

# The iPad

## FOR PHOTOGRAPHERS

THIRD EDITION

Master the Newest Tool in Your Camera Bag

JEFF CARLSON



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PEACHPIT PRESS

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Jeff Carlson

## **Peachpit Press**

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ISBN 13: 978-0-133-88847-8

ISBN 10: 0-133-88847-9

9 8 7 6 5 4 3 2 1

Printed and bound in the United States of America

*For Steve. Thank you.*

# Acknowledgments

It's fabulous to experience a whisper of an idea turn into a completed book, but without the encouragement and assistance of many people, that whisper could easily have dissipated into the ether. I owe a lot of gratitude, and no doubt coffees or martinis (or both) to the following good folks.

Susan Rimerman, Ted Waitt, Cliff Colby, Nancy Aldrich-Ruenzel, Nancy Davis, Scott Cowlin, Sara Jane Todd, and everyone else at Peachpit Press who encouraged this project and made it happen.

Mimi Heft designed the book and provided first-class templates in which I could work. Unlike many authors, I write directly into the book's layout using Adobe InDesign, so working in a template that's properly styled and professionally designed is a privilege.

My editing and production team, led by Susan Rimerman, made all the practicalities happen: Scout Festa made me wish I could write as fast and as sharp as she's able to copyedit my text; Karin Arrigoni managed the crush at the end of the project to produce a top-rate index; and Tracey Croom put her production talents to good use shepherding the laid-out files and keeping my work on the up-and-up.

Chris Morse and Chris Horne gave me access to pre-release versions of their app Photosmith in previous editions, and Brian Gerfort helped me better understand the underpinnings of how iOS works with images.

Glenn Fleishman helped maintain my link to the outside world as virtual officemate—and occasional in-person lunch or coffee companion—and patiently listened to my laments and successes.

Dana and David Bos granted permission for me to use photos I've shot of their daughter, Ainsley.

Jackie Baisa contributed advice and insight into professional workflows.

Peter Loh provided invaluable photo studio equipment.

Tor Bjorklund donated the wood used in many of the studio photos.

Mason Marsh helped with information about using Wi-Fi-equipped cameras.

Kim Carlson served as a fantastic photographer's assistant and propmaster, but most importantly kept me sane and supported this project from my first inkling of an idea.

And Ellie Carlson continues to serve as a great model and a good sport when I turn the camera on her. She'll thank me when she's older. Right?

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# Introduction

Photographers carry gear. It doesn't matter whether you're a pro with multiple camera bodies and lenses or a casual shooter with an ever-present point-and-shoot camera—there's always stuff to pack along. And if you're traveling or away from your office or studio, part of that gear typically includes a laptop for reviewing and backing up the photos you take. Too often I've heard friends who are about to go on vacation moan that they need to bring a bulky computer just to handle their digital photos.

The iPad is changing all that.

It's a fantastic device to take into the field. The iPad Air measures less than a quarter of an inch thick and weighs about 1 pound. The iPad mini is the same thickness and only three-quarters of a pound. (The iPad 2 and third- and fourth-generation iPads aren't much thicker or heavier.) With the addition of an inexpensive iPad camera adapter, you can import photos directly from a camera or memory card and view them on the iPad's high-resolution Retina color screen, revealing details that the relatively puny LCD on the back of your camera may obscure. More important, a rich array of photography apps and related products is adding to the list of things the iPad can do with those photos: rate and add keywords, perform color adjustments, retouch blemishes, and share the results online.

Oh, and don't forget everything else the iPad makes possible: browsing the Web, accessing your email, reading ebooks, playing movies and music, and, as they say, so much more.

## Can You Really Leave the Laptop Behind?

Although the iPad can do a lot that you would have needed a laptop to do just a few years ago, there are still some important limitations that you should keep in mind when you decide whether a laptop stays at home.

If you're generating a significant amount of image data, storage becomes a problem. As this book goes to press, the current highest-capacity iPad holds 128 GB. You can free up some memory by removing apps, music, videos, and the like, but if you're filling multiple 16 GB or 32 GB cards

with photos, the iPad won't work as a repository of your shots. (But I detail several workarounds and workflows in Chapter 2.)

One solution is to buy a lot of memory cards and use them as you would film canisters. The originals stay on the cards, while the keepers remain on the iPad; you delete the ones you don't want as you cull through them. Fortunately, memory cards are inexpensive now. Unfortunately, they're small and easy to lose. Make sure you know where they are, label them accurately, and keep them protected. Most important, make sure you have some system of backing up your images; options include uploading them to online photo storage services or transferring them wirelessly to a Wi-Fi-enabled hard disk like the Seagate Wireless Plus.

