

Learn the best
ways to compose
your pictures!

Canon EOS Rebel T5i / 700D

From Snapshots to Great Shots

Get great detail
in your subjects!

Jeff Revell

Canon EOS Rebel T5i/700D:
From
Snapshots to
Great Shots

Jeff Revell



Canon EOS Rebel T5i / 700D: From Snapshots to Great Shots

Jeff Revell

Peachpit Press
www.peachpit.com

To report errors, please send a note to errata@peachpit.com
Peachpit Press is a division of Pearson Education.

Copyright © 2014 by Peachpit Press

Project Editor: Valerie Witte
Production Editor: Lisa Brazieal
Copyeditor: Liz Welch
Proofreader: Patricia J. Pane
Composition: WolfsonDesign
Indexer: James Minkin
Cover Image: Jeff Revell
Cover Design: Aren Straiger
Interior Design: Riezebos Holzbaur Design Group
Back Cover Author Photo: Scott Kelby

Notice of Rights

All rights reserved. No part of this book may be reproduced or transmitted in any form by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher. For information on getting permission for reprints and excerpts, contact permissions@peachpit.com.

Notice of Liability

The information in this book is distributed on an “As Is” basis, without warranty. While every precaution has been taken in the preparation of the book, neither the author nor Peachpit shall have any liability to any person or entity with respect to any loss or damage caused or alleged to be caused directly or indirectly by the instructions contained in this book or by the computer software and hardware products described in it.

Trademarks

All Canon products are trademarks or registered trademarks of Canon Inc.

Many of the designations used by manufacturers and sellers to distinguish their products are claimed as trademarks. Where those designations appear in this book, and Peachpit was aware of a trademark claim, the designations appear as requested by the owner of the trademark. All other product names and services identified throughout this book are used in editorial fashion only and for the benefit of such companies with no intention of infringement of the trademark. No such use, or the use of any trade name, is intended to convey endorsement or other affiliation with this book.

ISBN-13: 978-0-321-94203-6

ISBN-10: 0-321-94203-5

9 8 7 6 5 4 3 2 1

Printed and bound in the United States of America

DEDICATION

For my wife Suzanne, and my wonderful children—Matt, Alex, Elizabeth, and Isabelle.
You are the fuel that keeps my fire burning.

ACKNOWLEDGMENTS

Getting a camera book off my computer and into a store is not an easy task. There are tons of people behind the scenes who do so much work with very little recognition. From copy edits, to layout, proofing, indexing, advertising, selling, the list just goes on and on. Thankfully I work with a fantastic publisher, Peachpit Press, which employs some super-talented folks who make me and my books look so good. I'm just the words on the paper guy, but the Peachpit staff turns it into something worth reading.

And while the publisher and author have a big part in bringing you this book, none of it would have happened without the assistance of my friends at B&H Photo. They worked with me to ensure that I had a brand-new camera in hand as soon as they started arriving on our shores. Of course, this doesn't surprise me at all because I have been purchasing photography equipment from them for years. I can say without a doubt that they are fantastic at what they do. They are always courteous and helpful, their knowledge is second to none, and they always give me a great deal. They are my number-one go-to resource for anything photographic, so check them out on the web when you get the chance: www.bhphotovideo.com.

The camera used while writing this *From Snapshots to Great Shots* book was generously provided by B&H Photo.



www.bhphotovideo.com

Contents

INTRODUCTION	x
CHAPTER 1: THE T5I TOP TEN LIST	1
Ten Tips to Make Your Shooting More Productive Right Out of the Box	
Poring Over the Camera	2
Poring Over the Camera	4
1. Charge Your Battery	5
2. Turn Off the “Release Shutter without Card” Setting	6
3. Set Your JPEG Image Quality	7
4. Turn Off the Auto ISO Setting	9
5. Set Your Focus Point and Mode	10
6. Set the Correct White Balance	12
7. Adjust the Viewfinder Diopter	15
8. Turn Off the Touch Screen	15
9. Review Your Shots	16
10. Hold Your Camera for Proper Shooting	22
Chapter 1 Assignments	23
CHAPTER 2: FIRST THINGS FIRST	25
A Few Things to Know and Do Before You Begin Taking Pictures	
Poring Over the Picture	26
Poring Over the Picture	28
Choosing the Right Memory Card	30
Formatting Your Memory Card	31
Updating the T5i’s Firmware	33
Cleaning the Sensor	36
Using the Right Format: RAW vs. JPEG	38
Lenses and Focal Lengths	40
What Is Exposure?	46
Motion and Depth of Field	49
Video and the T5i	52
Chapter 2 Assignments	59

CHAPTER 3: THE BASIC ZONE	61
Get Shooting with the Automatic Camera Modes	
Poring Over the Picture	62
Poring Over the Picture	64
Scene Intelligent Auto Mode	66
Portrait Mode	67
Landscape Mode	69
Close-up Mode	70
Sports Mode	71
Special Scene Mode	72
Flash Off Mode	74
Creative Auto Mode	75
Why You May Never Want to Use the Basic Zone Again	78
Chapter 3 Assignments	79
CHAPTER 4: THE CREATIVE ZONE	83
Taking Your Photography to the Next Level	
Poring Over the Picture	84
Poring Over the Picture	86
P: Program Mode	88
Tv: Shutter Priority Mode	91
Av: Aperture Priority Mode	95
M: Manual Mode	99
How I Shoot: A Closer Look at the Camera Settings I Use	102
Chapter 4 Assignments	104
CHAPTER 5: MOVING TARGET	107
The Tricks to Shooting Sports and More	
Poring Over the Picture	108
Poring Over the Picture	110
Stop Right There!	112
Using Shutter Priority (Tv) Mode to Stop Motion	117
Using Aperture Priority (Av) Mode to Isolate Your Subject	119
Keep Them in Focus with AI Servo and Auto AF Focus Point Selection	120
Stop and Go with AI Focus AF	122
Manual Focus for Anticipated Action	123
Keeping Up with the Continuous Shooting Mode	125
A Sense of Motion	126

Tips for Shooting Action	128
Chapter 5 Assignments	130
CHAPTER 6: SAY CHEESE!	133
Settings and Features to Make Great Portraits	
Poring Over the Picture	134
Poring Over the Picture	136
Automatic Portrait Mode	138
Using Aperture Priority Mode	139
Metering Modes for Portraits	141
Using the AE Lock Feature	143
Focusing: The Eyes Have It	144
Classic Black and White Portraits	146
The Portrait Picture Style for Better Skin Tones	149
Detect Faces with Live View	149
Use Fill Flash for Reducing Shadows	152
People on the Move	154
Tips for Shooting Better Portraits	155
Chapter 6 Assignments	163
CHAPTER 7: LANDSCAPE PHOTOGRAPHY	165
Tips, Tools, and Techniques to Get the Most Out of Your Landscape Photography	165
Poring Over the Picture	166
Poring Over the Picture	168
Sharp and in Focus: Using Tripods	170
Selecting the Proper ISO	172
Using Noise Reduction	173
Selecting a White Balance	174
Using the Landscape Picture Style	176
Taming Bright Skies with Exposure Compensation	178
Shooting Beautiful Black and White Landscapes	180
The Golden Light	182
Where to Focus	183
Easier Focusing	185
Making Water Fluid	187
Directing the Viewer: A Word About Composition	188
Advanced Techniques to Explore	193
Chapter 7 Assignments	201

CHAPTER 8: MOOD LIGHTING	203
Shooting When the Lights Get Low	
Poring Over the Picture	204
Poring Over the Picture	206
Raising the ISO: The Simple Solution	208
Using Very High ISOs	210
Using Multi Shot Noise Reduction	211
Stabilizing the Situation	213
Focusing in Low Light	215
Shooting Long Exposures	218
Using the Built-In Flash	220
Compensating for the Flash Exposure	224
Reducing Red-Eye	226
2nd Curtain Sync	228
Using an External Speedlite	231
Flash and Glass	235
Chapter 8 Assignments	236
CHAPTER 9: CREATIVE COMPOSITIONS	239
Improve Your Pictures with Sound Compositional Elements	
Poring Over the Picture	240
Depth of Field	242
Angles	244
Point of View	244
Patterns	244
Color	246
Contrast	247
Leading Lines	248
Splitting the Frame	249
Chapter 9 Assignments	251

CHAPTER 10: ADVANCED TECHNIQUES	253
Impress Your Family and Friends	
Poring Over the Picture	254
Spot Meter for More Exposure Control	256
Manual Mode	259
Bracketing Exposures	262
HDR Backlight Control	264
Auto Lighting Optimizer	265
Handheld Night Scene	267
The My Menu Setting	268
Customize Your White Balance	269
Conclusion	270
Chapter 10 Assignments	271
INDEX	272

Introduction

Walk into any bookseller, go to the photography section, and you will see countless books on the subject of photography. Look a little further and you will locate the camera-specific books. It is this divide between the camera-specific and instructional photography books that inspired me to write this book. What I was seeing in the store was a lot of books that were just sort of missing the mark—especially when it came to using a specific brand and model of camera along with actual photographic instruction. So with that, I set about to write this book on the Canon T5i, not as a rehash of the owner’s manual but as a resource to teach photography with the wonderful technology present in the T5i. I have put together a short Q&A to help you get a better understanding of exactly what you can expect from this book.

