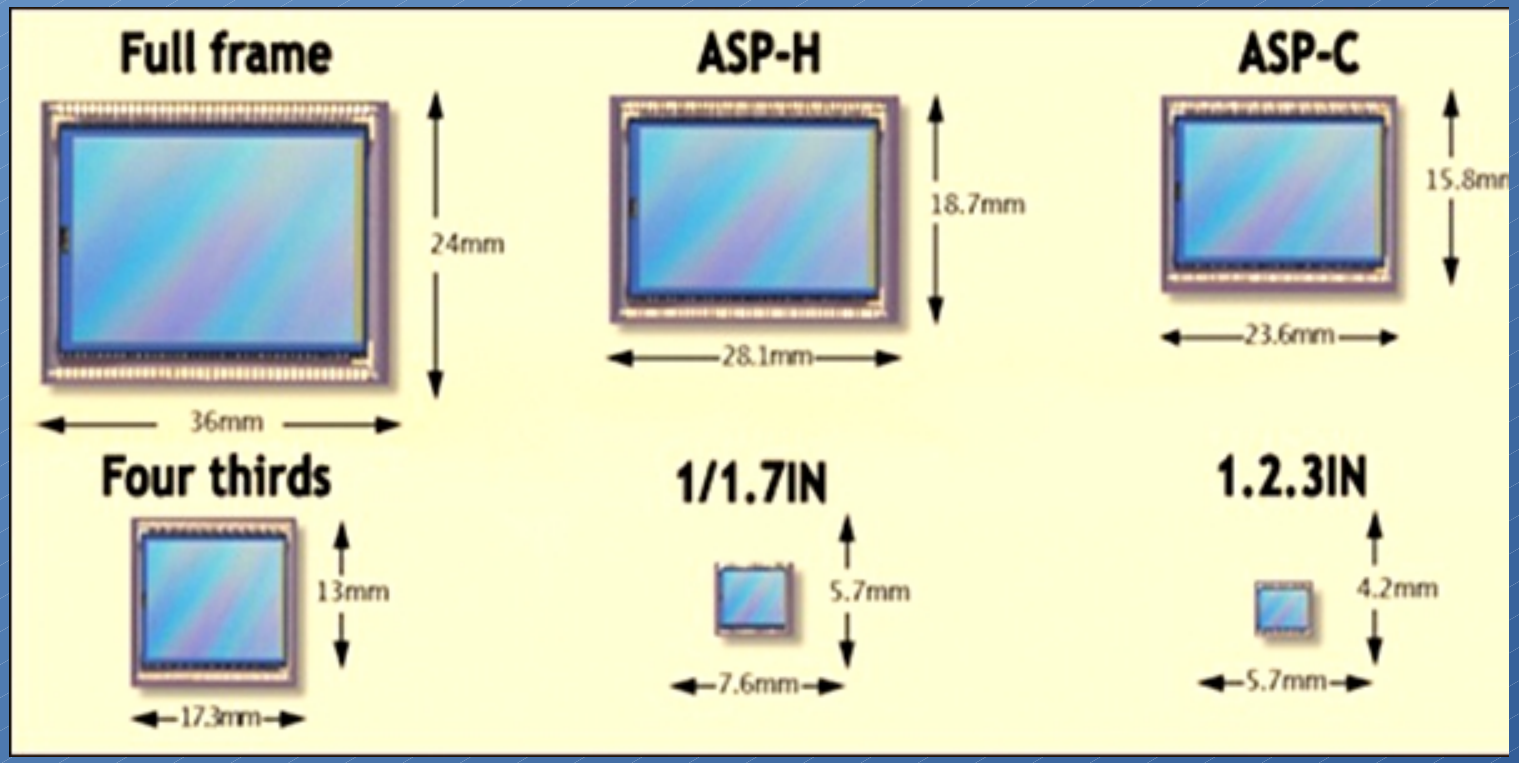
Getting the best from your Cell Phone

Cell Phone limitations:

Lack of Viewfinder, Small Sensor Size, Smaller Pixel Count,
Fixed Aperture, Fixed Lens,
Tedious Uploading, On-Screen controls are fiddly and sometimes difficult to operate

Cell Phone Strengths

Always with you, Weightless, Amazing Images – given its size, Manual Controls, OIS
3rd party creative tools
Reasonably good onboard Editing, Ease of sharing to Social Media



Small Sensors have more noise and sharpening artifacts caused by automatic built-in JPEG sharpening

F= 2.2 to 1.7

Focal Length = approx 28mm equivalent

DOF at 10’ = 3.5’ to ∞

New Cams have Dual lens Systems that have a 50 mm equiv Lens and a separate WA Lens

This will allow better blur effects As well as non-destructive image zooming

DEPTH OF FIELD CALCULATOR

A depth of field calculator is a useful photographic tool for assessing what camera settings are required to achieve a desired level of sharpness. For a background on what everything here means, also see the tutorial on depth of field.

Depth of Field Calculator

show advanced

Camera Type: APS

Selected Aperture: f/1.8

Lens Focal Length: 28 mm

Focus Distance: 10 feet

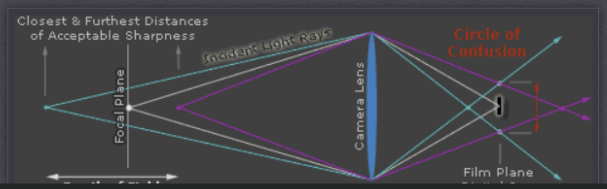
CALCULATE

Nearest Acceptable Sharpness: 8.66 ft

Furthest Acceptable Sharpness: 11.83 ft

Total Depth of Field: 3.17 ft

Note: CF = "crop factor" (commonly referred to as the focal length multiplier)

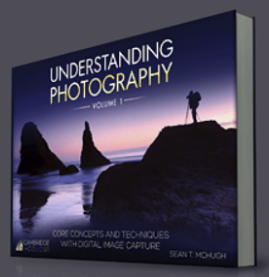


Follow us via

BROWSE CATEGORIES

- Concepts & Terminology
- Using Camera Equipment
- Editing & Post-Processing
- Color Management & Printing
- Photo Techniques & Styles

GET OUR NEW BOOK!



DEPTH OF FIELD CALCULATOR

A depth of field calculator is a useful photographic tool for assessing what camera settings are required to achieve a desired level of sharpness. For a background on what everything here means, also see the tutorial on depth of field.

