



## Impact With Smartphone Photography

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## A Smartphone for Serious Photography?



DSLR technically superior ...  
but photo quality depends on  
**technical skill, creative vision**

Smartphone cameras can  
produce remarkable pictures ...  
always at ready ...



After all ...

**The Best Camera is the  
One You Have With You**

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## Smartphone Camera Handling



Cradle phone with both hands in "C" shape ...  
keeps fingers away from lens ... reduces camera shake

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To further avoid camera shake, release shutter with volume buttons  
... or use Apple headphones



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### Keep Your Lens Clean

Phone spends lot of time in pocket  
or purse ... grimy lens = poor image  
quality

Clean often with microfiber cloth ...  
(*breathe on lens to add moisture —  
no liquids*)

Make small circles with soft pressure

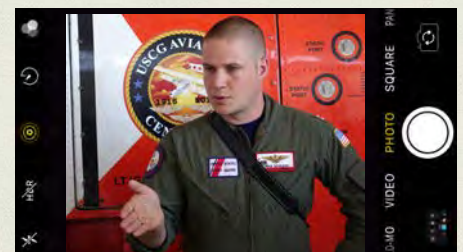
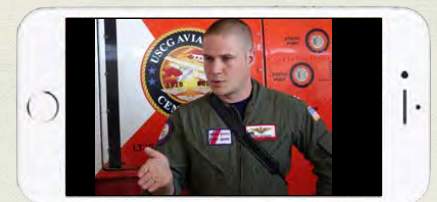
### Set Phone Down With Camera Facing Up



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### Master your camera's interface

Explore ... experiment  
with every control...  
every shooting mode  
in built-in camera app



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## Key Features: iPhone Standard Camera App

### Auto

"Point and shoot"... automatic focus and exposure

### Manual Focus

Tap a spot on screen to set focus

### Exposure Adjust

Swipe up or down to make image brighter or darker

### Lock Focus & Exp (AE Lock)

Tap and hold ... release when focus square flickers

### Burst

Take 10 photos in one second ... perfect to capture action

### High Dynamic Range (HDR)

Combines 3 different exposures to create one image with detail in both highlights and shadows

### Grid

Horizontal and vertical lines divide screen into nine equal parts

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### AE/AF Lock

Touch and hold finger on screen ... AE/AF Lock and sun indicators appear

### Exposure Adjust

Slide sun indicator up or down to make image lighter or darker

### Grid

Helps keep horizons level, architectural lines straight ... easy to compose by Rule of Thirds (turn On or Off with Settings)



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### AE/AF Lock ...

Compose without losing focus and exposure ... useful for:

- Candid photography
- Scene with movement in background
- Macro photography

To undo... tap screen

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### Burst Mode

Hold down shutter to take multiple images ... choose best (delete others)

Outstanding for freezing action ... candid ... or just right expression in portraits

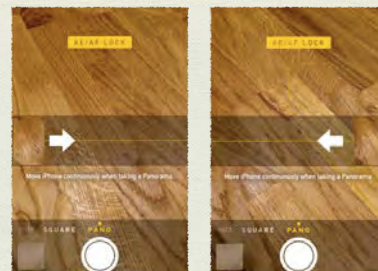
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**Panorama** To capture extremely wide view outdoors ... or indoors



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### To Create:

Portrait orientation ... select pano mode ... lock exposure ... press shutter and move camera slowly (from left or right) ... keep arrow on line

### To Stop:

Press shutter again ... or (best method) move camera slightly in opposite direction

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**HDR (High Dynamic Range)**

For extended range of detail ... most useful for high contrast scenes  
 Easy to shake camera ... hold phone very still or mount on tripod if possible



**Video Mode**

Apple introduced video recording with iPhone 3Gs ... newest models can shoot brilliant 4K footage

- Several Photo Mode on-screen controls
- Hold phone horizontally ... tap shutter to begin recording ... tap again to stop
- **Time lapse video** ... create fast-motion video from slow moving subjects
- **Slo-Mo video** is opposite ... captures video at 120 FPS to create slow motion

**Recommended Third Party Applications**



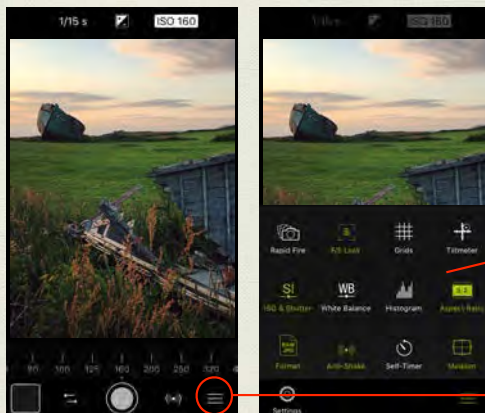
(iPhone)



