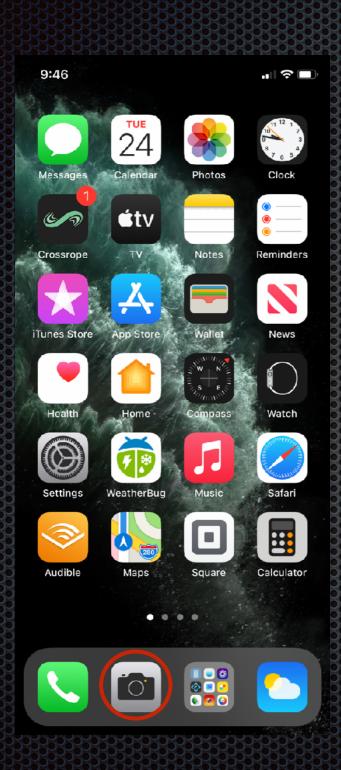
Getting Started With iPhone Photography

"The Best Camera to Have Is the One You Have With You!" —Wisdom of the Ages



How to Open the Camera



- 1. 1. Touch the camera icon on the Home screen.
- 2. Swipe left from the Home screen (locked or unlocked).
- 3. Swipe down from the upper right corner of the Home screen to reveal the Control Panel, then press the Camera icon.

Note: To record video of your camera screen press the video start icon at the lower left of the screen. After a 3-second countdown video recording will begin. To stop recording, open the Control panel again and press recording button to stop recording. Video will be saved to the Camera Roll and the Photos app.

4. Ask Siri to open the camera. (Hey Siri, open camera.



How to Hold the Camera



Portrait Mode (Vertical)
Especially when shooting Panorama





Landscape Mode (Horizontal)
Especially when shooting video
or Vertorama

 Use two hands or a phone holder for maximum stability unless using a WiFi triggered remote release.

How to Take the Photo

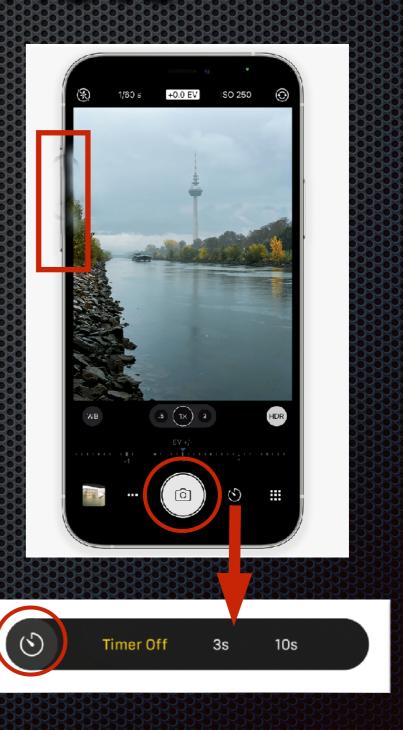
- 1. Press the Shutter Button
- 2. Use the camera's time delay option (3 sec or 10 sec)
- 3. Use the camera's Increase Volume button*
 - * Depends upon current camera settings.
- 4. Use the Increase Volume button on the camera's wired headphones that came with the iPhone.**
 - ** Also works with most other wired headphones.
- 5. Use a remote release to trigger the shutter via WiFi.