Depth of Field Calculator

show advanced

Camera Type

Digital compact with 1/1.8" sensor

Selected Aperture

f/1.8

Lens Focal Length 4.4 mm

Focus Distance 10 feet

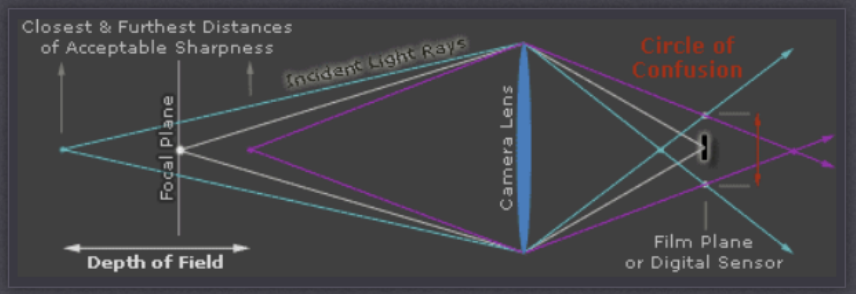
CALCULATE

Nearest Acceptable Sharpness: **3.48 ft**

Furthest Acceptable Sharpness: **∞ (infinity)**

Total Depth of Field: **∞ (infinite)**

Note: CF = "crop factor" (commonly referred to as the focal length multiplier)



DOF using close focus

Editing JPEGs is fine for sharing on Social Media and most other Web uses

Realize that rendering or “saving” your edit will re-compress an already Compressed file. OK for sharing – Not OK for printing or additional editing later on

Also – be careful with Sharpening as phone JPEGS are usually highly Sharpened already

Original JPEG

Edited

Final Edit w Vignette to hide Noise in Sky

Unlock your phones potential w 3rd Party Apps!

Raw or DNG Capture

Portrait and background blur

Low light - multi exposure stacking to make a sharp handheld image

HDR

Bracketing

Multi Effects and Filters

Image Editing and Crop

A few Iphone Apps:

Pro Camera

VSCO

Manual

Cortex Cam

Android Apps:

FV-5

Open Camera

Camera MX

Cymera

For fastest start up and shutter release - disable all unwanted computer dependent features such as: Face Detection, Voice Activation, etc.

DNG Advantages

1,024 shades of each primary color, and over a billion possible colors
vs 255 shades for JPEGS and “only” 16 million possible colors