Q: IS EVERY CAMERA FEATURE GOING TO BE COVERED?

A: Nope, just the ones I felt you need to know about in order to start taking great photos. Believe it or not, you already own a great resource that covers every feature of your camera: the owner’s manual. Writing a book that just repeats this information would have been a waste of my time and your money. What I did want to write about was how to harness certain camera features to the benefit of your photography. As you read through the book, you will also see callouts that point you to specific pages in your owner’s manual that are related to the topic being discussed. For example, in Chapter 6, I discuss the use of the AE-L button, but there is more information available on this feature in the manual. I cover the function that applies to your specific needs but also give you the page numbers in the manual to explore this function even further.

Q: SO, IF I ALREADY OWN THE MANUAL, WHY DO I NEED THIS BOOK?

A: The manual does a good job of telling you how to use a feature or turn it on in the menus, but it doesn’t necessarily tell you *why* and *when* you should use it. If you want to improve your photography, you need to know the whys and whens to put all of those great camera features to use at the right time. To that extent, the manual just isn’t going to cut it. It is, however, a great resource on the camera’s features, and for that reason I treat it like a companion to this book. You already own it, so why not get something of value from it?

Q: WHAT CAN I EXPECT TO LEARN FROM THIS BOOK?

A: Hopefully, you will learn how to take great photographs. My goal, and the reason the book is laid out the way it is, is to guide you through the basics of photography as they relate to different situations and scenarios. By using the features of your T5i and this book, you will learn about aperture, shutter speed, ISO, lens selection, depth of field, and many other photographic concepts. You will also find plenty of large full-page photos that include captions, shooting data, and callouts so you can see how all of the photography fundamentals come together to make great images. All the while, you will be learning how your camera works and how to apply its functions and features to your photography.

Q: WHAT ARE THE ASSIGNMENTS ALL ABOUT?

A: At the end of most of the chapters, you will find shooting assignments, where I give you some suggestions as to how you can apply the lessons of the chapter to help reinforce everything you just learned. Let's face it—using the camera is much more fun than reading about it, so the assignments are a way of taking a little break after each chapter and having some fun.

Q: SHOULD I READ THE BOOK STRAIGHT THROUGH, OR CAN I SKIP AROUND FROM CHAPTER TO CHAPTER?

A: Here's the easy answer: yes and no. No, because the first four chapters give you the basic information that you need to know about your camera. These are the building blocks for using the camera. After that, yes, you can move around the book as you see fit because the later chapters are written to stand on their own as guides to specific types of photography or shooting situations. You can bounce from portraits to shooting landscapes and then maybe to a little action photography. It's all about your needs and how you want to address them. Or you can read it straight through. The choice is up to you.

Q: I DON'T SEE ANY CHAPTERS DEVOTED TO VIDEO—WHY NOT?

A: I know that one of the reasons you probably bought the T5i was its ability to capture video. I have covered some basic video setup information in Chapter 2, but I wanted the focus of this book to center on the photographic capabilities and possibilities. Don't worry, though; read the next Q&A and I think you will be happy.

Q: IS THERE ANYTHING ELSE I SHOULD KNOW BEFORE GETTING STARTED?

A: To keep the book short and focused, I had to be pretty selective about what I put in each chapter. The problem is that there is a little more information that might come in handy after you've gone through all the chapters. So as an added value for you, I have written two bonus chapters called "Pimp My Ride" and "T5i Video: Beyond the Basics." The first chapter is full of information on photo accessories that will assist you in making better photographs. In it, you will find my recommendation for things like filters, tripods, and much more. The second chapter will lead you through some video tips and techniques to make your T5i movies even better. To access the bonus chapters, just log in or join peachpit.com (it's free), and then enter the book's ISBN. After you register the book, a link to the bonus chapters will be listed on your Account page under Registered Products.

Q: IS THAT IT?

A: One last thought before you dive into the first chapter. My goal in writing this book has been to give you a resource that you can turn to for creating great photographs with your Canon T5i. Take some time to learn the basics, and then put them to use. Photography, like most things, takes time to master and requires practice. I have been a photographer for 30 years and I'm still learning. Always remember, it's not the camera but the person using it who makes beautiful photographs. Have fun, make mistakes, and then learn from them. In no time, I'm sure you will transition from a person who takes snapshots to a photographer who makes great shots.



4

ISO 200
1/125 sec.
f/6.3
28mm lens



The Creative Zone

TAKING YOUR PHOTOGRAPHY TO THE NEXT LEVEL

The Creative zone is the name given by Canon to the shooting modes that offer you the greatest amount of control over your photography. For anyone who has been taking photographs for any period of time, these modes are the backbones of photography. They allow you to influence two of the most important factors for taking great photographs: *aperture* and *shutter speed*. To access these modes, you turn the Mode dial to the Creative mode of your choice and begin shooting. But wouldn't it be nice to know exactly what those modes control and how to make them do your bidding? Well, if you want to take that next step in controlling your photography, it is essential that you understand not only how to control these modes, but why and when to adjust them so that you achieve the results you want. So let's move that Mode dial to the first of our Creative modes: Program mode.

PORING OVER THE PICTURE

I placed my focus point on the eyes so they would be the sharpest point of the image.

A large aperture setting helped provide separation from the background.



It's not necessary to go on safari to get great images of big cats, but it does help to have a great zoo nearby. I am pretty fortunate in that respect because I live near the National Zoo in Washington, D.C., and I try to get there as often as possible. The key is to take a long lens to isolate the animals from their surroundings. Having a little patience in your camera bag doesn't hurt either.

I waited to get a dark background for even more separation.

A 300mm zoom lens usually provides enough length to get good close-ups.

