

Canon T3i Experience

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



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an eBook by:
Douglas J. Klostermann

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

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1. 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. While the camera's manual can tell you about the settings and controls and how they function, this guide will build upon that and tell you when and why you want to use them. Every button, menu item, and Custom Function setting 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 of photographers and shooting situations and you don't need to learn and use them all immediately, 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.



Figure 1 - Detail of the Canon T3i

Take Control of Your Camera

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 2*). You have to tell the camera to do all of this, through the various controls and settings, such as the autofocus AF Mode (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 2 - 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!

Learning to use and get the most out of a versatile dSLR camera like the T3i takes time, practice, patience, mistakes, and experimentation. If you are not yet familiar with all the controls of a dSLR and the exposure concepts of digital photography, don't expect to just pick it all up at once, in one or two readings of a single book. (In fact, you wouldn't want to, as the never ending task of learning and mastering photography is a big part of what it's all about!) Try not to become frustrated when you don't quite understand something or aren't yet getting the results you desire. Instead learn the controls, functions, settings, and concepts bit by bit, try them out in real life shooting situations, and return to this guide, the manual, and other photography books to address questions and problems you encounter. Continue to learn and to photograph often and it should all begin to come together, sometimes slowly and sometimes in rapid spurts of discovery and understanding.

If you have upgraded from an older dSLR to the T3i, you should find that many of the basic controls and features are similar. And its additional features and capabilities will more easily help you to capture images and photographs that you may have been limited in consistently attaining before. If you are new to dSLR photography, this book will help guide you through its features, controls, and capabilities. Be sure to take it slowly and patiently and start with the basic features and concepts that I will explain. With practice and experience you will soon be shooting with confidence and can begin to take advantage of the camera's more advanced functions.

Using This Guide

There are many different ways to use a digital SLR camera and its controls to capture images, and many diverse situations in which photographers work. I'm going to concentrate on the techniques that I believe are the most practical, useful, and effective for the majority of intermediate and dedicated photographers. The settings and controls I discuss can apply to various types of photography including everyday general photography, action, and travel photography. Once you have a firm grasp of the controls, settings, and basic techniques you will have the tools and knowledge to address different issues and challenging situations, and I encourage you to experiment and continue to learn.

Since this guide is intended to help you get the most out of your T3i, it will not go into detail about all of the automatic features. The Canon T3i is a sophisticated tool that deserves to be used to its full potential, and that involves taking control of the camera and its functions, which means taking it off Auto, off Program, off automatically selected auto-focus points, off Auto ISO. While this may be more challenging at first, these are the techniques that are necessary to take full advantage of the capabilities of any dSLR including the T3i, and will lead you to having more control and consistency over your image making. Hopefully this will inevitably lead to better images!

This guide is intended to be used with the camera in your hands. That is the best way to directly follow and understand the controls, functions, and settings as they are being explained. It is also intended to be used in conjunction with and in addition to the camera's manual, not to completely replace it, so every bit of information in the *Canon*

Shooting 2 menu

Exposure compensation/AEB

You can use the [Av+/-] Button and Main Dial for quickly changing exposure compensation rather than using this menu item, but you need to access this item for Auto Exposure Bracketing (AEB). More about **Exposure Compensation** and **Auto Exposure Bracketing** later. Put this in **My Menu** (discussed in upcoming Section 2.2) if you bracket often, such as for High Dynamic Range (HDR) shooting.

Auto Lighting Optimizer

This setting is fully addressed in the **Highlight Tone Priority and Auto Lighting Optimizer** section. Once you start to take control of your camera and your exposures, you may want to *Disable* this setting so that the camera isn't doing something with your exposures without you having control over it. After reading this guide you will know how to meter, read your histogram, and use **Exposure Compensation** to make proper or desired exposures.

Metering Mode

Metering modes will be discussed in detail in the **Metering Modes** section of this guide. For now, leave it on the default, *Evaluative Metering*. Put this item in **My Menu** in order to access it easily, or else you can access and change Metering Modes using the Q Button and the Quick Control Screen.

Custom White Balance

This is for setting a custom white balance rather than using one of the standard White Balance (WB) settings like Auto, Cloudy, or Fluorescent. For advanced users. Particularly handy for studio work where the lighting will remain constant or in a situation with difficult mixed lighting. This will be covered in the **White Balance** section.

WB Shift/BKT

This is White Balance Shift and White Balance Bracketing and is used for adjusting to a very precise WB, or bracketing exposures using different WB settings. Also for advanced users. This will be covered in the **White Balance** section.