If you capture raw-formatted images, you won't benefit from the same level of editing that a dedicated application on a desktop computer can offer. With a few exceptions, all image editing occurs on JPEG versions of the raw files, and exports as JPEG files (see Chapter 6 for more details).

So, to answer my question, in many circumstances yes, you can leave the laptop behind. If you're going to trek across Africa for four weeks, that's not ideal (but it is possible), but for most day trips or short vacations, the iPad makes a great companion.

## Which iPad Should You Use?

If you don't already own an iPad, or you're looking to upgrade from an older model, here are some guidelines for choosing one that will be a worthwhile addition to your camera bag.

For the reasons mentioned, I recommend getting the highest-capacity iPad that's available (and that you can afford). That gives you plenty of room to store photos and apps; some image editors make a copy of a photo to work with, so you could easily fill a couple of gigabytes just editing. Plus, it's an iPad, not just an extra hard disk, so you'll want to store music, movies, books, and all sorts of other media. If you're on a budget, get at least a 32 GB capacity model—the 16 GB configuration, in my view, is now barely enough storage for general use, much less as a photo companion.

Size and weight are also extremely important factors. Until last year, you bought whatever iPad was available, because they were all mostly the same. But then Apple introduced the svelte and light iPad mini, which is really a great traveling size. The tradeoff is that the iPad mini's screen measures 7.9 inches (versus 9.7 inches for the regular iPad). The entry-level iPad mini doesn't have a high-resolution Retina display, so I'd say skip that and go for the Retina version. The size is definitely compelling, and it's fine for reviewing and editing images.

You also need to determine whether you want to buy a model that connects to the Internet via Wi-Fi only or that also connects via cellular networking. For photographic uses, cellular isn't as important, because you may burn up your data allotment quickly if you transfer images to sharing sites or to online backup sources like Dropbox. (And it's turning out that even when a cellular provider offers "unlimited" data plans, they're not really unlimited.) Depending on where you're shooting, though, cellular can be helpful for looking up locations, checking weather reports, and other on-the-spot uses. (Then again, you may already have an iPhone or other smartphone that can handle those tasks.) I find the cellular capability useful in general iPad use, but not necessarily for photo-related uses.

In terms of which iPad model to get if you don't own one yet, I'd argue for the latest model. As I write this, Apple sells the iPad Air and iPad mini with Retina displays, the iPad mini with a standard display, and the fourth-generation Retina iPad as the low-cost point of entry for the larger size.

The iPad 2, which was discontinued shortly before this book went to press, is a fine model for photographers (it's what I used to write the first edition of this book), but your investment will last longer if you buy a newer model. The original iPad will also work in some cases, but just barely—its older processor and small amount of working memory prevent it from running iOS 6, and many developers (at Apple's insistence) are starting to phase out support for older versions of the operating system.

## What's New in the Third Edition

As more photographers and developers have adopted the iPad, more and better uses for it as a photo companion continue to appear. This third



edition of the book includes a host of new or changed material. Here are some highlights.

First of all, the biggest change to the iPad, apart from new hardware in the last year, has been the shift to iOS 7. All of the screenshots have been updated for apps that adopted the new iOS appearance, and I've edited the sequences dealing with Apple's Photos app, which changed in a few ways from the previous version.

When I talk to people at conferences and online, most of their questions are centered around workflow. The way the iPad handles raw files, in particular, creates interesting situations for processing photos in the field. So, I've broken the extensive workflow explanations and diagrams into their own chapter (Chapter 2).

The options for transferring photos wirelessly from the camera to the iPad continue to increase as camera manufacturers are finally starting to build wireless hardware into their products. Chapters 3 and 4 still focus on the Eyefi wireless SD cards and the CamRanger remote device, but now also include an example of controlling Wi-Fi cameras (in this case, a Fuji X-T1).

Chapter 5 still focuses on Photosmith and PhotosInfoPro for adding important metadata to photos, but I added an intriguing new app called PhotoScope, which lets you access Aperture and iPhoto libraries live when your iPad is on the same network.

The biggest addition to the book is Adobe Lightroom mobile, which I detail in Chapters 5 and 6. This app, which is free for people who subscribe to one of Adobe's Creative Cloud subscription plans, really is Lightroom on the iPad—albeit in a stripped-down, version 1.0 form. You won't find metadata tagging or rating (yet), but it does include all the Develop adjustments found in Lightroom's Basic panel. The best part is that photo collections you mark in Lightroom are synchronized automatically with Lightroom mobile: Edit a photo on the iPad and the changes are brought back to Lightroom within a minute or so.