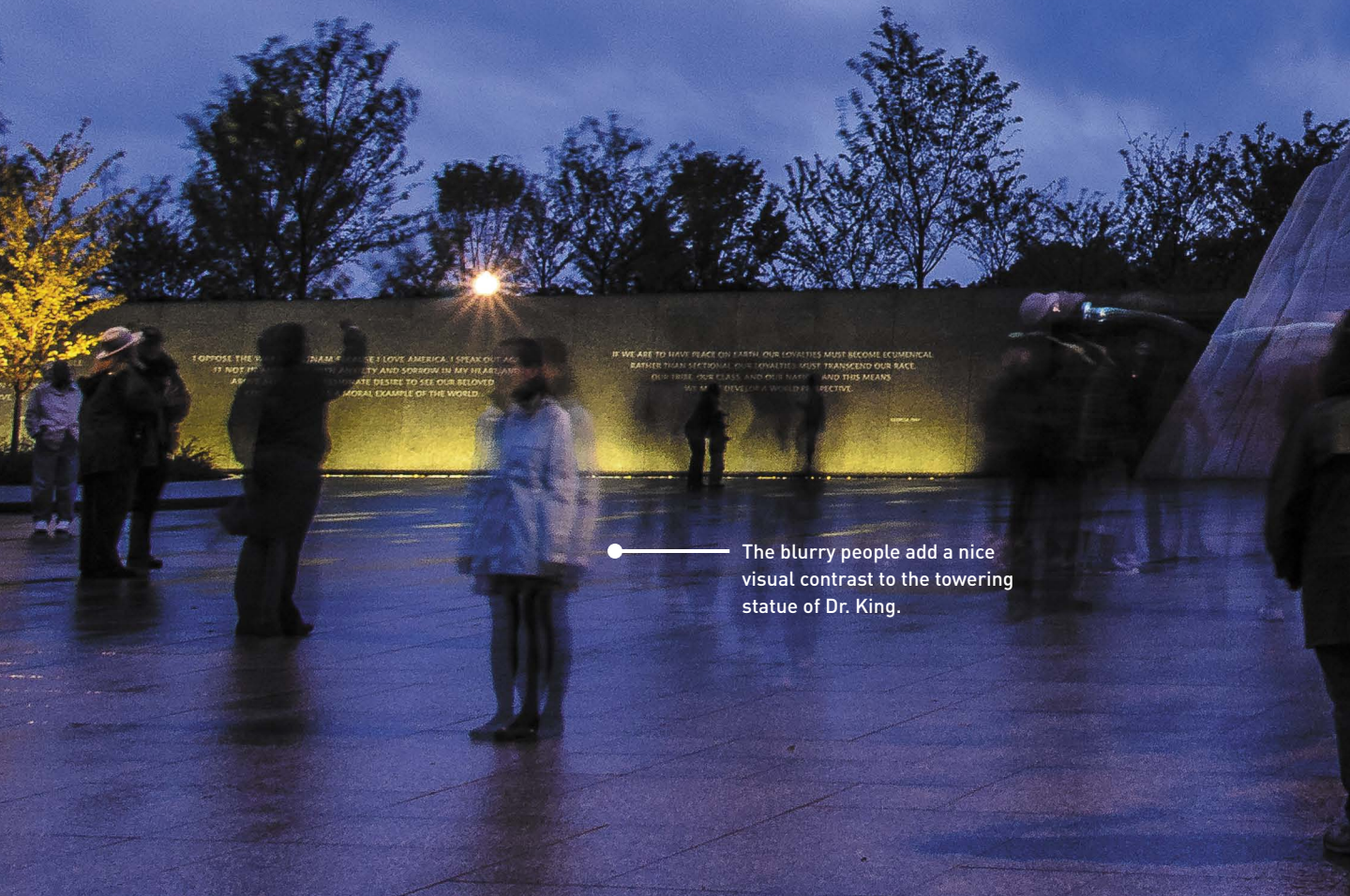
ISO 200
1/1000 sec.
f/4
280mm lens

PORING OVER THE PICTURE

I always enjoy leading photowalks because I usually come away with some great images. On this particular evening, I was leading a walk through the monuments in Washington, D.C., when we came upon the Martin Luther King Jr. memorial. One of the newer attractions on the National Mall, it has quickly become one of my favorites, not only for what it represents but also for the numerous photographic possibilities that surround it.

— The tungsten white balance added warmth to the statue while making the skies dark blue.

— The blurry people add a nice visual contrast to the towering statue of Dr. King.



I used a tripod to keep the camera steady during the long exposure.



I used the rule of thirds for the composition.

ISO 400
5 sec.
f/22
18mm lens

P: PROGRAM MODE



There is a reason that Program mode is only one click away from the Basic modes: with respect to apertures and shutter speeds, the camera is doing most of the thinking for you. So, if that is the case, why even bother with Program mode? First, let me say that rarely will I use Program mode because it just doesn't give as much control over the image-making process as the other Creative modes. There are occasions, however, when it comes in handy, like when I'm shooting in widely changing lighting conditions and I don't have time to think through all of my options, or I'm not concerned with having ultimate control of the scene. Think of a picnic outdoors in a partial shade/sun environment. You want great-looking pictures, but you aren't looking for anything to hang in a museum. If that's the scenario, why choose Program over one of the Basic modes? Because it gives you choices and control that none of the Basic modes, including Creative Auto, can deliver.

Manual Callout

To see a comparison of all of the different modes in the Basic and Creative zones, check out the tables on pages 314–315 of your owner's manual.

WHEN TO USE PROGRAM (P) MODE

Here's a guide to help you decide when to use Program (P) mode instead of the Basic zone modes:

- When shooting in a casual environment where quick adjustments are needed
- When you want control over the ISO
- If you want to use exposure compensation
- If you want or need to shoot in the Adobe RGB color space
- If you want to make corrections to the white balance

Let's return to our picnic scenario. The light is moving from deep shadow to bright sunlight, which means that the camera is trying to balance your three photo factors (ISO, aperture, and shutter speed) to make a good exposure. From Chapter 1, "The T5i Top Ten List," you know that Auto ISO is just not a consideration, so you have already turned that feature off (you did change it, didn't you?). Well, in Program mode, you can choose which ISO you would like the camera to base its exposure on. The lower the ISO number, the better the quality of your photographs, but the less

light sensitive the camera becomes. It's a balancing act, with the main goal always being to keep the ISO as low as possible—too low an ISO, and you will get camera shake in your images from a long shutter speed; too high an ISO means you will have an unacceptable amount of digital noise. Go ahead and select ISO 400 so that you provide enough sensitivity for those shadows, while allowing the camera to use shutter speeds that are fast enough to stop motion.

STARTING POINTS FOR ISO SELECTION

There is a lot of discussion concerning ISO in this and other chapters, but it might be helpful if you know where your starting points should be for your ISO settings. The first thing you should always try to do is use the lowest-possible ISO setting. That being said, here are some good starting points for your ISO settings:

- 100: Bright sunny day
- 200: Hazy or outdoor shade on a sunny day
- 400: Indoor lighting at night or cloudy conditions outside
- 800: Late night, low-light conditions or sporting arenas at night

These are just suggestions, and your ISO selection will depend on a number of factors that will be discussed later in the book. You might have to push your ISO even higher as needed, but at least now you know where to start.

With the ISO selected, you can now make use of the other controls built into Program mode. By rotating the Main dial, you now have the ability to shift the program settings. Remember, your camera is using the internal light meter to pick what it believes are suitable exposure values, but sometimes it doesn't know what it's looking at and how you want those values applied (**Figures 4.1** and **4.2**). With the program shift, you can influence what the shot will look like. Do you need faster shutter speeds in order to stop the action? Just turn the Main dial clockwise. Do you want a smaller aperture so that you get a narrow depth of field? Then turn the dial counterclockwise until you get the desired aperture. The camera shifts the shutter speed and aperture accordingly in order to get a proper exposure, and you will get the benefit of your choice as a result.

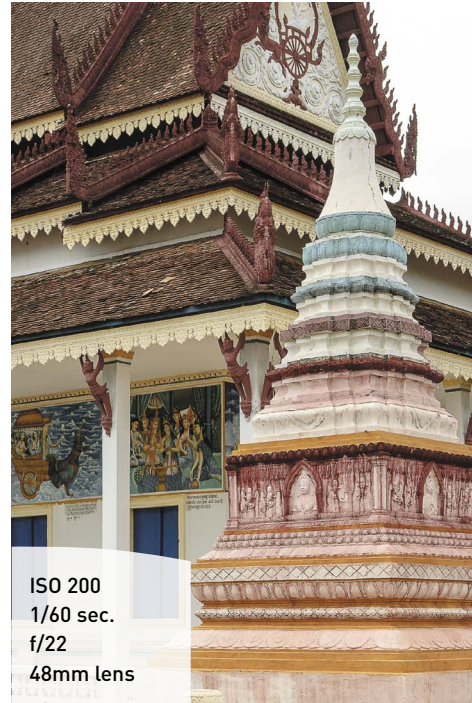
FIGURE 4.1

(left) This is my first shot using Program mode. Because I was pointing the camera at the dog lying inside the temple, the exposure was longer.



FIGURE 4.2

(right) This zoomed-out view shows more of the temple and bright sky, which made the exposure shorter.



Let's set up the camera for Program mode and see how you can make all of this come together.

SETTING UP AND SHOOTING IN PROGRAM MODE

1. Turn your camera on, and then turn the Mode dial to align the P with the indicator line.
2. Select your ISO by pressing the ISO button on top of the camera, and then turning the Main dial to the desired setting. Then press the ISO button again (the ISO selection will appear in the rear LCD panel).
3. Point the camera at your subject, and then activate the camera meter by depressing the shutter button halfway.
4. View the exposure information in the bottom of the viewfinder or by looking at the display panel on the back of the camera.
5. While the meter is activated, use your index finger to roll the Main dial left and right to see the changed exposure values.
6. Select the exposure that is right for you and start shooting. (Don't worry if you aren't sure what the right exposure is. We will start working on making the right choices for those great shots beginning with the next chapter.)



