specific types of shots, such
- Night mode: Helps you to take better photos in low-light conditions. • Lens switching: Some Androids have multiple lenses, such as a Scene modes: Some Android phones have scene modes that can be
- as portraits, landscapes, and action shots.
- HDR: This mode helps you to take better photos in high-contrast lighting conditions.

Apple Cameras

To open the camera:

- Tap Camera on the iPhone Home Screen.
- Swipe to the left on the iPhone Lock Screen.
- Touch and hold the camera icon on the bottom right of the iPhone Lock Screen.

To take a picture, hit the shutter button (circle) or use the volume buttons on the side of the phone.

To switch between the front and rear cameras, click the bottom right button with the two circulating arrows.

To **zoom in or out**, use the pinch-to-zoom gesture on the screen. To focus on a specific object, tap on it on the screen.





Common Apple Features • Video: Switch to the video tab to record. Hit the red button to

- begin recording.
- **Portrait**: Switch to this tab to take a "professional-looking" close-up photo. The background will be blurred. You can switch between different lighting options here as well.
- Slo-Mo: Switch to this tab to record in slow motion.
- Pano: This stands for "panoramic" photo. You hit the shutter then slowly move your phone, keeping the arrow on the yellow line (on the screen). You will capture an elongated scenic shot.
- Square: Take photos with a square ratio. Tap the upward arrow at the top center of screen. Select 4:3 to choose ratio.
- **Iphone 16**: New camera button on the lower right of the phone

Live Photos

- Live Photos ("Motion Photos" on some Android devices) capture what happens just before and after you take a photo, including the audio
- You take a Live Photo just like you do a normal photo. You can turn the feature on and off, just like turning a flash on or off
- To view a Live Photo:
 - <u>iPhone</u>: Open your camera roll/desired album. A Live Photo will have a small icon in the top left corner of the photo that says "LIVE." Press and hold on the screen to play the photo. You can also view all Live Photos from a default album that your phone makes.
 - <u>Androids</u>: Open your gallery/desired album. Usually a Motion Photo will say "View Motion Photo" at the bottom or have a small play button.



Live Photos

Android









CINEMATIC VIDEO PHOTO PORTRAIT SPATIAL

Photography Tips

- Make sure your lens is clean use a microfiber cloth to clean the outside of your phone
- Natural lighting is often best for taking good quality photos on your phone
 - Avoid taking photos outside in direct sunlight (creates harsh shadows)
- Don't be afraid to take lots of shots. Hit the shutter as many times as you'd like. You can always delete the shots you dislike later on
- Focus on your subject tap the screen
- Be aware that zooming in does reduce the image quality • Keep your phone stable, especially in low-lighting If you're moving or shaking your arm, the photo will likely become blurry, especially at night

What to Consider When Editing Photos

- **Brightness:** Is the photo too dark or too bright?
- Highlights/Shadows: Are there unnecessary shadows in the photo? Do I need to raise or lower the highlights?
- **Contrast:** Are the colors, highlights, and shadows too intense or too light?
- Cropping and/or Rotating: Is the photo upside down? Are there unnecessary elements in the background that can be cropped out?
- Saturation: Do I want the colors to be more or less vivid?
- Filters: Do I want to add a filter to change/enhance/reduce qualities of the photo?

Editing Photos on Android

- Open the photo you want to edit and tap Edit Google Photos will suggest edits to be made To apply a suggested edit, select the suggested name as it
 - appears, ie: "Enhance"
 - To undo changes, select the suggested edit name again
- Hit Save when finished

Adding filters:

- Under Edit, select Filters
- Select a filter, then tap it again to use the dial and adjust its intensity
- Hit Save when finished
- To undo a filter, select Original

Cropping a photo:

- Under Edit, select Crop
- Hit Save when finished

Editing Photos on Apple

Cropping a photo:

- Tap the photo to view full screen options
- Select Edit (top right corner)
- Select the Crop button (bottom right corner)
- Crop manually by dragging corners, select a preset ratio, or select Rotate or Flip (if desired)
- Tap Done to save your changes. To undo changes select Cancel and then **Discard Changes**

Adding filters:

- Tap the photo to view full screen options
- Select Edit (top right corner)
- Select the Filters button (bottom center button, 3 circles)
- Tap a filter, then drag the slider to adjust
- Tap Done to save your changes. To undo changes select Cancel and then **Discard Changes**





Organizing Your Photos

- Creating albums/folders
 - Allows you to name albums and add photos/videos
 - Can move/edit/delete at any time at your own pace
- Using the "favorites" button
 - Puts photos in a specific "favorites" album
 - Good for easy access to your favorite photos or important things (ie: barcodes, pictures of driver's license, etc.)
- Accessing pre-made albums/folders
 - Phone will divide photos into albums like Live Photos, Portraits, etc.
- Deleting old photos to clear storage space
 - Larger photo files (ie: portraits) and videos take up large amount of storage. It's good to clean them out 🙂





Creating an Album iPhone

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Essential albums

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Choose what to create



Album

Create a new album and add pictures and videos manually.



Auto-updating album

Create an album that automatically collects pictures of people you select.



Group

Create a group of related albums.



Shared album

Create an album you can share.

Shared family album

Create a shared album for your family and get bonus storage space.

Creating an Album Android

Essential albums

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Storage Basics

Taking a photo on your phone will typically lead to it being stored in an app like "photos" or "gallery." You can create albums/folders within these apps to organize photos.

The Cloud: A vast online storage space where you store files and applications, accessible from anywhere with an internet connection

Android uses Google for Cloud storage, Apple uses iCloud





Additional Resources

- iPhone Camera Symbols Explained:
- https://techpp.com/2025/03/18/iphone-camera-app-symbolsexplained/
- Live Photos on iPhone: https://support.apple.com/guide/iphone/takelive-photos-iph17471d6de/ios
- iPhone Camera Basics: https://support.apple.com/guide/iphone/camera-basicsiph263472f78/ios
- Samsung Galaxy Camera Basics: https://www.samsung.com/uk/support/mobile-devices/how-to-usethe-camera-on-a-galaxy-smartphone/
- Info on Advanced Settings for Androids: https://www.androidpolice.com/use-smartphone-camera-manualsettings-guide/
- Smartphone Photography Guide: https://extension.okstate.edu/factsheets/smart-phone-photography.html