(The timing of Lightroom mobile inspired me to write a stand-alone ebook for Peachpit Press called *Adobe Lightroom mobile: Your Lightroom On the Go*. It's available from Peachpit directly; you can find it and my other books at <http://jeffcarlson.com/my-books/>.)

There are lots of little changes here and there that aren't worth calling out specifically, so in short I'll say: I'm proud that this is a meaty update to the first edition.

## Notes About This Book

As you read, you'll run into examples where I've adopted general terms or phrases to avoid getting distracted by details. For example, I frequently refer to the "computer" or the "desktop" as shorthand for any traditional computer that isn't the iPad. Although the iPad is most certainly a computer, I'm making the distinction between it and other computing devices, such as laptops, towers, all-in-one machines, and other hardware that runs OS X or Windows. When those details are important to a task, I note specific applications or computers.

The same general rule applies to iPad models. The iPad mini, despite its size, is still a fully functional iPad, so when I refer to "iPad" in general it applies to the iPad mini as well as to the larger, flagship model.

I also assume you're familiar with the way an iPad works—using gestures such as taps and swipes, syncing with a computer, connecting to the Internet, charging the battery, and otherwise taking care of your tablet. If you're brand new to the iPad, allow me a shameless plug as I encourage you to buy my *iPad Pocket Guide* (also from Peachpit Press).

Don't be surprised when you frequently run across the phrase "As I write this." Both the iPad and the software useful to photographers are advancing rapidly, which makes this an exciting topic to cover.

I mention many apps throughout the book, so instead of cluttering up the text with Web addresses, you'll find links in the App Reference appendix at the end of the book.

To stay abreast of the changing field, be sure to visit the companion site for this book, [www.ipadforphotographers.com](http://www.ipadforphotographers.com), where I post updates and information related to the newest tool in your camera bag. I've also set up an iPad for Photographers community on Google+ for readers and others to share photos and conversation: <https://plus.google.com/communities/111822708330207901957>.

Lastly, please sign up for my low-volume newsletter, where I keep readers abreast of new projects and giveaways: <http://eepurl.com/KYLFv>.

Have fun shooting, and please feel free to contact me at the sites above with feedback!





## CHAPTER 4

# The iPad in the Studio

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An iPad is a great photographer's companion in the field, but it doesn't have to sit dormant when you're back at home or in a studio. The techniques covered in Chapter 3, such as importing photos using the iPad camera adapters or wireless devices, still apply when you're no longer on location. Other possibilities open up when you're not trying to minimize your equipment footprint.

The iPad can work alongside your camera, triggering the camera shutter, providing clients or visitors a window to a photo shoot (without them peeking directly over your shoulder), or even controlling a remote iPhone or iPod touch to capture photos or create stop-motion or time-lapse movies. And with a new crop of wireless accessories, you don't even need a computer (and its cables) in the room with you.

# Control a Camera from the iPad

Often when you're working in a studio, the camera is tethered to a computer. This arrangement allows you to import photos directly into software such as Lightroom or Aperture, review shots as they come from the camera, and skip the separate import step entirely. So where does the iPad fit in this situation?

If you're shooting products, food, or other compositions that require the camera to remain locked down, you can trigger the shutter, change exposure settings, and more from the iPad without touching the camera. With wireless devices like the CamRanger and iUSBportCamera, or cameras with built-in Wi-Fi and an iOS app to control them, you won't trip on a tether cable as you move around.

An iPad also works well when clients or others want to see your output as the photo shoot progresses. If it's inconvenient to have them hovering over your shoulder, you can hand over the iPad and encourage them to relax on a couch situated a comfortable distance away from the camera.

## Wireless Remote Control Devices

As I write this in April 2014, two devices on the market can control a DSLR from the iPad. The CamRanger (\$299) and the iUSBportCamera (\$199) attach to your Canon or Nikon DSLR's USB port. Both create their own wireless network, to which you connect using the iPad. You then control the camera using an app. By way of example, I focus on using the CamRanger in this chapter.

### Tethered Shooting Using Capture Pilot HD

---

If you prefer to shoot tethered to a computer in the studio but want to incorporate the iPad, look to Capture Pilot HD, which works with Phase One's \$299 Capture One software for Mac or Windows. Capture Pilot HD is free to use with Capture One, allowing you (or a client) to view, rate, and tag images as they're captured. A \$14.99 in-app purchase unlocks the ability to control the camera and shoot from the iPad.