TV: SHUTTER PRIORITY MODE



Tv mode is what most photographers refer to as Shutter Priority mode. If you dig deep in your manual, you will actually see that Tv stands for Time Value. I'm not sure who came up with this term, but I can tell you that it wasn't a photographer. In all my years of shooting, I don't ever recall thinking, "Hey, this would be a great situation to use the Time Value mode." However, you don't need to know why it is called Tv mode; the important thing is to know why and when to use it.

Just as with Program mode, Tv mode gives you more freedom to control certain aspects of your photography. In this case, I'm talking about shutter speed. The selected shutter speed determines just how long you expose your camera's sensor to light. The longer it remains open, the more time your sensor has to gather light. The shutter speed also, to a large degree, determines how sharp your photographs are. This is different from the image being sharply in focus. One of the major influences on the sharpness of an image is camera shake as well as the subject's movement. Because a slower shutter speed means that light from your subject is hitting the sensor for a longer period of time, any movement by you or your subject will show up in your photos as blur.

SHUTTER SPEEDS

A *slow* shutter speed refers to leaving the shutter open for a long period of time—like 1/30 of a second or longer. A *fast* shutter speed means that the shutter is open for a very short period of time—like 1/250 of a second or less.

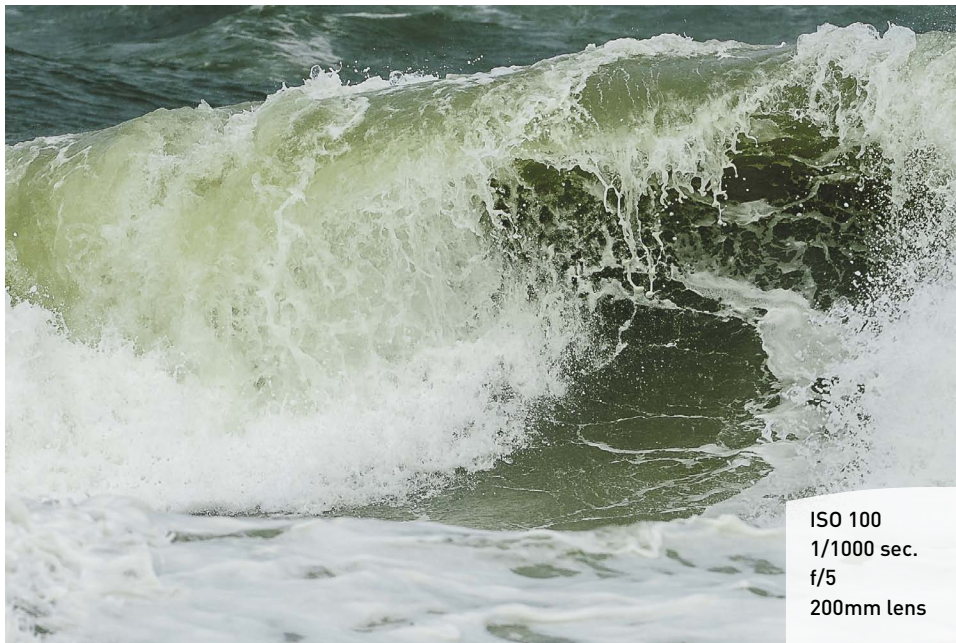
WHEN TO USE SHUTTER PRIORITY (TV) MODE

Here's a guide to help you decide when to use Shutter Priority (Tv) mode:

- When working with fast-moving subjects where you want to freeze the action (**Figure 4.3**); you'll learn more about this in Chapter 5, "Moving Target"
- When you want to emphasize movement in your subject with motion blur (**Figure 4.4**)
- When you want to use a long exposure to gather light over a long period of time (**Figure 4.5**); you'll learn more about this in Chapter 8, "Mood Lighting"
- When you want to create that silky-looking water in a waterfall or fountain (**Figure 4.6**)

FIGURE 4.3

The crashing wave was frozen in place with a fast shutter speed.



ISO 100
1/1000 sec.
f/5
200mm lens

FIGURE 4.4

Slowing down the shutter speed allows your photographs to convey a sense of movement.



ISO 400
1/25 sec.
f/32
130mm lens

ISO 400
5 sec.
f/22
18mm lens



FIGURE 4.5
A long exposure coupled with a small aperture and a steady tripod helped capture this late-evening image of the Martin Luther King Jr. memorial.



ISO 100
1 sec.
f/25
35mm lens

FIGURE 4.6
Increasing the length of the exposure time gives flowing water a silky look.

As you can see, the subject of your photo usually determines whether you will use Tv mode. You must be able to visualize the result of using a particular shutter speed. The great thing about shooting with digital cameras is that you get instant feedback by checking your shot on the LCD screen. But what if your subject won't give you a do-over? Such is often the case when shooting sporting events. It's not like you can go ask the quarterback to throw that touchdown pass again because your last shot was blurry from a slow shutter speed. This is why it's important to know what those speeds represent in terms of their abilities to stop the action and deliver a blur-free shot.

First, let's examine just how much control you have over the shutter speeds. The T5i has a shutter speed range from 1/4000 of a second all the way down to 30 seconds. With that much latitude, you should have enough control to capture almost any subject. The other thing to think about is that Tv mode is considered a "semiautomatic" mode. This means that you are taking control over one aspect of the total exposure while the camera handles the other. In this instance, you are controlling the shutter speed and the camera is controlling the aperture. This is important to know because there will be times when you want to use a particular shutter speed, but your lens won't be able to accommodate your request.

For example, you might encounter this problem when shooting in low-light situations: if you are shooting a fast-moving subject that will blur at a shutter speed slower than 1/125 of a second but the largest aperture of your lens is f/3.5, you might see that your aperture display in your viewfinder and the rear LCD panel will begin to blink. This is your warning that there won't be enough light available for the shot—due to the limitations of the lens—so your picture will be underexposed (too dark).

Another case where you might run into this situation is when you are shooting moving water. To get that look of silky, flowing water, you'll usually find it necessary to use a shutter speed of at least 1/15 of a second, if not longer. If your waterfall is in full sunlight, you may get that blinking aperture display once again because the lens you are using only closes down to f/22 at its smallest opening. In this instance, your camera is warning you that you will be overexposing your image (too light). Workarounds exist for these problems, and we will discuss them later (see Chapter 7, "Landscape Photography"), but you should know that there can be limitations when you're using Tv mode.

SETTING UP AND SHOOTING IN TV MODE

1. Turn your camera on, and then turn the Mode dial to align the Tv with the indicator line.
2. Select your ISO by pressing the ISO button on top of the camera, and then turning the Main dial (the ISO selection will appear in the rear LCD panel).

3. Point the camera at your subject, and then activate the camera meter by depressing the shutter button halfway.
4. View the exposure information in the bottom area of the viewfinder or by looking at the rear LCD panel.
5. While the meter is activated, use your index finger to roll the Main dial left and right to see the changed exposure values. Roll the dial to the right for faster shutter speeds and to the left for slower speeds.



AV: APERTURE PRIORITY MODE



You wouldn't know it from its name, but Av mode is one of the most useful and popular modes in the Creative zone. Av stands for Aperture Value and, like Time Value, it's another term that you'll seldom hear a photographer toss around. The mode is one of my personal favorites, though, and I believe that it will quickly become one of yours as well. Av, more commonly referred to as Aperture Priority mode, is also deemed a semiautomatic mode because it allows you to once again control one factor of exposure while the camera adjusts for the other.

Why, you may ask, is this one of my favorite modes? It's because the aperture of your lens dictates depth of field. Depth of field, along with composition, is a major factor in how you direct attention to what is important in your image. It is the controlling factor of how much area in your image is in focus. If you want to isolate a subject from the background, such as when shooting a portrait, you can use a large aperture to keep the focus on your subject and make both the foreground and background blurry. If you want to keep the entire scene sharply focused, such as with a landscape scene, then using a small aperture will render the greatest amount of depth of field possible.

WHEN TO USE APERTURE PRIORITY (AV) MODE

Here's a guide to help you decide when to use Aperture Priority (Av) mode:

- When shooting portraits or wildlife (**Figure 4.7**)
- When shooting most landscape photography (**Figure 4.8**)
- When shooting macro, or close-up, photography (**Figure 4.9**)
- When shooting architectural photography, which often benefits from a large depth of field (**Figure 4.10**)

FIGURE 4.7

A fairly large aperture combined with a long focal length created a blurry background, so all the emphasis was left on the subject.

