Navigating and Setting Up the EOS Rebel T1i/500D

CHAPTER 1

In This Chapter

One of the most important first steps in photography is learning the camera well enough that you can operate the camera without hesitation or searching for camera controls. Then you can make camera adjustments quickly and confidently without missing a shot. Knowing your camera and lens controls not only gives you confidence but also enables you to react quickly to get those important shots that you might otherwise miss or wish had been better.

The EOS Rebel T1i/500D is both easy and fun to master, and as you learn more about the Rebel you will also find that it offers complete creative control. Regardless of how much or how little you know, Canon's 15.1-megapixel CMOS (complementary metal-oxide semiconductor) sensor, DIGIC 4 image processor, and 14-bit tonal conversion deliver rich, sharp images, especially at the highest image-quality settings.

Roadmap to the Rebel T1i/500D

Chances are good that you've already been using the Rebel T1i/500D, so by now you know that the most frequently used camera controls are conveniently located for quick adjustment

as you're shooting. Less frequently used, but no less important, functions are accessible only via the camera menus. Study the following sections to familiarize yourself with the T1i/500D controls and menus. You can refer back to the figures at any time to locate the controls you need.

Front camera controls

On the front of the camera, the controls that you'll use most often are the Lens Release button and the Depth of Field Preview button. And, of course, you'll use the lens mount each time you change lenses. If you use Canon EF-S lenses, line up the white mark on both the lens and the lens mount. Canon EF lenses have a red mark instead, which matches up to the red mark on the lens mount.

From left to right, the buttons and indicator lamps are:

- **Shutter button.** This button sets focus, and it fires the shutter to make an exposure. To set the focus for the image, press the Shutter button halfway. To make the picture, press the Shutter button completely.
- **Red-eye reduction/Self-timer lamp.** When you have Red-eye reduction turned on, this lamp burns yellow to help reduce the subject's pupils to counteract red-eye in the final image. In self-timer modes, the yellow lamp lights or flashes depending on the self-timer mode, and a beeper sounds to count down the seconds to shutter release.
- **EF and EF-S lens mount index markers.** Use these markers on the lens mount to line up the lens when you mount it on the camera. Use the red EF lens mount index for all lenses that have a red marker on the lens barrel, and use the white EF-S lens mount index for lenses that have a white marker on the lens barrel.
- **Built-in flash and Flash pop-up button.** The flash provides illumination either as the main light source or as a fill flash. In Basic Zone shooting modes such as Full Auto, Portrait, and so on, the flash fires automatically. In Creative Zone shooting modes including P, Tv, Av, M, and A-DEP, you have to press the Flash pop-up button to use the built-in flash.
- **Microphone.** The built-in monoaural microphone can be turned on to record sound when you're shooting movies. Sound levels are automatically adjusted.
- **Mirror.** The reflex mirror reflects the image into the viewfinder as you're composing the image, and then it flips up and out of the way of the optical path when you press the Shutter button completely to make the picture.
- **Depth of Field Preview button.** Press this button to stop down, or adjust, the lens diaphragm to the current aperture (f-stop) so that you can preview the depth of field in the viewfinder. The larger the area of darkness in the viewfinder, the more extensive the depth of field will be. At the lens's maximum aperture, the Depth of Field Preview button cannot be depressed because the diaphragm is fully open. The maximum aperture is the widest lens opening; for example, f/2.8 or f/4.5. The maximum aperture is determined by the

1.1 Rebel T1i/500D front camera controls

lens you're using. The aperture cannot be changed as long as the Depth of Field Preview button is depressed. You can also use the Depth of Field Preview button when you shoot in Live View mode.

- **Lens Release button.** Press this button to disengage the lens from the lens mount, and then turn the lens to the right to remove it.

Top camera controls

Controls on the top of the camera enable you to use your thumb and index finger on your right hand to control common adjustments quickly. Here is a look at the top camera controls.

- **Mode dial.** Turning this dial switches among shooting modes. Just line up the shooting mode you want to use with the white mark beside the dial.
- **Power switch.** This button switches the camera on and off.
- **ISO speed button.** Pressing this button displays the ISO speed screen on the LCD so that you can set the sensor's ISO setting, which determines the sensor's sensitivity to light. In Creative Zone modes such as P (Program AE), Tv (Shutter-priority), Av (Aperture-priority), and M (Manual), you can select Auto in which the

1.2 Rebel T1i/500D top camera controls

camera automatically determines the best ISO from 100 to 1600, or you can set it from 100 to 3200. In all automatic shooting modes such as Portrait and Landscape, the camera automatically sets the ISO between 100 and 1600. You can also turn on two additional high ISO settings, equivalent to 6400 and 12800 by setting Custom Function I-2: ISO expansion.

Custom Functions are detailed in Chapter 6.

- **Main dial.** Turning this dial selects a variety of settings and options. Turn the Main dial to select options on the LCD screen; to manually select an AF (autofocus) point after pressing the AF-Point Selection/Enlarge button; and to set the aperture (f-stop) in Av mode, the shutter speed in Tv and Manual mode, and to shift the exposure program in P mode. Additionally, you can use the Main dial to scroll among the camera menu tabs.
- **Shutter button.** Pressing the Shutter button halfway sets the point of sharpest focus at the selected AF point in manual AF-point selection mode, and it simultaneously sets the camera's recommended exposure based on the ISO. Pressing the Shutter button completely makes the picture. In any mode except Direct Printing, you can also half-press the Shutter button to dismiss camera menus and image playback.

Rear camera controls

You use the rear camera controls most often. The Rebel T1i/500D offers buttons that are handy for making quick adjustments while you're shooting. In particular, you'll use the WB (White Balance), Menu, Playback, and AF-Point Selection/Enlarge buttons often.

Some of the rear camera controls can be used depending on the shooting mode you set. In the automatic camera modes such as Portrait, Landscape, and Sports, the camera sets the exposure for you, so pressing the AV, WB, and Drive mode selection buttons has no effect. But in the Creative Zone modes such as P, Tv, Av, or M, these buttons function as described next.