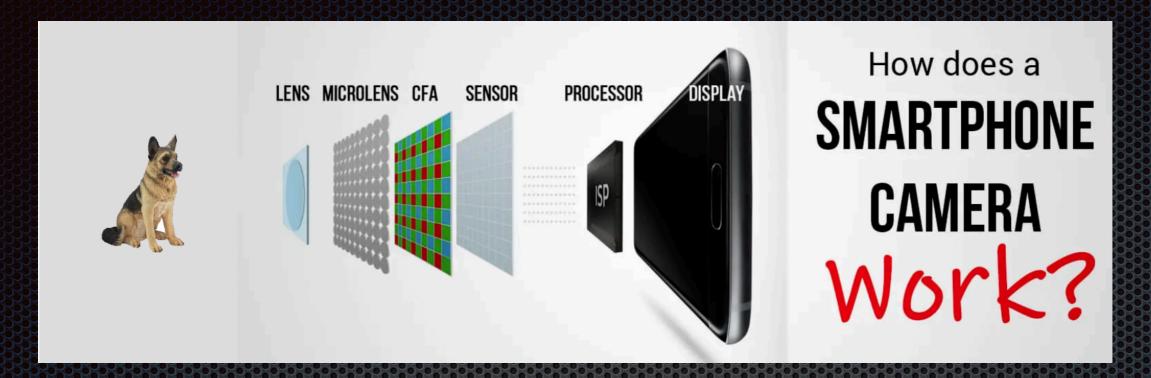
Wired Headphones



Remote Release







- When you open the camera and point to your subject it will focus on the entire scene and determine the exposure by averaging the overall light in the scene. It has no idea what/ who really is the subject nor whether the scene is brighter or darker than normal. It's on AUTO.
 - Press the shutter button and light is captured and passes through the . . .
 - Lenses
 - Color filter array
 - Camera Sensor to determine exposure (aperture, shutter speed, ISO, and where it
 is stabilized to adjust for any minor camera movement
 - And finally to the image processor which takes over to complete the capture, add color, and any special effects set before exposure, eg, exposure compensation, filters, etc.

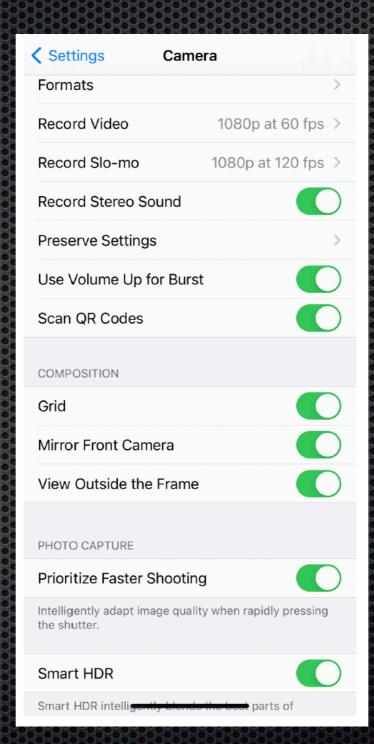
All you really have to do is point & shoot "...and therein lies the rub."

A Look Under the Hood

A few suggested settings for your mobile camera . . .

Formats: HEIF or JPG

- HEIF creates a smaller file but the format is not universally compatible.
- JPG creates a larger file and the format is compatible with most programs.
- Record Video & Record Slo-Mo provide various option for resolution and frame rate.
- Record Stereo Sound: On or Off
- Preserve Settings for . . .
 - Camera Mode or return to Photo
 - Creative Controls or auto reset
 - Exposure Adjustment or auto reset
 - Live Photo setting or reset to ON
- Use Volume Up for Burst instead of video
- Scan QR Codes



- Grid: ON displays a Rule of Thirds grid.
- Mirror Front Camera corrects image inversion when using Selfie camera.
- View Outside the Frame
 - Image fills the camera frame when shooting 1X or 3X.
 - Allows for more latitude in cropping
 - Excess image deletes after 30 days
- Prioritize Faster Shooting
 - Favors faster shooting instead of image quality
 - Use to capture fast moving action
- Smart HDR
 - Shoots several frames at different exposures and blends highlights and shadows to make the best single exposure
 - Select ON here to always use
 - Select OFF here and the option will appear in camera mode.
 - Works in Photo & Portrait Mode

Photo Modes - Video Options

- TIME LAPSE mode takes multiple still photos over a period of time then combines them to create a video.
- SLO-MO creates a video using a higher (eg,240 FPS) than normal (24-60 FPS) frame
 rate so that when the video is played any motion in the scene appears to be very slow
 relative to the speed at which things normally move.
- CINEMATIC mode lets the iPhone camera record videos with a shallow depth of field and add beautiful focus transitions for a cinema-grade look. You can also change the focus point and the depth of field in post-processing. Here's a short video with more information on this feature.

https://www.youtube.com/watch?v=0qtlzbvKNnc

 VIDEO mode creates a video at normal frame rates (eg, 24-60 FPS) so objects in motion appear to move in the video as they do in real life. Theatrical frame rates are in the 24-30 FPS range while 30-60 FPS is more common for online video.