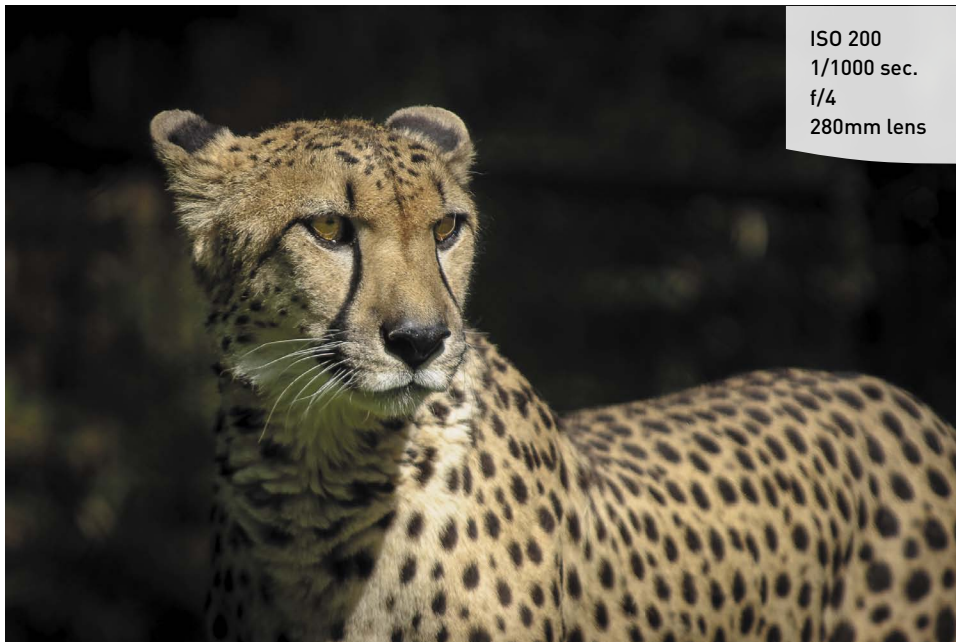


FIGURE 4.8

The smaller aperture setting brings sharpness to near and far objects.





FIGURE 4.9
Small apertures give more sharpness in macro images.

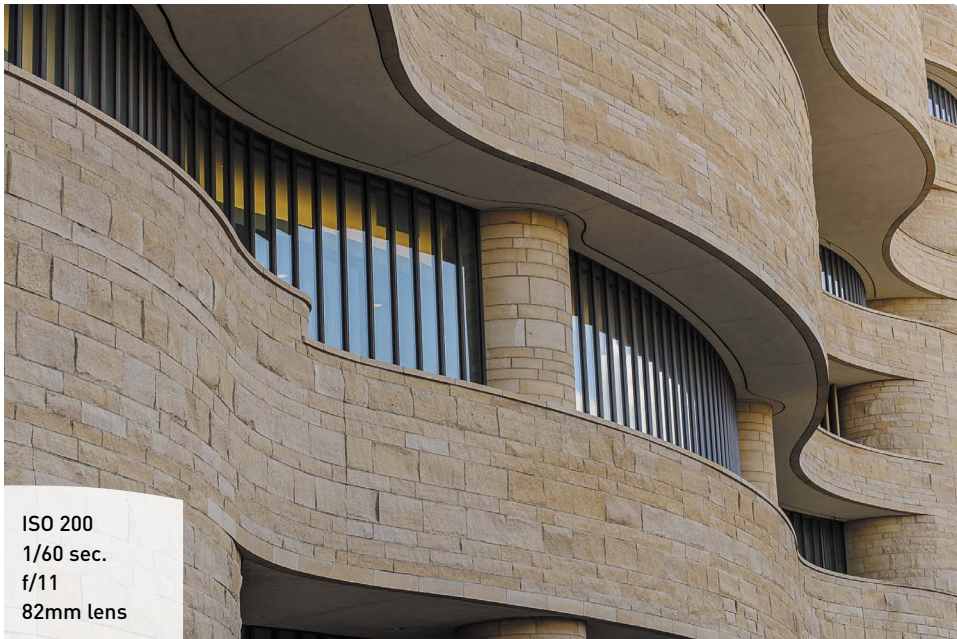


FIGURE 4.10
A small aperture helps capture all the details in this interesting building.

F-STOPS AND APERTURE

As discussed earlier, when referring to the numeric value of your lens aperture, you will find it described as an *f-stop*. The f-stop is one of those old photography terms that, technically, relates to the focal length of the lens (e.g., 200mm) divided by the effective aperture diameter. These measurements are defined as “stops” and work incrementally with your shutter speed to create proper exposure. Older camera lenses used one-stop increments to assist in exposure adjustments, such as 1.4, 2, 2.8, 4, 5.6, 8, 11, 16, and 22. Each stop represents about half the amount of light entering the lens iris as the larger stop before it. Today, most lenses don’t have f-stop markings, since all adjustments to this setting are performed via the camera’s electronics. The stops are also now typically divided into 1/3-stop increments to allow much finer adjustments to exposures, as well as to match the incremental values of your camera’s ISO settings, which are also adjusted in 1/3-stop increments.

We have established that Aperture Priority (Av) mode is highly useful in controlling the depth of field in your image. But it’s also pivotal in determining the limits of available light that you can shoot in. Different lenses have different maximum apertures. The larger the maximum aperture, the less light you need to achieve a properly exposed image. You will recall that, when in Tv mode, there is a limit at which you can handhold your camera without introducing movement or hand shake, which causes blurriness in the final picture. If your lens has a larger aperture, you can let in more light all at once, which means that you can use faster shutter speeds. This is why lenses with large maximum apertures, such as f/1.4, are called “fast” lenses.

On the other hand, bright scenes require the use of a small aperture (such as f/16 or f/22), especially if you want to use a slower shutter speed. That small opening reduces the amount of incoming light, and this reduction of light requires that the shutter stay open longer.

SETTING UP AND SHOOTING IN AV MODE

1. Turn your camera on, and then turn the Mode dial to align the Av with the indicator line.
2. Select your ISO by pressing the ISO button on top of the camera, and then turning the Main dial.
3. Point the camera at your subject, and then activate the camera meter by depressing the shutter button halfway.
4. View the exposure information in the bottom area of the viewfinder or by looking at the rear display panel.
5. While the meter is activated, use your index finger to roll the Main dial left and right to see the changed exposure values. Roll the dial to the right for a smaller aperture (higher f-stop number) and to the left for a larger aperture (smaller f-stop number).



ZOOM LENSES AND MAXIMUM APERTURES

Some zoom lenses (like the 18–135mm kit lens) have a variable maximum aperture. This means that the largest opening will change depending on the zoom setting. In the example of the 18–135mm zoom, the lens has a maximum aperture of $f/3.5$ at 18mm and only $f/5.6$ when the lens is zoomed out to 135mm. Fixed aperture zoom lenses maintain the same maximum aperture throughout the zoom range. They are typically much more expensive than their variable maximum aperture counterparts.

M: MANUAL MODE



Once upon a time, long before digital cameras and program modes, there was manual mode. In those days it wasn't called "manual mode" because there were no other modes. It was just photography. In fact, many photographers, including myself, cut their teeth on completely manual cameras. Let's face it—if you want to learn the effects of aperture and shutter speed on your photography, there is no better way to learn than by setting these adjustments yourself. However, today, with the advancement of camera technology, many new photographers never give this mode a second thought. That's truly a shame. Not only is it an excellent way to learn your photography basics, it's also an essential tool to have in your photographic bag of tricks.

When you have your camera set to Manual (M) mode, the camera meter will give you a reading of the scene you are photographing. It's your job, though, to set both the f-stop (aperture) and the shutter speed to achieve a correct exposure. If you need a faster shutter speed, you will have to make the reciprocal change to your f-stop. Using any other mode, such as Tv or Av, would mean that you just have to worry about one of these changes, but Manual mode means you have to do it all yourself. This can be a little challenging at first, but after a while you will have a complete understanding of how each change affects your exposure, which will, in turn, improve the way that you use the other modes.