At 10 Bits, DNG files will withstand editing better than JPEGS

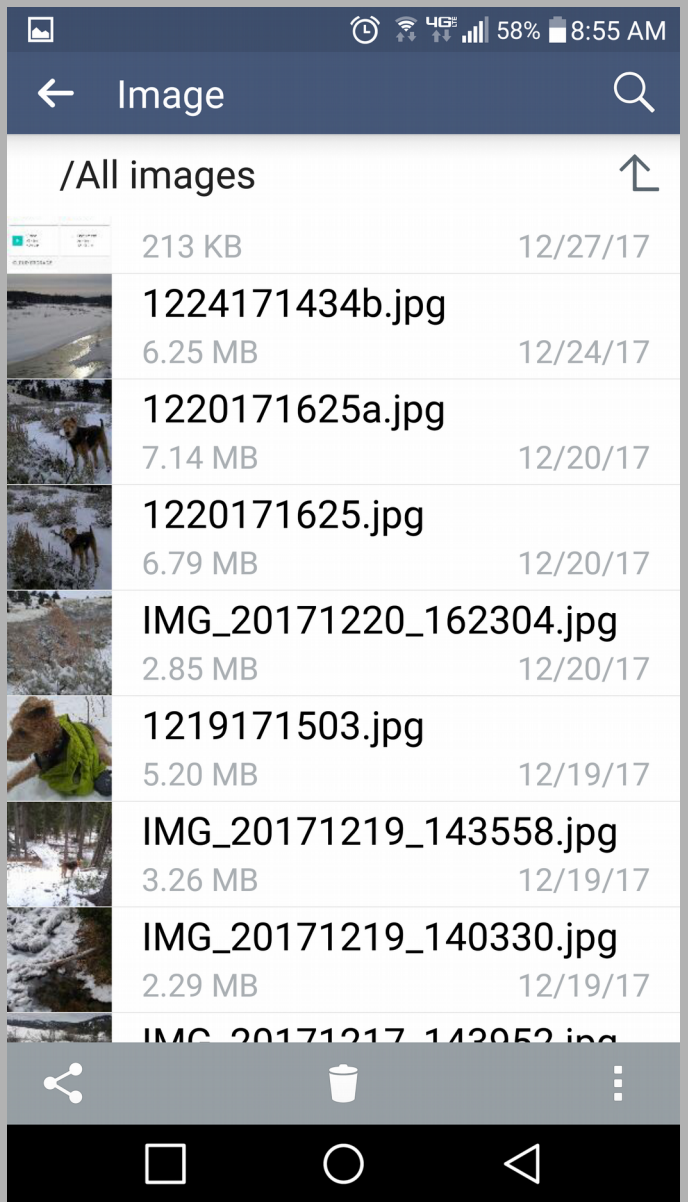
vs Disadvantages

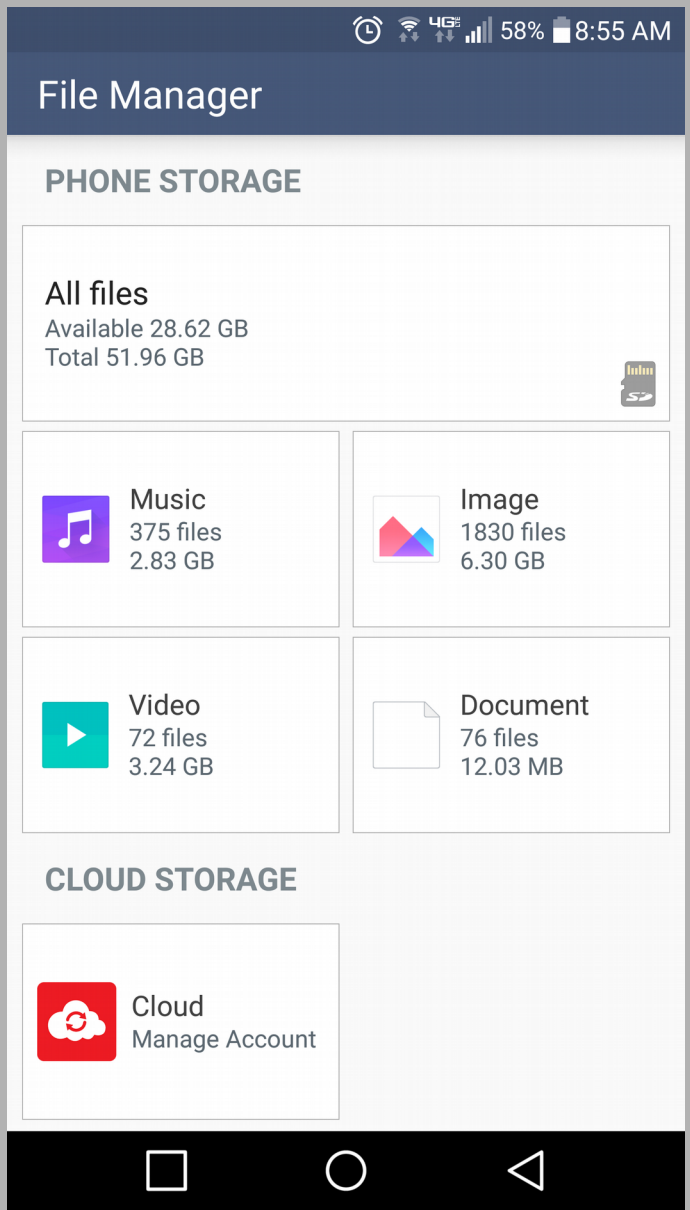
DNG files are much larger, cannot be easily shared to social media
*and **usually do not appear within the phones Image Gallery**

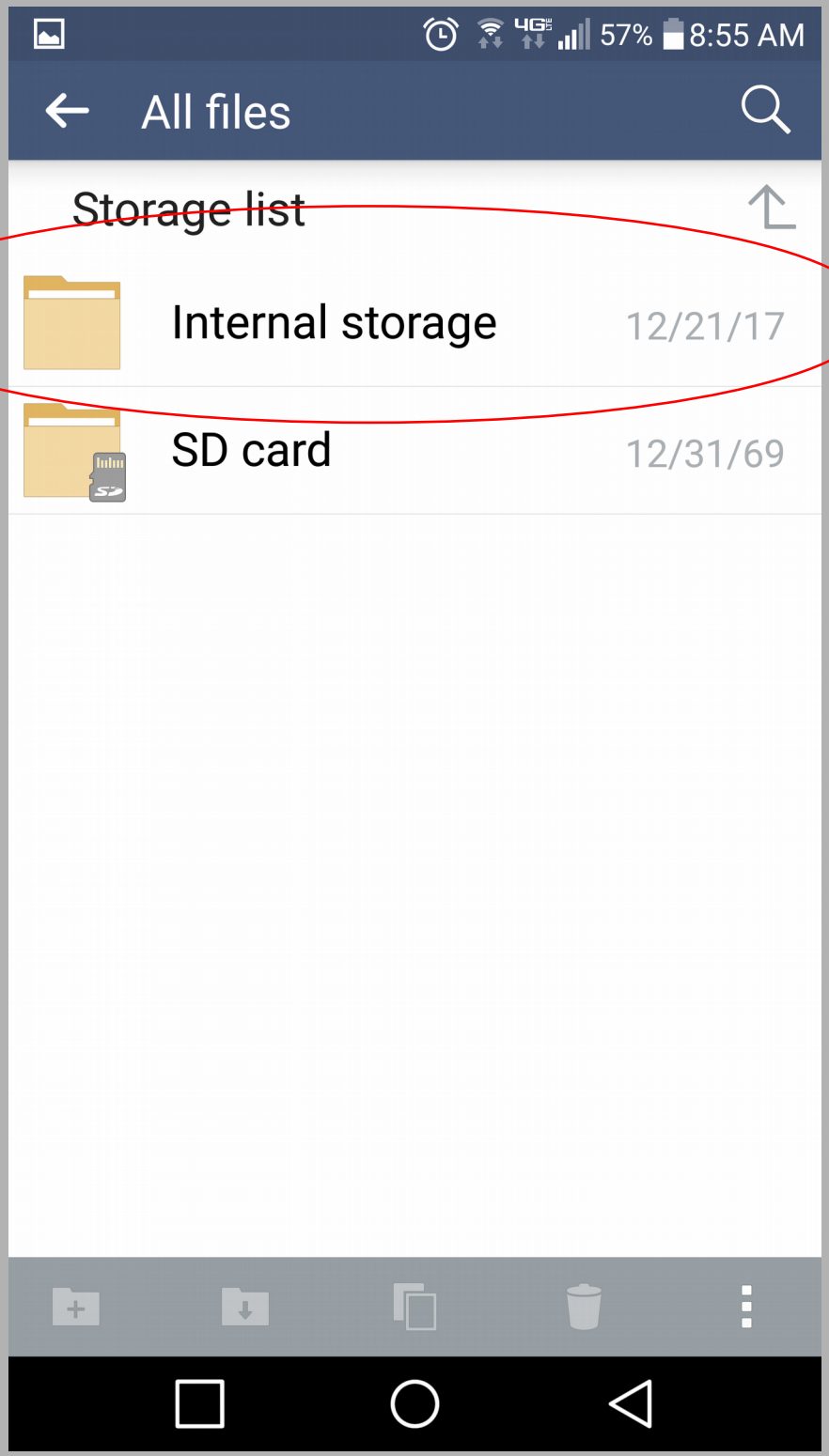
DNG images do not have any associated conversion
Profiles, often appearing in galleries and editing software with shifted colors -
They must be uploaded somehow for editing.