Photo Modes - Still Options

- PHOTO mode creates still images which the camera captures using it's own algorithms for exposure, depth of field, lighting, etc., although the latest versions of camera allow for some user input primarily for focus and exposure.
- PORTRAIT mode is the newest addition to the camera operation. It provides several options for lighting effects and for adjusting depth of field. It can be used for portraits as well as for still life images as long as it's lens-to-subject criteria are met. Photos taken in Portrait Mode can be edited to change the preset lighting options and the depth of field. Note: Portrait mode always defaults the lens to 3x.
- PANO mode is used to take photos of scenes that are too wide or tall to capture with the standard lenses. Panos can be taken of a horizontal scene (panorama) with the iPhone held vertically, or a vertical scene (vertorama) with the iPhone held horizontally.



Panorama

Vertorama

Navigating the Shooting Tools

- Box #1 displays the active shooting tools:
 - In this example, the first symbol indicates the camera Flash is Off and will not fire even if needed.
 - The next symbol indicates Night exposure mode which will turn on automatically for a dark scene.
 - The arrow at the center of Box #1 is used to open or close the shooting tools shown in Box #3.
 - The last symbol in Box 1 indicates Live Photo mode is on. This mode will be explained later.
 - · If your camera has multiple lenses, as shown in Box 2, choose the one closest to what you want rather than pinching to zoom in or out.
 - Best quality comes from the original focal length of the lens. When you pinch in or out the camera will adjust the image digitally resulting in a lower quality image.

(±)

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Shooting Tool Options (cont.)

 Box #3: The box at the bottom of the screen (above the shutter button) displays 6 of the 9 camera tools.* * Scroll left to display the FILTER options.

Flash Controls: AUTO, ON, OFF

Night Mode: AUTO, OFF, MAX

Live Photo: ON/OFF

Photo Ratio Options: 4:3, 1:1, 16:9

- Exposure Compensation: +/- 2 stops
 Note: When Exposure Compensation is active a small Histogram will appear in Box #1.
- Timer: Provides a 3 sec or 10 sec shutter delay.
- Camera Styles, Live Filters, and RAW indicator are not shown.

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Shooting Tool Options (cont.)

Box #4: Camera Roll, Shutter Button, Selfie Option

- Camera Roll: When a picture is taken, the image appears in the small box to the <u>left side of Box #4.</u>
- Click on the image to view the latest photo or video taken or to scroll through all other images.
- This will display the image in a new window that will provide options to Share the image, highlight the image with a heart icon indicating a favorite, open the editing tools, or move it to the Trash.
- You can scroll through your images by swiping left or right on the screen, or in the film strip that appears just above the icons.
 - Click on the image again to make it full-screen
- Scroll up on the full-screen image to add a Caption, view the Live Photo options, see the image on a map, and even see "Nearby Photos."

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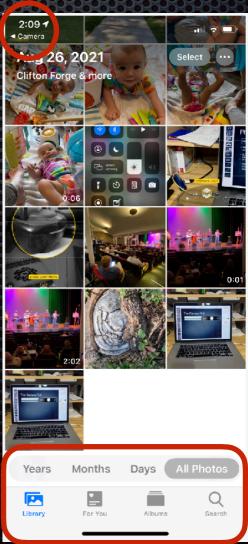
The Camera Roll



The Camera Roll is a unique view that only you can see. It automatically finds and shows you every photo and video you've ever taken or uploaded to your account, the latest being the one displayed.

- To view your latest photos just press the Camera Roll icon. This will open the last image taken.
 Other recent images, as well as the Share, Heart, Edit, and Trash icons will also be displayed.
- Click on the currently open photo to see it full screen or swipe right to view other images.
- To see all the images in your Camera Roll press the *All Photos* option at the top right of the screen. This will open small square thumbnails of all the photos in the Camera Roll and allow you to Select those you may want to Share, create as Favorites by pressing the Heart icon, Edit, or send to the Trash.
- The *All Photos* option also lets you search for images by Years, Months, and Days, as well as options for Library, For You, Albums, and a Search field. These will be explained later.
- Click on the left facing arrow at the top left corner of the screen to return to the camera.





