Mobile Phones-How Things have changed since early 1970s!



Using Your Mobile phone Camera

This looks at the iphone 11 pro camera but most of the features are available with an android

Standard Options

Camera Settings

Editing the Photo

Other Photo Features

Latest Phones and Apps available to use it like a DSLR

Add Ons





About the Iphone 11 Pro

Cameras: Triple 12
MP Ultra-Wide,
Wide, and
Telephoto

Sensor Size: 1/2.55" (Wide), 1/3.6" (Ultra-Wide and Telephoto) Ultra-Wide Camera: 1.54mm f/2.4 (13mm FF equivalent)

Ultra-Wide Camera Lens Elements: 5 Wide Camera: 4.25mm f/1.8 (26mm FF equivalent)

Wide Camera Lens Elements: 6 Telephoto
Camera: 6mm
f/2.0 (52mm FF
equivalent)

Telephoto Camera Lens Elements: 6 Image Stabilization: Dual optical image stabilization (Wide and Telephoto) Built-in Camera Features:
Portrait Mode, Portrait
Lighting, Panorama, Night
Mode, Smart HDR, Live Photos,
Advanced Red-Eye Correction,
Photo Geotagging, Burst Mode

Image Formats: HEIF(The HEIF format produces images with a smaller file size and higher image quality than the older JPEG standardand), JPEG

Video Recording: Up to 4K @ Up to 60 FPS Optical Image Stabilization for Video: Wide and Telephoto Cameras

Slow Motion: 1080p at 120 FPS or 240 FPS Video Formats: HEVC (as HEIF but for video)and H.264

Display: 6.5" OLED (iPhone 11 Pro Max)

Weather Sealing: Splash, Water, and Dust Resistant

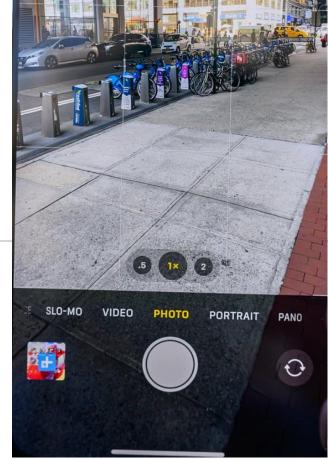
Capacity: 64GB, 256GB, 512GB

Weight: 188 grams

Dimensions: 144.0×8.1×71.4m m

- Lens Selection
- 1. Standard Options

- Time-lapse
- Slo-Mo (slow motion) Video
- Photo 0.5x, 1x,2x and every step up to 10x or more
- Portrait (with various light options)
- Panoramic .5x, 1x, 2x
- Plus Information Date, Time and location
- Create Slide Show
- Add to an Album
- Save as a video

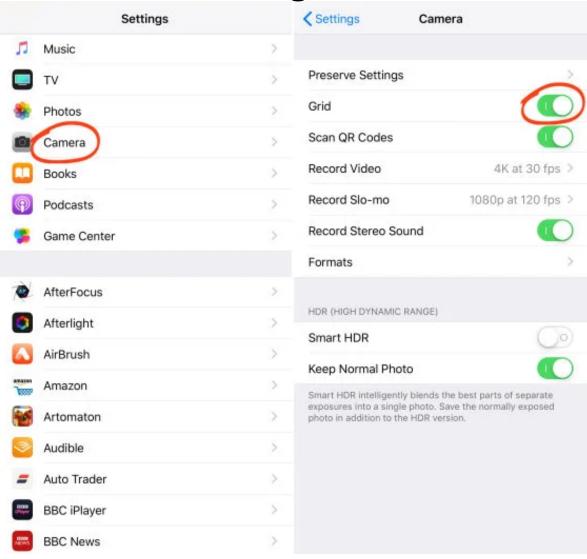




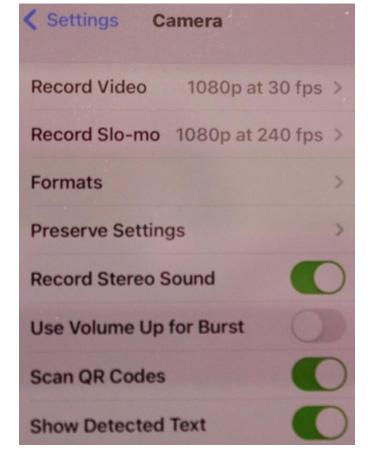
When Taking a Photo Press again and it will instantly change to a Video for as long as you hold the button