Color Space

Most users can safely leave this on *sRGB*. You can read the various blogs, forums and books that endlessly debate sRGB vs. AdobeRGB, then continue to leave it on sRGB. sRGB is a slightly smaller color space than AdobeRGB, but will display properly on computer screens and printers. AdobeRGB is intended for uses like commercial printing. Unless you are calibrating your monitor, printing with a printer that has 5 or more ink cartridges, shooting for a commercially printed publication, and well versed in using color spaces and profiles in Photoshop and printing, you will never miss the difference and AdobeRGB images will possibly not display or print properly. If you are doing all these things, then use *AdobeRGB*.

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 only* or *3: IR AF assist beam only* which will only use the infrared AF-assist beam and not the series of small flashes of light. Make sure the Speedlite's custom functions have it turned on too.

recommend: 0

C.Fn III-8 - Mirror Lockup

This is the mirror lockup that you might have read about from landscape and macro photographers. By enabling it you reduce that extra little bit of vibration that may cause slight blurring with a long lens or a macro lens. It is only worth using in conjunction with a remote shutter release or the self timer, and a tripod. You definitely don't want to use it all the time, so disable it, and put it in your **My Menu** if you need it sometimes. This is not the feature to use to raise your mirror for manual sensor cleaning. That feature is under Sensor Cleaning in the *Set-up 2 menu*. More about **Sensor Cleaning** later.

recommend: 0

C.Fn IV: Operation/ Others

C.Fn IV-9 - Shutter/AE Lock Button

This is used to change the function assigned to the Shutter Button when it is pressed half-way and the AE Lock Button (the one with *). The default setting, *0*, is for locking both focus and exposure when you press the Shutter Button halfway (when using Evaluative Metering Mode). You then recompose if necessary and fully press the Shutter Button to take your photo. The problem with this is that if you recompose, the correct exposure may change due to your new framing, and the photo may be slightly or possibly greatly under- or over-exposed because you locked in a different exposure. To prevent this, you can use the AE Lock Button (exposure lock button, [*]) to lock in the exposure of your desired framing. This is the default setting, *0*. Exposure lock will be covered later in the **Exposure** section. The other following settings are for advanced users, and can be returned to later after reading about **Back Button Focusing**.

Setting *1* separates the exposure lock and the autofocus to 2 different buttons. Pressing the shutter button half-way will lock in exposure but not focus. The [*] button is used to autofocus, and letting go of it will stop AF and lock in focus at that distance. It is

some situations the exposure that the camera determines may not be the exposure you desire. This may happen when photographing scenes with very bright and/ or dark areas, or some other type of dramatic lighting. Since dramatic and interesting lighting can make for compelling images, you will need to know how to deal with this. In these situations you can make use of either **Exposure Compensation**, **Exposure Lock** (AE Lock), or one of the other Metering Modes below. Of more likely, a combination of these three solutions.

3.6b Partial Metering

This mode meters a small central area, about 9% of the viewfinder area of the T3i. The area is approximately a circle that is larger than the spot metering circle you see in the viewfinder, and reaches to about the inside edges of the nearest focus points (see *Figure 14*).



Figure 14 - Harbor, Gloucester, Mass. - Partial and Spot Metering Areas of the T3i - Partial Metering Mode evaluates only the area under the superimposed grey circle to determine the exposure settings. Spot Metering Mode evaluates only the area inside the black circle seen in the viewfinder to determine the exposure setting. Shutter speed 1/400, aperture f/4.0, ISO 100

This mode is useful where there is a dramatic difference in lighting between the foreground or subject and the background. For example, when your subject is backlit - maybe standing in front of a bright window or the sun - and consequently their face is in shadow. I know I said evaluative mode can often handle this type of situation, but if you

want the face or the subject to be properly exposed and not risk blowing the shot, it is worth it to use Partial Metering mode. Another time to use this is when there is a wide range of light in your scene, from bright sunlight to deep shadows. You will need to determine and lock the exposure settings of a critical area of the scene - a face or a middle tone in the area you want properly exposed (see *Figure 15*). Remember, this mode is *not* linked to your focus point. The partial area that is metered is always in the center, so meter on a face or middle tone in the part of the scene that is most critical and that you want properly exposed, using the central area of the viewfinder. Lock in that exposure using **Exposure Lock** (explained below), then focus, recompose and take the shot.