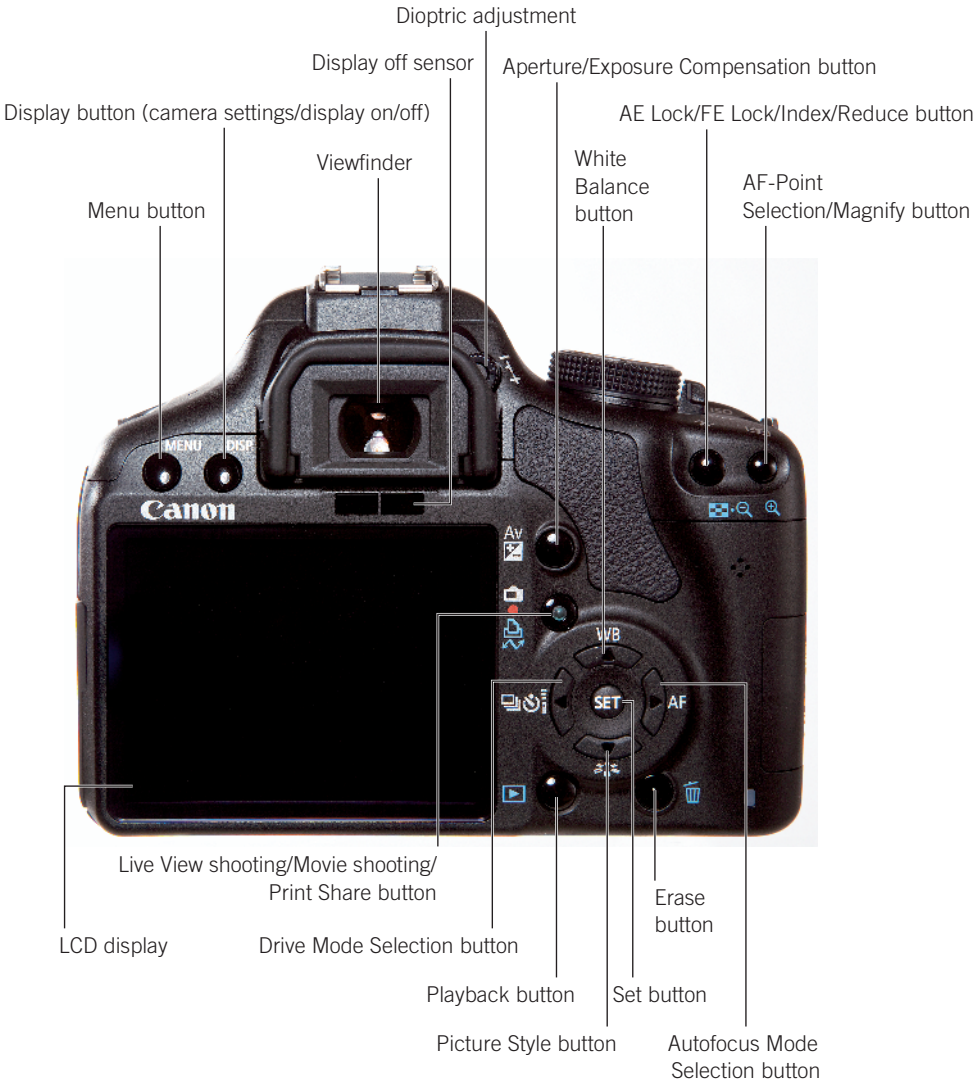
Just remember, if you press the White Balance or other buttons and nothing happens, check the shooting mode on the Mode dial first to see if you're using an automatic mode. If you want to change the white balance, then you have to turn the Mode dial to P, Tv, Av, M, or A-DEP shooting mode. Also some settings are not available in Live View and Movie modes.

Here is a look at the controls found on the back of the camera.

- **Menu button.** Press the Menu button to display camera menus. To move among menu tabs, turn the Main dial or press the left or right cross keys on the back of the camera.
- **Display (DISP.) button.** Press this button to turn off the LCD display. If you're using the camera menus, you can press this button to display the current camera settings, space on the SD card, and other camera settings. Then press the button again to return to the menu. Or if you are in single-image playback, pressing this button cycles through the various playback display modes to show shooting information and one or more histograms displayed with an image preview. You can also use this button when you're

printing directly from the SD card to change the image between horizontal and vertical orientations.

✦ The LCD display is on by default when you turn the camera on. But if you want to maximize battery life, you can set Custom Function (C.Fn) IV-12 to Option 1: Retain power OFF status to have the display off when you turn on the camera. See Chapter 6 for details on using Custom Functions.



1.3 Rebel T1i/500D rear camera controls

- **Display off sensor.** This sensor detects when you move the camera to your eye and automatically turns off the LCD display so the light isn't bothersome. You can optionally choose to turn off the automatic sensor.
- **Dioptric adjustment.** Turn this knob to adjust the sharpness for your vision by -3 to +1 diopters. If you wear eyeglasses or contact lenses for shooting, be sure to wear them as you adjust the dioptric adjustment knob. To make the adjustment, point the lens to a light colored surface such as a white wall, and then turn the control until the AF points in the viewfinder are perfectly sharp for your vision.
- **Aperture/Exposure Compensation button.** Press and hold this button and turn the Main dial to set exposure compensation in Creative Zone modes such as P, Tv, and Av. In Manual mode, press and hold this button and turn the Main dial to set the aperture.
- **Live View shooting/Movie shooting/Print Share button.** Pressing this button in P, Tv, Av, M, and A-DEP shooting modes enables you to begin shooting in Live View mode, to shoot movies when the Mode dial is set to Movie mode, or to transfer all or selected images from the SD card to your computer when the camera is connected to a compatible printer.
- **Playback button.** Press this button to display the last captured image on the LCD. The default single-image Playback display includes a ribbon of shooting information at the top. Pressing the Index/Reduce button on the top-right back of the camera during playback displays a grid of 2 × 2 or 3 × 3 images that you can scroll through using the Main dial. Press the AF-Point Selection/Enlarge button once or twice to return to single-image display.
- **Erase button.** During image playback, press this button to delete the currently displayed image.

Within the circle at the back left of the Rebel T1i/500D are four buttons, collectively referred to as cross keys. The functionality of the keys or buttons changes depending on whether you're playing back images, navigating camera menus, or changing exposure settings.

During image playback, the left and right cross keys move backward and forward through the images stored on the SD/SDHC card. When you navigate through menu options, the up and down cross keys move among options.

Here is a look at the cross-key and Set button functions.

- **Drive Mode Selection button.** Press this button, also referred to as the left cross key, to set the Drive mode. You can choose to shoot one picture at a time, to shoot continuously at 3.4 frames per second (fps), or to shoot in one of the Self-timer/Remote control modes. The maximum burst during continuous shooting is approximately 170 Large/Fine JPEG frames or nine RAW frames. During image playback, press this button to move to a previous image.

- **WB (White Balance) button.** Press this button to display the White Balance screen where you can choose among seven preset White Balance options, or choose Custom White Balance.
- **AF (Autofocus) Mode Selection button.** Press this button to choose one of three autofocus modes: One-shot AF (also known as AI Focus) for still subjects, AI Focus AF for subjects that may start to move or move unpredictably such as kids and wildlife, or AI Servo AF for tracking focus of moving subjects.
- **Picture Style button.** Press this button to display the Picture Style screen where you can choose the "look" of images in terms of contrast, color rendition, saturation, and sharpness. You can choose Standard, Portrait, Landscape, Neutral, Faithful, or Monochrome Picture styles, and you can customize up to three user-defined styles displayed as 1, 2, and 3 on the Picture Style screen.
- **Set button.** Press this button to confirm changes you make on the camera menus, and to display submenus. You can also customize this button using C.Fn IV-11 for use while you're shooting. See Chapter 6 for details on setting Custom Functions.

At the top-right corner of the Rebel T1i/500D are two buttons that you'll use often to manually select an AF point and to enlarge images during playback to check focus.

- **AE Lock/FE Lock/Index/Reduce button.** Press this button and turn the Main dial to set Auto Exposure (AE) Lock or Flash Exposure (FE) Lock, to display multiple images as an index during image playback, or to reduce the size of an enlarged LCD image during image playback.
- **AF-Point Selection/Magnify button.** Press this button to activate the AF points displayed in the viewfinder. As you hold the button and turn the Main dial, you can select one AF point or all AF points to have the camera automatically select the AF point or points during shooting. During image playback you can press this button to enlarge the image to check focus.