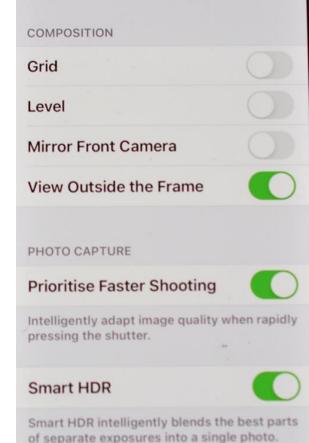
When taking a video press again and it will take a photo

Camera Settings









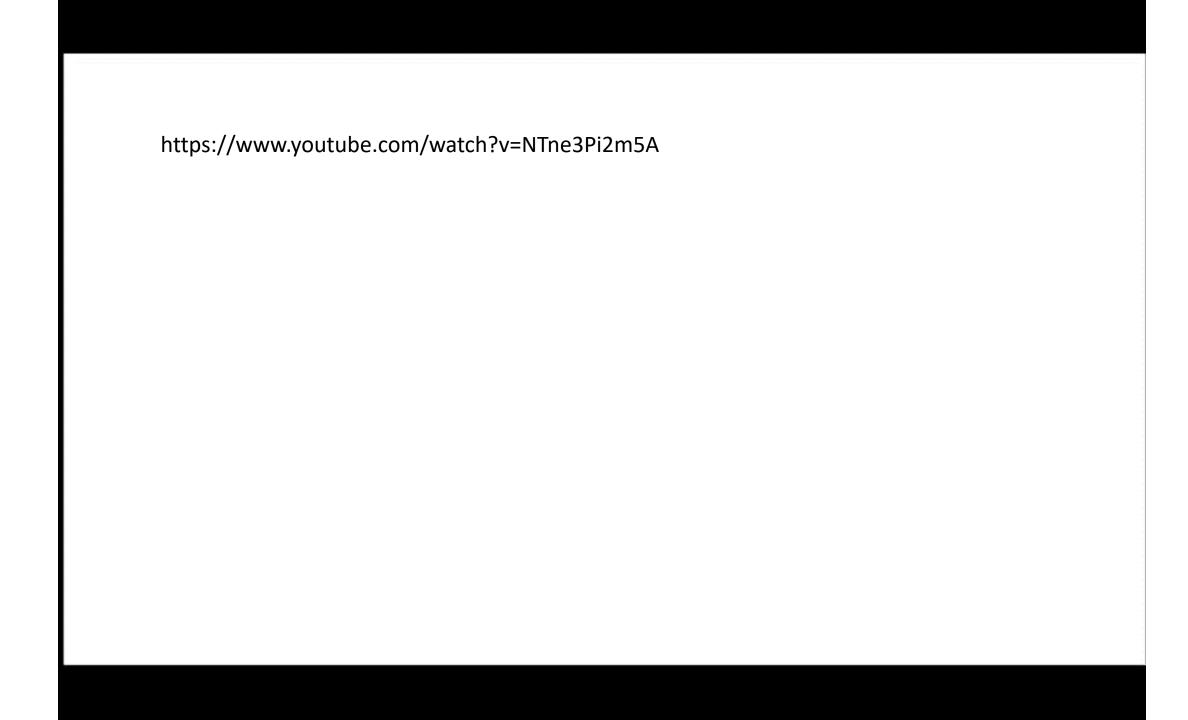
Camera Adjustments

The iPhone's built-in Camera app is loaded with features to help you. iPhone Camera Settings

- 1. Set The Focus For Tack-Sharp Photos
- 2. Adjust Exposure To Achieve Perfect Brightness Levels
- 3. Switch Between iPhone Lenses To Zoom In & Out
- 4. Use Night Mode For Low Light Photos
- 5. Blur The Background In Your Photos With Portrait Mode
- 6. Use Portrait Lighting To Add Studio Light Effects To Your Photos
- 7. Activate Burst Mode For Action Shots
- 8. Shoot Live Photos
- 9. Set The Timer For Hands-Free Shooting
- 10. Switch On The Grid In iPhone Camera Settings For Better Compositions