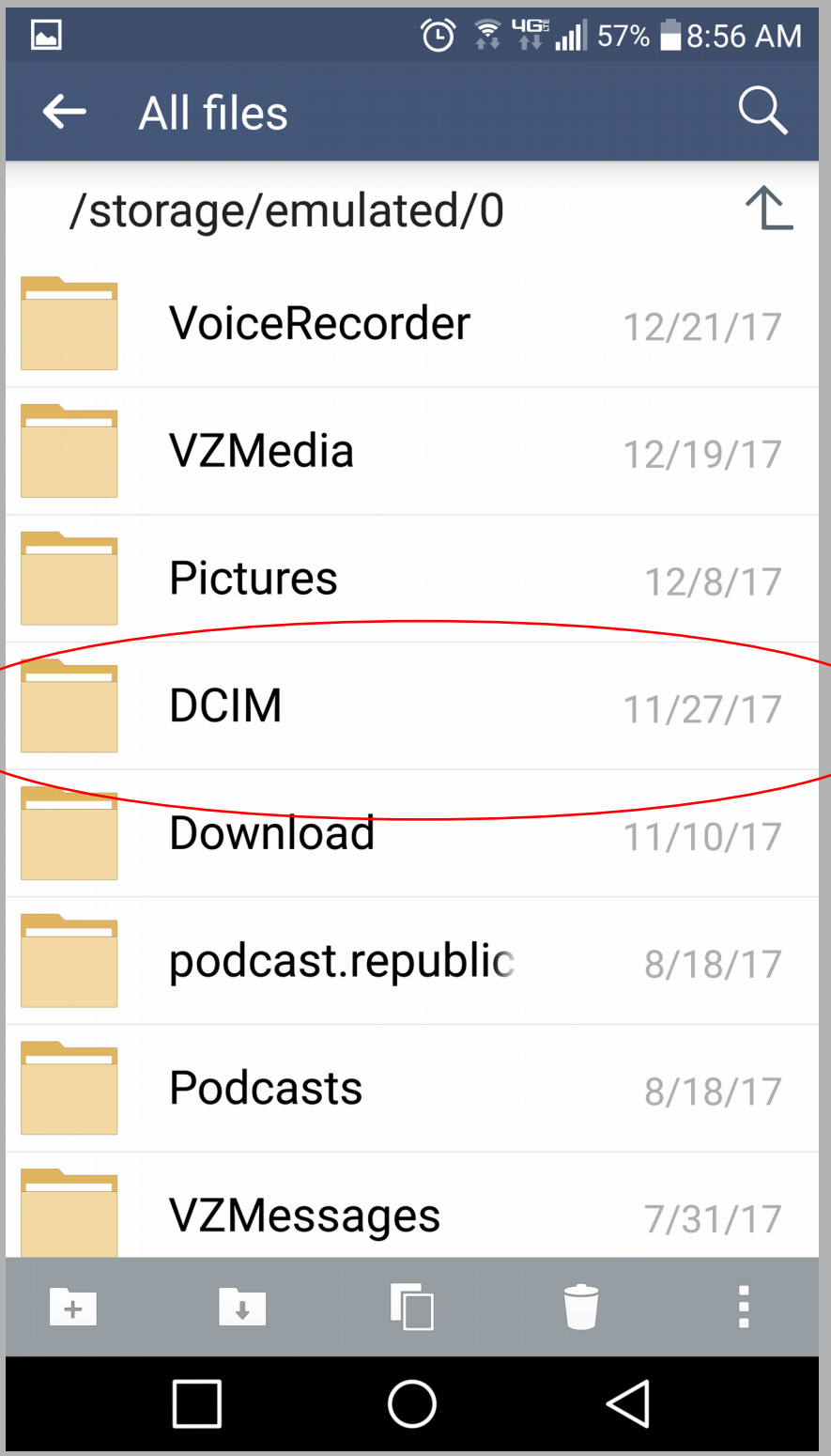
DNG or RAW Files probably
Not displayed In stock Gallery

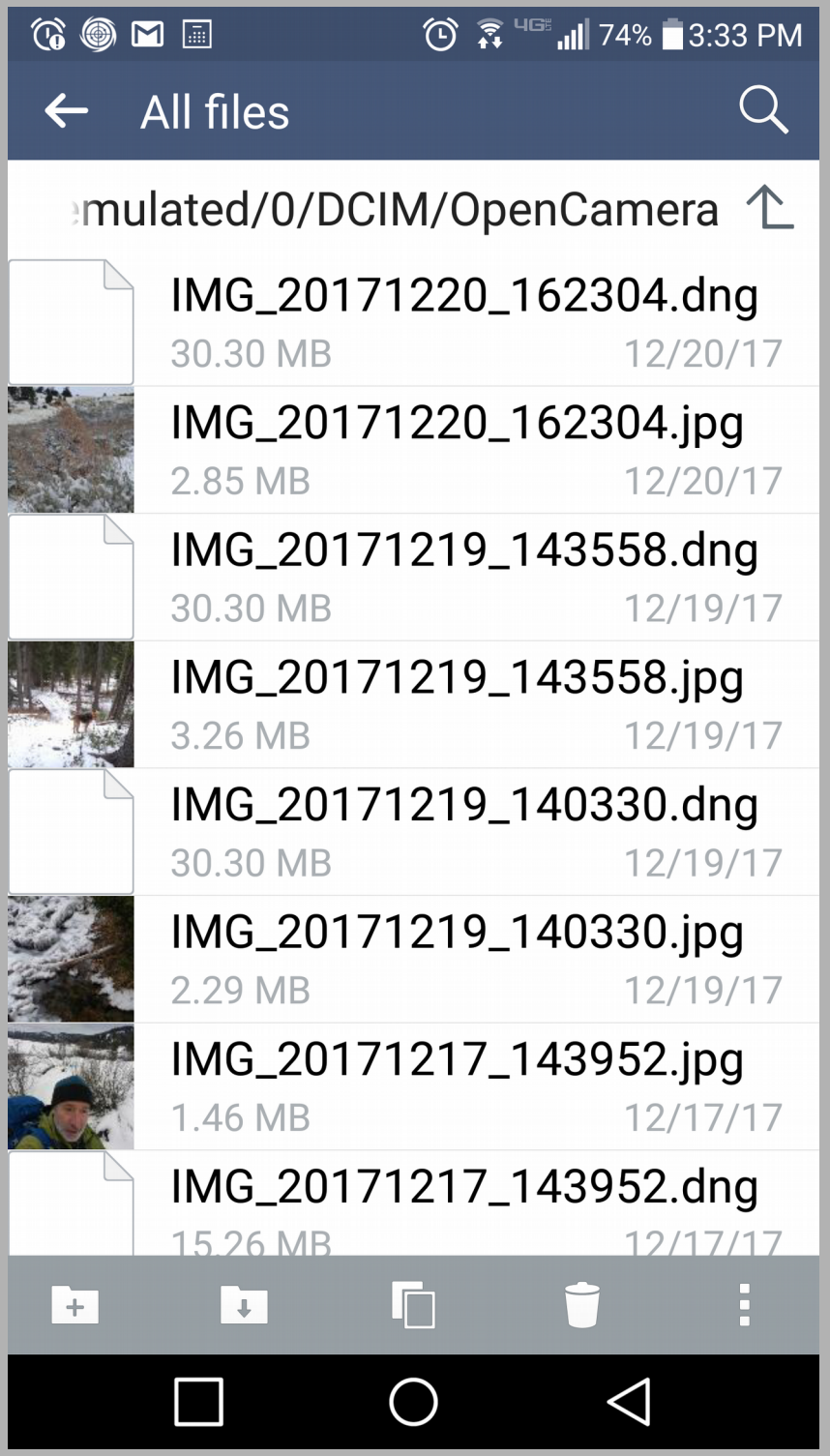
DNG files Must be moved to Computer
W / File Mgr - Or opened On device
In Lightroom Mobil

