Last Month's Demonstration: Model Photography with Smartphones
by John Robinson

I learned photography basics starting with film cameras and then digital SLR cameras in the early 2000s. I still prefer my digital SLR camera to anything else, but I know of many that only use smartphones. I've always thought the quality of smartphone pictures to be lacking when it came to model photography, but lately I decided to take a closer look.

What I found was that the smartphone hardware and software technology has advanced quite a bit in the last 2-3 years. In my demo are some basic tips and advanced tips that might help you get better photos out of your smartphone.

I presented this demo as a PowerPoint slide show, but here are the slides converted to text. **If you want the slideshow, download the PDF here.**

Hardware & Software
• Smartphone cameras in recent years have greatly improved
• Now include multiple lenses
• Default apps allow more control

Smartphone Features and Settings
• Vary greatly with brand, model and operating systems
• Learn the operation of your device
• Search online for "smartphone photography tips"
• Experiment on your own and take notes

BASIC TIPS:

1. Lens
• Clean the lens
• Soft cotton cloth damp with a tiny amount of rubbing alcohol
• Scratched lenses degrade the image

2. Smartphone Orientation
• Shoot with the smartphone in landscape (wide) mode

3. Image Quality
• Check your settings and enable HDR (high dynamic range) if possible
• HDR takes several exposures and blends them together, getting the best of both worlds

4. Lighting
• Don't use the smartphone's flash
• Use the task lights from your workbench
• More light = better detail

5. Stabilize
• Use a smartphone tripod or improvise a stable mount for your smartphone
• Affordable tripods can be bought for around $20
• Hack your own with a camera/video tripod and rubber bands, etc.

6. Timer
• Timers allow touchless operation
• Timers eliminate the shaking that results in blurry images
• Best results - a timer coupled with a tripod

7. Backgrounds
• Use a solid color background behind your model; white is recommended
• Poster board paper is cheap and effective
• Roll the paper out from the desktop edge toward the back and then upward
• Anchor it with binder clips, thumbtacks or tape

8. Lens Zooming
• Modern smartphones have multiple lenses; each is designed for specific uses
• Wide-angle and telephoto lenses do not work well with models
• Use the default zoom (1x) and physically move your smartphone until the model almost fills the screen
• Don't use the wide-angle lens by zooming less than 1x – it distorts straight lines into curved ones

9. Filters and Effects
• Be careful about using filters or effects to automatically modify your photos
• Although perfect in some cases, they were likely not designed for closeup photography

10. Image Size & Aspect Ratio
• Check your settings for aspect ratio choices
• Most default to 4:3, which is nearly square
• A 16:9 ratio may work better with models

ADVANCED Tips

1. Exposure
• Exposure is an expression of light and dark levels
• Check if your device has an exposure adjustment
• You can tweak the dark/light areas to look better and capture more detail

2. Focus
• Look for a selective focus feature that overrides the automatic settings
• Cluttered or busy backgrounds may "attract" the sensor away from your model and cause focusing errors

3. Image Grain
• Check your device for a setting that controls the ISO
• Lower numbers (<100) produce images that are crisp, but require compensating factors to let in more light
• This setting is usually automatically configured although aftermarket apps can give you access

4. Camera Apps
• More control over settings is possible with dedicated apps
• Free: too many to list but do some research first
• Purchase: ProCamera ($8.99), ProCam ($7.99), Camera+($7.99)

What's the difference? See the next page.

Before (all default settings): cluttered background, inadequate lighting, hand-held, 4:3 aspect ratio

After: white background, LED task lighting, timer/tripod, exposure-adjusted, 16:9 aspect ratio, HDR