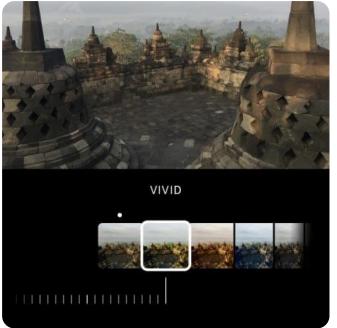






Editing





- Use auto adjust or The Edit of light controls include:
- Exposure: Act as though more or less light got into the lens.
- Brilliance: Lighten shadows while toning down highlights.
- Highlights: Adjust the brightness of the lightest parts in the image.
- Shadows: Adjust the brightness of the darkest parts in the image.
- Contrast: Make the darker parts darker and the lighter parts lighter.
- Brightness: Make the entire image lighter or darker.
- Black Point: Adjust the very darkest part of the image.
- The color controls include:
- Saturation: Change the intensity of colors in the image.
- Vibrance: Change the intensity of the least saturated colors.
- Warmth: Adjust the yellow and blue tones to warm or cool an image.
- Tint: Adjust the green or magenta tones in your image.
- And the detail controls include:
- Sharpness: Sharpen the edges in your image.
- Definition: Make the details in your image clearer.
- Noise Reduction: Reduce the graininess in your image.
- Vignette: Darken the corners of the image.

Edit Photos

Adjustment and **Filters**





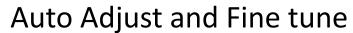
Duplicate



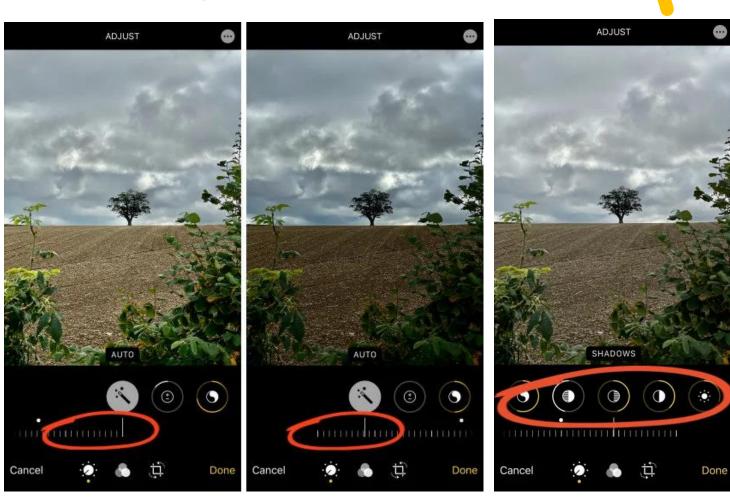


Edit Photos









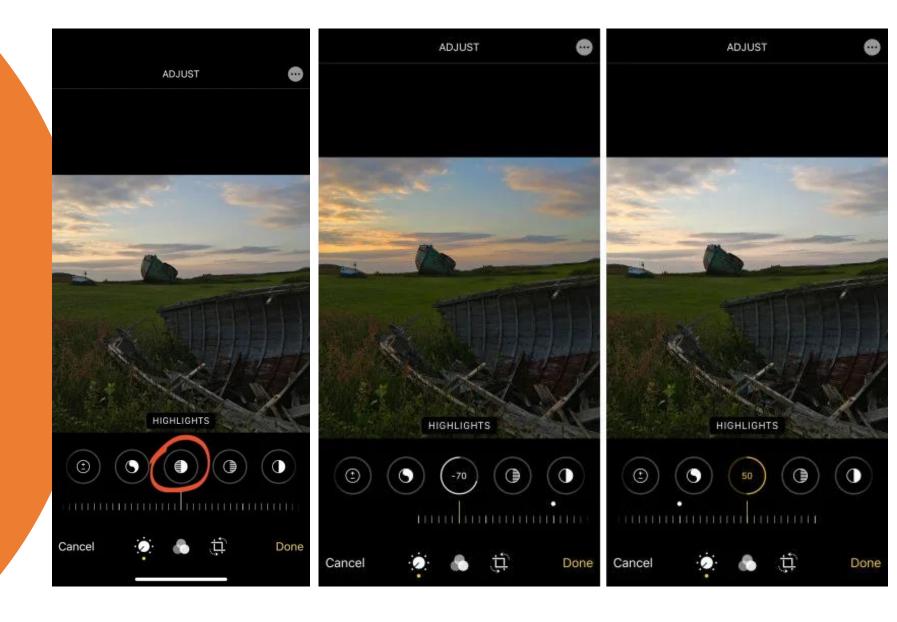
Edit Photos
Some of the options - Exposure