Side camera controls

On the side of the T1i/500D is a set of terminals under a cover and embossed with icons that identify the terminals, which include:

- **Remote (E3 type) terminal.** This terminal enables connection of an accessory Remote Switch RS-60E3 or a wireless Timer Remote Controller RC-1/RC-5 to the camera.
- **AV Out/Digital terminal.** The AV Out terminal enables you to connect the camera to a non-high-definition (HD) television set using the AV cable supplied in the camera box to view still images and movies on the TV.

- **HDMI mini OUT terminal.** This is used to connect the camera to an HD television using the accessory HTC-100 cable to play back still images and movies.

Lens controls

All Canon lenses provide both automatic and manual focusing functionality via the AF/MF (Autofocus/Manual Focus) switch on the side of the lens. If you choose MF, the T1i/500D provides focus assist, shown in the viewfinder, to confirm sharp focus. When sharp focus is achieved, the Focus confirmation light in the viewfinder burns steadily and the camera emits a focus confirmation beep.

Depending on the lens, additional controls may include the following:

- **Focusing distance range selection switch.** This switch determines and limits the range that the lens uses when seeking focus to speed up autofocusing. The focusing distance range options vary by lens.

1.4 Lens controls. All Canon lenses offer the Focus mode switch that enables you to switch between autofocus or manual focus. Image Stabilization (IS) lenses offer controls to turn stabilization on or off. Lens controls differ by lens.

- **Image Stabilizer switch.** This switch turns optical image stabilization on or off. Optical Image Stabilization (IS) corrects vibrations at any angle when handholding the camera and lens. IS lenses typically allow sharp handheld images of two or more f-stops over the lens's maximum aperture.
- **Stabilizer mode switch.** Offered on some telephoto lenses, this switch has two modes: one mode for standard shooting and one mode for vibration correction when panning at right angles to the camera's panning movement.
- **Zoom ring.** The zoom ring zooms the lens in or out to the focal lengths marked on the ring.
- **Focusing ring.** The lens focusing ring can be used at any time regardless of focusing mode by switching to MF on the side of the lens, and then turning this ring to focus.
- **Distance scale and infinity compensation mark.** This shows the lens's minimum focusing distance to infinity. The infinity compensation mark compensates for shifting the infinity focus point resulting from changes in temperature. You can set the distance scale slightly past the infinity mark to compensate.

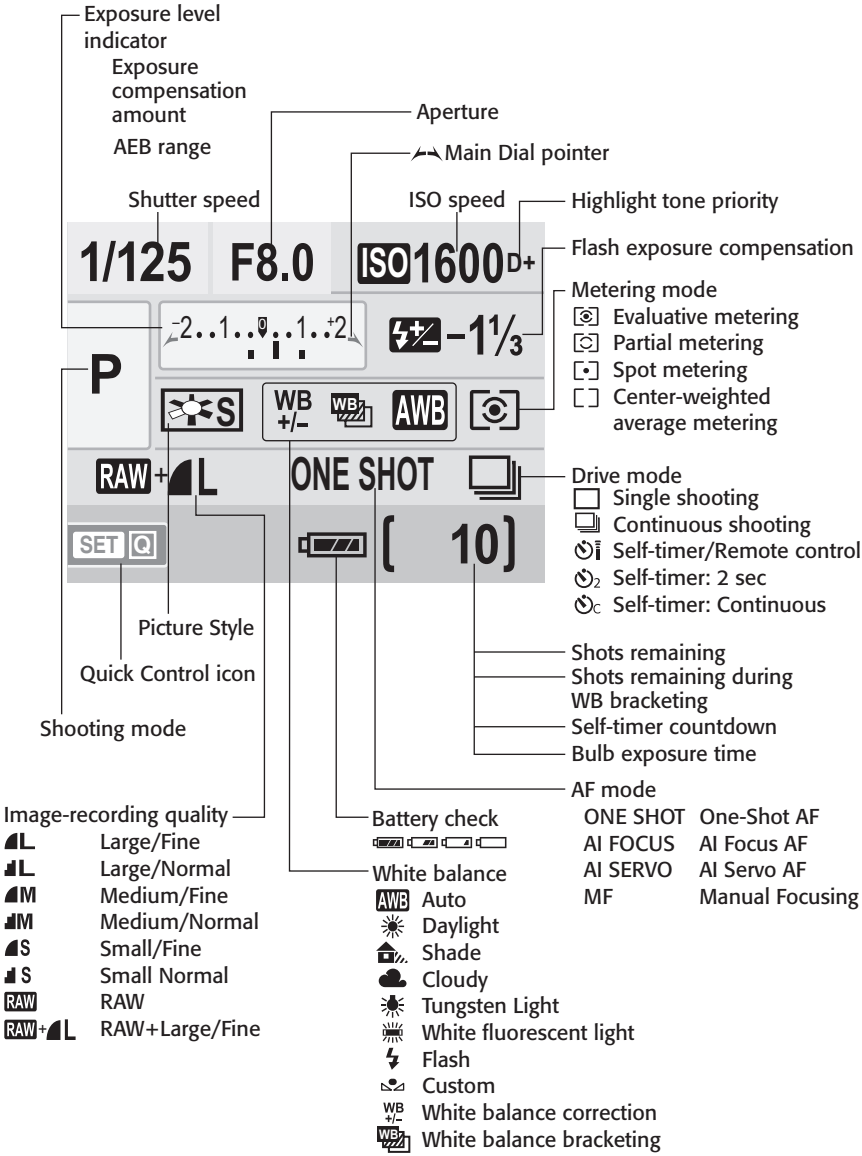
The LCD

With the T1i/500D, the 3-inch LCD takes on new functions so that it not only displays captured images and current camera settings, but it also provides a live view and focusing screen with Live View and Movie mode shooting. The LCD displays 100 percent coverage of the scene.