WHEN TO USE MANUAL (M) MODE

Here's a guide to help you decide when to use Manual (M) mode:

- When you need to maintain exposures between different frames for a panorama (Figure 4.11)
- When your environment is fooling your light meter and you need to maintain a certain exposure setting (Figure 4.12)
- When shooting silhouetted subjects, which requires overriding the camera's meter readings (Figure 4.13)



FIGURE 4.11

Setting the camera on Manual for panorama shots helps to keep the exposure consistent.

ISO 800
1/20 sec.
f/16
400mm lens



FIGURE 4.12
This much blue sky would definitely cause underexposure, so a manual setting kept things bright.

ISO 800
1/1600 sec.
f/18
18mm lens



FIGURE 4.13
I wanted a silhouette of the person on the ridge, so I placed my camera in Manual mode and underexposed the shot.

SETTING UP AND SHOOTING IN MANUAL MODE

1. Turn the Mode dial to align the M with the indicator line.
2. Select your ISO by pressing the ISO button on top of the camera, and then turning the Main dial.
3. Point the camera at your subject, and then activate the camera meter by depressing the shutter button halfway.
4. View the exposure information in the bottom area of the viewfinder or by looking at the rear display panel.
5. While the meter is activated, use your index finger to roll the Main dial left and right to change your shutter speed value until the exposure mark is lined up with the zero mark. The exposure information is displayed by a scale with marks that run from -2 to +2 stops. A “proper” exposure will line up with the arrow mark in the middle. As the indicator moves to the left, it is a sign that you will be underexposing (not enough light is hitting the sensor to provide adequate exposure). Move the indicator to the right and you will be providing more exposure than the camera meter calls for. This is overexposure.
6. To set your exposure using the aperture, depress the shutter release button until the meter is activated. Then, using your thumb, hold in the Av button on the back of the camera, and then use your index finger to turn the Main dial right for a smaller aperture (large f-stop number) or left for a larger aperture (small f-stop number).



HOW I SHOOT: A CLOSER LOOK AT THE CAMERA SETTINGS I USE

The great thing about working with a DSLR camera is that I can always feel confident that some things will remain unchanged from camera to camera. For me, these are the Aperture Priority (Av) and Shutter Priority (Tv) shooting modes. Although I like to think of myself as a generalist in terms of my photography, I do tend to lean heavily on the landscape and urban photography genres. Working in these areas means that I’m almost always going to be concerned with my depth of field. Whether it’s isolating my subject with a large aperture or trying to maximize the overall sharpness of a sweeping landscape, I keep an eye on my aperture setting.

If I have a need to control the action, I use Shutter Priority. If I’m trying to create a silky waterfall effect, I can depend on Tv to provide that long shutter speed that it will deliver. Maybe I am shooting a motocross jumper. I definitely need the fast shutter speeds that will freeze the fast-moving action. Although the other camera modes

have their place, I think you will find that you will use the Av and Tv modes for 90 percent of your shooting.

The other concern that I have when I am setting up my camera is just how low I can keep my ISO. I raise the ISO only as a last resort, because each increase in sensitivity is an opportunity for more digital noise to enter my image. To that end, I always have the High ISO Speed Noise Reduction feature turned on Standard (see Chapter 7).

To make quick changes while I shoot, I often use the Exposure Compensation feature (covered in Chapter 7) so that I can make small over- and underexposure changes. This is different than changing the aperture or shutter; it is more like fooling the camera meter into thinking the scene is brighter or darker than it actually is.

One of the reasons I change my exposure is to make corrections when I see the “blinkies” while looking at my images on the rear LCD. Blinkies are the warning signal that part of my image has been overexposed to the point that I no longer have any detail in the highlights. The highlight alert will flash wherever the potential exists for overexposure. The only unfortunate thing about this feature is that it doesn’t work with the full-screen preview mode. You have to set your camera display to one of the Histogram modes, and then you will see the highlight alert (**Figure 4.14**). If you see any area of the thumbnail blinking black, you are probably overexposing that part of the image.

As you work your way through the coming chapters, you will see other tips and tricks I use in my daily photography, but the most important tip I can give is that you take the time to understand the features of your camera so that you can leverage the technology in a knowledgeable way. Doing so will result in better photographs.

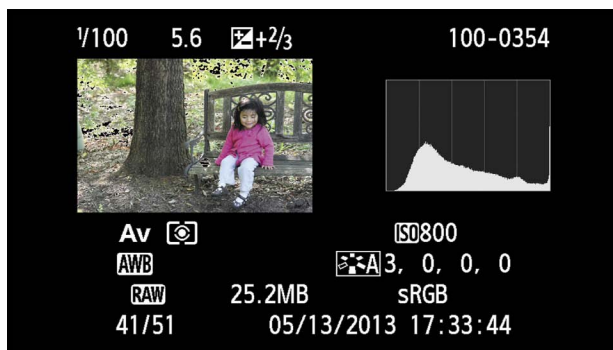


FIGURE 4.14

The T5i’s highlight alert screen blinks black for areas that are overexposed.

Chapter 4 Assignments

The information covered in this chapter will define how you work with your camera from this point on. Granted, there may be times that you just want to grab some quick pictures and will resort to the Basic zone, but to get serious with your photography, you should learn the modes in the Creative zone.

Starting off with Program mode

Set your camera on Program mode and start shooting. Become familiar with the adjustments you can make to your exposure by turning the Main dial. While shooting, keep an eye on your ISO.

Learning to control time with the Tv mode

Find some moving subjects, and then set your camera to Tv mode. Have someone ride their bike back and forth, or you can even just photograph cars as they go by. Begin with a slow shutter speed of around 1/30 of a second, and then start shooting with faster and faster shutter speeds. Keep shooting until you can freeze the action. Now find something that isn't moving, like a flower. Begin with a fast shutter speed, something like 1/500 of a second, and then work your way down to about 1/4 of a second. The point is to see how well you can handhold your camera before you start introducing hand shake into the image.

Controlling depth of field with the Av mode

The name of the game with Av mode is depth of field. Set up 3 items at different distances from you. You can use chess pieces or something similar. Now focus on the middle item and set your camera to the largest aperture that your lens allows (remember, large aperture means a small number like $f/3.5$). Now, while still focusing on the middle subject, start shooting with ever-smaller apertures until you are at the smallest f-stop for your lens. If you have a zoom lens, try doing this exercise with the lens at the widest lens setting, like 18mm, and then the longest telephoto setting, like 55mm or 135mm. Now move up to subjects that are farther away, like telephone poles, and shoot them in the same way. The idea is to get a feel for how each aperture setting affects your depth of field.

Giving and taking with Manual mode

Go outside on a sunny day and, using the camera in Manual mode, set your ISO to 100, your shutter speed to 1/125 of a second, and your aperture to f/16. Now press your shutter release button to get a meter reading. You should be pretty close to that zero mark. If not, make small adjustments to one of your settings until it hits that mark. This is where the fun begins. Start moving your shutter speed slower, to 1/60, and then set your aperture to f/22. Now go the other way. Set your aperture on f/8 and your shutter speed to 1/500. Review your images. If all went well, all the exposures should look the same. This is because you balanced the light with reciprocal changes to the aperture and shutter speed. Now go back to your original setting of 1/125 at f/16 and try moving the shutter speed without changing the aperture. Just make 1/3-stop changes (1/125 to 1/100 to 1/80 to 1/60), and then review your images to see what a 1/3 stop of overexposure looks like. Then do the same thing going in the opposite way. It's hard to know if you want to over- or underexpose a scene until you've done it and seen the results.

Share your results with the book's Flickr group!