Easy control of professional features ... enables same level of control as DSLR or compact camera



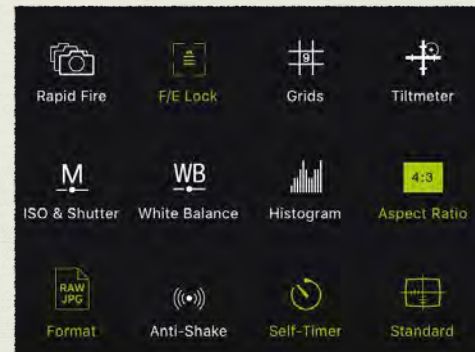
(\$4.99)



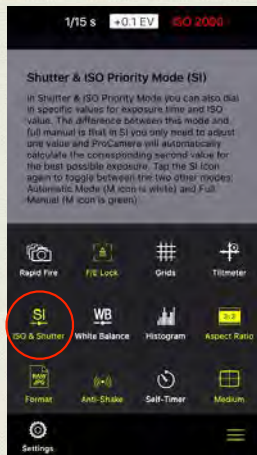
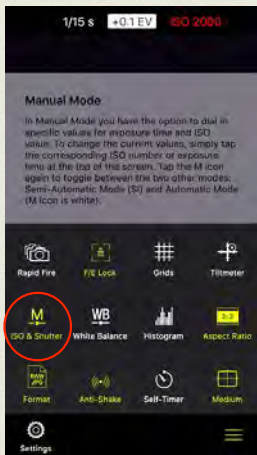
**ProCamera Control Panel**

Control Panel opens

Tap Menu Icon

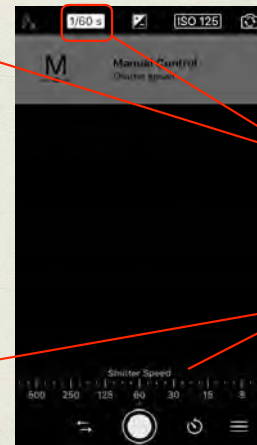
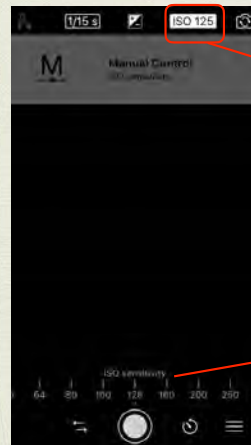


Control Panel detail with multiple selections (selected items in green)



Two options in Manual Mode

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Tap button

Adjust slider

Full Manual Mode

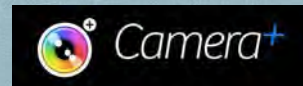
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As with standard camera app ... if shadows too dark or highlights too bright ... use HDR to create better, more balanced exposure

Vivid HDR, is a ProCamera in-app purchase that features 3- or 5-picture HDR processing — a first in mobile photography

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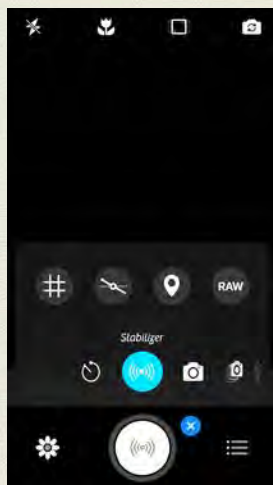


Powerful, full-featured app ... bring your photography to next level



(\$2.99)

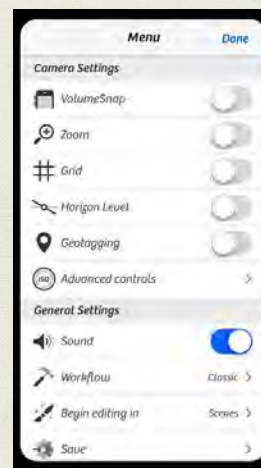
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**Camera+ Feature Set**

- Set exposure & focus individually
- Manual control of shutter speed, ISO
- Custom white balance (8 presets or by Kelvin temperature)
- Exposure compensation by up +/- 2EV
- Display a grid or horizon level
- Stabilizer mode
- Burst mode
- RAW image capture
- Timer can be set for as long as 30 sec

