

Stay Focused Guide

# Canon XS

Canon 1000D

Simple  
Techniques  
For Taking  
Great Photos



**Stay Focused: Canon XS Editors**

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# Introduction

You're the proud owner of a new Canon XS (also called the 1000D) digital SLR camera. It's loaded with features that are capable of capturing great photos. You've used it a few times but you're not getting the results that you know are possible. Now you'd like to find out how to turn your snapshots into gallery quality photos.

Unlike other guides that treat the camera as a technical gadget requiring confusing explanation, this **Stay Focused Guide** is for those picture takers who want to solve common shooting problems and capture the best photos that their cameras promise.

We answer the questions standing between you and the perfect photo that's within your grasp. We explain the way out of the many annoying problems that come up as you learn to use the many features that set your advanced digital SLR apart from the point-and-shoot variety cameras. We won't confuse the explanations with any high tech jargon; we use easy-to-understand English. Furthermore, we illustrate the answers and show you before/after photos so that you can instantly see the solution.

# How We've Organized The Book

We've organized this book into ten distinctive sections, therefore you won't need to read from page 1 to the end to find the solution to your photo challenge.

Each section has several common challenges that you have likely faced while snapping your photos. We'll use a "before" photo that describes the problem as well as an "after" photo that shows a solution. Then you'll find out how to adjust your camera to get the "after" photo.

## How The Book Is Organized

Each section has a "before" photo that highlights a challenge that you probably have had in your photos.

**Adjusting Focus For Closeups**

Although I used the manual focus as suggested in a previous technique, only a small portion of the flower is in focus. Is there something I can do to sharpen the picture?

**Many times your closeups just don't appear to be sharp enough. In other words, only a small part of the photo is in focus.**

**By using a smaller aperture, you're increasing the depth of field and therefore bringing more of the subject into focus.**

**Fixing Blurry Photos**

Many times your closeups just don't appear to be sharp enough. In other words, only a small part of the photo is in focus.

**By using a smaller aperture, you're increasing the depth of field and therefore bringing more of the subject into focus.**

Stay Focused Guide Canon X5

Stay Focused Guide Canon X5

Aperture

Depth of Field

ISO



Shutter



# Boosting Your Photography IQ

**You don't have to be a camera whiz to use your Canon XS.**

**But understanding a few things about how it works will help you jump-start your photography IQ.**

**Read this section to learn a few photography basics or move to the next section if you'd rather skip the fundamentals.**

In days gone by when film was king, if you wanted to take pictures with an SLR camera, you'd first have to learn a few *fundamentals of photography* to get started. You'd need enough know-how to make the appropriate camera settings to take a good photograph.

Fortunately, today's digital SLRs have marvelous brains which make picture taking so much simpler. For many scenes, you can just turn it on and start snapping away. The myriad of advanced features of your Canon XS lessens the need for you to understand how the camera decides how to best take your photograph.

With such smarts built right into the camera, why do we include a beginner's section?

We know that many of you will want to skip this section and rely on the technical prowess of your camera to make the decisions for you. But others may want to understand how the camera makes many of its automatic decisions and what they can do to effect these to their benefit and produce even better quality photos.

If you'd like to stay with us, keep reading. Otherwise skip ahead.

Film is no longer king. Rather, the digital camera's sensor is king. The sensor in the Canon XS is a large set of electronic eyes that are sensitive to light much the same as the film's surface is sensitive to light. To put it simply, the key to a good photograph is to ensure that the camera's sensor captures the proper *exposure* — the correct amount of light for the camera to record an ideal image.

Your Canon XS has many different features and a good many of them are there to determine the proper exposure for a given scene. The three main controls that affect exposure are:

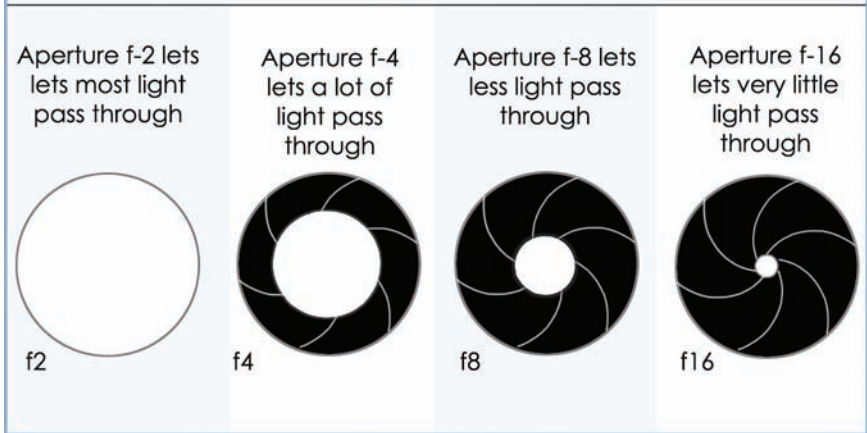
- ❖ Aperture
- ❖ Shutter speed
- ❖ ISO setting

There's one more topic that we'll mention — a topic that isn't directly concerned with exposure. However, understanding *depth of field* will definitely boost your photo IQ.

## Aperture

When taking a photograph, the light reflecting from your scene passes through the lens on its way to the sensor in your XS. The lens has two jobs to do: *focus* the rays of light that pass through and *control* the amount of light that passes through. The glass in the lens is responsible for focusing the light. The aperture, a mechanical device within the lens, controls the amount of light passing through it by opening wider or closing narrower.

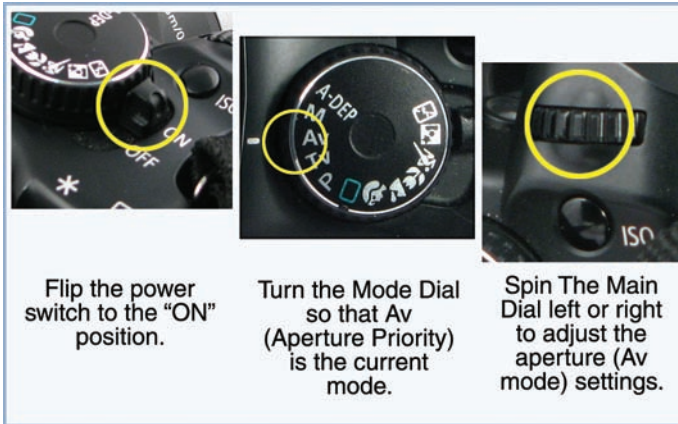
The aperture controls the amount of light passing through it by opening wider or closing narrower. In other words, the aperture is the lens opening. The larger the opening, the more light that can pass through.



