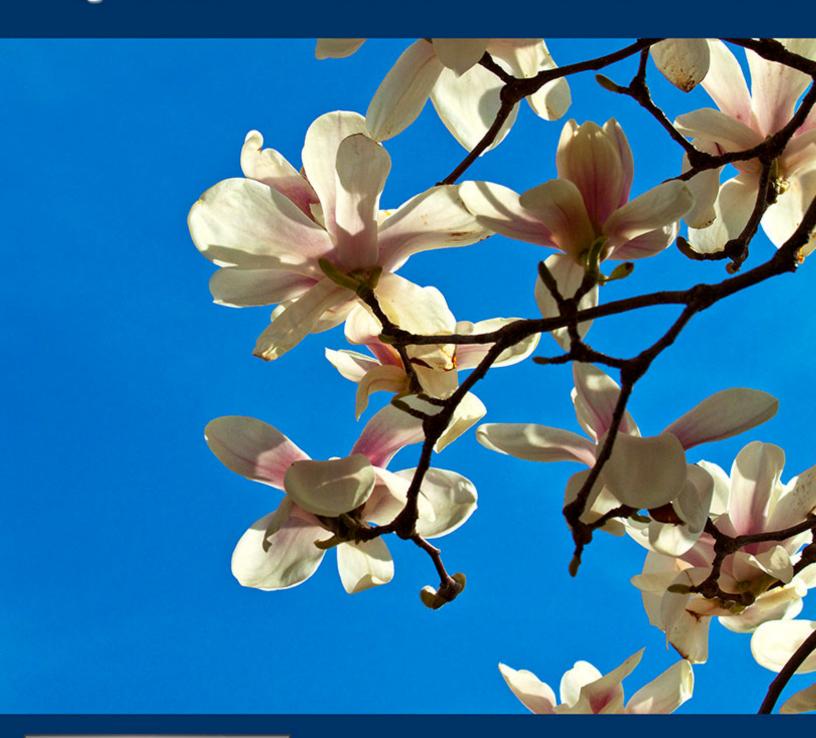
Canon T3i Experience

The Still Photographer's Guide to Operation and Image Creation with the Canon Rebel T3i/EOS 600D





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> by Douglas J. Klostermann

> > Full Stop. good writing for better photography

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INTRODUCTION

With the introduction of the Rebel T3i (also known as the EOS 600D) Canon has continued its well respected line of powerful, affordable, and easy to operate digital SLR cameras. Boasting features such as its 18 megapixel sensor, 63-zone dual-layer exposure metering system, high ISO performance expandable up to 12800, and Digic 4 image processor, the T3i shares many of the capabilities of Canon's semi-professional models. And with its 3.7 frames per second shooting speed, articulating high resolution rear LCD Monitor, and customization options it has the ability to meet most enthusiast photographers' needs. The Canon Rebel T3i / EOS 600D is a powerful, advanced tool for digital photography and is fully capable of capturing professional quality images in most any situation you wish to use it. But it is merely a tool.

It is up to you to make use of its features and capabilities to create the images you envision. Since the camera is a tool to take the images *you* want to take, you can't always allow the camera to make decisions for you. You have to take control of the camera to ensure that you capture exactly the images you intend – by autofocusing where you want, setting the aperture or shutter speed that you want, and obtaining the exposure you want. While the T3i is an intelligent camera, it cannot read your mind and your intentions and does not know that you wish to focus on and properly expose the small blossoms in the foreground, while making the background appear out of focus, and the branches to be caught still and not be blurred from the motion of the wind, on this bright, sunny day (see *Figure 1*). You have to tell the camera to do all of this, through the various controls and settings, such as the Autofocus Point (focus on the blossoms), the Exposure Metering Mode (properly expose the blossoms), the Aperture setting (the out-of-focus background), the Shutter Speed (freezing the motion of the branches), the ISO (bright day) and the White Balance (sunny day).