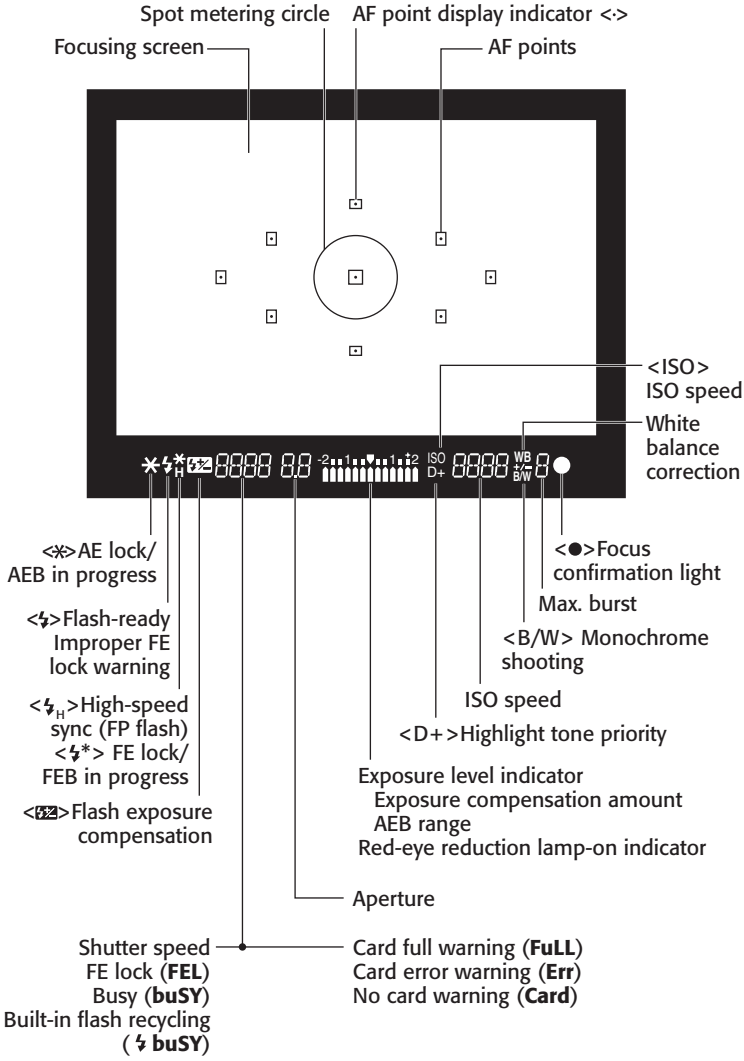
Viewfinder display

On the Rebel T1i/500D, the optical, eye-level pentaprism viewfinder displays approximately 95 percent of the scene that the sensor captures. In addition, the viewfinder displays the AF points, a 4 percent Spot metering circle that is etched into the center of the viewfinder, as well as information at the bottom that displays the current shooting settings, a focus confirmation light, and other settings.

Nine AF points are etched in the focusing screen. When you manually select AF points by pressing the AF-Point Selection/Magnify button, the AF points are highlighted in red in the viewfinder as you turn the Main dial. If the camera automatically selects an AF point, the selected point or points display(s) in red in the viewfinder when you press the Shutter button halfway down.



1.5 Rebel T1i/500D LCD display



1.6 Rebel T1i/500D viewfinder display. You can verify exposure settings, focus, and more in the viewfinder before making a picture. The display changes depending on the shooting mode you're using.

Setting Up the Rebel T1i/500D

If you've been using your Rebel T1i/500D already, then you've likely set the date and time, as well as other basic settings. But it's a good idea to check through this section of the book for settings that you may have missed or want to revise. The settings that I recommend are based on the philosophy of getting images that you can print at full size to take advantage of all the high resolution that the camera offers.

Many people are afraid that changing camera settings will "mess up" the pictures that they're getting, and that they will forget how to reset the camera if they don't like the changes they've made. Canon provides a reset option, which means that you can always revert to the original settings on the Rebel T1i/500D so that you can start fresh.

To reset the camera to the default settings, just press the Menu button, press the right cross key to select the Setup 3 (yellow) menu, and then press the down cross key to select Clear settings. Then press the Set button. To reset the camera to factory default settings, press the up or down cross key to select Clear all camera settings, and then press the Set button. The Clear all camera settings confirmation screen appears. Press the right cross key to select OK.

About Media Cards

The Rebel T1i/500D accepts SD and SDHC, or Secure Digital High Capacity, media cards. Not all media cards are created equal, and the type and speed of media that you use affects the Rebel T1i/500D's response and performance times including how quickly images are written to the media card, and your ability to continue shooting during the image-writing process. Memory card speed also affects the speed at which images display on the LCD, and how quickly you can zoom images on the LCD. And with the high-definition video capability of the Rebel, Canon recommends using a Class 6 or higher media card.

The type of file format that you choose also affects the speed of certain tasks. For example, when writing images to the media card, JPEG image files write to the card faster than RAW or RAW + Large JPEG files. JPEG and RAW file formats are discussed in detail later in this chapter.

For performance results of various media cards, visit Rob Galbraith's Web site at www.robgalbraith.com.

As you take pictures, the LCD on the Rebel T1i/500D shows the approximate number of images that remain on the media card. The number is approximate because each image varies slightly, depending on the ISO setting, the file format and resolution, the Picture Style chosen on the camera, and the image itself (different images compress differently). And as you shoot video, the Rebel displays the recording time on the LCD. Video recording shuts off automatically when the size of the movie file reaches 4GB. For still and video shooting, a 4GB card is good and an 8GB card is better.

When you buy a new card, always format it in the camera and never on your computer. However, be sure that you off-load all

images to the computer before you format the card because formatting erases images even if you've set protection on them. Also be sure to format cards that you've used in other cameras when you begin using them in the Rebel T1i/500D. Formatting a media card in the camera also cleans any image-related data freeing up space on the card, and it manages the file structure on the card so the Rebel T1i/500D and media card work properly together.

If you get a card-related error on the camera, first try formatting the card if you don't already have images on the card.

To format a card in the camera, be sure that you download all images to your computer first, and then follow these steps:

1. **Press the Menu button, and then turn the Main dial to select the Setup 1 (yellow) menu.**
2. **Press the down cross key to select Format, and then press the Set button.** The Format screen appears asking you to confirm that you want to format the card and lose all data on the card. You can optionally choose the Low-level format option that erases the recordable sectors on the card. While Low-level format takes a bit longer, it can improve the performance of the card, and it ensures that all information on the card is permanently erased.
3. **To do a low-level format, press the Erase button to place a checkmark next to Low level format, and then press the right cross key to select OK.**
4. **Press the Set button.** The camera formats the card, and then displays the Setup 1 menu.

It is generally a good idea to format media cards every few weeks to keep them clean.

To avoid taking pictures when no memory card is in the camera, press the Menu button, choose the Shooting 1 (red) menu, and then press the down cross key to select Release shutter without card. Press the Set button, press the down cross key to select Disable, and then press the Set button again. Now you cannot release the shutter unless a card is in the camera.

Avoid Losing Images

When the camera's red access light — located on the back of the camera — is blinking, it means that the camera is recording or erasing image data. When the access light is blinking, do not open the SD card slot cover, do not attempt to remove the SD card, and do not remove the camera battery. Any of these actions can result in a loss of images and damage to the media card and camera. There is an audible warning to let you know that images are being written to the card, but make it a habit to watch for the access light anyway to know not to open the media card slot cover or turn off the camera.

Choosing the File Format and Quality

The file format, either JPEG or RAW, and the JPEG quality level that you choose determine not only the number of images that you can store on the media card, but also the sizes at which you can later print images from the Rebel T1i/500D. Table 1.1 details the available options.

The Rebel T1i/500D delivers very high-quality images that make beautiful prints at approximately 10 × 15 inches. Even if you don't foresee printing images any larger than 4 × 5 inches, you may get a once-in-a-lifetime shot and want to print it as large as possible. For this reason, and to take advantage of the Rebel T1i/500D's fine image detail and high resolution, you'll want to choose a high-quality setting and leave it there for all of your shooting. The high image-quality settings take more space on the SD/SDHC card, but the price of the card is small compared to missing out on a great image that you can't print full size.

The JPEG quality options on the Rebel T1i/500D are displayed with icons on the Quality screen that indicate the compression level of the files and the recording size. For example, a solid quarter circle and "L" indicate the largest JPEG file size and the solid quarter circle indicates the lowest level of file compression with highest image quality. Likewise, a jagged quarter circle indicates higher compression levels and relatively lower quality, and "M" indicates medium quality. File formats and compression are discussed next.