## Compose and shoot

In many respects, your digital camera is already a computer, so why not use another computer to control the camera's settings and fire the shutter? In the device's app, use the following controls (4.1, on the next page).

Some items can't be adjusted, depending on the camera model. For example, some cameras don't let you change the exposure mode in software, because that setting is a physical knob on the camera. Also, as you would expect, the mode determines which settings are active—in Shutter Priority mode ("S" on Nikon models, "Tv" on Canon cameras), the aperture can't be set, because that's a value the camera calculates based on the desired shutter speed and ISO.



4.1 The CamRanger interface

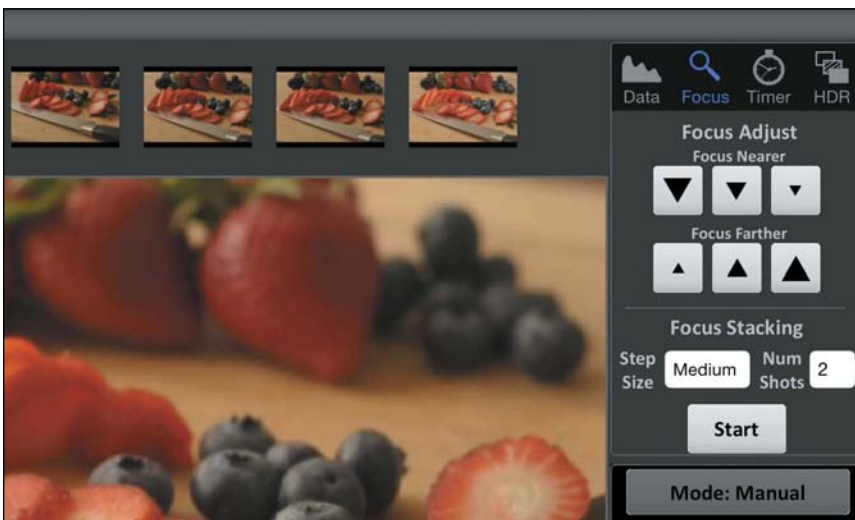
- A. Shutter Speed. Tap the Shutter Speed button to specify how long the shutter remains open.
- B. Aperture. Tap the current Aperture setting to choose an f-stop from the list of possible values. The popover that appears shows only the settings that are available to the current lens.
- C. ISO Speed. Tap this button to choose the level of light sensitivity.
- D. Metering Mode. Tap to select how the camera calculates exposure.
- E. Drive Mode. Tap to set how many shots are taken during a capture, including time delay and remote trigger options.
- F. White Balance. Tap to select one of the color temperature presets.
- G. Image Quality. Switch between available quality and format options.

- H. Auto Focus Mode. Set how the camera determines where to focus.
  - I. Exposure Compensation. Choose from the range of positive and negative exposure adjustments.
  - J. Live View. See what the camera is seeing.
  - K. Movie Mode. Control video recording.
  - L. Movie Auto Focus. Tap to toggle between auto and manual focus in Movie mode.
  - M. Capture. Tap this button when you're ready to capture a shot.
- **TIP** The options that are enabled depend on whether the camera is in PC or Cam USB mode. Tap the Settings button, tap Connection/Network, and change the Connection Mode to PC; that lets you change settings like Mode despite what the camera's physical knobs are set to.

## Use Live View

On supported cameras, tap the Live View button to get a live feed of what the camera's image sensor is seeing.

The CamRanger software can take advantage of the camera's auto-focus features: Tap the image preview to set the Auto Focus point, or tap the Focus button at the top of the screen for more specific focus control (Focus Nearer, Focus Farther, and Focus Stacking) (4.2).



