Using the iPad Cameras with Camera, Photo Booth, and FaceTime

Perhaps the most significant upgrade to the second-generation iPad is represented in its two cameras. These cameras introduce new and compelling features to the formerly cameralss iPad: the ability to take photos and record high-definition video, the ability to play with those videos using Photo Booth, and the ability to place and receive FaceTime video calls.

Are you lucky enough to own one of the latest iPads? If not, this chapter is really not for you, at least until you’re ready to upgrade. But if you’ve been able to purchase a newer-generation iPad, then this chapter will teach you great ways to take photos and record video.

The Camera Hardware

The iPad 2 features two cameras—one in the front and one in the rear. These cameras allow you to snap photos and record video. The cameras aren’t created equal, however. As you’ll see, each one has been designed for different uses.

Front Camera

The front iPad camera is located at the top of the device, directly in the center of the iPad’s upper bezel, across from the unit’s Home button. If you own a white iPad, the tiny dot is quite obvious to see; it’s less conspicuous on black models. Behind this dot lies the front-facing camera.

This front camera is meant primarily for FaceTime video calls, but you can also take photos and record video with it. For example, you might use the front-facing camera to snap a profile picture for your Facebook account or to record yourself and a friend singing “Happy Birthday” to a special someone. With the front camera, there’s no
shooting pictures in a bathroom mirror or turning a camera around and hoping you frame yourself into the shot. The front camera allows you to see and compose the shot as you take it.

The front-facing camera isn’t as powerful as the rear camera; it cannot record high-definition (HD) video. HD video is video that has at least 720 lines of resolution. With video, the more lines of resolution you have, the sharper the picture will be. Although the front camera can record video, its resolution is limited to standard-definition (SD). SD video, also called video graphics array (VGA), uses a resolution of 640x480. VGA refers to an old computer monitor standard and is actually a higher resolution than the 525 lines that was originally broadcast over commercial television stations in the original NTSC standard.

Why didn’t Apple use an HD camera in the front? Well, it would be unnecessary. The front camera was designed for FaceTime video calling, not recording video. The image quality while video calling on a portable device like the iPad is more than good enough using an SD camera.

**Rear Camera**

The iPad’s powerful rear camera allows you to take photos, record video, and work with third-party augmented reality applications. When you flip your iPad over, you can easily spot the rear camera in the top-left corner of the device.

The rear camera records videos in 720p HD resolution at 30 frames a second; that’s 1280x720 pixels wide. Although its still-camera capabilities are better than the front-facing camera, the rear-facing camera is still limited to taking still pictures at 960x720 resolution. If that doesn’t sound like a lot, it’s because it isn’t. 960x720 resolution isn’t even equivalent to a 1-megapixel camera; or, if you want to get specific, the iPad’s still capabilities record photos in 0.69 megapixels. That’s far less than you expect with most point-and-click digital cameras you buy on the market today.

The iPad’s sub-megapixel resolution is fine for simple snapshots for e-mailing or posting to Facebook, but when you are at an important event like a wedding or a child’s birthday party and want to take some good quality pictures suitable for framing, leave the iPad at home and bring your point-and-shoot digital camera.

**NOTE:** What’s the p stand for in 720p, you ask? It means progressive. When HD video is displayed on a screen, it shows either all 720 lines of resolution at a time or just half of them. If it shows only half of them, this is known as *interlace video* and is denoted with an *i*. Simply put, progressive video generally looks sharper, because it shows you all the data (or lines of resolution) in a single frame at a time, and interlace shows you only half the data at a time (followed quickly by the other half). Interlace video used to be the norm when bandwidth issues were more of a factor for television reception, but as bandwidth increased, progressive video slowly took over.