To say it a different way, the aperture is the lens opening. The larger the opening, the more light that can pass through. In most situations, the Canon XS automatically makes the opening wider or narrower as it adjusts the exposure for your particular scene.

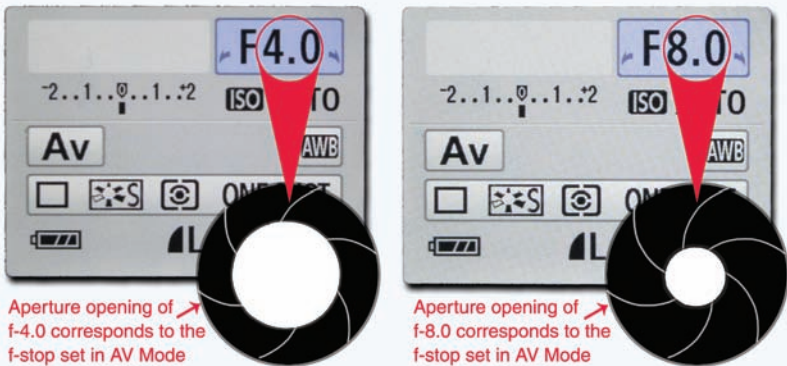
To get a little more technical, the measurement of the lens aperture is referred to as an *f-stop* (and is shown on the Canon XS as f2, f4, f8, etc.). Let's see how the XS refers to the aperture.

Power on your camera and turn the Mode Dial to Av mode. Spin the Main Dial and you'll see that the large value in the top right of the LCD changes to display f-5.6, f-8.0 or f-11.0, for example. A smaller value (f-5.6) allows more light to pass through the lens than a larger value (f-8.0). These values may be confusing since a smaller value represents a larger aperture (opening) and a larger value represents a smaller aperture (opening).



When you press the shutter to capture a scene, the lens opening is set to the proper f-stop. Here's an illustration that shows openings representing two different f-stops.

When you press the shutter to capture a scene, the lens opening is set automatically to the proper f-stop. In this illustration, the openings representing the two different f-stops are f-4.0 (left) and f-8.0 (right).



Therefore, the rule when talking about f-stops, is to use a smaller f-stop when you need more light to reach the sensor and use a larger f-stop when you need less light to reach the sensor.

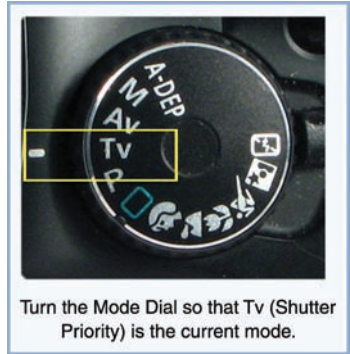
So when talking about f-stops, the rule is to use a smaller f-stop to allow more light to reach the sensor and use a larger f-stop to allow less light to reach the sensor.

## Shutter Speed

The shutter is a mechanical device inside the camera positioned directly in front of the sensor. It's electronically controlled to open and then close for a varying length of time. This time period is known as the camera's *shutter speed*.

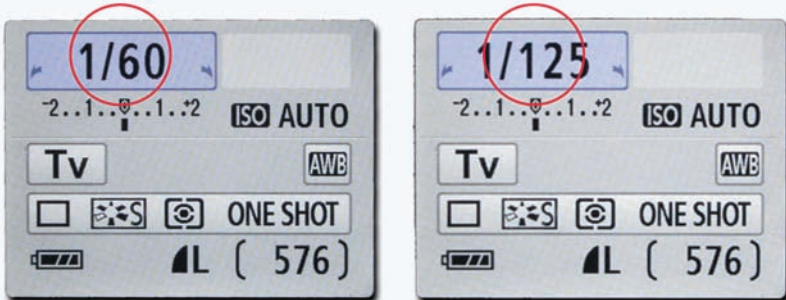
A shutter that opens for only a short time allows less light to reach the sensor than a shutter that opens for a longer time. Let's say this a different way: *a slow shutter speed implies a longer exposure time while a fast shutter speed implies a shorter exposure time.*

Let's see how the XS refers to the shutter speed. Power on your camera and turn the Mode Dial to Tv mode.



Spin the Main Dial and you'll see that the value in the upper left of the LCD changes to, for example, 1/60 or 1/125. A smaller value (1/60) indicates a shutter speed of one-sixtieth of a second while a larger value (1/125) indicates a faster shutter speed of one-hundred twenty-fifth of a second. As you can see, these values usually indicate a fraction of a second.

Notice that as you spin the Main Dial the value in the upper right of the LCD changes to numbers such as 1/60 or 1/125, for example. A smaller value (1/60) indicates a shutter speed of one-sixtieth of a second while a larger value (1/250) indicates a faster shutter speed of one-two-hundred fiftieth of a second.



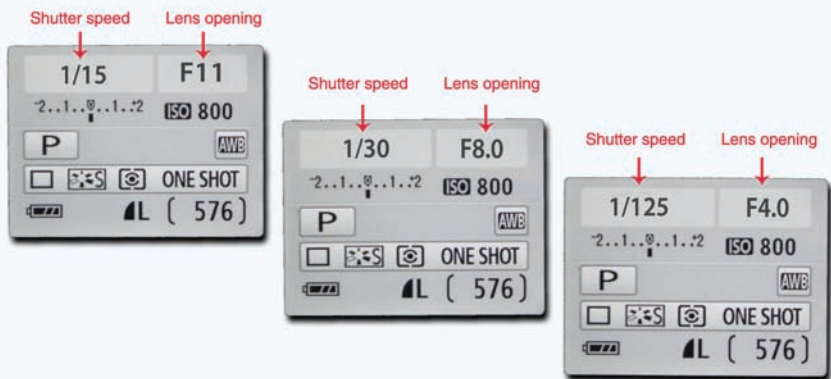
As you can see, the values you set for the shutter speed in Tv Mode usually indicate a fraction of a second.

A camera's shutter speed also changes the way action or movement in a scene is captured in a photograph. You'll want to use a fast shutter speed to freeze fast-moving subjects such as runners or racing cars. Conversely, you'll want to use a slow shutter speed to blur moving subjects to create special effects such as flowing water.

### The Aperture and Shutter Speed Dance

When you set the Mode Dial to P (Program AE) mode, the XS automatically determines the exposure for a scene. While pointing the camera at a scene, press the shutter button halfway and observe the LCD. You'll see both the aperture and shutter speed that the camera has selected for this scene. Spin the Main Dial and you'll see that both the aperture and shutter speed change on the LCD. Continue to spin the Main Dial and you'll see all of the aperture and shutter speed combinations that will produce a proper exposure. These are all equivalent exposure combinations.

When you set your XS to P (Program AE mode), it automatically determines the exposure for a scene.