Figure 1 – Japanese Garden, Brooklyn, NY – Autofocus, exposure metering mode, aperture, shutter speed, ISO, and white balance all considered in creating this image. Shutter speed 1/125, aperture f/6.3, ISO 200

One has to think about all this stuff for every photo? Well, yes, that is what digital SLR photography is all about. At least if you wish to consistently create dramatic and compelling images. That is why the T3i has all these controls and features for you to make use of. You're not in the realm of point-and-shoots anymore!

While the camera's manual can tell you about all the settings and controls and how they function, this guide will build upon that and tell you when and why you might want to use them. Every button, menu item, and custom function of the T3i is there for a reason: to help you capture the images you want. Some of them are more useful to different types and levels of photographers, and you don't need to learn and use them all, but this guide should help to give you the knowledge to confidently use the ones that turn your Canon Rebel T3i into an image capturing tool that works best for you.

There are many different techniques to use a digital SLR (dSLR) camera and its controls to capture images, and I am going to concentrate on the ways that I believe are the most practical, useful, and effective. The settings and techniques I discuss apply to general photography, which includes most travel photography. I encourage you to experiment and find what works best and is the most comfortable or intuitive for you.

Since this guide is intended to help you get the most out of your T3i, it will not go into detail about the automatic features and basic modes. The Canon Rebel T3i is a sophisticated tool that deserves to be used to its full potential, and that means taking control of the camera and its functions. And since this guide is about image creation - the capturing of a photograph - it will not discuss features that deal with image processing, such as the Creative Filters (which are pretty self-explanatory). And finally, while it will discuss basic video settings and options to get you started, the guide will focus on still photography and image creation. However there is a great deal to be learned about everything else including the autofocus system, the exposure metering system, white balance, and even basic composition.

This guide is designed to be used in conjunction with the camera's manual, not to replace it, so every bit of information in the *Canon EOS Rebel T3i / EOS 600D Instruction Manual* will not be repeated here. For example, I may explain the use of AI Servo autofocus mode, but not necessarily explain how to change this setting on your camera. If you don't know how to change it please read the manual where it will tell you to press the AF Button on the Cross Keys, press the left or right Cross Keys Button until the desired mode appears on the LCD Monitor screen, then press the SET Button. Note that the T3iD manual can also be obtained as a PDF file from the Canon website: http://gdlp01.c-wss.com/gds/0/0300004720/01/eosrt3i-eos600d-im-en.pdf

As you can see, there is a lot to make sense of regarding terminology and controls, so I recommend that you familiarize yourself with the controls and displays of the camera body, as shown on pages 18-22 of the *Canon EOS Rebel T3i / EOS 600D Instruction Manual*, as well as read through the manual and attempt to understand as much as possible. Yes, much of it may be complicated and confusing at first, but this ebook guide will attempt to cut through the numerous buttons, controls, menus, and settings and concentrate on the essential ones to get you started taking great images.

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printer that has 6 or more ink cartridges, shooting for a commercially printed publication, and/or well versed in using color profiles in Photoshop and printing, you will never miss the difference and *AdobeRGB* will possibly not display or print properly.

Picture Style

User preference for those shooting JPEGs. Not needed if you shoot in RAW because the selected style applies to JPEG files only, although please note that the Picture Style you set applies to the images you see on the rear LCD Monitor *even* if you are shooting in only RAW. So the exposure shown on the LCD Monitor may not be the same as the exposure captured in the RAW files. Therefore it is somewhat important that you leave this set at *Standard* (or *Neutral*) if you shoot RAW. Also choose Standard or Neutral if you shoot JPEGs but plan to edit in Photoshop later. More on setting and customizing **Picture Styles** in a later section.

Shooting 3 menu

Dust Delete Data

This feature uses a reference image to process out dust spots from your image files. Hopefully you won't need this because your sensor stays clean with the camera's automatic sensor cleaning. It is much better to have a properly cleaned sensor than to use this. More on **Sensor Cleaning** below.

ISO Auto

Set to *Max 3200* unless you have a specific need for really high ISO. After learning about ISO in the **Exposure** section later, you will hopefully be setting the ISO yourself and not using Auto ISO, so this shouldn't make a difference.