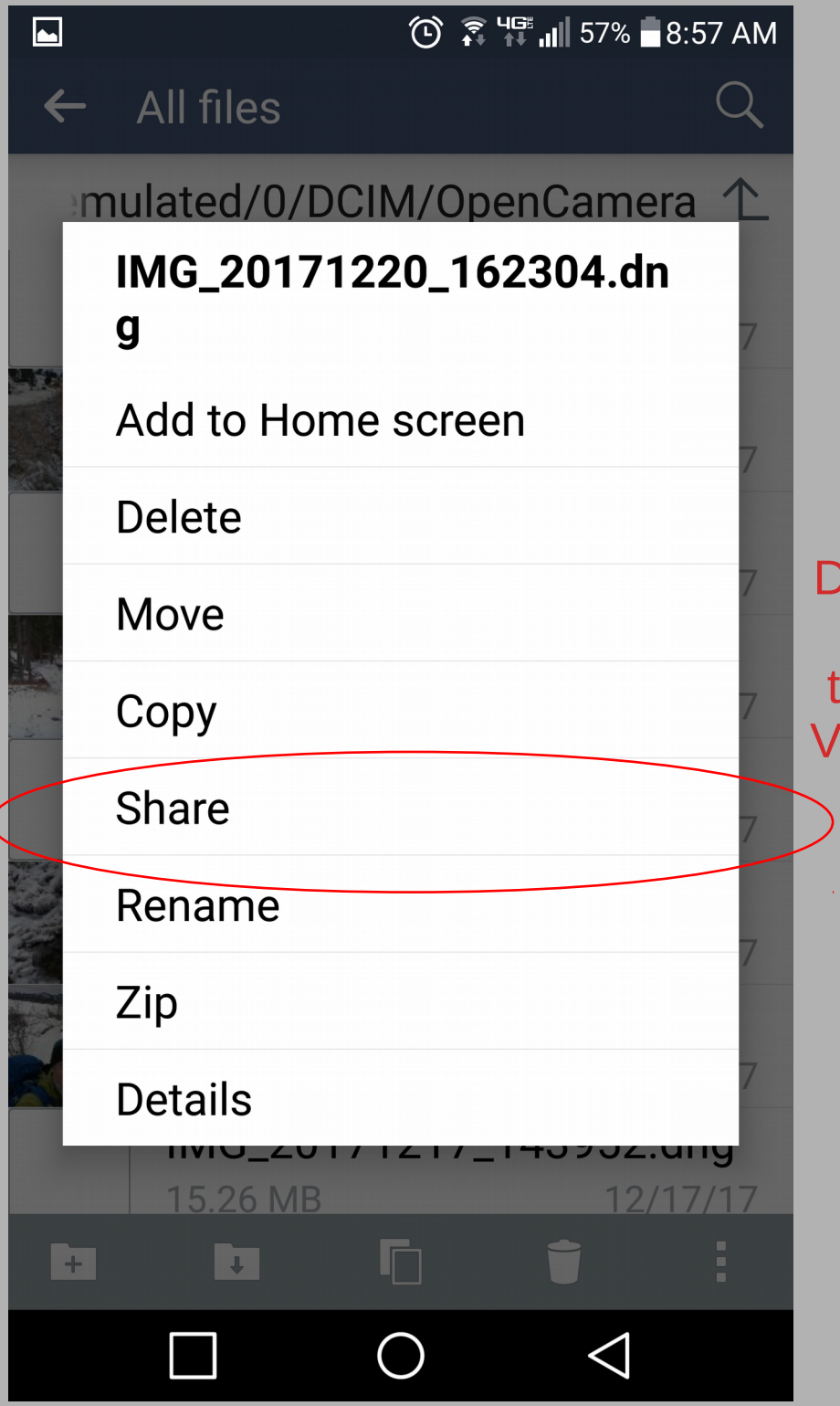




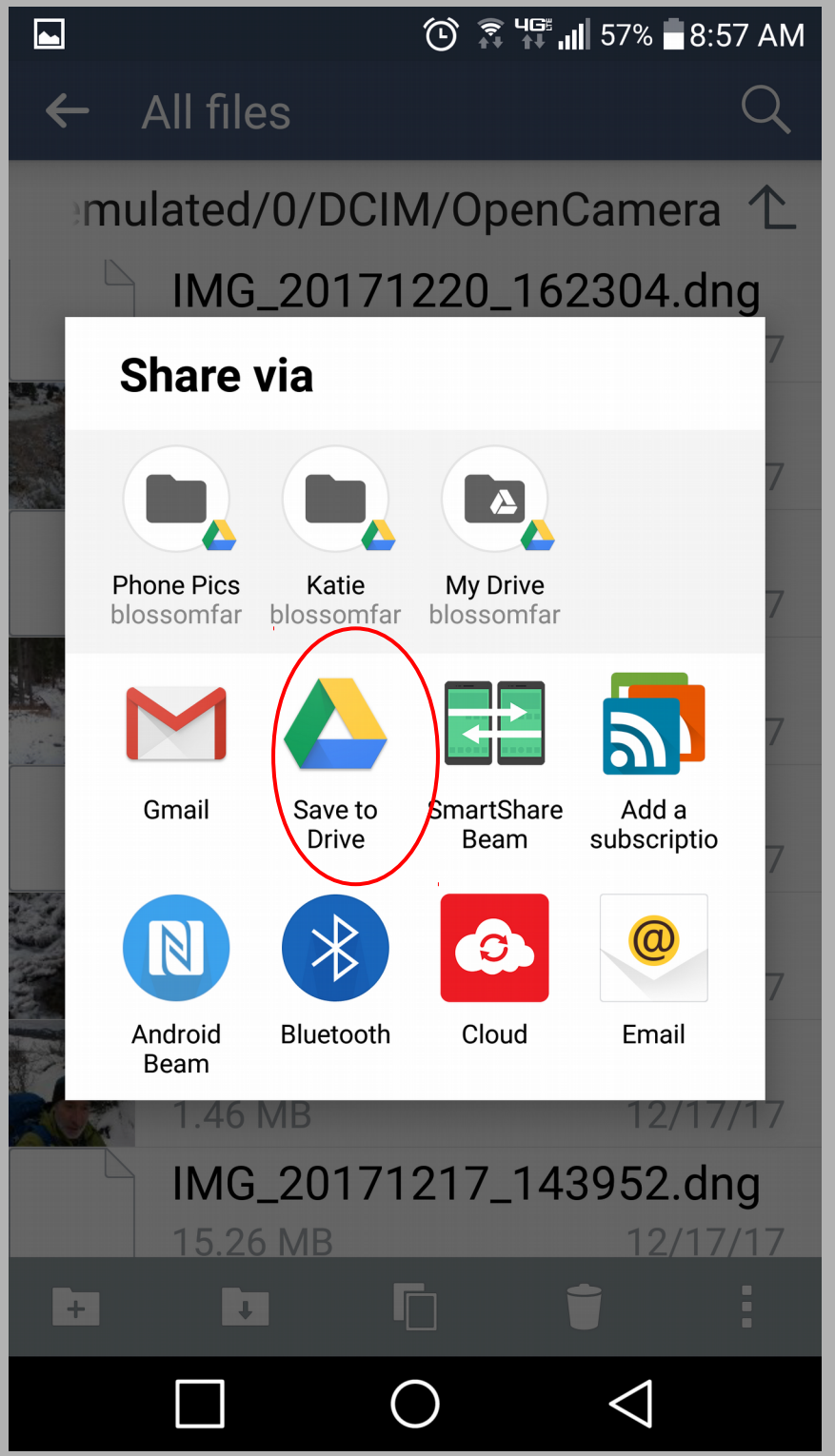

57% 8:55 AM
All files
Storage list
Internal storage 12/21/17
SD card 12/31/69

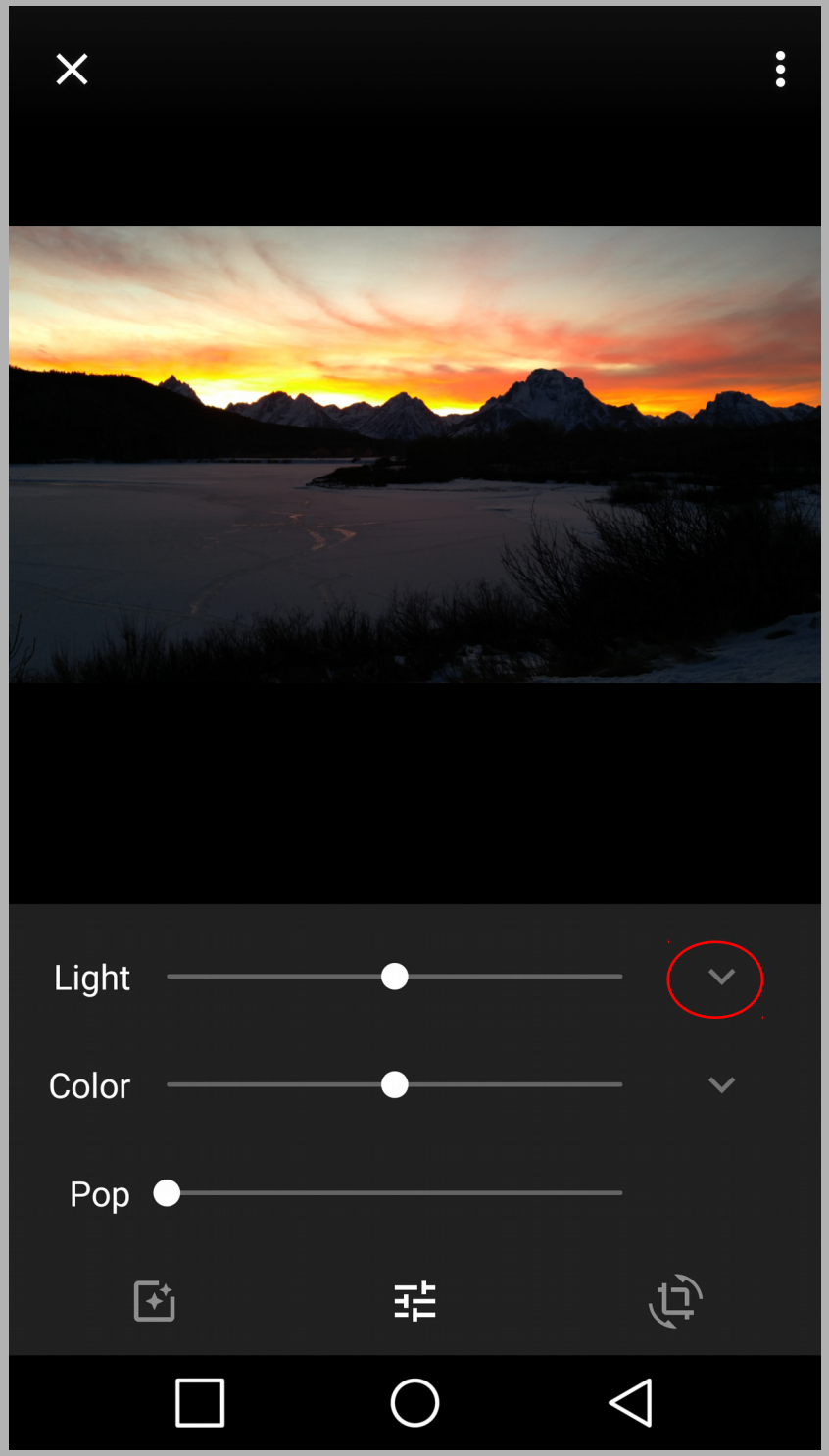

57% 8:56 AM
All files
/storage/emulated/0
VoiceRecorder 12/21/17
VZMedia 12/19/17
Pictures 12/8/17
DCIM 11/27/17
Download 11/10/17
podcast.republic 8/18/17
Podcasts 8/18/17
VZMessages 7/31/17