4.2 Focus controls in CamRanger



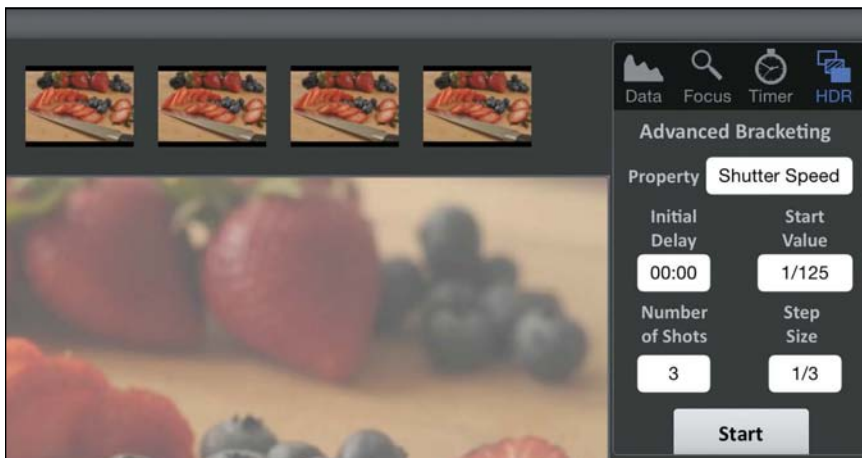
- ▶ **TIP** Since the image needs to travel across the wireless network from the camera to the iPad, expect a little lag when using Live View. It's not terrible, but it's not as smooth as looking through the camera's viewfinder. If the camera is locked down, that isn't a problem. Shooting handheld action proves to be more difficult.
- ▶ **TIP** The CamRanger doesn't automatically save photos on the iPad. Select a shot you've taken, and tap the Save button to copy it to the Camera Roll.

## Use bracketing/HDR

The remote camera devices tap into your camera's ability to shoot a succession of three photos with different exposures (the current one, overexposed, and underexposed), a feature known as "bracketing." HDR (high dynamic range) images, for example, are created with three or more images at varying exposures. (However, the app doesn't merge the shots into a single HDR image; "HDR" is just shorthand for bracketing.)

1. Put the camera into its manual shooting mode.
2. In CamRanger, tap the HDR button to reveal the feature's options (4.3).
3. Set which variable is locked using the Property control: Aperture, Shutter Speed, or ISO Speed. If Aperture is selected, for instance, the camera will adjust the shutter speed and ISO to achieve the exposure change, leaving your chosen aperture constant.
4. Tap the Start Value button and choose a setting that establishes a decent exposure for the image, as if you were shooting just one shot.

4.3 Bracketing/HDR options



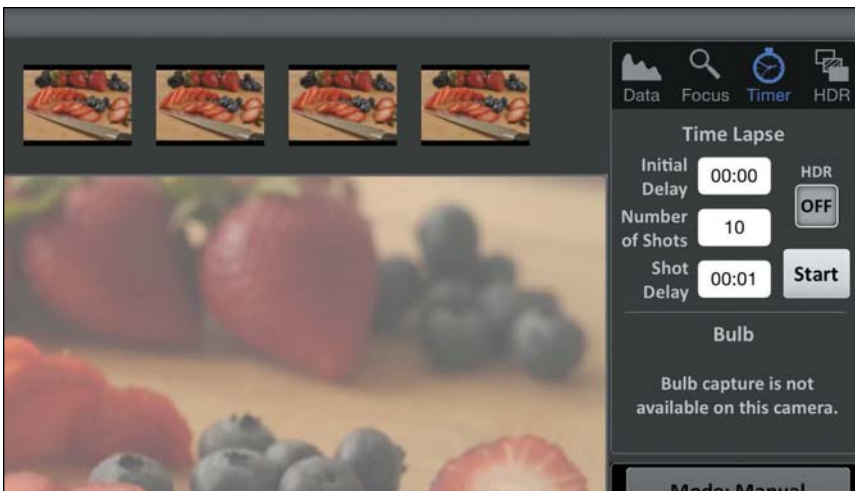
5. Choose how many exposures will fire using the Number of Shots button.
6. Drag the first slider to specify the variance in f-stops between each shot. For example, a setting of 1 would give you an image at the current exposure, one at +1, and one at -1. The higher the value, the broader the difference in exposure will be in the set of shots.
7. Tap the Start button to fire the shots.

## Shoot at specified intervals

An intervalometer captures a series of shots at a specified interval. This automation lets you create a series of time-lapse shots.

1. Tap the Timer button (4.4).
2. To pause before the first capture, set a time using the Initial Delay control.
3. Tap the Number of Shots button, and enter a number in the text field to dictate how many captures are made during the session.
4. Tap the Shot Delay button, and choose the duration between shots in hours, minutes, and seconds (up to 59:59).
5. Tap the Start button to start the intervalometer.

► **TIP** The CamRanger stores the intervalometer settings on the device, so once you've started it, the iPad doesn't need to be on or even connected.