Figure 15 - Lion Sculpture in Museum - Partial Metering used to properly expose for the subject, then focus and exposure locked, and framing recomposed to place subject off center. (Very carefully hand-held at very slow shutter speed.) Shutter speed 1/13, aperture f/4.0, ISO 800

3.6c Spot Metering

This mode meters a smaller center area, approximately 4% of the viewfinder area. This area is indicated by the small circle in the center of the viewfinder (see *Figure 14*). So when do you want to use Spot metering? This, again, is useful for scenes with great variation in light and shadow, or in very critical situations. It is used like Partial Metering, but when the critical area that you are metering is even smaller and more precise. One of the most common ways to use it is when metering for proper exposure

on a dramatically lit face or subject, where the proper exposure of that part of the image is critical (see *Figure 16*).



Figure 16 - Singer - Use Partial Metering 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, focus, and recompose for the final image. Shutter speed 1/60, aperture f/4.5, ISO 1600

Or for advanced users, Spot Metering is used to determine the exposure values of several important parts of the scene, and then the desired exposure is determined and manually set using Manual Exposure Mode. If you have ever read about a photographer metering different elements of a scene in order to determine their relationships and place them in exposure “zones,” that is related to this technique. In this way Spot Metering Mode is used to turn your camera into a light meter, as a tool to

determine proper exposure of a subject or scene before switching the camera to Manual Mode for a controlled studio shot, a critical shot, or a series of shots where the lighting is not going to change.

3.6d Center-Weighted Average Metering

This metering mode can be thought of as a combination of 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 exposure metering zones. This mode is useful where there is a difference in lighting between the foreground or subject and the background, but unlike Spot or Partial Metering you still wish for the camera to take both subject and background exposure into consideration (see *Figure 17*).

As with Spot or Partial Metering, this might be used when your subject is backlit, or when a nicely lit subject is in front of a darker or lighter background. Another time to use this is when there is a wide range of light in your scene, such as bright sunlight to deep shadows. Determine the proper exposure by metering on the subject using the center of the viewfinder, and lock in that exposure (see **Exposure Lock** below).

Again, this is *not* linked to the active autofocus AF 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 the exposure on your subject and then 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 Partial Metering or Center-Weighted Average Metering in conjunction with Exposure Lock. Or use **Exposure Compensation**, discussed below.

Center-Weighted, Partial, or Spot?

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 15*). Use Center-Weighted Metering in a situation where you want to ensure the subject is properly metered, but the background or other areas of the image are also somewhat important for the metering system to consider, and aren't so light or dark compared to the subject that they will throw off the exposure (see *Figure 17*). Use Spot in a similar manner to Partial, except that you need to meter on even a smaller area for more precision (see *Figure 16*).

What Readers are Saying About Canon T3i Experience:

A Must-Have Accessory - What a great addition to my bag. This is a well written, full body of work that explains, in plain English, how to get the most out my new camera. Doug provides the knowledge and experience to bring you to the next level. I look forward to learning more every time I open the book.

-Steven

Definitely reduces the slope of the learning curve to an easy gradient - I found that it was easy to read and understand, full of important hints and suggestions and allowed me to get to grips with the tools available in the camera in a very short time indeed. Excellent value!

-O.B.

Great for New T3i Owners - This is an excellent resource for new T3i owners. In my case, I was upgrading from a Rebel XT so I appreciated the "just the facts" point of view. Overall, a great resource - highly recommended!

S. Wheeler

Quite a Helpful Book - It is a great foundational teaching on the camera and was a lot of help in getting me comfortable with the controls. I also found the personal experiences and thoughts shared by the author to be quite helpful. I have recommended and will continue to do so.

-J.S.B.

It really made using the Canon Rebel T3i very simple - I also liked the fact that it is in pdf format, which means I can keep it on my iPhone or iPad while I'm out in the field. The price is right, the product is sound and most of all, the information is useful.

-Michael M.

Excellent T3i Learning Jump Start - The book and author do not disappoint. There are so many helpful and practical tips shared and in terms I can understand as a novice.

-Cathryn C.

Amazing! - Great and easy to understand and very complete. Very highly recommended. The guy really knows what he's talking about.

-P.M.

Awesome Book - Bought this book right after I got the camera - was the best decision I made. It shows the key points of setting up and taking images with the Canon T3i. I am a novice when it comes to DSLR's and I still felt this book helped me a ton. Would highly recommend it to anyone.

-Sean S.

Purchase Canon T3i Experience at:

http://www.dojoklo.com/Full_Stop/Canon_T3i_Experience.htm