Shooting 4 menu

The following settings in the *Shooting 4 menu* apply to Live View shooting only.

Live View Shooting

Enable unless you plan to never use Live View.

AF Mode

This is the autofocus mode that will be used when shooting with Live View. User preference. They each operate a little differently. With *Live Mode* the camera uses the sensor to focus on the area under the large AF Point, and it is sometimes slow and difficult. With *Quick Mode* you use the multiple focus points as displayed on the LCD Monitor, so it is accurate but the camera momentarily interrupts the Live View on the LCD Monitor to access the AF sensor. *Face Live Mode* works like Live Mode but locates and focuses on faces, kind of like turning your powerful camera into a point and shoot. More about **Live View Autofocus Modes** in the **Focusing** section.

Grid Display

This displays a grid on the rear LCD Monitor when using Live View. *Grid 1* is the "rule of thirds" grid to help keep your framing straight and your compositions interesting. *Grid 2* is a

C.Fn II: Image

C.Fn II-4

Long Exposure Noise Reduction: This setting is for the camera to apply noise reduction to long exposures, just as its title says. It does this by taking a blank image right after you take your image, for the same length of time as your image. It then compares where the noise is on your image and on the blank image, and then cancels it out. This setting will most likely result in more accurate noise reduction than any attempt in Photoshop. If you typically take long exposures, especially at high ISOs, you should determine if you want to apply this sometimes when the camera thinks it should, setting 1; or all the time, setting 2. Note that if you take a 10 second exposure, the noise reduction will take a second 10 second blank exposure and you will not be able to take another picture until it is complete. If you never take long exposures, leave it off. If you sometimes take them, I suggest you set it on 1 so that it functions when you need it to.

recommend: 1

C.Fn II-5

High ISO Speed Noise Reduction: This, obviously, reduces noise that appears due to using high ISO speeds. This type of noise appears at all shutter speeds when using high ISO settings, so it is not the same as the above setting. You should try to avoid high ISO speeds (1600 or above) but I think you will find the T3i produces acceptable noise at 1600 and often even at 3200. Decide if you wish to have the camera do this in-camera or if you wish to do it in post-processing. If you decide to use this, experiment to see which level you prefer. In the mean time, set it for 0: Standard. Note that setting it for Strong will decrease your maximum burst capability.

recommend: 0

C.Fn II-6

Highlight Tone Priority: This setting improves the details seen in highlights and helps prevent them from being overexposed or blown-out. It shifts the dynamic range to the brighter end, so you sacrifice some detail in the shadows. It is worth using in certain situations, such as photographing a wedding dress or something very bright or high key where you don't wish to lose the subtle details. However, you probably don't want it on all the time. I would put it in **My Menu** so you remember it is there to use when you need it. Note that when you enable this, the camera will disable Auto Lighting Optimizer and will limit your ISO range to 200-6400. This will be discussed a little bit more in the **Highlight Tone Priority and Auto Lighting Optimizer** section.

recommend: 0 - but put in My Menu

C.Fn III: Autofocus/ Drive

C.Fn III-7

AF-Assist Beam Firing: This setting is to enable or disable the autofocus assist beam, which is a flash of light emitted from the internal or external flash to help the camera focus on the subject. I suggest enabling it, setting 0, unless you are in a situation where it is too distracting in some way. If you never use the internal flash and just a Speedlite, set it on 2: Enable external flash



Figure 5 – Farmer's Market, Cambridge – A slow shutter speed can express action and movement (the motion blur of the walking shopper). Shutter speed 1/30, aperture f/13, ISO 100

Aperture Priority Mode (Av) and Shutter Priority Mode (Tv)

Aperture Priority AE Mode - Av: To control the depth of field (dof) you need to use Aperture Priority AE mode (Av). As will be discussed more in the **Composition** section, depth of field is one of the most powerful composition tools available to photographers. Many photographers work the majority of the time with their camera set in Aperture Priority AE Mode (Av) so that they have full control of the dof of their images.