The point here is that as you change the shutter speed, you'll also have to change the aperture to produce a proper exposure. Conversely, as you change the aperture, you'll have to change the shutter speed to keep in step. In P mode (Program AE), the camera does this for you simply by spinning the Main Dial.

### ISO

The third way to control exposure with the XS is by adjusting its ISO speed. We've already learned that the light reflected from a scene enters the lens, passes through the shutter and strikes the camera's sensor. When the scene

has sufficient brightness, the sensor records all of the elements of the scene in vivid detail. However, as the brightness of the scene diminishes, such as under heavy overcast skies or as night begins to fall, the sensor may have trouble capturing all the detail.

Using its sophisticated electronics, the XS is able to increase the sensitivity of its sensor thus allowing it to record more detail when the lighting is diminished. The camera's ISO speed is a measurement of the sensor's sensitivity and ranges from 100 to 1600 — with 100 being the least sensitive and 1600 being the most sensitive.

When the Mode Dial is set to any of the Basic Zones, the XS automatically sets the ISO speed for the scene. When the Mode Dial is set to any of the Creative Zones, you can explicitly set the ISO speed. We'll show you how to do this in the sections that follow.



As you might expect, changing the camera's ISO speed requires a change in both the aperture and shutter speed to achieve a proper exposure. But again, the XS automatically synchronizes the settings as you change one of these three controls (except when the Mode Dial is set to M).

In general, using a lower ISO speed produces a higher quality photograph than when using a higher ISO speed. Using higher ISO speeds, for example 800 and higher, may add speckles (granular spots) to your photographs. So if you're striving for the highest quality photos, use the lowest ISO speed that the scene allows.

## Depth of Field

There's one last topic that we'll discuss here. *Depth of Field* (DOF for short) refers to the closest and farthest distance from the camera that appears in focus in the photograph. Keep in mind that DOF occurs as a gradual transition and is not a sudden change from clear to blurry.

Depth of Field (DOF) refers to the closest and farthest distance from the camera that appears in focus in the photograph.

Keep in mind that DOF occurs as a gradual transition and is not a sudden change from clear to blurry.

Out of Focus

Gradually Becoming Out of Focus

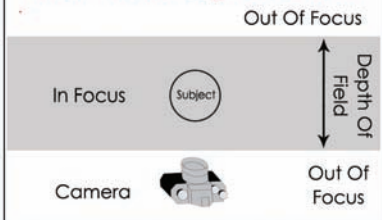
In Focus



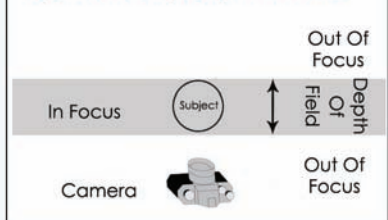
DOF is affected by both the *focal length* of the lens and its aperture setting.

First a quick note about focal length. The standard lens for the Canon XS is the 18mm-55mm zoom lens. This lens has a focal length that can be varied from 18mm at its widest setting to 55mm at its longest lens setting. When at its widest setting, the DOF is greater compared to its longest setting. This means that more of the scene is in focus at its widest lens setting than at its longest setting.

The depth of field (DOF) is greater than at a focal length of 18-mm.



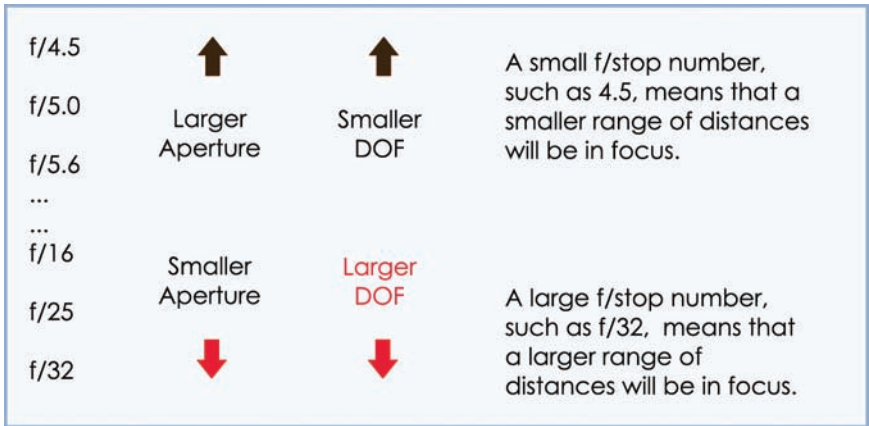
At a focal length of 55-mm, the depth of field (DOF) is narrower.



**This diagram compares the depth of field for 18-mm and 55-mm lenses.**

Likewise, the aperture setting of the lens affects the photograph's DOF. If you snap two photos, one captured at a large f-stop and the other captured at a small f-stop, the second will show more DOF.





Using this know-how, you'll be able to better control the amount of a scene that you'd like to keep in sharp focus.

### Mode Dial and Modes

The large Mode Dial on the top right of your camera is the first control that you'll want to set before you begin snapping away. As you rotate the dial, you're changing the shooting modes. These are divided into two types: the Basic Zones and the Creative Zones.

Those of you who are starting out will most likely choose to shoot using one of the Basic Zones where the XS automatically sets most of the controls when you press the shutter button.

As you progress and learn how the controls are able to add subtle enhancements to your photos, you'll be using one of the Creative Zones more often. In fact, most of the techniques that we'll show you in the next pages will have you using one of the Creative Zone shooting modes.

Finally, for reference, we'll show you a detailed illustration of the controls and indicators that you'll be using to get those great photos from your XS.

## XS Controls, Dials And Buttons

You'll need to be familiar with the controls and features that we talk about in the book. Sometimes, however, we might talk about a specific control and you may not know where it is on the camera.

You should already be familiar with the power switch for the camera but you should also know the location of the other controls on the top of the camera, specifically the Mode dial and the Main dial.



- 1 Built-in flash
- 2 Flash hot shoe
- 3 Shutter button
- 4 Main dial
- 5 ISO setting button
- 6 Power switch
- 7 AF point selection button
- 8 AE lock (auto exposure)
- 9 Mode Dial



- 1 LCD Monitor
- 2 Menu button
- 3 Display button
- 4 Viewfinder
- 5 Dioptric adjustment knob
- 6 Aperture Exposure Compensation button
- 7 White balance
- 8 Metering mode *(also up cross key)*
- 9 AF mode (autofocus) *(also right cross key)*
- 10 Picture style *(also down cross key)*
- 11 Drive mode *(also left cross key)*
- 12 Set button
- 13 AE lock (auto exposure)
- 14 AF point selection button



# Fixing Blurry Photos

**A blurry or out of focus photo is the most common problem many photographers encounter. Fortunately, this is a problem that you can solve easily.**

**There are also times, however, when you want your photo to be blurry, for example, when you want to add a feeling of depth.**

**We'll talk about these situations in this section.**

## Adjusting The Viewfinder

While I'm looking through the viewfinder everything is out of focus. Even when the lens is set to autofocus, the scene appears blurry. What is the problem?