74% 3:33 PM
All files
mulated/0/DCIM/OpenCamera
IMG_20171220_162304.dng
30.30 MB
12/20/17
IMG_20171220_162304.jpg
2.85 MB
12/20/17
IMG_20171219_143558.dng
30.30 MB
12/19/17
IMG_20171219_143558.jpg
3.26 MB
12/19/17
IMG_20171219_140330.dng
30.30 MB
12/19/17
IMG_20171219_140330.jpg
2.29 MB
12/19/17
IMG_20171217_143952.jpg
1.46 MB
12/17/17
IMG_20171217_143952.dng
15.26 MB
12/17/17

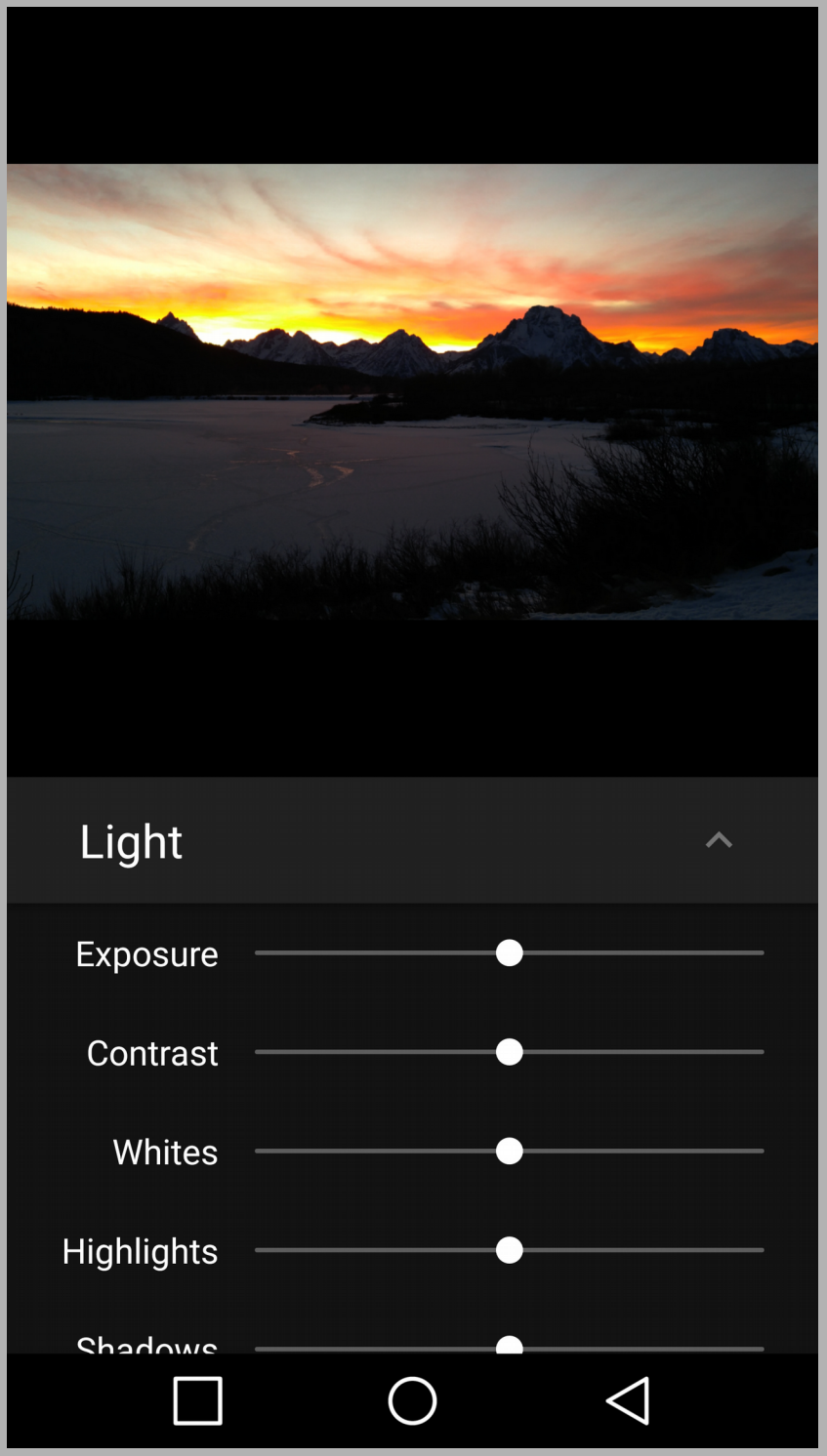


DNG too
Big
to share
Via Gmail





Google Photo Editor



In Adequate light, DNG captures are surprisingly good. With little noise and good detail
They can take a fair amount of appropriate Sharpening
One noticeable defect is Chromatic Aberration that LR can effectively minimize.

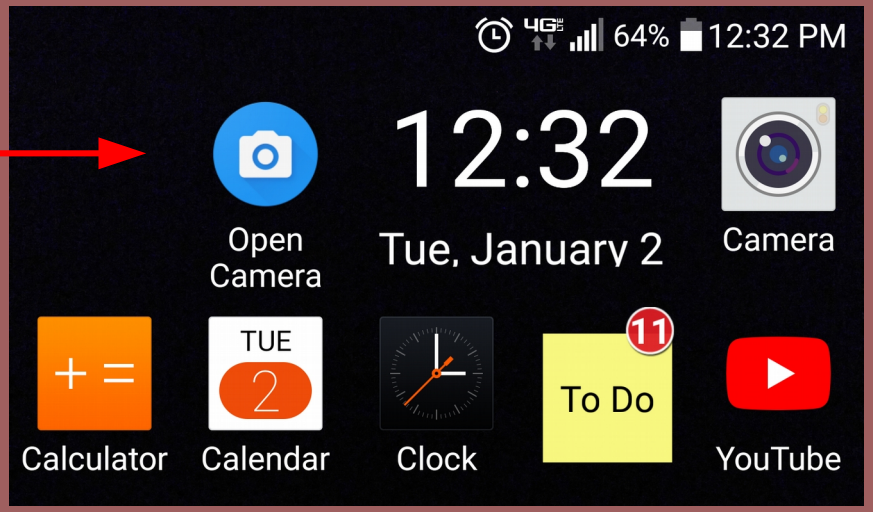
Sharpening and Noise Reduction Must be applied To DNG or RAW Files for printing

CA appears on Backlit trees and Edges - can be Reduced in Lens Corrections

A partially cropped 16 MP sensor image has enough pixels to nearly fill 13x19 Photo Paper without Rezing up .