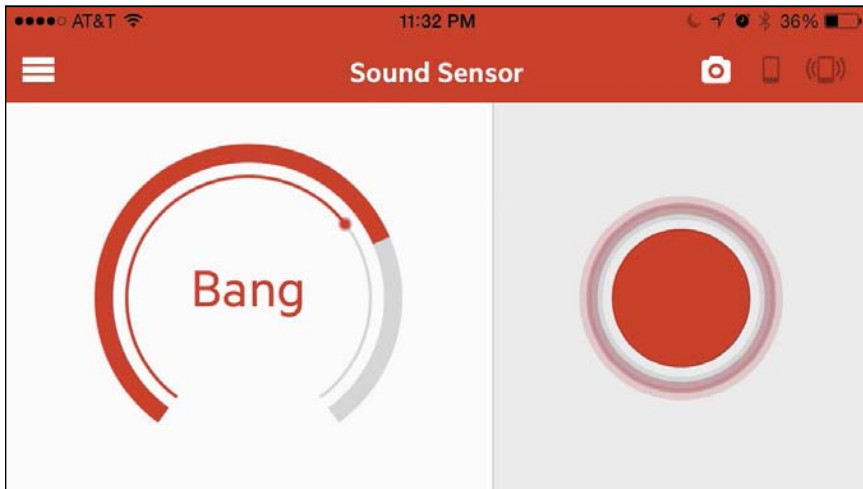
4.4 CamRanger's Timer controls

# Triggertrap

If \$200–\$300 is too costly but you still want to control your DSLR from the iPad, the \$30 Triggertrap is a great option. It doesn't give you a live view from the camera—in fact, you don't see any photos at all—but it does offer many methods of triggering the shutter. The Triggertrap app is free; the \$30 is to purchase a dongle that's compatible with your camera.

Yes, you can remotely capture a shot of a specific duration, but that's just the start. Triggertrap uses the iPad (or iPhone) sensors to do things like fire the shutter when a loud noise (such as a clap, whistle, or tap) occurs (4.5), fire when you are driving and want a shot captured out the window every 20 kilometers, and fire when a person enters the picture (for cameras that do not offer built-in facial recognition).

4.5 Trigger the shutter based on noise level.

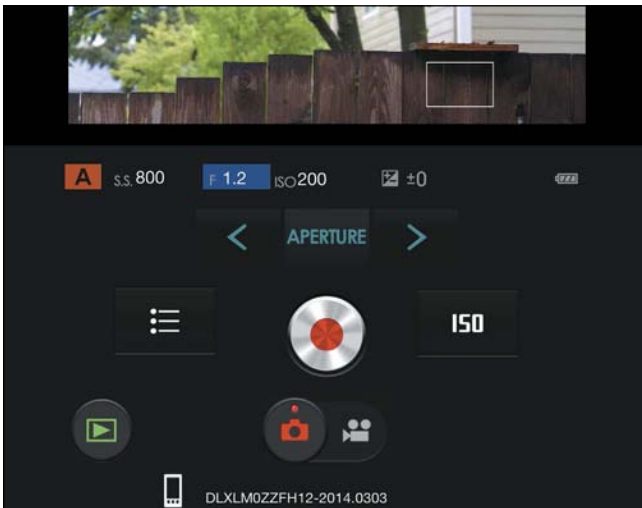


Triggertrap is also ideal if you want extreme control over time-lapse and long-exposure photography. The Wi-Fi Master mode works with another iOS device to control Triggertrap remotely (for example, when you want to capture starfields but would prefer to sit inside a cabin where it's warm).

- ▶ **TIP** For some creative shooting, check out the Triggertrap Flash Adapter, an add-on that lets you shoot high-speed photos (water droplets, glass breaking) using the strobes you likely already own.

## Control a Wireless Camera

I believe that it won't be long before most cameras will incorporate some sort of wireless control. I'm happy to report that manufacturers have started building Wi-Fi connectivity into their cameras (4.6). The apps vary in their capabilities, but mostly they offer the same shooting features described earlier in this chapter. They also take advantage of the iPad's sensors, such as pulling location data and applying it to photos on the camera's memory card.



4.6 The FujiFilm Camera Remote app establishes a live link to the camera (a Fuji XT-1, in this case).

## Control Another iOS Device

I've focused on controlling a DSLR so far in this chapter, but if you own an iPhone (or iPod touch, or another iPad), you already have a pretty good camera available. Blux Camera for iPad, which I mentioned in Chapter 1, has a companion app, called Blux Lens, that enables the iPhone to be a remote camera. As long as both devices are on the same Wi-Fi network, Blux Lens becomes the camera and the iPad acts as the controller.