Table 1.1
Rebel T1i/500D File Quality and Size

Image Quality	*Approximate File Sizes in Megabytes (MB)*	*Image Size in Pixels*	*Approximate Image Capacity for a 4GB SD/SDHC card*
L (Large/Fine) JPEG	5.0MB (15.1 megapixels)	4752 × 3168	595
L (Large/Normal) JPEG	2.5MB (15 megapixels)	4752 × 3168	1199
M (Medium/Fine) JPEG	3.0MB (8 megapixels)	3456 × 2304	1028
M (Medium/ Normal) JPEG	1.6MB (8 megapixels)	3456 × 2304	2067
S (Small/Fine) JPEG	1.7MB (3.7 megapixels)	2352 × 1568	1849
S (Small/Normal) JPEG	0.9MB (3.7 megapixels)	2352 × 1568	3729
RAW	20.2MB (15.1 megapixels)	4752 × 3168	126

JPEG format

JPEG, which stands for Joint Photographic Experts Group, is a popular file format for digital images that provides not only smaller file sizes than the RAW files, but it also offers the advantage of being able to display your images straight from the camera on any computer, on the Web, and in e-mail messages. To achieve the small file size, JPEG compresses images, and, in the process, it discards some data from the image — typically data that you would not easily see anyway. This characteristic of discarding image data during compression gains JPEG its *lossy* moniker. The amount of data discarded depends on the level of JPEG compression. High compression levels discard more image data than low levels. The higher the compression level, the smaller the file size and the more images that you can store on the media card, and vice versa.

As the compression level increases to make the file size smaller, more of the original image data is discarded, and the image quality degrades. Compression also introduces defects, referred to as *artifacts*, that can create a blocky, jagged look, blurring, and diminished color fidelity in the image. At low compression levels, artifacts are minimal, but as the level increases, they become more noticeable and objectionable. You'll see the effects of high compression ratios when you enlarge the image to 100 percent in an image-editing program on the computer. To get the highest-quality images, use the lowest compression and the highest quality settings, such as Large/Fine. If space on the card is tight, then use the next lower setting, Large/Normal. If you use lower quality settings, beware that the image quality diminishes accordingly.

If you edit JPEG images in an editing program, image data continues to be discarded each time you save the file. I recommend downloading JPEG files to the computer, and then saving them as TIFF (Tagged Image File Format) or PSD (Photoshop's file format) files. TIFF is a lossless file format that does not discard image data. PSD, available in Adobe's Photoshop image-editing program, is also a lossless file format.

Also, when you shoot JPEG images, the camera's internal software processes, or edits, the images before storing them on the media card. This image preprocessing is an advantage if you routinely print images directly from the SD card, and if you prefer not to edit images on the computer. And because the T1i offers a variety of Picture Styles that change the way that image contrast, saturation, sharpness, and color are rendered, you can get very nice prints with no editing on the computer.

Picture Styles are detailed in Chapter 3.

RAW format

RAW files store image data directly from the camera's sensor to the media card with a minimum of in-camera processing. Unlike JPEG images, which you can view in any image-editing program, you must view RAW files using the Canon Image Browser, Digital Photo Professional or another RAW-compatible program such as Adobe Bridge and Camera Raw. More operating systems, such as the Mac, are providing regular updates so that you can view RAW images without using a RAW conversion program.

And you must also convert the RAW image data to a standard file format using a program that supports the T1i/500D's RAW file format using Canon's Digital Photo Professional program or a third-party RAW-conversion program.

You may wonder why you'd choose RAW shooting. RAW files offer the highest image quality and the ultimate flexibility because you can change key camera settings after you take the picture. For example, if you didn't set the correct white balance or exposure, you can change it when you convert the image on the computer. Canon includes its Digital Photo Professional program on the disc included in the Rebel T1i/500D box, and that program enables you to convert RAW files. In addition, you can adjust the exposure, contrast, and saturation — in effect, you have a second chance to correct underexposed or overexposed images, and to correct the color balance, contrast, and saturation after you take the picture. The only camera settings that the Rebel T1i/500D applies to RAW files are aperture, ISO, and shutter speed. Other settings such as White Balance, Picture Style, and so on are "noted," but not applied to the file. As a result, you have a great deal of control over how image data looks when you convert a RAW image.

Because RAW is a lossless format (no loss of image data), image quality is not degraded by compression. However, RAW files are larger, as indicated in Table 1.1, so you can store fewer RAW images on the media card than JPEG images.

RAW files are denoted with a .CR2 filename extension. After converting the RAW data, you can save the image in a standard file format such as TIFF or JPEG.

RAW + JPEG

On the Rebel T1i/500D, you can also choose to shoot RAW+JPEG, which records the RAW file and Large/Fine JPEG image of the quality and size you specify. The RAW+JPEG option is handy when you want the advantages of a RAW file, and you also want a JPEG image to quickly post on a Web site or to send in e-mail. If you choose RAW+JPEG, the two images are saved in the same folder on the SD/SDHC card with the same file number. While both images have an IMG_ prefix, you can tell the files apart by the file extensions. RAW files have a .CR2 extension, and JPEG files have a .JPG extension.

Movie files are prefixed with MVI_ and have a .MOV file extension.

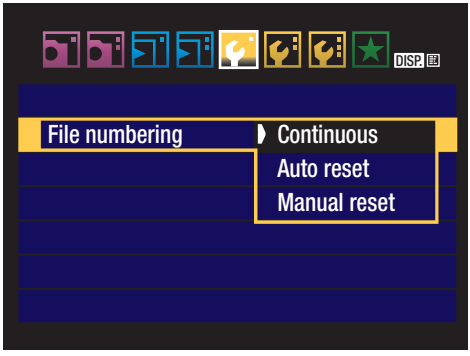
To set the image quality in both Basic and Creative Zone modes, follow these steps:

1. **Press the Menu button, and then turn the Main dial to select the Shooting 1 (red) menu.**
2. **Press the down cross key to select Quality.**
3. **Press the Set button.** The Quality screen appears with the currently selected quality setting displayed along with the image dimensions in pixels and the approximate number of images you can store on the current SD/SDHC card in the camera.
4. **Press the left or right cross key to select the size and quality that you want.**
5. **Press the Set button.**

Changing File Numbering

When you begin shooting images, the Rebel T1i/500D automatically creates a folder on the SD/SDHC card to store the images. The folder is named 100Canon, and you see the folder when you download images from the camera to the computer. In addition, the camera numbers the images and assigns prefixes and file extensions. Both JPEG and RAW files begin with the prefix IMG_. Movie files begin with MVI_ and have a .MOV file extension.

While much of the file management on the camera is automatic, you can choose how the camera numbers images, and your choice can help you manage images on your computer. The file numbering options are: Continuous, Auto reset, and Manual reset. Here is how each file numbering option works.



1.7 The File numbering options screen

Continuous file numbering

This is the default option for file numbering on the T1i/500D where the camera numbers images sequentially. When you replace the SD/SDHC card, the camera remembers the last highest image number and continues numbering from the last file number. Images are numbered sequentially using a unique, four-digit number from 0001 to 9999. The camera continues sequential numbering until you shoot image number 9999. At that point, the camera creates a new folder named 102, and images you shoot restart with number 0001.

This file numbering works great until you insert an SD card that has images on it. When you take another picture, the new image file number continues from the highest numbered image that's already stored on the card if it is higher than the highest image number stored in the camera's memory. In other words, the camera uses the highest number whether that high number is stored in internal memory or is stored on the card. Then the camera uses that number to continue file numbering. If you want to continue continuous numbering, be sure to insert formatted/empty SD cards into the camera.

To a point, this file-numbering option ensures unique filenames, so that managing and organizing images on the computer is easier because there is less chance that images will have duplicate filenames.