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**Camera+ Settings Menu**

Several more options for professional results

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**HDR and Movement**

Moving objects are always a problem in shooting HDR

**Clarity** (in-app purchase) captures multiple shots without looking like Picasso painted moving subjects

**With Clarity** ...moving objects are no issue ...and photo has richer look, more vibrant colors



Custom control ... stronger, more dramatic HDR than standard Camera app

**Pro HDR X**

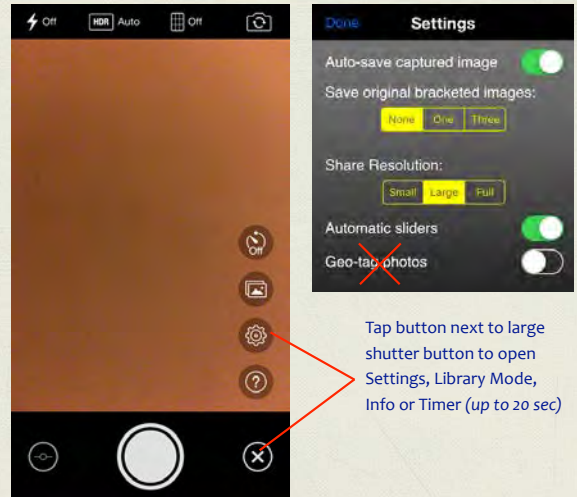


(\$2.99)

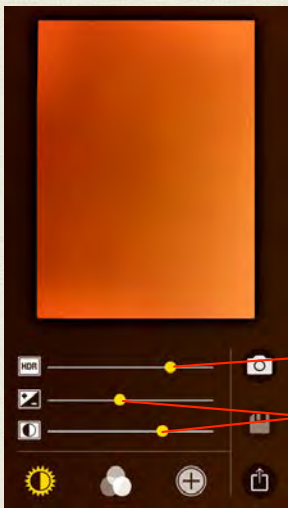
Available for Android as ProHDR Camera (1.99)



**Manual HDR Exposure** Drag exposure targets to darkest part of scene ... to mid-range tonal values ... to brightest area



Tap button next to large shutter button to open Settings, Library Mode, Info or Timer (up to 20 sec)



**Pro HDR X Editing Panel**

Opens once image is taken

You can save without adjusting ... best is to use right away, then save

Adjust slider if you feel HDR effect too harsh or unrealistic

Fine tune exposure and contrast if needed



**ProHDR X** Exceptional highlight and shadow detail in backlit iPhone photo



Professional camera application with DSLR-like controls



(\$3.95)

### Picture Taking Apps for Android



### Camera FV-5 Feature Set

- Adjust ISO
- Exposure compensation
- Focus Mode
- White balance adjust
- Long exposure capability
- Manual bracketing
- Shutter speeds from 1/8000 to 2 seconds
- Program and Speed-Priority modes
- True 16-bit RAW in DNG format
- Touch-to-focus
- 10 composition grid overlays
- True manual focus
- Auto exposure/auto white balance lock
- DSLR-like electronic viewfinder display



Camera Zoom (\$3.49)

- Adjust ISO
- Focus
- Metering
- Brightness & Saturation
- HDR Mode Pro
- RAW Capture
- Set shutter speed
- Burst Mode
- Stable Shot Mode
- Grid overlay
- Self-timer
- Time Lapse Mode
- Tap anywhere to shoot



Open Camera (Free)

- Open Source application
- Adjust ISO
- Exposure compensation
- Adjust white balance
- Image stabilization
- Scene Modes
- Video recording in HD
- External mic support
- Exposure lock
- Face detection

(Not all features available on all Android devices)

## Coast Guard Photographers: Don't Make These Mistakes



### Digital Zoom

Smartphones have fixed lens ... no optical zoom

AVOID digital zoom ... not actually "zoom" but just cropping ... images are grainy, pixelated

### Photo Manipulation

Apple App Store & Google Play loaded with apps and filters that offer countless ways to create funky, often unrealistic images

Follow CG policy regarding photo alteration

### Filter Trickery



## Explore Further

### iPhone Photography School

Tutorials, interviews ... leader for iPhone photography education ...

Tips for Android shooters also ... [iphonephotographyschool.com](http://iphonephotographyschool.com)



### iPhoneography Today

Curated online newspaper by iPhoneography expert Jack Hollingsworth ... latest trends, important news ... [scoop.it/t/iphoneography-today](http://scoop.it/t/iphoneography-today)

### Digital Photography School

Good source Android photo instruction ... [digital-photography-school.com/tips-resources](http://digital-photography-school.com/tips-resources)