Choose one to act as the camera and one to act as the remote, and you can then fire the shutter; lock focus, exposure, and white balance; and set a timer. And, of course, it offers a range of filters to change the look of the captured photo.

# Make a Stop-Motion or Time-Lapse Video

Since a studio offers a controlled workspace, you don't have to deal with the whims of natural light or environment. Several apps feature an intervalometer for firing off shots at specific intervals, which can then be combined into a time-lapse video later. But here I want to focus on a clever app that makes the process of creating time-lapse or stop-motion videos easy on the iPad. iStopMotion for iPad by Boinx Software (\$9.99) can use the iPad's built-in camera or an iPhone (or iPod touch) with the help of the iStopMotion Remote Camera app.

## Create a Stop-Motion Video in iStopMotion

Although you could use the iPad or an iPhone to snap a bunch of photos and then stitch them together to make a stop-motion video, iStopMotion makes the process painless.

1. In iStopMotion, tap the New (+) button to create a new project.
2. Tap the Cameras button at the top right area of the toolbar and choose the front or back camera.  

If you're using another iOS device as a remote camera, first launch the free iStopMotion Remote Camera app there. Then, on the iPad, select the name of the camera device. Lastly, tap the Accept button on that device to establish the connection.
3. On the iPad or the other device, drag the Focus indicator to a spot where you want the focus to be locked (4.7). You can also tap the Exposure button at the top of the screen and identify an area on which to base the exposure level.  

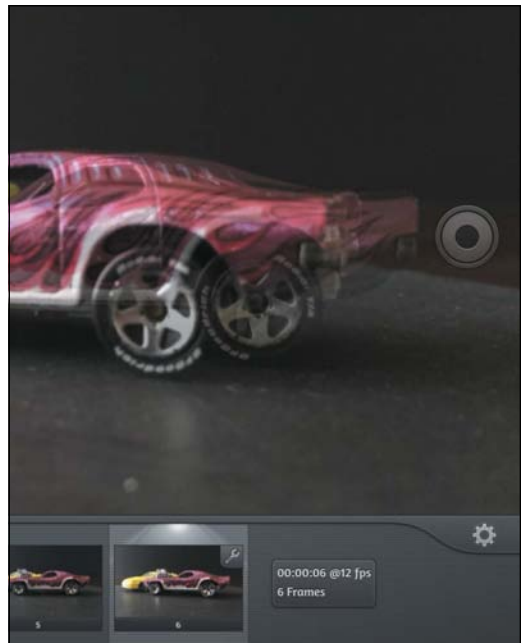
► **TIP** You'll want to shoot where the lighting is consistent, but also make sure you set the Exposure indicator to an area of the scene that's not likely to contain moving elements; they'll throw off the color in those frames.
4. Tap Done to exit the camera settings screen.

5. Tap the Clip Settings button (the gear icon) to set playback speed (frames per second) and how the editing environment appears. Tap the Show button and choose the middle option, which uses an “onion skin” mode to show the last frame and a ghosted rendition of the live video so you can see what the next frame will look like (4.8).
6. Set your scene, and then tap the Capture button to take a shot.
7. Reposition elements in the frame.
8. Tap the Capture button to grab the next frame.
9. Continue adjusting your elements and capturing photos until the scene is complete. Tap the Play button at any time to review what you’ve shot so far.

You can jump back to any frame to re-take it (make sure you line up your elements accurately), or you can delete a frame by selecting it, tapping the Actions button (the wrench icon), and then tapping the Delete Frame button.