Auto reset

With this option, you can have the file numbering restart with 0001 each time you insert a different SD/SDHC card. If the SD/SDHC card has images stored on it, then numbering continues from the highest image number stored on the card. So if you want the images to always begin at 0001 on each SD/SDHC card, then be sure to insert formatted SD/SDHC cards each time you replace the card.

If you like to organize images by media card, this is a good option. However, be aware that multiple images that you store on the computer will have the same filename. This means that you should create separate folders on the computer and follow scrupulous folder organization to avoid filename conflicts and potential overwriting of images with the same filename.

Manual reset

If you choose this option, then the camera creates a new folder on the SD/SDHC card, and images are saved to the new folder starting at file number 0001. After Manual reset, file numbering returns to Continuous or Auto reset — whichever option you used previously.

The Manual reset option is handy if you want the camera to create separate folders for images that you take over a span of several days.

On the Rebel T1i/500D, up to 999 folders can be created automatically by the camera with up to 9,999 images stored in each folder. If you reach these capacities, a message appears telling you to change the SD/SDHC card even if there is room remaining on it. Until you change the SD/SHDC card, you can't continue shooting.

To change the file-numbering method on the T1i/500D, follow these steps:

1. **Press the Menu button, and then turn the Main dial to select the Setup 1 (yellow) menu.**
2. **Press the down cross key to select File numbering, and then press the Set button.** Three file numbering options appear with the current setting highlighted.
3. **Press the down cross key to select Continuous, Auto reset, or Manual reset, and then press the Set button.** The option you choose remains in effect until you change it with the exception of Manual reset as noted previously.

General Setup Options

There are a number of very straightforward setup options that will make your shooting easier and more efficient. You may have already set some of these options, but in case you missed some, you can check the Table 1.2 and see which ones you want to change.

The general setup options are typically those that you set up only once, although there are some that you may revisit in specific shooting scenarios. For example, I prefer to turn on the autofocus confirmation beep in

most shooting situations. But in situations such as weddings or at an event when the sound of the beep is intrusive, I turn it off.

Also, you may prefer to have vertical images automatically rotated on the LCD to the correct orientation. However, this rotation makes the LCD image smaller, so you may prefer to rotate vertical images only for computer display.

Table 1.2 provides a guide for the setup options. If you don't see an option listed in the table, check to see which shooting mode you've set on the Mode dial. Some options are not available in the automatic, or Basic Zone, shooting modes such as Portrait, Landscape, Sports, and so on. Just change the Mode dial to P, Tv, Av, M, or A-DEP and the option will be displayed. In other instances, the options are detailed in later chapters of this book.

To change these options, press the Menu button, and then follow the instructions in Table 1.2.

Table 1.2
Selecting General Setup Options

Turn the Main dial to choose this Menu tab.	***Press a cross key to select this Menu option.***	***Press the Set button to display these Menu Sub-options or screen.***	***Press a cross key to select the option you want, and then press the Set button.***
Shooting 1	Beep	On/Off	Choose On for audible confirmation that the camera achieved sharp focus. Choose Off for shooting scenarios where noise is intrusive or unwanted.
	Release shutter without card	Enable/ Disable	Choose Disable to prevent inadvertently shooting when no SD/SDHC card is inserted. The Enable option is marginally useful, and then only when gathering Dust Delete Data.
	Review Time	Off, 2, 4, 8 sec., and Hold	Longer durations of 4 or 8 seconds to review LCD images have a negligible impact on battery life except during travel when battery power is at a premium. I use 4 sec. unless I'm reviewing images with a subject, then I choose 8 sec.
Playback 1	Rotate		Choosing this option rotates vertical images to the correct orientation on the LCD, albeit at a smaller size. Movies cannot be rotated. If you set the Auto rotate option (below), you do not need to use this option.

Turn the Main dial to choose this Menu tab.	*Press a cross key to select this Menu option.*	*Press the Set button to display these Menu Sub-options or screen.*	*Press a cross key to select the option you want, and then press the Set button.*
Setup 1	Auto Power off	30 sec., 1, 2, 4, 8, 15 min., Off	This setting determines when the camera turns off after you haven't used it. Shorter times conserve battery power. To turn the camera back on, lightly press the Shutter button or press the Menu, DISP., a cross key, and so on. Even if you choose the Off option, the LCD turns off automatically after 30 minutes.
	Auto rotate	On the LCD and computer, On for the computer only, or Off	Two On options let you choose to automatically rotate vertical images to the correct orientation on the LCD and computer monitors, or only on the computer monitor. If you choose the first option, the LCD preview image is displayed at a reduced size. Or choose Off for no rotation on the camera or computer.
	LCD auto off	Enable, Disable	Enable is the default that turns the LCD off as you move the camera to your eye to avoid the bright monitor interfering with seeing through the viewfinder. If you want the LCD monitor to remain on, choose Disable.
	Screen color	1, 2, 3, or 4	Choose the screen color for the Shooting settings screen.
Setup 2	LCD brightness	7 levels of brightness	Watch both the preview image and the grayscale chart as you turn the left or right cross key to adjust the LCD brightness. As you adjust brightness, ensure that all tonalities on the grayscale chart are clearly distinguishable.

Viewing and Playing Back Images

On the Rebel T1i/500D, you can not only view images after you take them, but you can also magnify images to verify that the focus is sharp, display and page through multiple images that you have stored on the SD/SDHC card, display an image with a brightness or RGB histogram, display images as a slide show, and display the image along with its exposure settings. The following sections describe viewing options and suggestions for using each option.

You can also play back movies, as detailed in Chapter 5.

Single-image playback

Single-image playback is the default playback mode, and it briefly displays the image on the LCD after you take the picture. Canon sets the initial display time to 2 seconds, hardly enough time to move the camera from your eye and to see the image preview. The display time is intentionally set to 2 seconds to maximize battery life, but a longer display time of 4 seconds is more useful. You can also choose to set the Hold option to display the image until you dismiss it by lightly pressing the Shutter button.

To turn on image review, press the Playback button on the back of the camera. If you have multiple pictures on the SD/SDHC card, you can use the left and right cross keys or the Main dial to move forward and backward through the images.

If you want to change the length of time that images display on the LCD, follow these steps:

1. **Press the Menu button.**
2. **Turn the Main dial to select the Shooting 1 (red) menu, then press the down cross key to select Review time.**
3. **Press the Set button.** The Review time options appear.
4. **Press the down cross key to select Off, 2, 4, 8 sec., or Hold.** The numbers indicate the number of seconds that the image displays. Off disables image display, while Hold displays the image until you dismiss it by pressing the Shutter button.
5. **Press the Set button.** Lightly press the Shutter button to return to shooting.

Index display

Index display shows thumbnails of four or nine images stored on the SD/SDHC card at a time on the LCD. This display is handy when you need to ensure that you have a picture of everyone at a party or event, or to quickly select a particular image on a card that is full of images.

To turn on the Index display, follow these steps:

1. **Press the Playback button on the back of the camera.**
2. **Press the AE/FE Lock button on the back of the camera.** This button has an asterisk displayed above it. The LCD displays the last four images stored on the SD card. If you don't have four images on the card, it displays as many images as are stored on the card.
3. **Press the cross keys to move among the images.** The selected image has a blue border. You can press the AE/FE Lock button again to display an index page of nine images.
4. **To move through individual images, press a cross key, or to move to the next page of images, turn the Main dial.**
5. **Press the Magnify button one or more times to return to single-image display.**

6. **Lightly press the Shutter button to cancel the display.**

Slide show

When you want to sit back and enjoy all the pictures on the SD/SDHC card, the Slide show option plays a slide show of images on the card. Use this option when you want to share pictures with the people that you're photographing, or to verify that you've taken all the shots that you intended to take during a shooting session.