The Shutter Button



The Shutter Button has several unique features:

- 1. Press the Shutter Button to take a still image in Photo or Portrait mode, or to start recording in Pano mode.
- 2. Press the Shutter Button to record in Video, Slo-Mo, or Time Lapse mode.
- 3. Press and hold the Shutter Button while in Photo mode and It will start recording in Video mode until you release it. ORyou can slide the shutter button to the right to lock-in video recording. Press the shutter button again when you're ready to stop recording.
- 4. The *Volume Up* and *Volume Down* buttons can also be used as shutter buttons when the camera is open.

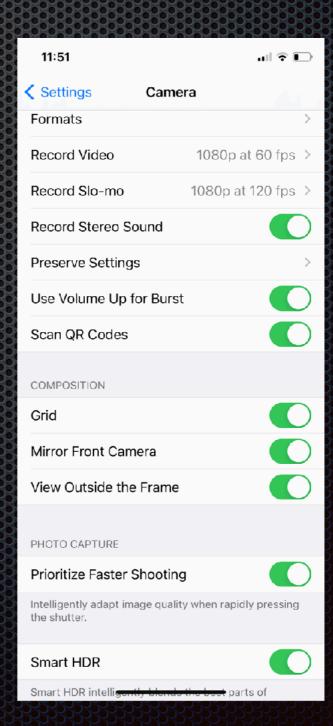
Note: The Volume Up and Volume Down buttons by default will start video recording with a Press and Hold, unless the Camera Settings are changed to use Volume Up for burst shooting. In this case Volume Up will initiate Burst Mode and Volume Down will initiate Video.



The Selfie Button

- The Selfie Button is used to activate the front facing camera for selfportraits. The camera lens is located just to the left of center on the iPhone 13, however, other versions may have the camera on the right side of the screen.
- The Selfie mode camera creates an image that is inverted left to right. To correct the inversion go to Settings>Camera>Mirror Front Camera.
- The Selfie camera on the iPhone 13 has been upgraded to 12MP resolution.
- A Selfie photo can be taken with the Shutter Button or either Volume button.

Note: Remember that a long press on the Increase Volume button may result in Burst mode shots, and a long press on the Decrease Volume button will result in a video recording.



Selecting a Shooting Mode

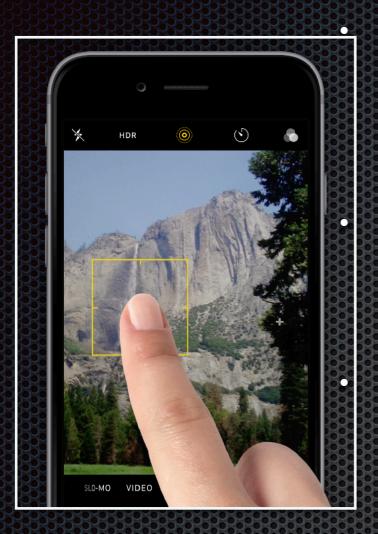
There are a total of 7 shooting modes:

- Three still image modes: Photo, Portrait, Pano
- Four video modes: Time-lapse, Slo-Mo, Cinematic, Video
- Select a mode by touching the name of the mode so that it highlights in Yellow at the bottom of the screen . . . OR
- Swipe the screen left or right to select the mode you want.

Caution: The lens zoom factor may change when you swipe the screen, so be sure to check that the camera mode you want is highlighted in yellow at the bottom of the screen.