Apertures are identified by numbers such as f/5.6 or f/16. In the viewfinder of your camera you will just see the number like 5.6 or 16. On the LCD Monitor you may see F5.6 or F16. These numbers often confuse people because a seemingly "small" aperture number like f/2.8 is a large aperture opening, and a seemingly "large" aperture number like f/22 is a small aperture opening. But because they are fractions, f/2.8 really is larger than f/22. 1/3 of a pie is larger than 1/22 of a pie, right? So I will say *large aperture size* to mean a large opening (maybe f/2.8 or f/4) and *small aperture size* to mean a small opening (maybe f/16 or f/22). A large aperture size will create shallow depth of field, which will make the background blurry, and generally creates a more dramatic or interesting photo. A small aperture size will create deep depth of field, where everything from the foreground to the distance is in focus, and is often used in landscape photography (see *Figure 6*).

You can use Av mode most of the time, in non-action situations, to control the range of what will be in focus (your dof) and the amount of background blur.



Figure 9 – Singer – Use Partial, or Spot Metering in high-contrast situations to meter for the area you want properly exposed (such as an area of skin tone here), then lock exposure and focus and recompose for final image. Shutter speed 1/60, aperture f/4.5, ISO 1600

Center-Weighted Average Metering

This metering mode is sort of a cross between Evaluative and Partial Metering. It acknowledges that the subject is in the center and requires special metering attention, but it also takes into account all the other zones. Again, this is *not* linked to the AF focus point, but always to the center, so if your subject is off center - which it typically should be for a more dynamic image - you need to lock in exposure on your subject and then focus and recompose. If you are finding that Evaluative Metering is not giving you the exposures you desire because you are always seeking out and using unusual, dramatic, or difficult lighting, and your exposures are consistently slightly too dark or too light, try using Center-Weighted Average Metering (or **Exposure Compensation**, discussed below).

To decide between Center-Weighted Metering and Partial Metering: use Partial Metering in a high-contrast situation where you want to properly meter on the subject but don't want an extremely bright or dark background to influence the exposure (see *Figure 8*). Use Center-

What Readers are Saying about Doug's Previous Guide, T2i Experience

Best Guide to using a T2i - I don't know how I could fully take advantage of all the features the T2i has to offer without this publication! It's well-organized, easy to understand, and succinct enough to keep your attention while still containing a wealth of tips and tricks to get the most out of your camera. I'm very happy that I found this guide.

-Nathan K.

Essential Travel Companion - Alas, a comprehensive and concise guide for hobbyists who desire to enhance their photography experiences. I highly recommend this guide to anyone who wants to ease out of auto mode and learn how to take high-quality photos. It brilliantly explains how to apply advanced techniques and tips, walks you through the daunting task of menu settings, and smoothly guides you through the image-taking process. The instructions and brief explanations are easy to follow and well organized. The guide is a portable class on digital photography! A must-have if you want to learn how to use your camera to its fullest advantage. -Elizabeth J.

A Fantastic Book For T2i Users - This book has exactly the no frills condensed practical advice on camera settings that I was looking for. The author has a gift for separating the wheat from the chaff. I didn't have a clue how to operate a digital camera, let alone know the definition of the technical terms. After reading this book, I now understand all the critical functions of the Canon T2i and how to take advantage of them. This is a book I plan to keep handy for years to come. -TP

What Readers are Saying about Doug's Other dSLR User's Guides:

This book, together with the manual that came with your camera, is all you need to start discovering all the potential of this camera.

-Max M.

It's the first guide I've read which has taken me through all the settings in an understandable way. I now feel that I have control over the camera -Peter S.

I would recommend this to anyone who wants to get a quick start to using their camera. Manuals are nice, but this eBook highlights the important information and gives a quick easy to understand explanation of most all of the functions and controls.

-Ray M.

This manual is a clearly written, concise and useful explanation of the rationale for the seemingly infinite and often confusing settings options. Used in conjunction with the (camera's) manual I feel a bit more confident in understanding how to at last proceed in getting better photographs. -WLS

Learn more and purchase *Canon T3i Experience* here: http://www.dojoklo.com/Full Stop/Canon T3i Experience.htm