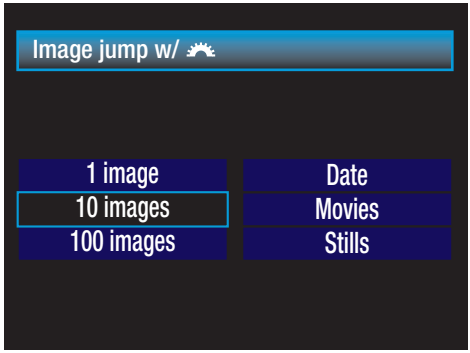
During the slide show, the camera does not go to sleep to interrupt the image or movie playback.

You can start a slide show by following these steps:

1. **Press the Menu button, and then turn the Main dial to select the Playback 2 (blue) menu.**
2. **Press the down cross key to select Slide show, and then press the Set button.** The Slide show screen appears.
3. **Press the up or down cross key to select All images, and then press the Set button.** Up and down arrow controls appear to the right of the All images text.
4. **Press the up or down cross key to select from the options: All images, Stills, Movies, or Date, and then press the Set button.** If you select Date, press the Display (DISP.) button, and then press the up or down cross key to select the date from the Select date screen. Then press the Set button.
5. **Press the down cross key to select Set up, and then press the Set button.** The Slide show screen appears with options to set the Play time and Repeat.
6. **Press the down cross key to select Play time, and then press the Set button.** The Play time options appear and are 1, 2, 3, or 5 seconds.
7. **Press the down cross key to select the Play time duration you want, and then press the Set button.**
8. **Press the down cross key to select Repeat, and then press the Set button.**
9. **Press the up or down cross key to select On or Off for the Repeat option, and then press the Set button.**
10. **Press the Menu button, and then press the down cross key to select Start.**
11. **Press the Set button to begin the slide show.** You can pause and restart the slide show by pressing the Set button. If you're playing back movies, turn the Main dial to adjust the volume. Press the Menu button to stop the slide show and return to the Slide show screen.

Image jump

When you have a lot of images on the SD/SDHC card, it can be hard to find a picture that you're looking for. On the Rebel T1i/500D, you can jump through images by 1, 10, or 100 images at a time, or by date, movies, or still (images).



1.8 The Image jump options screen

Here is how to choose the jump method and then move through images using that method:

1. **Press the Menu button, and then turn the Main dial to select the Playback 2 (blue) menu.**
2. **Press the up or down cross key to highlight Image jump w/[Main dial], and then press the Set button.** The Image jump with Main dial screen appears. You can choose 1, 10, 100 images, or Date, Movies, Stills (still images).
3. **Press the up or down cross key to select the jump method, and then press the Set button.** The Playback 2 (blue) menu appears.
4. **To jump through images, press the Playback button on the back of the camera.** The most recent image is displayed on the LCD.
5. **Turn the Main dial to jump through images by the option you selected in Step 3.** The LCD displays the jump method and relative progress through the images on the card at the lower right of the LCD. You can change the jump option by pressing the up cross key.

During playback, you can press the up cross key to display a jump bar that enables you to move forward and backward among images by the jump options described previously. To change the jump method, press the up or down cross key one or more times to select the increment you want. Then you can turn the Main dial to browse through images. To return to single-image browsing, press the left or right cross key.

Using the Display (DISP.) button

In image playback mode, you can use the Display (DISP.) button to sequence through different displays in Playback mode. In Single-image playback mode, press the Display button once to display basic shooting information overlaid on the image preview. Press it again to display shooting information, a small image preview, and the image brightness histogram. Press it once more to display abbreviated shooting information with the RGB and brightness histograms. Or press the Display button again to return to single-image review with minimal shooting information displayed. You can use the cross keys to move forward and backward through pictures in this display.

Erasing and Protecting Images

If you often keep multiple images on one or more media cards for days, weeks, or months, then it's important to take advantage of the options that enable you to manage the number of images on the card by

either deleting one or multiple images, or ensuring that the images you want to keep are not accidentally erased. The following sections detail how to erase one or multiple images and how to protect images.

Erasing images

Erasing images is useful only when you know without a doubt that you don't want the image that you're deleting. From experience, however, I know that some images that appear to be mediocre on the LCD can very often be salvaged with some judicious image editing on the computer. For that reason, I recommend erasing images with caution.

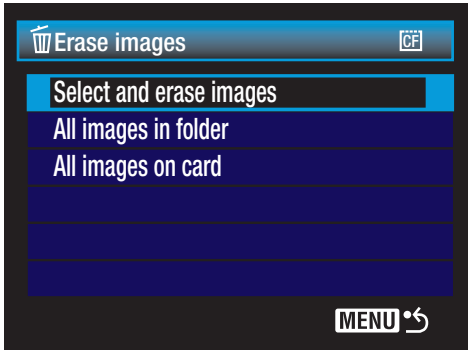
With the Rebel T1i/500D, you can choose to erase images one at a time or mark multiple images to erase at the same time.

If you want to delete an image, follow these steps:

1. **Press the Playback button on the back of the camera, and then press the left and right cross keys to select the picture that you want to delete.**
2. **Press the Erase button, and then press the right cross key to select Erase.**
3. **Press the Set button to erase the image.** When the access lamp stops blinking, lightly press the Shutter button to continue shooting.

To select and erase multiple images at one time, follow these steps:

1. **Press the Menu button, and then turn the Main dial to select the Playback 1 (blue) menu.**



1.9 Choosing the Select and erase images option enables you to mark multiple images to erase as a group.

2. **Press the down cross key to highlight Select and erase images, and then press the Set button.** The Erase images screen appears on the LCD with the last image displayed.
3. **To select the current image, press the up or down cross key to place a checkmark in the box at the top left of the screen.**
4. **Press the left or right cross key to move to the next image, and then press the up or down cross key to mark it for deletion.**
5. **Continue pressing the left or right cross key to move through images and mark the ones you want to erase.**
6. **When all the images you want to erase are marked, press the Erase button on the back of the camera.** The Erase images screen appears with a confirmation message asking if you want to erase the selected images.
7. **Press the right cross key to select OK, and then press the Set button.** All check-marked images are erased.

Protecting images

On the other end of the spectrum from erasing images is protecting images to ensure that images are not accidentally deleted. Setting protection means that no one can erase the image when using the Erase or Erase All options.

Even protected images are erased if you or someone else formats the SD/SDHC card.

You can protect an image by following these steps:

1. **Press the Menu button, and then turn the Main dial to select the Playback 1 (blue) menu.**
2. **Press the up or down cross key to select Protect images, and then press the Set button.** The last image taken is displayed on the LCD with a protection and a SET icon in the upper-right corner. If this isn't the image you want to protect, press the left or right cross key to display the image you want to protect.
3. **Press the Set button to protect the displayed image.** A protection icon denoted by a key appears above the thumbnail display and to the left of the image number.
4. **Press the left or right cross key to scroll to other images that you want to protect, and then press the Set button to add protection to the images.** If you want to remove protection, scroll to a protected image, and then press the Set button. Protection is removed and is indicated by the protection icon being removed.