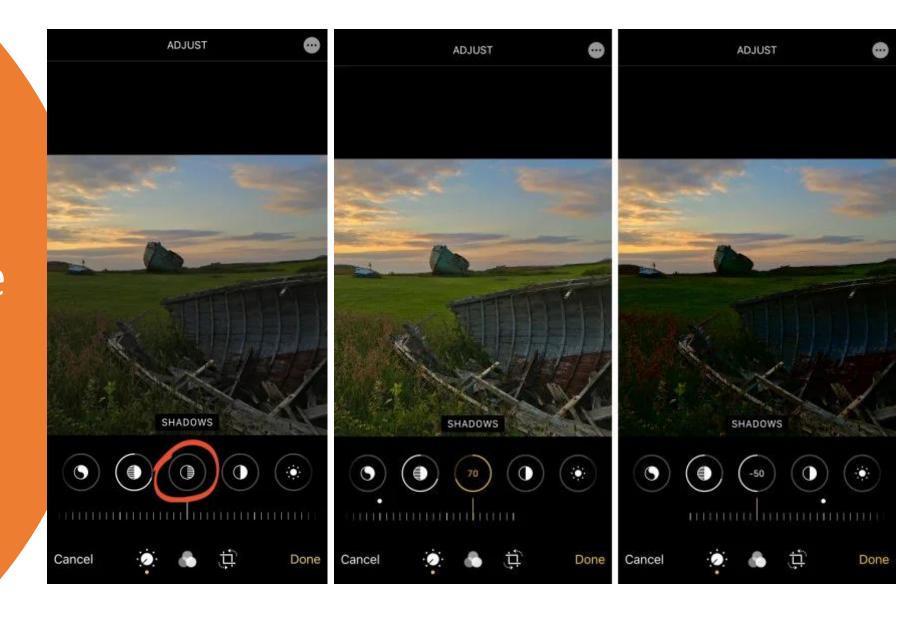
Edit Photos some of the options - Brilliance



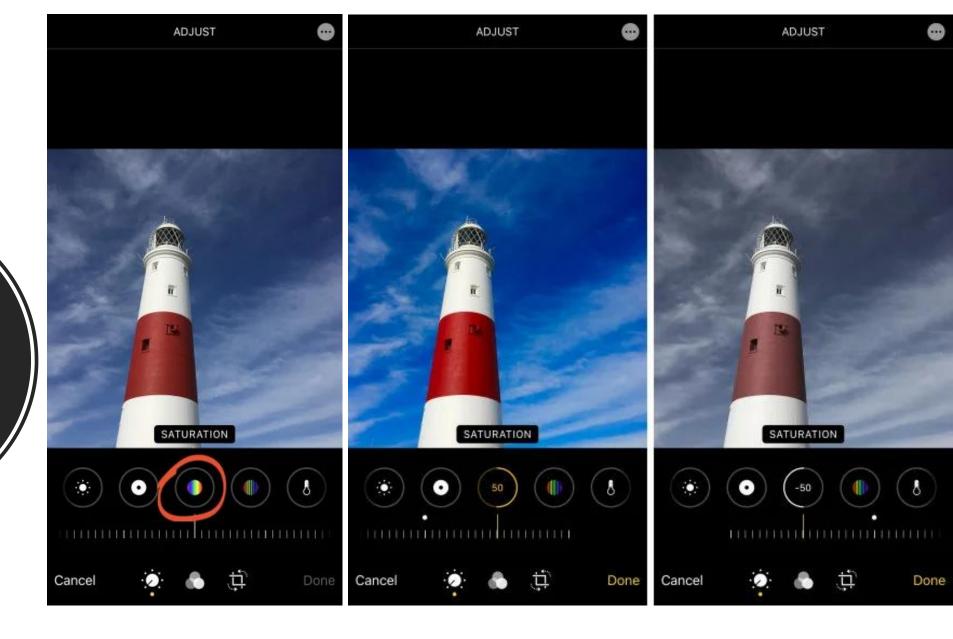
Edit Photos
Some of the options Highlights