**If you look through the viewfinder and the scene appears out of focus but the lens seems to be working, you may need to adjust the viewfinder dioptic setting.**



**The dioptic adjustment knob is the small thumbwheel to the right of the viewfinder to make the view sharp.**



Look at the AF points (autofocus points) on the viewfinder. (1)

Turn the dioptic adjustment knob (2) back and forth.

When the AF points are sharpest, your viewfinder is set. (3)

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Adjusting The Viewfinder

## Tip Talk

If you look through the viewfinder and the scene appears out of focus but the lens seems to be working fine, you may need to adjust the viewfinder dioptic setting. The *dioptric adjustment knob* is the small thumbwheel to the right of the viewfinder (see diagram on the preceding page).

You can adjust the viewfinder for different eyesight corrections by turning the knob back and forth. In other words, the dioptic setting is used to adjust the viewfinder to your particular eyesight whether you use eyeglasses, contact lenses, etc.

Keep in mind that the dioptic adjustment is now set for your eyesight. Therefore, if anyone else uses your camera, they may need to readjust the dioptic setting for their eyesight.

### Zooming In On A Dioptic Adjustment Lens

If you cannot bring the focus points into sharp focus, you may have to purchase the optional Dioptic Adjustment Lens E (-2). This accessory costs about \$20 and is available at camera stores and the Internet.





# My Main Subject Is Out Of Focus

The main subject in my photo is far away and I can see that it's blurry. For example, I took the following photo of the attractive building. However, when I look at the photo closely, I can see the building is out of focus. What do I need to do to keep it in focus?



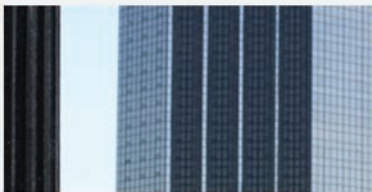
Mode: Full Auto Exposure: 1/160  
Aperture: f-10.0 ISO: 200

Notice in this "before" photo that the building is out of focus.



Mode: P (Program AE) Exposure: 1/200  
Aperture: f-10.0 ISO: 200

The building is in perfect focus in this "after" photo.



Turn the Mode Dial to P (Program AE Zone). (1)



Press the AF point selection button. (2)



Rotate the Main Dial (3) to choose Manual sel.



If the center AF point (4) isn't selected, rotate the Main Dial (3) to select it.



Compose the picture by placing the center AF point (5) over the main subject.



Press and hold the shutter button halfway. (6) Recompose the shot to position the building as desired in the viewfinder.

Press the shutter button fully to capture the picture. (6)



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My Main Subject Is Out Of Focus

**Tip Talk**

The camera’s AF point is focusing on the nearest object in the viewfinder, in this case the light pole. To fix the problem, you’ll want to select an AF point that overlays the building instead of the light pole.

When you set the Mode Dial to one of the Basic Zones, your camera selects one (or more) of the nine AF points automatically. If an AF point covers an object in the viewfinder, the point will flash red when you press the shutter button halfway. If more than one AF point flashes, the camera chooses the focus point for the object closest to the camera. The light pole in the first photo is closer to the camera than the rest of the scene. Therefore the light pole is in perfect focus but the building isn’t in focus.

By switching to Program AE mode, you can select a particular AF point from the Manual AF Point selection menu. You then position the AF point over the main subject in the viewfinder to choose which of the of the multiple objects in the viewfinder is the most important; in our case, it’s the large building.

**Zooming In On Creative Zones & Basic Zones**

The Mode Dial for your XS is located at the top of the camera. You’ll turn it to select which mode you want to use. The XS divides its 12 modes into two types in the Creative Zone and Basic Zone.

The modes in the Creative Zone give you more control over exposure and other camera settings.



The primary benefit of using the Basic Zone is that you can match the XS to the current conditions or to a subject. The modes in the Basic Zone permit the camera to predetermine a number of settings, some of which you cannot adjust.

## My Closeups Are Blurry

The photos of the flowers from my garden are coming out blurry. What can I do to fix this?



**Mode:** Close-up **Exposure:** 1/50  
**Aperture:** f-5.0 **ISO:** 200

**Although the photo is good overall, the flower is too blurry.**



**Mode:** Close-up **Exposure:** 1/50  
**Aperture:** f-5.0 **ISO:** 200  
**Focus:** Manual Focus

**By using the Close-up mode, you can get the flower in focus.**



Turn the Mode Dial to Close-up mode. (1)



Move the lever on your lens from AF to MF to set the lens to manual focus. (2)



Compose the scene.

Slowly and carefully focus the lens manually by turning the focusing ring back and forth (3) until the portion of the flower that is important to you appears sharpest in the viewfinder. (4)



Press the shutter button halfway to set the exposure and then fully to capture the picture. (5)

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My Closeups Are Blurry

## Tip Talk

When shooting upclose, you may want to switch your autofocus lens to manual for precise focus.

When you're trying to take an extreme closeup, your camera may not be able to achieve perfect focus automatically. By setting the lens to MF (manual focus) you can arbitrarily choose the portion of the flower that you want to be in exact focus.

Regardless of whether you use AF (autofocus) or MF (manual focus), each lens has a minimum focus distance. As you can imagine, attempting to capture a subject closer than the minimum focus distance will result in a blurry photo.

When you're finished taking closeups be sure to set the lens back to AF (autofocus).

# My Closeups Are Still Blurry

When shooting closeups, even a gentle breeze moves the flowers. What can I do to keep the flower in focus?



**Mode:** Full Auto **Exposure:** 1/50  
**Aperture:** f-5.6 **ISO:** 250

**Just when you think you captured a great shot, even a gentle breeze can make the photo blurry.**



**Mode:** P (Program AE) **Exposure:** 1/200  
**Aperture:** f-5.6 **ISO:** 800 **Focus:** Manual

**By using a higher shutter speed, you can “arrest” the movement of the subject, the flower in this example, and therefore capture the flower in focus.**



Turn the Mode Dial to P (Program AE). (1)

Press the ISO button (2) and turn the Main Dial (3) to select 800 for the ISO setting. Press the SET button. (4)

Turn the Main Dial (3) to a shutter speed of 1/200 (or faster).

Your LCD Monitor should look similar to this. (5)

Move the lever on the lens from AF (autofocus) to MF (manual focus) (6).