Add copyright information

One of the basic workflow steps that you can accomplish on the camera is adding your copyright information to the image metadata so that it is carried with each image you shoot with the Rebel T1i/500D. Including your copyright is a great first step to identify ownership of the images you make. And if your name changes or you need to delete or change the information for any reason, you can do so.

Metadata is simply information about the image. The copyright information is included in the Creator field of the user-defined IPTC metadata. IPTC is a standardized metadata format initially developed by the Newspaper Association of America (NAA) and the International Press Telecommunications Council (IPTC). IPTC metadata is displayed in many image-editing programs and is stored with the image.

Before you begin this task, ensure that you have:

- Installed the Canon EOS Utility that is included with the EOS Digital Solution Disk that comes in the Rebel T1i/500D box
- The USB Interface cable handy
- A good charge on the camera battery

To include your copyright and the camera owner's name on your images, follow these steps:

1. **Turn off the camera, and insert the USB Interface cable to the Digital terminal on the side of the camera.**
2. **Insert the other end of the Interface cable to a USB port on the computer.**

3. **Turn on the camera, and then on the Control Camera tab of the EOS Utility, click Camera settings/ Remote shooting.** The EOS Rebel T1i/500D control panel appears.
4. **Click the Setup button.** This is the middle of three buttons to the left and below the exposure meter on the panel. The Setup menu appears.
5. **Click the Owner's name field, type your name in the box, and then click OK.**
6. **Click the Copyright notice field, type your name next to the Copyright: text, and then click OK.** The information is recorded on the Rebel T1i/500D and is included for each image.
7. **Click the Close button on the EOS Utility panel, turn off the camera, and detach the Interface cable.**

To change the copyright name, repeat these steps and type a new name in Step 6.

To view or delete the copyright information on the camera, follow these steps.

1. **Press the Menu button, highlight the Setup 3 tab, and then press the down cross key to highlight Clear settings.**
2. **Press the Set button.** The Clear settings screen appears.
3. **To display the existing copyright information, press the Diplay button.** The Display copyright info. screen appears with the copyright name. Or to delete the copyright information, highlight Delete copyright information, and then press the Set button. The Delete copyright information screen appears.
4. **Highlight OK, and then press the Set button.**

1.10 The Copyright options you can set using Canon's EOS Utility program

Using the EOS Integrated Cleaning System

Each time you change the lens on the camera, dust can filter into the lens chamber and settle on a filter in front of the image sensor. These dust spots on the image sensor appear as spots on your images. With the Rebel T1i/500D, a two-step automated cleaning system addresses both small, light particles and sticky particles that adhere to the filter in front of the image sensor.

The first step is automatic cleaning that uses ultrasonic vibrations to shake off dust from the filter in front of the image sensor, capturing it on a sticky material that surrounds the filter. Each time you turn the camera on and off, the self-cleaning unit runs. You can suspend automatic cleaning by pressing the Shutter button, and you can initiate cleaning via the camera menu.

The second step of the camera's Integrated Cleaning System addresses larger, sticky particles that can't be shaken off by vibration. This step, called Dust Delete Data, identifies the size and position of large dust particles from a picture that you take of a white piece of paper. The camera then appends a small file that identifies the dust data to all upcoming JPEG and RAW images. Then you use Canon's Digital Photo Professional Copy Stamp tool and apply the Dust Delete Data that removes the spots from your images. Dust Delete Data can be updated at any time, and you can stop the camera from appending the data to images if you want.

Automatic sensor cleaning

Automatic sensor cleaning can be initiated and turned off at any time. To reduce the risk of overheating the cleaning element, self-cleaning can't be operated more than five consecutive times in a 10-second period.

To manually initiate sensor cleaning, follow these steps:

1. **Press the Menu button, and then turn the Main dial to select the Setup 2 (yellow) menu.**
2. **Press the down cross key to select Sensor cleaning, and then press the Set button.** The Sensor cleaning screen appears.
3. **Press the up or down cross key to select the option you want:**
   - **Auto Cleaning.** Select this option if you want to turn off the default sensor cleaning when the power switch is turned on and off. Press the Set button, select Disable, and then press the Set button.
   - **Clean now.** Select this option to clean the sensor now, and then press the Set button to select OK on the Clean now screen.
   - **Clean manually.** If the camera is in a Creative Zone mode (P, Tv, Av, M, and A-DEP), you can also select this option. Then press the Set button. The reflex mirror flips up and the shutter opens to allow you to use appropriate cleaning tools and materials to clean the sensor. When you finish, turn the power off.

Obtaining Dust Delete Data

To erase larger, sticky dust particles, you can have the camera locate dust. To do this, you take a picture of a white piece of paper. (Although you take a picture of the paper, no image is recorded to the SD/SDHC card.) From the picture, the T1i/500D maps the coordinates of dust particles that are stuck to the low-pass filter, and the Rebel creates a tiny data file that is appended to future images. To erase the dust, use Canon's Digital Photo Professional, an editing program that is included on the Canon EOS Digital Solution Disk that comes with the Rebel T1i/500D.

Before you begin:

- Have a clean piece of white paper that will fill the viewfinder if you position it approximately 1 foot from the lens. Ensure that the paper is evenly lit by any light source.
- Set the lens focal length to 50mm or longer. On a zoom lens, the focal-length settings are displayed on the lens ring. Turn the lens ring to a focal length of 50mm or longer.
- Set the lens to Manual Focus by turning the switch on the side of the lens to MF.
- With the camera facing forward, set the focus to infinity by turning the lens-focusing ring all the way to the left.

To obtain Dust Delete Data, follow these steps:

1. **Press the Menu button, and then select the Shooting 2 (red) menu.**
2. **Press the down cross key to select Dust Delete Data, and then press the Set button.** The Dust Delete Data screen appears.
3. **Press the right cross key to select OK, and then press the Set button.** The camera initiates the automatic sensor self-cleaning. A message appears telling you to press the Shutter button when you're ready to take the picture.
4. **With the camera approximately 1 foot from the white paper and the paper filling the viewfinder, press the Shutter button completely to take a picture of the paper.** The T1i/500D captures the Dust Delete Data and displays a confirmation message.
5. **Select OK by pressing the Set button.** The Shooting menu appears. Lightly press the Shutter button to return to shooting. A tiny file containing a map of the dust particles is appended to all image files. You should periodically repeat these steps to update the Dust Delete Data file.

Applying Dust Delete Data

After you acquire Dust Delete Data, you can use Canon's Digital Photo Professional program to apply the data to images. Be sure that you have installed Digital Photo Professional from the Canon EOS Digital Solution Disk that comes with the camera. You can apply Dust Delete Data to either JPEG or RAW images.

To apply Dust Delete Data in Digital Photo Professional, follow these steps:

1. **Start Digital Photo Professional, and then navigate to the folder that contains images with Dust Delete Data appended.**
2. **Select an image, and then click in the Edit image window in the toolbar.** The image-editing window appears.
3. **On the menu, click Tools, and then click Start Stamp tool.** A new window appears with the image and a tool palette on the right side.
4. **Click Apply Dust Delete Data.** A progress pane appears, and then a confirmation message that tells you that the data has been applied.
5. **Click OK.** You can repeat these steps to apply the Dust Delete Data to the remaining images in the folder.