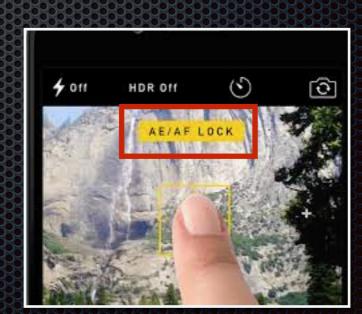
Setting Focus and Exposure



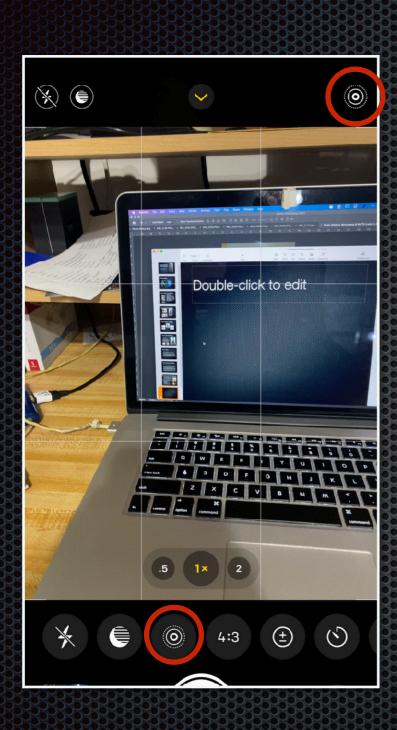
To select a focus point simply press on the subject in the scene. A yellow box will appear around your subject for several seconds. The camera will set focus and exposure based on that point.

While the box is visible, you can adjust the exposure by sliding your finger up or down on the screen. These settings will hold for only one shot.

To lock the focus point and the exposure for several shots, press and hold over your subject until the AE/AF LOCK label appears. The focus and exposure are now locked until you select another point of focus. You will still be able to adjust the exposure by swiping up or down on the screen.



Live Photo Mode



The Live Photo mode lets your iPhone records what happens 1.5 sec before and after it takes a still photo. It displays what it defines as a "Key" image as a still.

- To activate *Live Photo* mode, press the *Live Photo* icon in the toolbar or from the icon above the screen.
- If Live Photo is ON the concentric circles icon will appear as shown. If OFF, then a diagonal line will appear across the circles.
- A Live Photo icon will appear with the image during review or editing and the image can be edited with all the usual editing options.
- A small part of the motion in the Live Photo will playback as a video with sound. To view the entire sequence (approx 3 sec) you will need to press and hold on the image.
- The beauty of the Live Photo mode is in the options described on the following pages.

Editing the Live Photo

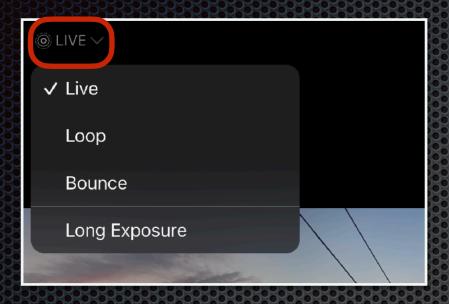


Editing the Live photo is done in two parts:

- 1. The usual editing process is optional. Select the Live photo then press *Edit* to display the editing tools:
 - Live Photo will display all images made during the exposure
 - Exposure will display the usual editing tools
 - Filters display an array of filter presets you can select
 - Crop will let you Crop or Rotate an image.
- 2. Press the *Live Photo* icon in the *Edit* panel to display the viewing options: Live, Loop, Bounce & Long Exposure.

To Share a *Live View* image as a video, tap to select image, look for the *Share* or *Edit* link, then select the *Save as Vide*o option.

Live Photo Viewing Options

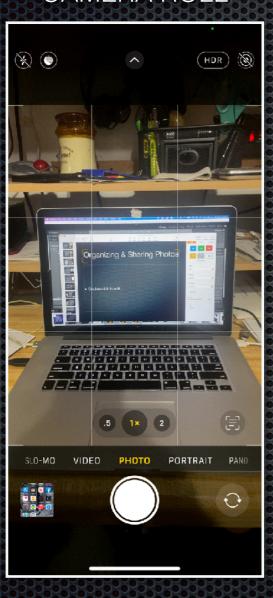


Click on the Live link to see the viewing options.

- Live will let you view the Live Photo action as it is seen when you press and hold the image. This is the default setting and works with iPhones. Live Photos and videos can also be shared with Android using Google Drive.
- Loop will play the images as a video from beginning to end continuously.
- Bounce will play the video forward and then backward continuously.
- Long Exposure will combine any motion in the image to create a long exposure effect. This works well when there is some motion in the scene as well as a still subject like traffic moving along a highway or water along a stream.