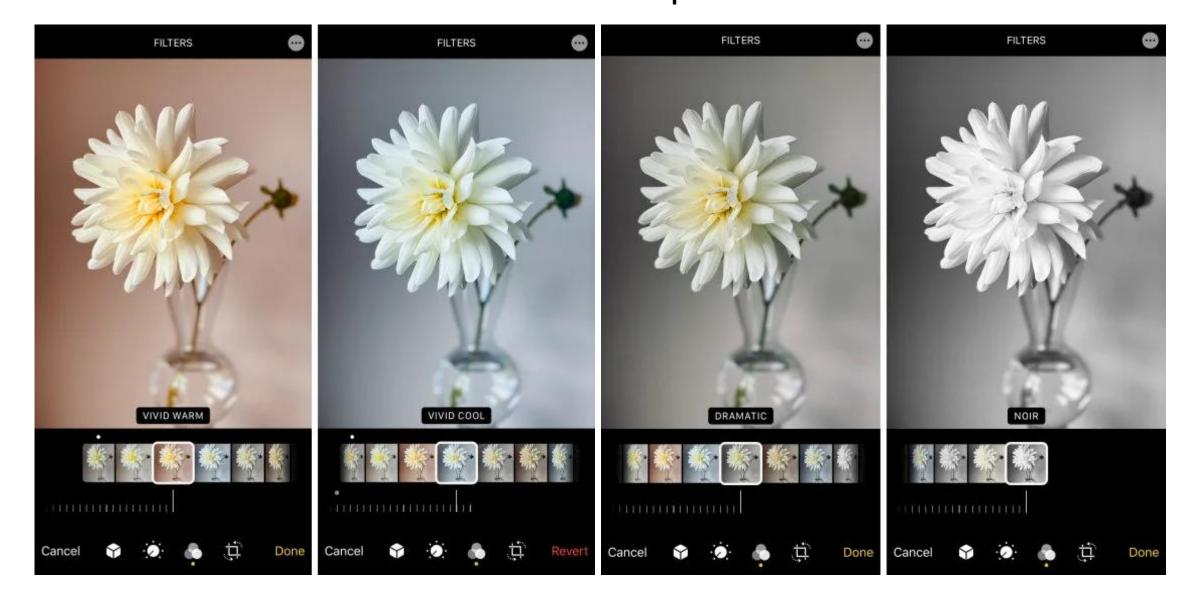
Edit Photos
Some of the options Shadows



Edit Photos
Some of the
options Saturation



Edit Photos Some of the options - Filters



Editing

Plus you can make these adjustments

- Contrast: Make the darker parts darker and the lighter parts lighter.
- Brightness: Make the entire image lighter or darker.
- Black Point: Adjust the very darkest part of the image.
- Vibrance: Change the intensity of the least saturated colors.
- Warmth: Adjust the yellow and blue tones to warm or cool an image.
- Tint: Adjust the green or magenta tones in your image.
- Sharpness: Sharpen the edges in your image.
- Definition: Make the details in your image clearer.
- Noise Reduction: Reduce the graininess in your image.
- Vignette: Darken the corners of the image.
- You can Crop, Straighten, -Vertical and Horizontal adjustment, write on the picture ...