Join the group here: [flickr.com/groups/t5i700dfromsnapshotstogreatshots](https://www.flickr.com/groups/t5i700dfromsnapshotstogreatshots)

INDEX

1st Curtain Sync mode, 228, 230
2nd Curtain Sync mode, 228–231

A

action shots, 107–131. *See also* motion
AI Servo mode, 120–122
Aperture Priority mode, 95–99, 119–120
Continuous Shooting mode, 125–126
conveying motion, 126–128
focus, 120–124
panning, 126–127
shutter speed and, 112–118
Sports mode, 71–72
tips for, 128–130
zooming in/out and, 116
advanced techniques
Auto Lighting Optimizer, 265–267
bracketing exposures, 200, 262–266
Bulb setting, 259–261
custom white balance, 269–270
Handheld Night Scene, 267
HDR Backlight Control, 72, 264–265
landscape scenes, 193–200
Manual mode, 259–261
My Menu setting, 268
Spot metering mode, 141, 256–258
AE (Automatic Exposure) Lock function, 143–144, 223, 224
AI Focus mode, 79, 122–123
AI Servo mode, 79, 120–122
Ambience setting, 76
angles, 244
aperture
depth of field and, 50, 51, 242–243
described, 46
f-stops and, 98
portraits, 139–141
shutter speed and, 218
Aperture Priority (Av) mode
action shots, 95–99, 119–120
flash and, 221
overview, 95
portraits, 139–141
vs. Shutter Priority mode, 95–99
when to use, 95–98
artifacts, 10
auto AF focus point selection, 120–122
Auto Exposure Bracketing feature, 262–266
Auto ISO setting, 9–10
Auto Lighting Optimizer, 265–267
auto white balance feature, 12–14
autofocus
AF Point mode, 120, 122
AI Focus mode, 79, 122–123
AI Servo mode, 120–121
considerations, 79, 215
Face Detection mode, 149–152
methods/modes, 10–12
Scene Intelligent Auto mode, 66–67
setting, 12–14

Automatic Exposure (AE) Lock function, 143–144, 223, 224
automatic modes. *See* Basic zone
Av mode. *See* Aperture Priority mode
Average metering mode, 222

B

backlighting, 72, 264–265
Basic zone, 61–81
Close-Up mode, 70
considerations, 78–79
Creative Auto mode, 75–78
Focus Assist mode, 217–218
Landscape mode, 69
Night Portrait mode, 220
Portrait mode, 67–68, 138
Scene Intelligent Auto mode, 66–67
Sports mode, 71–72
batteries, 5, 16, 35
battery level, 5
black and white images
landscapes, 180–182
portraits, 146–148
blinkies, 103, 178
blurring
depth of field and, 49–51
motion blur, 49–51, 127–128
bracketing, 200, 262–266
brightness, 20
Bulb setting, 259–261
burst mode, 125–126

C

CA (Creative Auto) mode, 75–78
cable release, 218
camera
cleaning sensor, 36–37
features, x
firmware, 33–35
front/back/top of, 2–4
holding, 22
internal memory, 126
introduction, x–xi
LCD display, 15–19
lenses. *See* lenses
reviewing shots on, 16–19, 116
top ten list, 1–23
touch screen display, 15–16
camera modes
Aperture Priority. *See* Aperture Priority mode
automatic. *See* Basic zone
Close-Up mode, 70
Continuous Shooting mode, 125–126
drive modes, 76–77
Flash Off mode, 74
focus modes. *See* focus modes
Landscape mode, 69
metering modes. *See* metering modes
Night Portrait mode, 220
Portrait mode, 67–68
Program. *See* Program mode
Shutter Priority. *See* Shutter Priority mode

- Special Scene modes, 72–73, 267
- Sports mode, 71–72
- sync modes, 228–231
- camera shake, 22, 66, 170
- camera shots. *See* images
- Canon T5i camera. *See* camera
- catchlight, 153
- Center-Weighted metering mode, 141, 142
- children, 154–155, 161
- clipping, 20–21
- Close-Up mode, 70
- close-up portraits, 162
- color
 - composition and, 246
 - contrast, 246, 248
 - filters, 180–182
 - saturated, 246
 - warm/cool, 183
- color histogram, 19
- color space, 78
- color temperature, 14
- composition, 239–251
 - angles, 244
 - color and, 246
 - contrast, 247–248
 - depth of field and, 242–243
 - frame splitting, 249–250
 - landscape scenes, 188–192
 - leading lines, 248–249
 - overview, 239
 - patterns, 244, 245
 - point of view, 244, 245
 - rule of thirds, 250
- compression, 7–8, 38
- Continuous focus mode, 154
- Continuous Shooting mode, 125–126
- contrast, 246, 248, 265–267
- Creative Auto (CA) mode, 75–78
- Creative zone, 83–105. *See also specific modes*
 - Manual mode, 99–102
 - Program mode, 88–90
 - Shutter Priority mode, 91–95
- cropping, 156, 158

D

- deleting images, 19
- depth of field
 - aperture and, 50, 51, 242–243
 - as composition, 242–243
 - focal lengths and, 242–243
 - motion and, 49–51
 - sharpness and, 242–243
- Depth-of-Field Preview, 2, 183, 184, 185
- digital camera. *See* camera
- diopter. *See* viewfinder diopter
- distance compression, 43
- drive modes, 76–77

E

- environmental photos, 140
- EOS Utility program, 34–35
- E-TTL II (Evaluative Through the Lens) technology, 222, 224

- Evaluative metering mode, 141, 142, 222, 256
- Evaluative Through the Lens (E-TTL II) technology, 222, 224
- exposure
 - AE Lock function, 143–144
 - bracketing, 200, 262–266
 - calculating, 47–49
 - Evaluative metering mode, 141, 142, 222, 256
 - long, 218–219, 259–261
 - overview, 46–49
 - Spot metering mode, 256–258
- Exposure Compensation feature
 - considerations, 103
 - flash, 224–226
 - landscape scenes, 178–180
 - portraits, 142
 - regaining details in highlights, 178–180
- exposure triangle, 46–47

F

- Face Detection mode, 149–152
- FE (Flash Exposure) Lock function, 223, 224
- fill flash, 152–154
- filters
 - built-in, 180–182
 - colors, 180–182
 - monochrome, 146–148
 - neutral density, 188
 - polarizing, 188
- fireworks scenes, 215, 216, 259–260
- firmware updates, 33–35
- flash, 220–235
 - AE/FE Lock feature, 223–224
 - built-in, 220–224
 - considerations, 13, 208, 220
 - disabling, 218
 - exposure compensation, 224–226
 - external, 220
 - fill, 152–154
 - Flash Off mode, 74
 - metering modes, 222–224
 - off-camera Speedlite, 231–234
 - options, 77
 - shooting through glass, 235
 - shutter speed and, 220–222
 - sync modes, 228–231
 - sync speed, 219, 221–222
 - turning on, 220
 - using, 220–224
 - wireless, 231–234
- Flash Exposure Compensation feature, 224–226
- Flash Exposure (FE) Lock function, 223, 224
- Flash firing options, 228–231
- Flash Off mode, 74
- flash range, 223
- focal lengths
 - depth of field and, 242–243
 - lenses and, 40–45
- focus
 - action shots, 120–124
 - automatic. *See* autofocus
 - on eyes, 144–146
 - face detection, 149–152
 - Focus Assist mode, 217–218

focus (*continued*)
landscape scenes, 183–186
in low light, 215–218
manual, 123–124
on single point, 11–12, 145–146
video camera, 56
Focus Assist mode, 217–218
focus modes
AI Focus mode, 79, 122–123
AI Servo mode, 79, 120–122
Focus Assist, 217–218
One Shot mode, 11–12, 79, 144–146
setting, 10–12
focus point/mode, 10–12
frame splitting, 249–250
f-stops, 46, 47–49, 98. *See also* aperture

G

glass, shooting through, 235
golden light, 182–183
grid overlay, 151–152

H

Handheld Night Scene mode, 267
HD video, 52–54
HDR Backlight Control mode, 72, 264–265
HDR images, 198–200, 264–265
HFD (hyper focal distance), 183, 185
high dynamic range. *See* HDR
High ISO Speed Noise Reduction feature, 208–210
highlights, 103, 178, 180, 198
histograms, 19–21
Hold setting, 16
hyper focal distance (HFD), 183, 185

I

Image Review feature, 16–19
image review time setting, 17–19
image stabilization (IS), 213–215
images
action. *See* action shots
black and white, 146–148, 180–182
deleting, 19
HDR, 198–200, 264–265
high-key/low-key, 180
information about, 17–19
JPEG, 7–8, 38–40
landscapes. *See* landscape photography
at night. *See* night shots
portraits. *See* portraits
quality settings, 7–8, 40
RAW, 38–40
resolution, 39
reviewing on camera, 16–19, 116
sharpness. *See* sharpness
INFO button, 17–19
IS (image stabilization), 213–215
ISO Expansion feature, 210–211
ISO numbers, 117–118
ISO settings
adjusting, 9–10, 117–118, 208–211
auto, 9–10

considerations, 9–10, 78, 89
described, 46
high, 208–211
landscape scenes, 172–173
noise and, 172–174, 208–213
raising ISO, 208–211