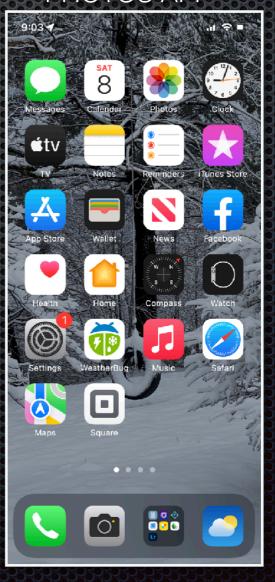
Organizing & Sharing Photos

CAMERA ROLL



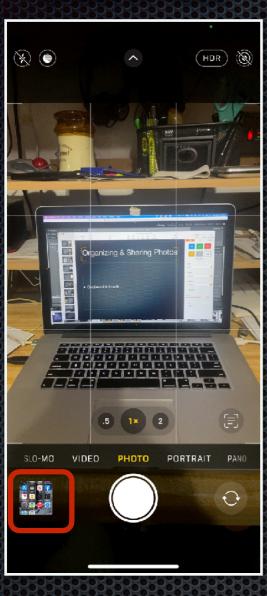
VS

PHOTOS APP



CAMERA ROLL

CAMERA ROLL



The camera roll link, located left of the shutter button, is an integral part of the Camera App.

- Touch the camera roll link to display the latest image taken.
 - To see other images, scroll right through the group of images or press the *All Photos* link at the upper right corner of the window.
 - Touch a photo to view it larger and bring up the Share, Like, Info, Edit, and Trash options seen at the lower right.

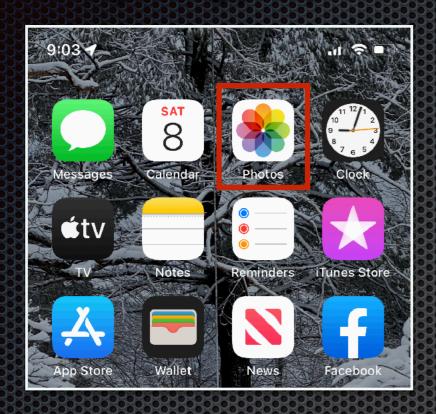
The Camera Roll is a good choice for quick image reviews, not so good for organization.

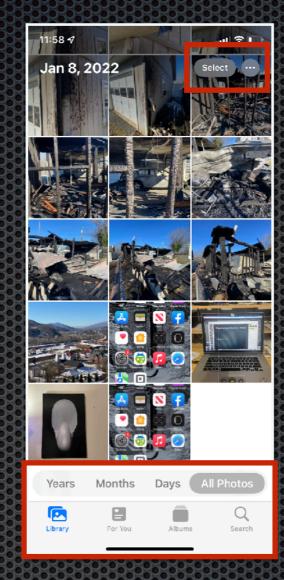


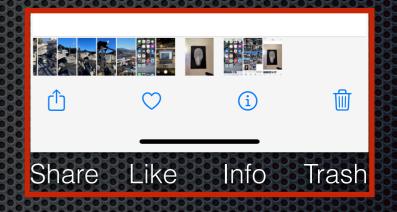
Share Like Info Edit Trash

Photos App

The Photos App is the best choice for organizing your photos



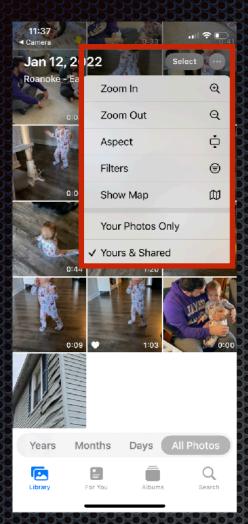


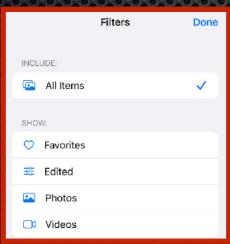


Viewing images in the Photos App lets you view, rate, edit and organize your images

- You can choose to view images from Years, Months, Days or All Photos
- The Library view will display all photos in the camera roll with the most recent first
- For You displays only the images you have designated with a heart symbol
- Albums lets you see images you have previously stored in albums
- Press on any image to see an enlarged view
- Press Select to select one or more images for editing, sharing, or placing into an Album
- Once the images are selected, Share, Like, Info, & Trash are options