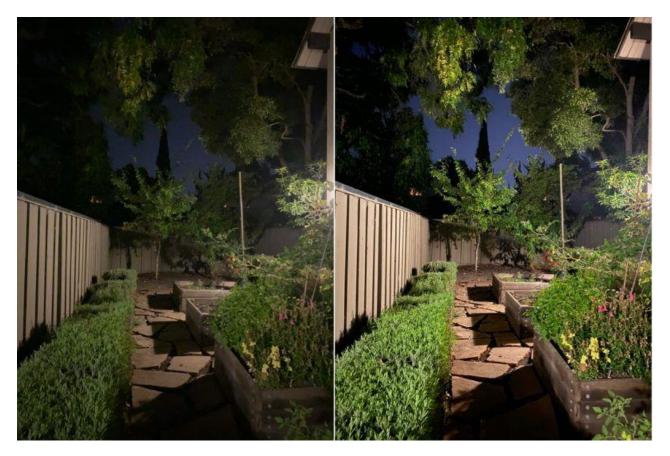
Photos Outside the Frame

When you take a photo with the telephoto or wide-angle camera on the iPhone 11 Pro there's a feature that automatically captures what's outside the frame using one of the other lenses, just in case you accidentally cut something out.



Night Mode

Night Mode comes on automatically in situations with low lighting, and you know that it's activated when you see a yellow icon at the top of the iPhone's camera with a little moon icon and a number.







- As shown earlier, if you're shooting photos and decide to make a video instead, just hold down on the shutter button and it will start recording. But if you want to keep recording for more than a few seconds, keep holding and swipe over to the right side of the screen to continue the video in the video mode.
- QuickTake videos are recorded at 1920 x 1440 resolution at 30 frames per second in the 4:3 aspect ratio. Videos are 1440 x 1440 resolution when using the square aspect ratio, and 1920 x 1080 in 16:9 aspect ratio.

Action shots - Use Burst Mode

By holding down the shutter button, you can take a burst of many photos in quick succession. Hold and Scan or Click quickly

This is one of the best iPhone camera tricks you can use when photographing moving subjects. It makes it easy to capture the perfect action shot as you're bound to get at least one great photo in the sequence.

First switch on Live Photos using the circles icon at the top of the Camera app.

When you tap the shutter button, you'll record a 3-second Live Photo complete with movement and sound.

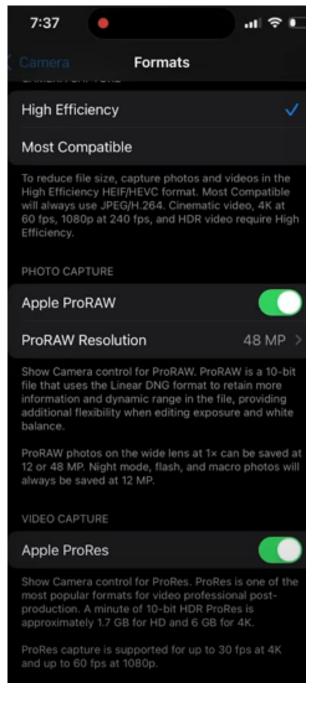
To turn the Live Photo into a long exposure, swipe up to access the Live Photo Effects. Swipe across the effects and select Long Exposure. Any movement in your Live Photo will appear as motion blur, while stationary objects remain sharp.

If you change your mind, you can remove the long exposure effect by selecting Live in the Effects section.



Latest Phones and Apps

On iPhone 12 Pro and later Pro models with iOS 14.3 or later, you can take photos in Apple ProRAW. ProRAW gives you greater creative control when editing photos.



The latest iPhones also have macro focusing modes for getting close to subjects, which is something you'll also find on numerous Android models now, including the Samsung Galaxy S22 Ultra and the Google Pixel 7 Pro.