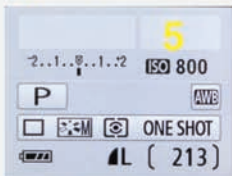
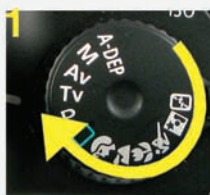
Compose the scene

Slowly and carefully focus the lens by turning the focusing ring back and forth (7) until the portion of the flower that is important appears sharpest. For extreme closeups, only a small portion of the flower may be in focus.

Press the shutter button (7) halfway to set the exposure.

If you recompose or if the breeze moves the flower, you'll need to release the shutter button and then press it again to reset the exposure.

Press the shutter button (8) fully to capture the photo.



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My Closeups Are Still Blurry



## Tip Talk

Most flowers are so delicate that even slight breezes on warm days can cause them to move. While you may not think that the wind is a factor, a gentle whiff can cause a small flower to move appreciably.

When wind is a factor, use a higher shutter speed to arrest the motion.

A faster shutter speed will reduce the possibility of blurry photo if the breeze or wind causes the flower to move.

To insure less movement from breezes, you can construct a small *wind blind* around the flower. The blind can be as simple as a large cardboard carton that shields the flower from the direct effects of the wind.



*You can use something as simple as a cardboard carton for a wind blind to shield the flower from the direct effects of the wind when you're taking closeup photos.*

## Adjusting Focus For Closeups

Although I used the manual focus as suggested in a previous technique, only a small portion of the flower is in focus. Is there something I can do to sharpen the picture?



Mode: Close-up Exposure: 1/100  
Aperture: f-5.6 ISO: 320

Many times your closeups just don't appear to be sharp enough, in other words, only a small part of the photo is in focus.



Mode: Av (Aperture Priority) Exposure: 1/50  
Aperture: f-10.0 ISO: 800

By using a smaller aperture, you're increasing the depth of field and therefore bringing more of the subject into focus.



Turn the Mode Dial to Av (Aperture Priority). (1)

Press the ISO button (2) and turn the Main Dial (3) to select 800 for the ISO setting. Press the SET button. (4)

Turn the Main Dial to select an aperture of F8.0 or smaller. (5)

Move the lever on the lens from AF to MF. (5) to set the lens to manual focus.

Compose the scene.

Slowly and carefully focus the lens manually by turning the focusing ring (6) back and forth until the portion of the flower that is important to appears sharpest. For extreme closeups, only a small portion of the flower may be in focus.

Press the shutter button (7) halfway to set the exposure and then fully to capture the picture.



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Adjusting Focus For Closeups

## Tip Talk

By choosing a smaller aperture, you're increasing the *depth of field* of the lens. This is a term that describes how much of the subject is in focus at varying distances from the camera. By using a smaller aperture (larger f-number), more of the subject is in focus. By using a larger aperture (smaller f-number), less of the subject is in focus.

Depending on the brightness of the scene, an aperture of f-11 or f-16 would produce a photo with a larger portion of the flower in focus.

### Zooming In On Aperture Mode

The best way to understand aperture priority is to shoot several photos in Av mode when you don't need to worry about taking great pictures. If you can convince some friends or family members to pose for you, position them a few feet in front of each other and take a series of photos, each one at a different f/number.



You'll probably get both subjects clearly in focus in some photos but only one in focus in other photos.

Keep in mind that where you focus has a bearing on your final image. For example, focus on the foreground subject when using a small f/number, and the background subject will probably be out of focus.

Also, the farther away that you focus, the deeper the depth of field will be. So focusing on the subject in back will yield more depth of field than if you focus on the closest subject, even at the same aperture setting.

Understanding the relationship between aperture size and distance is important for photography in general but it's critical when you're shooting closeups. The closer your camera is to the subject, the narrower your depth of field becomes. If you're shooting something that's only a few inches away, then the depth of field can be less than an inch. This is the perfect time to switch to aperture priority and dial in the deepest depth of field possible.

## Only One Person Is In Focus In My Group Photo

At a recent gathering, we wanted to take a group photo. The people in the front row are in focus, but those in the back aren't. How can I get everyone to be in focus?



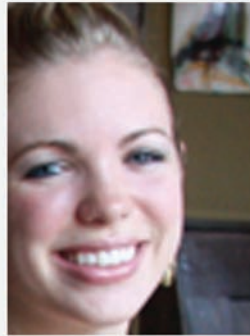
Mode: Full Auto Exposure: 1/25  
Aperture: f-4.0 ISO: 250

Sometimes when you're shooting a group, the people toward the back are out of focus.



Mode: A-DEP Exposure: 1/100  
Aperture: f-5.6 ISO: 800

By switching to A-DEP mode you can bring everyone into focus.



Turn the Mode Dial to A-DEP (Automatic Depth). (1)

Compose the picture by placing the AF points (colored green in this image) over the multiple subjects. (2)

Press the shutter button halfway (4) and watch the red flashing AF points. (3) These indicate the subjects that will be in focus.

Press the shutter button (4) fully to capture the picture.

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Only One Person Is In Focus In My Group Photo

## Tip Talk

When you set your camera to A-DEP, it chooses a lens aperture setting that tries to keep several subjects in focus. If the camera is unable to keep all subjects in focus, the aperture will flash in the viewfinder. In this case, you'll have to move farther away from the subjects or use a wide-angle lens.

### Zooming In On The D-DEP Mode

If you're shooting a landscape and want a large depth of field, make certain to select settings in your camera that will yield deep depth of field and focus at a point that will ensure that your depth of field covers the area you want.

The A-DEP mode on your XS camera will automatically try to calculate settings that will give the maximum depth of field for your scene. When you select A-DEP, the XS automatically switches back to autofocus point selection and activates all autofocus points. To use A-DEP, turn the Mode dial to A-DEP and frame your shot as you would normally. Then press the shutter halfway. The XS then uses its autofocus mechanism to determine the closest and farthest points in your scene. It then chooses a focus point and exposure settings that will render the entire image range in focus.

Keep in mind that for A-DEP to work, you should have the upper focus points on the farthest point in your scene and the lowest point to be on the closest point in your scene.