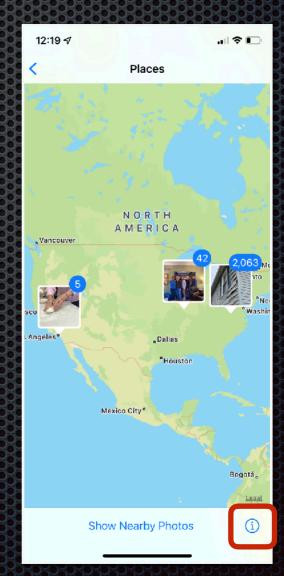
The Elusive Ellipsis...*





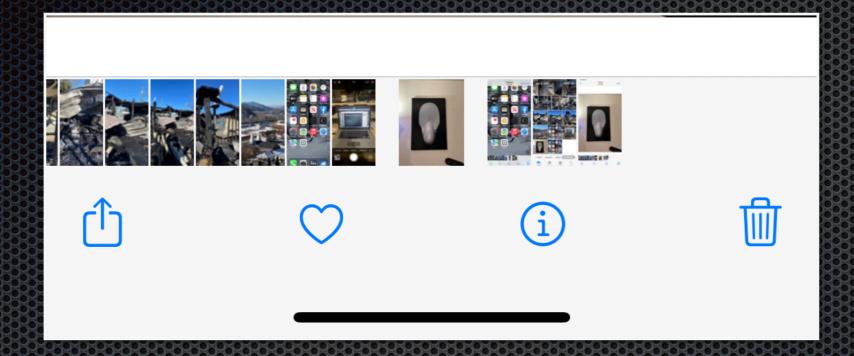
The ellipsis (. . .) provides unique options where ever it appears. Click on the ellipsis to open a drop down menu to see your choices.

- Zoom In or Zoom Out will let you change image size, and can also be done by "pinching" the image.
- Aspect will display your images in their original aspect ratio instead of small squares.
- Map will show your image in Google Maps along with any other images taken nearby. The map can be zoomed in to street level.
- Click on the "i" icon in *Map* view to change the map style.
- Filters, in the Library option, will help you organize and find photos and video files.



* Be sure to check the ellipsis whenever it appears to see the options it provides.

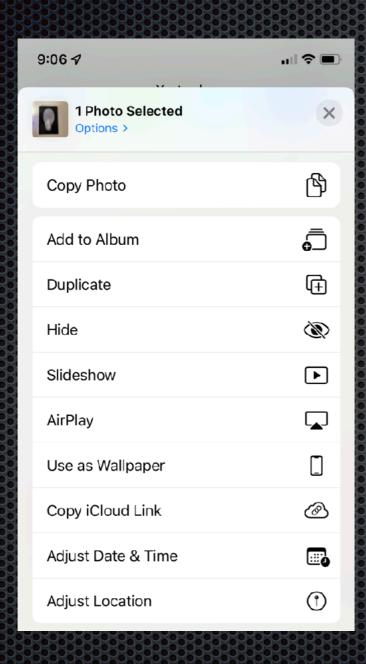
Share, Like, Info, Trash

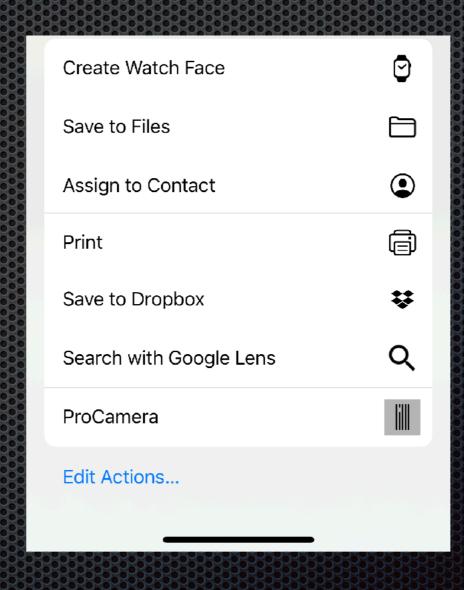


Share provides many options for sharing, sending, & storing images. These will be discussed in the following pages.

- The *Heart* indicates a favorite image. Press the Heart when images are selected and a small red heart will appear on each image. It becomes a way to organize and search for your special images.
- Info will provide details about your image like Date & Time, Geo Coordinates, Map Location, Image Details, and more.
- Trash is where you delete unwanted images.