If you don't have these latest phones you can add an app that makes the phone behave like a DSRL

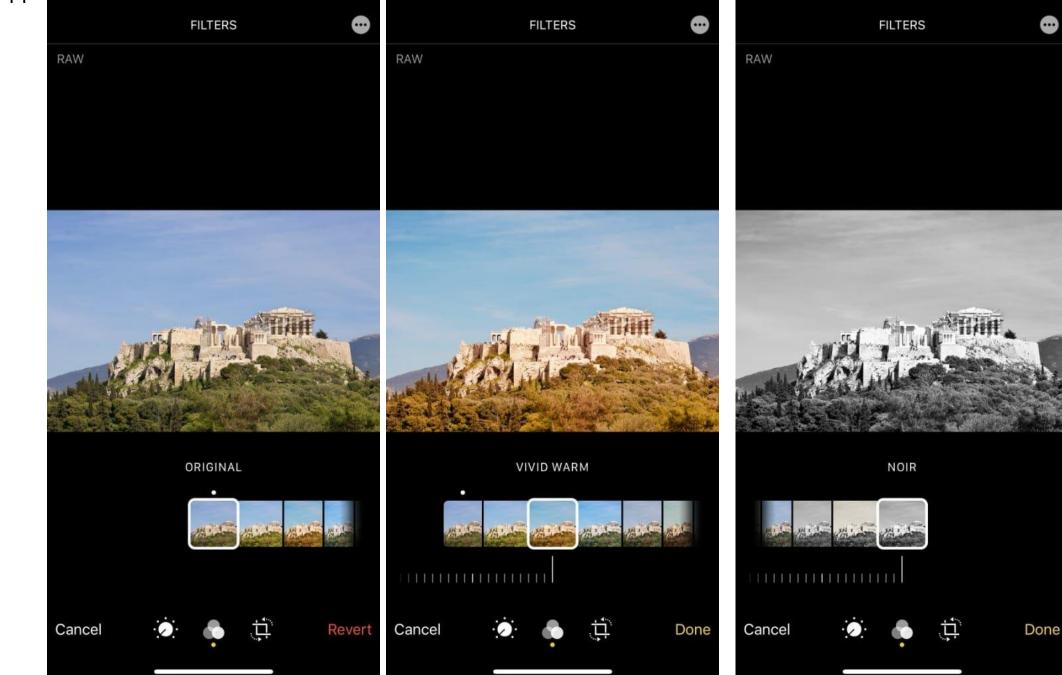
Camera+ 2 includes manual controls, along with a simpler interface for beginners that find the shutter speed, ISO and white balance options confusing. RAW shooting is built in, along with depth options for dual-lens cameras. The app's depth-capture mode will save the depth map with the image, which allows the app's editing interface to edit only the subject or only the background



Word of warning when selecting an App

- Some say they are free apps but either limit features or time in free version.
- Some look for monthly subscription
- Some bring with them lots of Adverts
- Best to look for a one off payment version Camera+
 2 was one of these but things can change

RAW Edit



Latest Phones and Apps **ADJUST ADJUST ADJUST** RAW RAW RAW Raw Edit AUTO BRILLIANCE VIBRANCE Cancel Cancel Cancel Done Done Done



Accessories to the phone

• Apart from protective cases, microphones, speakers, ear pods selfie sticks etc there are some dedicated for camera use



Lens

Add more Lenses



Lens Filter



Under Water

Under Water Case

Case with extra lighting





Tripod

With Remote Control





And much more

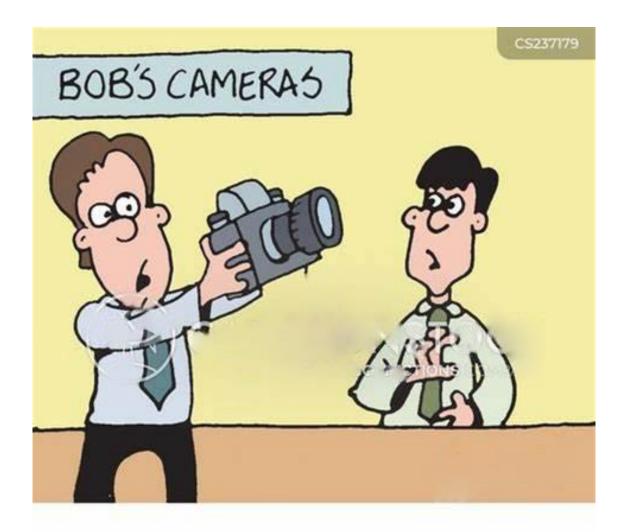
Selfie Stick with remote Control



Lighting



The End



DOES IT COME WITH A BUILT IN MOBILE PHONE?