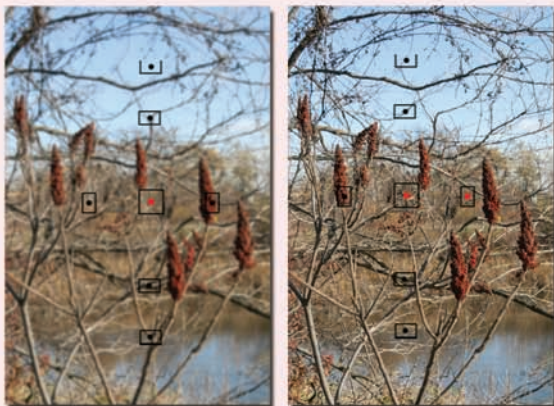


# Preventing Blurry Photos

Blur is most often caused by improper focus. So focusing the camera better will take you a long way to eliminating most of the situations in which your photos turn out blurry. Here are a few tips to help you capture that picture perfectly the first time.

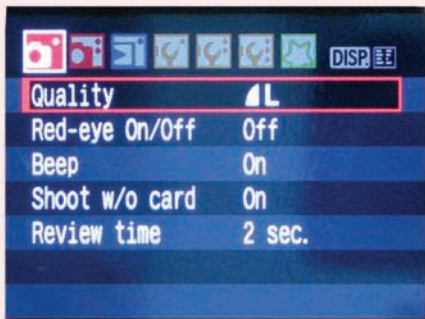
## AF Points

The key to getting your lens to produce tack-sharp photos is to pay attention to the AF points. When an AF point flashes red over a subject, the lens is focused on that subject. If more than one AF point flashes red, the lens is focused on the closest subject.



If the desired subject is not the closest, it may appear blurry in the photo. Therefore you may want to selectively choose a focus point to ensure perfect focus.

When you set your XS to one of the Basic modes, all the AF points are active. Set the camera to one of the Creative modes to select a single focus point. Make doubly sure that the AF point covers your subject and press the shutter button halfway to lock focus. While still depressing the shutter button, recompose the scene in the viewfinder if necessary and then press fully to capture the scene.



## Quality Setting

Until now, we haven't talked about the image recording Quality setting. While the XS has several settings, we recommend that you always use the highest quality **L** setting. Recording your photos in the **L** setting produces the highest resolution image possible. This in turn produces sharper photos than images with less resolution.



## Manual Focus

While autofocus lenses perform quite well for most photos, sometimes you may want to focus manually. This is especially true for close-ups. If you hear the lens struggling by moving as it tries to focus, switch to MF (manual focus).



By focusing the lens manually, you'll often get sharp photos that are difficult to capture with autofocus. Keep in mind that each lens has a minimum focus distance. If you try to take a photo of a subject that is closer than this minimum focus distance, your results will be blurry.



## Difficult Scenes

When shooting scenes with low light or low contrast, your camera may hesitate while focusing. You'll hear the lens move back and forth several times and then just set there if it is unable to achieve proper focus.

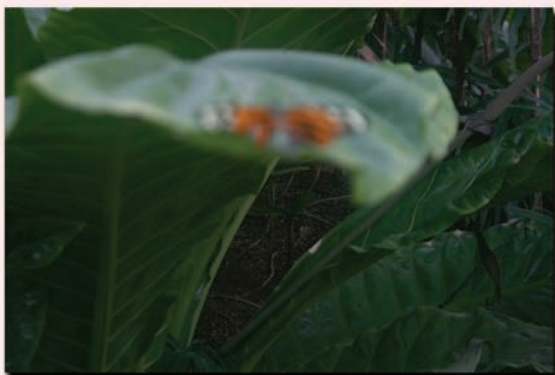
When this happens one solution is to focus on a secondary subject that is the same distance from you as the desired subject. Lock the focus by keeping the shutter depressed halfway, recompose the scene in the viewfinder and then press fully to capture the scene.

*Focus on a secondary subject the same distance from you as the desired subject when your XS hesitates while focusing.*

## More Tips On Fixing Blurry Photos

It's helpful to know whether a blurry photo is the result of poor focus or camera shake.

Poor focus usually produces a blurry photo with some elements that are sharp and others that are out of focus. The elements tend to have soft yet smooth edges.



*Example of poor focus causing the photo to be blurred.*



*Example of camera shake causing the photo to be blurred.*

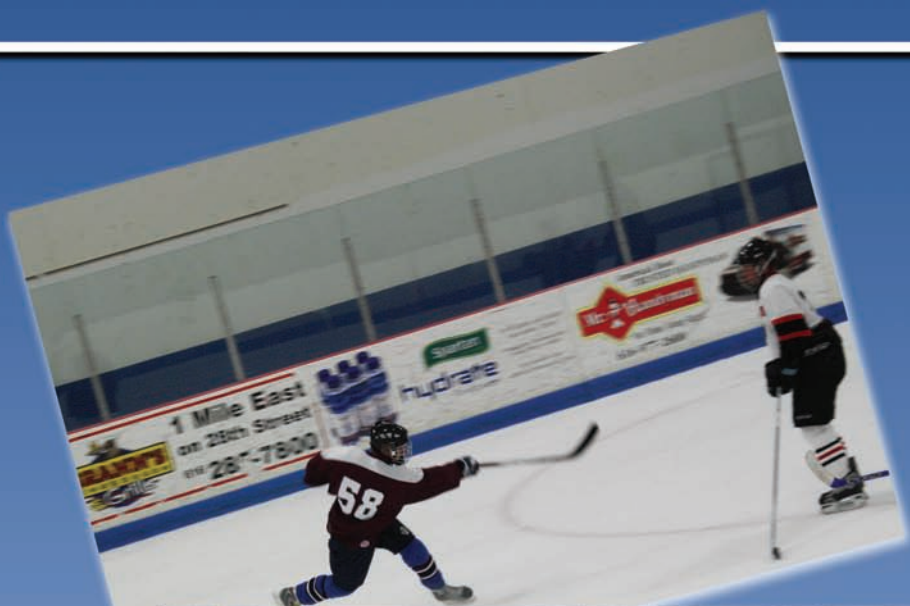
On the other hand, camera shake usually produces a photo that is blurry throughout. The elements have a jagged or harsh look.

*If you conclude your photo suffers from poor focus, follow these tips:*

- ❖ Set the lens for autofocus (AF on the lens)
- ❖ Consider using manual focus (MF on the lens) for closeups
- ❖ Consider using manual focus (MF on the lens) for scenes with low contrast
- ❖ Pay attention to the AF points -- the AF point covering the subject closest to you determines the focus.
- ❖ Select the center AF point as required by the scene -- using one of the Creative Modes.

*If you conclude your blurry photo suffers from camera shake, follow these tips:*

- ❖ Set the lens to use its Image Stabilizer, if available (Stabilizer ON | OFF on the lens)
- ❖ Plant your feet firmly on the ground -- don't stand on your toes
- ❖ Hold your XS so that your elbows are braced against your chest
- ❖ Carefully and gently press the shutter button -- don't hammer the shutter.
- ❖ Use a tripod if shutter speed is longer than 1/30th of a second.