J

JPEG images, 7–8, 38–40
JPEG settings, 7–8

K

Kelvin temperature scale, 14

L

Landscape mode, 69
landscape photography, 165–201
advanced techniques, 193–200
black and white images, 180–182
composition, 188–192
exposure compensation, 178–180
focus, 183–186
golden light, 182–183
ISO settings, 172–173
lightning storms, 259, 261
noise reduction, 173–174
panoramas, 193–198
sky images. *See* skies
sunlight, 94, 159, 182–183
sunrise/sunset shots, 182–183, 257–258
tripods, 170–171, 183, 185
water, 91, 94, 127, 187–188
white balance, 174–176
Landscape picture style, 176–178, 180–182
LCD display, 15–19
leading lines, 248–249
lenses
focal length, 40–45
image stabilizer, 213–214
IS, 171, 213–214
long, 162
normal, 43, 44
for portraits, 68, 140, 157
telephoto, 43, 44–45
wide-angle, 41–42, 140, 157
zoom, 45, 99
light meter, 141
lighting, 203–237
Auto Lighting Optimizer, 265–267
backlighting, 72, 264–265
catchlight, 153
flash and. *See* flash
focusing in low light, 215–218
golden light, 182–183
highlights, 103, 178, 180, 198
image stabilizer, 213–215
long exposures, 218–219
nighttime. *See* night shots
portraits, 141
raising ISO, 208–211
sunlight, 94, 159, 182–183
lightning storms, 259, 261

- Live View
 - face detection, 149–152
 - grid overlay, 151–152
 - white balance settings, 176
- luminance, 20
- luminance histogram, 20

M

- M mode. *See* Manual mode
- macro settings, 70
- manual, for camera, x
- manual focus, 123–124
- Manual (M) mode
 - advanced techniques, 259–261
 - considerations, 99–102
 - flash and, 222
 - overview, 99–100
 - setting up, 102
 - when to use, 100–101
- megapixels, 39
- memory cards, 57–58, 210
 - choosing, 30–31
 - considerations, 7, 31, 40, 210
 - formatting, 31–32
 - No Card message, 6–7
 - number of images on, 7
 - Release Shutter Without Card, 6–7
- Menu button, 268
- metering modes
 - Average, 222
 - Center-weighted, 141, 142
 - Evaluative, 141, 142, 222, 256
 - flash usage, 222–223
 - Partial, 141, 142–143
 - for portraits, 141–143
 - Spot, 141, 256–258
- mirrors, 243
- modes. *See* camera modes
- Monochrome filters, 146–148
- Monochrome picture style
 - landscapes, 180–182
 - portraits, 146–148
- motion. *See also* action shots
 - conveying, 126–128
 - depth of field and, 49–51
 - portraits and, 154–156
 - Sports mode, 71–72
 - stopping with Shutter Priority, 117–118
- motion blur, 49–51, 127–128
- Movie mode, 52, 56. *See also* video
- Multi Shot Noise Reduction option, 211–213
- My Menu setting, 268

N

- neutral density filter, 188
- Night Portrait mode, 72–73, 220
- night shots
 - Bulb setting, 259–261
 - fireworks, 215, 216, 259–260
 - Handheld Night Scene, 267
 - lightning storms, 259, 261
 - Night Portrait mode, 220
- noise, 10, 71

- noise reduction
 - ISO settings and, 172–174, 208–213
 - long exposures, 218–219
 - Multi Shot Noise Reduction, 211–213

O

- off-camera Speedlite, 231–234
- One Shot mode, 11–12, 79, 144–146

P

- P (Program) mode, 88–90, 221
- panning, 126–127
- panoramas, 193–198
- Partial metering mode, 141, 142–143
- patterns, 244, 245
- photos. *See* images
- picture styles
 - considerations, 78
 - Landscape, 176–178, 180–182
 - Monochrome. *See* Monochrome picture style
 - Portrait, 149
- playback button, 19
- point of view, 244, 245
- Portrait mode, 67–68, 138
- Portrait picture style, 149
- portraits, 133–163
 - AE Lock feature and, 143–144
 - Aperture Priority mode, 139–141
 - black and white, 146–148
 - candid shots, 162
 - catchlight, 153
 - centering, 155–156
 - children, 154–156, 161
 - closeups, 162
 - cropping, 156, 158
 - Face Detection mode, 149–152
 - fill flash, 152–154
 - focusing on eyes, 144–146
 - framing, 157–158, 160
 - lenses for, 68, 140, 157
 - lighting, 141
 - metering modes for, 141–143
 - motion and, 154–156
 - Night Portrait mode, 72–73, 220
 - Portrait mode, 67–68, 138
 - red-eye, 226–228
 - reducing shadows, 152–154
 - Shutter Priority mode, 154, 155
 - skin tones, 146, 149
 - sunlight and, 159
 - tips for, 155–162
- Program (P) mode, 88–90, 221

Q

- quality settings, 7–8

R

- RAW format, 7, 38–40, 199
- RAW images, 38–40
- RAW+JPEG mode, 40
- reciprocal exposures, 48–49

- Red-Eye Reduction feature, 226–228
- reflections, 235, 243, 246
- Release Shutter Without Card setting, 6–7
- remote cord, 261
- resolution
 - images, 39
 - video, 52–53
- rule of thirds, 188–192, 250

S

- Scene Intelligent Auto mode, 66–67
- self-timer, 66, 77, 215
- sensors, cleaning, 36–37
- shadows, 152–154, 180
- sharpness
 - background, 76
 - considerations, 184
 - depth of field and, 242–243
 - RAW vs. JPEG images, 39
 - self-timer and, 215
- shooting modes, 13
- Shutter Priority (Tv) mode
 - vs. Aperture mode, 95–99
 - considerations, 102–103
 - flash and, 221
 - overview, 91
 - portraits, 154, 155
 - setting up, 99
 - shooting in, 94–95
 - stopping motion with, 117–118
 - when to use, 91–95
- shutter speed
 - action shots and, 112–118
 - aperture and, 218
 - Bulb setting, 259–261
 - considerations, 49, 91, 112
 - described, 46
 - direction of travel and, 112–113
 - fast, 220–222
 - flash and, 220–222
 - long exposures, 218–219, 259–261
 - Release Shutter Without Card setting, 6–7
 - Shutter Priority mode, 91–95
 - Stabilizer function, 211–213
 - subject speed, 114
 - subject-to-camera distance, 115
 - tripods and, 208, 218, 219
- skies
 - exposure compensation, 178–180
 - golden light, 182–183
 - sunrise/sunset, 182–183, 257–258
- skin tones, 146, 149
- sound, video, 54–55
- Special Scene modes, 72–73, 267
- Speedlite, off-camera, 231–234
- Sports mode, 71–72
- Spot metering mode, 141, 256–258
- Stabilizer function, 211–213
- stops. *See* f-stops
- sunlight, 94, 159, 182–183
- sunrise/sunset shots, 182–183, 257–258

T

- tack sharp, 184
- temperature, color, 14
- tonemapping, 198
- top ten list, 1–23
- Touch Control option, 15–16
- touch screen display, 15–16
- tripods
 - Bulb setting, 261
 - considerations, 171, 261
 - IS lenses and, 171, 213–214
 - landscape scenes, 170–171, 183, 185
 - panoramic images, 195
 - shutter speed, 208, 218, 219
- Tv mode. *See* Shutter Priority mode

V

- video, 52–58
 - focus, 56
 - Movie mode, 52
 - Movie-Servo mode, 56
 - overview, 52
 - progressive/interlaced, 53
 - quality, 52–54
 - resolution, 52–53
 - sound, 54–55
 - watching, 57–58
- video snapshots, 56–57
- viewfinder diopter, 10, 15, 126

W

- water, 91, 94, 127, 187–188
- white balance
 - adjusting, 174–176
 - considerations, 78
 - correct setting for, 12–14
 - custom settings, 269–270
 - landscape scenes, 174–176
 - settings, 13–14
- wireless flash photography, 231–234
- wireless remote, 66

Z

- zooming in/out
 - action shots and, 116
 - AE Lock feature and, 143
 - checking image sharpness, 116
 - portraits, 157