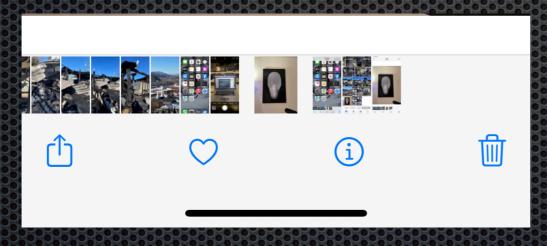
"Share" Details & Options





"Heart" Details & Options

- The Heart symbol is used to designate your favorite images and will appear in the lower left corner of the images when applied.
- Press once to apply the Heart to your selected image(s); press again to remove it.
- Using this symbol to select your favorite images is a great way to help find and organize your images.



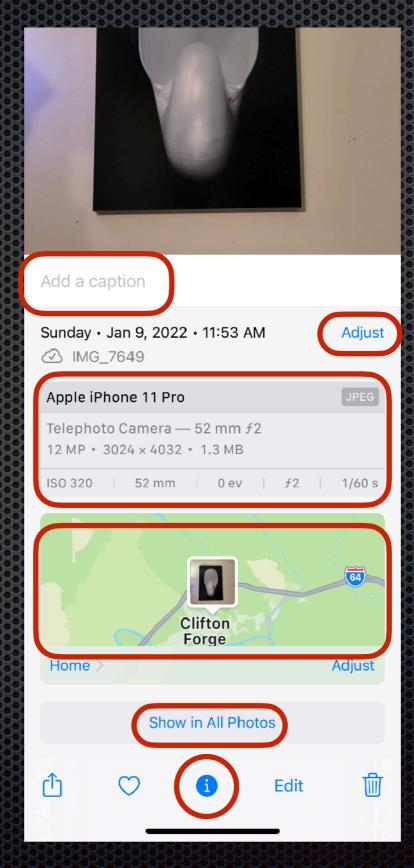
Share

Like Info Trash



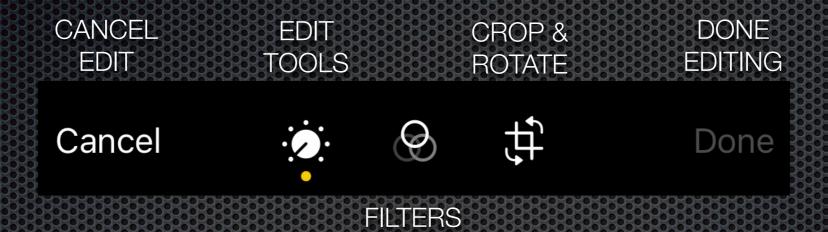
"Info" Options

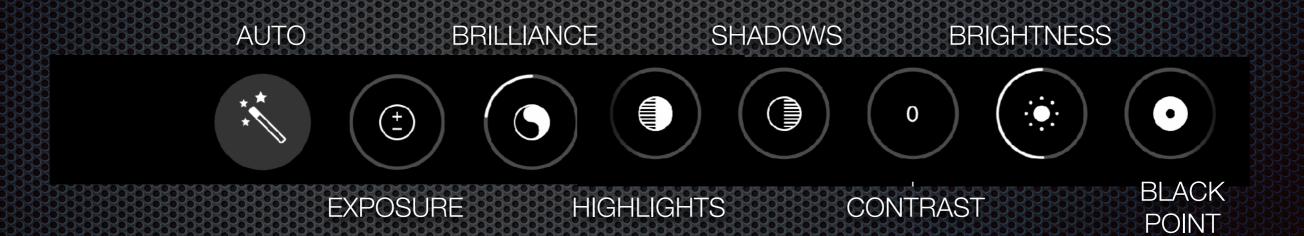
Open any image via Camera Roll or Photos and click on the "i" link at the bottom of the screen to display or adjust information about the image. Press "i" once again to return to images.



- Captions can be added
- Date can be adjusted
- Capture device & exposure details are provided
 - Images are shown on map
 - Option to Show in All Photos

"Edit Tools"





EDIT TOOLS (cont.)