# Action & Sports Photos

Recording action and sporting events are among the most exciting types of photos. Here are a few ways to make your photos come alive.

## My Indoor Sporting Events Photos Are Blurry

My son plays hockey on his high school team. When taking photos at the indoor rink using Sports mode, the photos are out of focus. Shouldn't Sports Mode stop the action?



**Mode:** Sports Mode **Exposure:** 1/100  
**Aperture:** f-5.6 **ISO:** 400

Although the Sports Mode works great in many situations, sometimes the action is too fast and results in the main action becoming blurred.



**Mode:** Av (Aperture Priority - Widest setting)  
**Exposure:** 1/250 **Aperture:** f-5.6 **ISO:** 1600

By switching to Av mode and boosting the ISO to 1600, you can use a faster shutter speed to stop the action.



Turn the Mode Dial to Av (Aperture priority). (1)



Press the ISO button (2) and turn the Main Dial (3) to select 1600. (4) Press the SET button. (5)



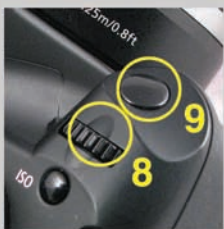
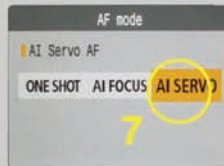
Press the AF mode button (6), and use the cross keys to select AI SERVO (7) and press SET. (5)



Rotate the Main dial (8) to the left until the aperture is at the widest setting. As you change the aperture to the widest setting, you're also setting the fastest shutter speed.



Press the shutter button (7) completely to capture the action.



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My Indoor Sporting Events Photos Are Blurry

## Tip Talk

When you set the camera to Sports mode, it limits the ISO setting that the camera uses. This in turn limits the shutter speed for proper exposure that can introduce subject movement into the photos.

You can boost the ISO to 1600 by changing the mode to Av (Aperture Priority) thus allowing you to choose a wider aperture and faster shutter speed to stop the action.

### Zooming In On ISO

The ISO number indicates how sensitive the image sensor in your XS is to the amount of available light. A higher ISO number means the image sensor is more sensitive to light. This means that you can take photos in low-light situations.



One common example is when you're in conditions where there isn't enough light to correctly expose a scene. Although you might be able to use the built-in flash, you can manually set a higher ISO to 800 or even 1600, for example. Also, if you've set a shutter speed so slow (1/60 sec. and slower) that it's difficult to hold the XS steady, then try the next higher ISO which will then allow you to select a faster shutter speed.

You should keep these general rules in mind about the ISO setting:

- ❖ When you're shooting in conditions where there is enough light for a correct exposure, such as on a sunny day, set a low ISO such as 100.
- ❖ If you want to take photos indoors in low-light conditions, you'd need to improve the conditions by using the flash or setting a higher ISO.
- ❖ You can prevent camera shake and blurry photos by using a higher ISO.
- ❖ The problem of noise with high ISO settings, which was a major concern for photographers before, isn't as much of a problem now. Therefore, don't be afraid to set a higher ISO number in situations that require it.



## My Indoor Sporting Events Photos Are Blurry #2

My youngest is a skateboarder. To capture him in action, I've increased the ISO but the photos are still blurry and out of focus. Is there anything I can do to make the photos sharper?



**Mode:** P (Program AE) **Exposure:** 1/125  
**Aperture:** f-4.0 **ISO:** 1600

**In some situations boosting the ISO may not stop the action leaving a blurry photo.**



**Mode:** P (Program AE) **Exposure:** 1/125  
**Aperture:** f-4.0 **ISO:** 1600

**When available lighting is low, you can "pan" the camera to follow the action.**



Turn the Mode Dial to Av (Aperture priority). (1)

Press the ISO button (2) and turn the Main Dial (3) to select 1600. Press the SET button. (4)

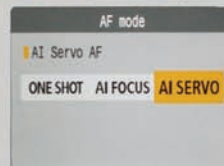
Press the AF mode button (5), press the left or right cross key to select AI SERVO and then press SET. (4)

Press the shutter button (6) halfway and rotate the Main dial (7) to the left until the aperture is at the widest setting. As you change the aperture to the widest setting, you're also setting the fastest shutter speed.

Position yourself so you can observe the movement of the subject from either a left to right direction or from right to left direction. (8) Follow the movement from this position by keeping the subject centered in the viewfinder. This is called *panning*. See the next page for more information on panning.

Press and hold the shutter button (6) halfway as you slowly and steadily pan the camera.

Press the shutter button (6) completely to capture the action.



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My Indoor Sporting Events Are Blurry #2

## Tip Talk

By increasing the ISO setting and using the widest aperture, you're using a fast shutter speed to help stop the action.

In situations when the lighting is low, such as this indoor skateboard park, the shutter speed may not be fast enough to stop the action. You can by panning, however, reduce the amount of subject movement (in relation to the camera) and capture a sharper image of your subject.

Take several different shots varying the speed at which you follow the subject in the viewfinder. Keep your panning movement smooth and steady. The panning technique takes practice so don't get discouraged if your first few attempts aren't perfect.

### Zooming In On Panning

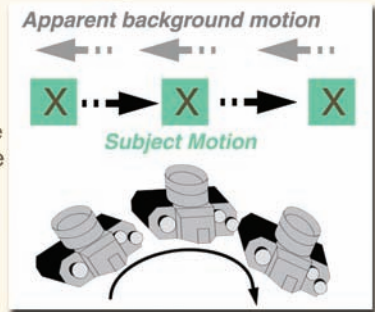
The technique of panning to convey a sense of motion is one that takes practice. You'll need slow shutter speeds and steady hands.

One reason that panning requires practice is that unlike most of your other photos, panning means you're moving the XS instead of holding it still.

Note the subject in this diagram is moving from left to right but could be moving in the other direction or up or down. What is important is that you can follow the movement evenly throughout the time it takes to capture the photo. How fast and how close the moving subject is will determine the shutter speed to use.

Use a slower shutter speed if you want to emphasize the sense of movement but keep in mind that this will make it more difficult to keep your camera steady.

Plant your feet, draw your arms into your body, hold your camera securely and rotate the top half of your body as you track your subject. Pan as fast as the subject moves so you keep it in the same position in your viewfinder. Press the shutter down as you continue your motion and follow through even after the shutter has closed. Use continuous shooting mode if you have time for more exposures.



## Capturing Peak Action

My son plays soccer and I've been using my XS to take action shots. However, my photos lack the excitement that go with these games. What can I do to capture the peak action?



**Mode:** Tv (Shutter Priority)  
**Exposure:** 1/250 **Aperture:** f-4.0  
**ISO:** 200 **Drive Mode:** Single shooting

Here's a **single stop** action of the soccer player.