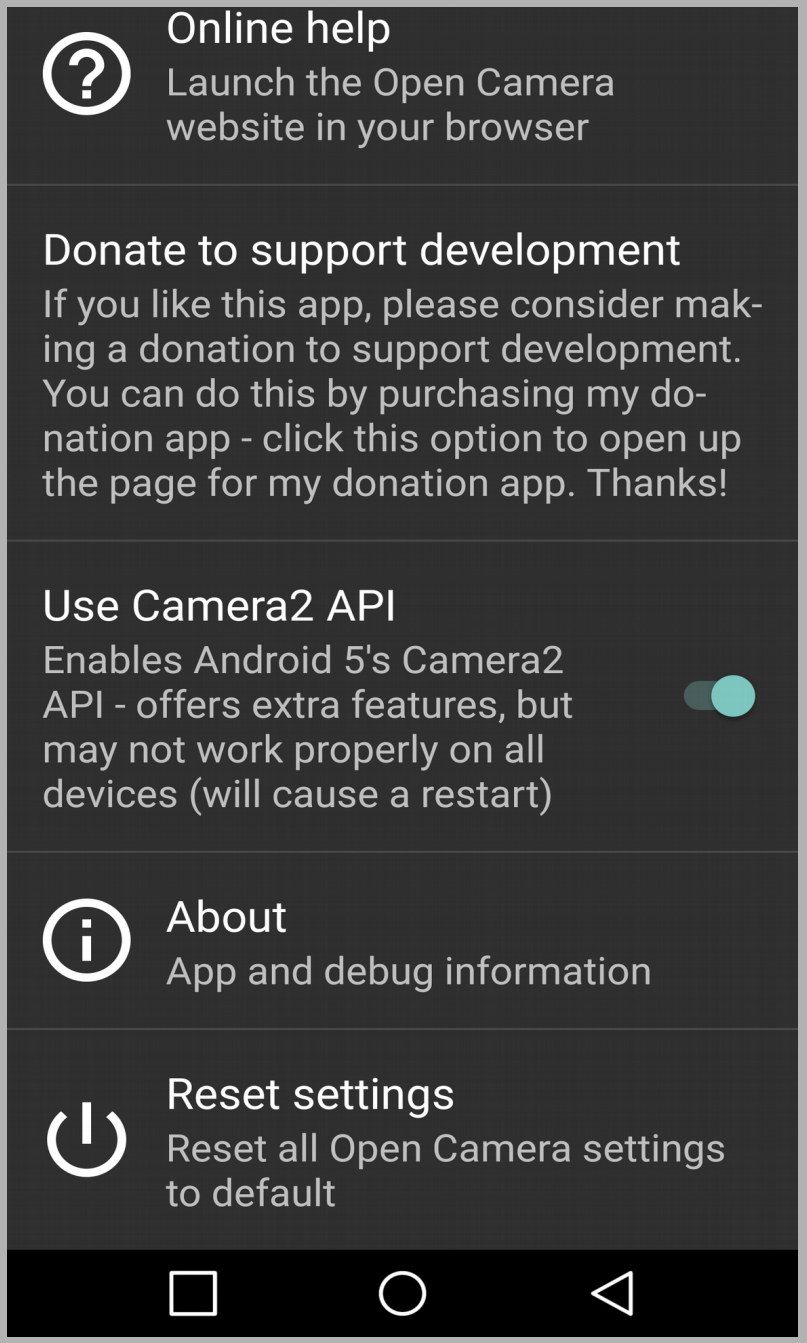
For fast and easy access to both JPEG or DNG
Keep the stock camera app and 3rd party app on your Home Screen

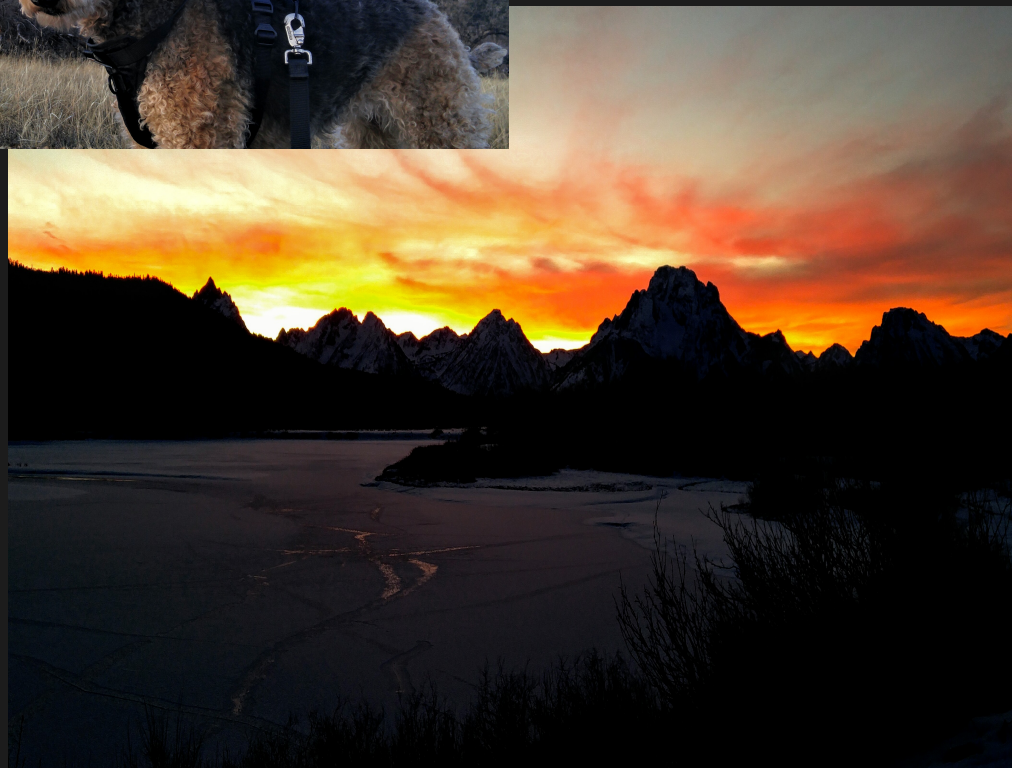
Set for
DNG + JPEG



Set for JPEG

On Android Camera Apps, - Activate this feature!



Before anything else
–

Lens Cleaning!