4.7 Lock focus in iStopMotion for iPad.

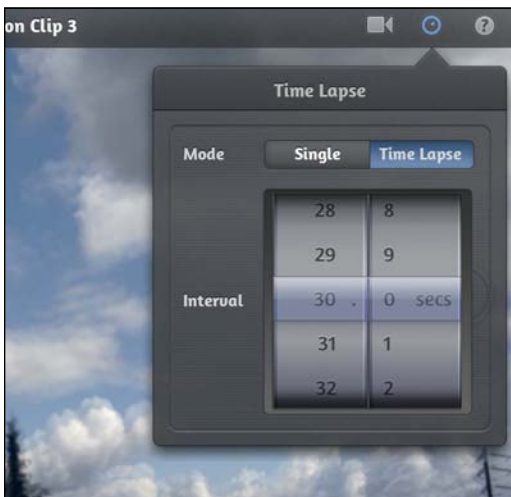


4.8 See the relative position of objects between shots.

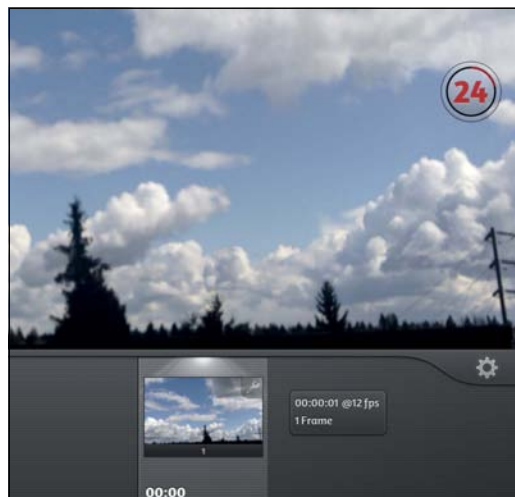
## Create a Time-Lapse Video in iStopMotion

Stop-motion animations require a lot of work and even more patience to do well. A time-lapse video, by contrast, needs just patience and an interesting place to point the camera. iStopMotion can automatically fire off a shot at an interval you choose, ranging from 0.1 second to 99.9 seconds.

1. Set up your iPad, iPhone, or iPod touch where you want to capture action over a period of time.
  2. Choose a camera from the Cameras popover.
  3. Tap the Time Lapse button to the right of the Cameras button.
  4. Make sure Time Lapse is selected under Mode.
  5. Drag the dials to select an interval, then tap outside the popover to dismiss it (4.9).
  6. Tap the Capture button to start capturing the scene. The button doubles as a countdown timer while waiting for the next shot (4.10).
  7. Tap the Capture button again to stop recording frames.
- **TIP** Tapping anywhere near the Capture button works, too—you don't have to hit the button perfectly centered.



4.9 Specify Time Lapse settings.



4.10 The Capture button counts the time to the next shot.

# Mount the iPad

The iPad's portability can sometimes be a hindrance when you're shooting in the studio. Your hands are probably already full with camera gear—you don't want to set that down to pick up the iPad, or have to crane over a tabletop to view the screen without reflections from overhead lights. That's when mounting the iPad is useful.

Although there is no shortage of cases and stands for the iPad, I favor two options: a secure mount that was designed to integrate into a photographer's collection of stands and arms, and a simple desk mount that props up my iPad nearly all the time it's close to my computer. I encourage you to explore the market for options, which change often. For example, if you also dabble in music, a number of attachments designed for performance stands could also work to hold the iPad in place, to set it up as a teleprompter, to play relaxing music for clients or subjects, and for other uses.

## Tether Tools Wallee System

The Wallee Connect system from Tether Tools consists of two parts: a case that connects to the back of the iPad (see the next page), and the Wallee Connect, a sturdy adapter that secures to the case and features holes and threads to connect it to tripods, heads, and lighting stands (4.11). The Connect Kit, which includes the case and the Connect, costs about \$120.



*Threads for tripods and light stands*



*Locking mechanism*

4.11 Wallee Connect





## The Stump

Hundreds of iPad stands exist on the market now, ranging from simple plastic kickstands to large suction cups, but there's one that's proved invaluable to how I work. I often want to prop the iPad next to my computer or on a shelf or table near where I'm shooting. The Stump is a \$25 angled piece of heavy material covered in rubber that puts the iPad into three positions, in either portrait or landscape orientation (4.12).

It sounds almost too simple, I'll grant you. I received one in a bag of goodies for speaking at a conference and figured I'd toss it fairly soon. However, it's currently lifting my iPad more often than the Smart Cover I bought. Whether it's for during a shoot or for working next to your computer later, the Stump is a great little addition.



**4.12** The Stump is simple, portable, and quite useful.

## Extend Your Computer Desktop with Air Display

Here's a neat way to take advantage of the iPad's screen real estate when you're back at your computer processing images: Set it up as a second display. Avatron's Air Display (\$9.99) communicates between your computer and iPad via Wi-Fi to extend the computer's desktop (4.13). Stash Photoshop panels on the iPad's screen to get them out of the way, or keep email and Twitter windows off to the side, leaving more space for working with your photos.

Speaking of Photoshop, the Adobe Nav app for the iPad can be helpful without invoking screen sharing. When running Photoshop CS5 or later on the computer, Adobe Nav (\$1.99) accesses tools off to the side, offering more workspace on your computer.



**4.13** Use the iPad as an external monitor with Air Display.

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