**Mode:** Tv (Shutter Priority)  
**Exposure:** 1/250 **Aperture:** f-7.1  
**ISO:** 200 **Drive Mode:** Continuous

When you set the **Drive Mode** to **Continuous**, you can record a series of action photos.



Turn the Mode Dial to Tv (Shutter priority). (1)

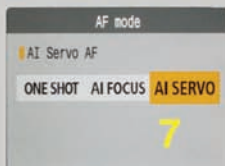
Press the ISO button (2) and rotate the Main Dial (3) to select 1600. Press the SET button. (4)

Press the AF mode button (5), and press the left or right cross key to select AI SERVO (7) and press SET. (4)

Press the Drive mode button (6) and press the left or right cross key to select Continuous shooting. (8)

Rotate the Main dial (9) to the left until the aperture is at the widest setting. As you change the aperture to the widest setting, you're also setting the fastest shutter speed.

Compose your scene and press and hold the shutter button (10) to capture a series of action shots. Your XSi can capture 50 continuous high resolution images.



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Capturing The Peak Action

## Tip Talk

The usual way of capturing subjects in action is to use Sports mode. The Sports mode, however, limits the ISO setting to 800, which, in turn, limits the shutter speed and causes the subject blur. In low light situations, such as this indoor skating rink, however, you'll want to increase the ISO setting to insure a proper exposure with minimum subject movement.

By changing to Aperture priority mode (Av), you can first boost the ISO to 1600 and choose a wider aperture plus faster shutter speed to stop the action. The camera's Continuous shooting mode lets you take a series of action photos when you hold down the shutter button. This lets you choose from a group of action photos to select a "peak" capture.

### Zooming In On Clearing Custom Settings

Don't forget to clear or change any settings to your XS that you have made before your next photo opportunity.

You can do this easily by following these steps:

- ❖ Turn the Mode Dial to select a mode in the Creative Zone (such as Tv).
- ❖ Press the MENU button.
- ❖ Press the right cross key to highlight the third Tool icon.
- ❖ Press the down cross key to select "Clear settings"
- ❖ Press the SET button
- ❖ Press the down cross key to select "Clear all camera settings"
- ❖ Press the SET button
- ❖ Press the right cross key only if you want to confirm that you want to clear the camera settings.
- ❖ Press the SET button.

This will return your XS to the original settings, for example, ISO, exposure, etc.





The Continuous shooting mode lets you take several action photos when you press and hold down the shutter button. This lets you choose the "peak" action photo.



**Mode:** Av (Aperture Priority)  
**Exposure:** 1/250 **Aperture:** f-8.0  
**ISO:** 200 **Drive Mode:** Continuous

# Tips On Shooting At Sporting Events

## Problem With Lights Inside Gyms

The mercury or sodium vapor lights used in many high school gyms occasionally flicker or change in both intensity and color. Although you may not notice it because it happens so fast, your camera may notice it and therefore you'll see it on the resulting photo. The best way, and perhaps the only way, to avoid this problem is to use the built-in flash on your camera. Check to make certain that flash photography is allowed at the event.

## Practice

Snap as many photos as you can at your children's sporting events to increase the chance of getting great photos that you can proudly show to family and friends. It also gives you more experience in getting the proper camera settings for future sporting events. It's not always possible to capture every single moment at a sports event but snapping as many photos as you can increases the chances of getting better photos.

## Don't Forget The Action Behind The Scenes

Not all the activity occurs on the field, court or ice so consider taking photos of the fans as well. These types of photos can help tell the story the game or event.



## Get Photos Of The Scoreboard

Don't overlook the scoreboard. It's a great way to record game information you may later need to help tell a story with your photos.





## **Set Your Camera For Continuous Mode**

Because it's impossible to time every shot perfectly, use continuous mode so you can take several photos in quick succession. (See page 47 for more information.)

## **Capture The Action By Panning**

Panning is one technique you should practice for photographing sporting events. By becoming experienced in panning, you'll produce a photo with a nice effect of seeing your athlete in focus yet have the background slightly blurred. (See page 45 for more information.)

## **Anticipate The Action**

One way to snap your best photo is by anticipating the action. Always be ready for opportunities such as the action near a goal in a hockey or soccer game or your son waiting for the pitch in baseball game.

## **Expect The Unexpected**

The most interesting sports photo opportunities are not always found on the field so look around for photo opportunities in unexpected places, such as the bleachers, pressbox, refreshment stands, etc.

## **Use breaks in the action**

Use timeouts and other breaks in the action to check your camera settings, battery power, memory, etc.



# Fixing Color In Your Photos

You can take what you think (hope) is a great photo only to realize that it's too blue or too yellow. These are examples of problems with color that you may have noticed before but tried to fix on your computer using software.

However, it's better to avoid these problems in the camera instead of using software.

You also may be trying to take that sunset or sunrise photo but never quite got the shades of color just right.

We'll talk about various color problems and solutions in this section.

## Fixing Orange/Red-tinted Photos

When I'm taking photos indoors without the flash, the faces look reddish or orangish. How can I fix this?



**Mode:** Full Auto (therefore AWB)  
**Exposure:** 1/25 **Aperture:** f-4.0 **ISO:** 640

**Notice the reddish tint in this photo. This type of problem is usually due to an incorrect white balance setting on the camera.**



**Mode:** P (Program AE) **Exposure:** 1/30  
**Aperture:** f-3.5 **ISO:** 800  
**White Balance:** Set to Tungsten light

**Notice that the color is more pleasing after the white balance is adjusted.**



Turn the Mode Dial to P (Program AE Zone). (1)

Press the ISO button (2) and rotate the Main Dial (3) to select **AUTO**.

Press the SET button. (4)

Press the WB button. (5)

Press the right cross key to select **Tungsten light** (6) from the choices and press the SET button. (4)

Compose your scene with the main subject in the center of the viewfinder and press the shutter button (7) fully to capture the picture.



## Tip Talk

To fix red faces, we'll change the *white balance* setting of the camera.

The indoor lighting in most of our homes comes from tungsten light bulbs, also called incandescent bulbs. The problem with these types of light bulbs is that they tend to turn skin color, or flesh tones, orangish or reddish in photos. You can compensate for the orangish or reddish flesh tones by selecting one of the Creative Zones and then selecting the appropriate white balance (WB) setting.

Keep in mind that you must be in one of the Creative Zones to set the WB; when you set your camera to one of the Basic Zones, you cannot select any of the WB settings.

### Zooming In On Locating Buttons & Keys

Refer to pages 12-13 for information on locating buttons, keys, etc., that we mention in the diagrams.



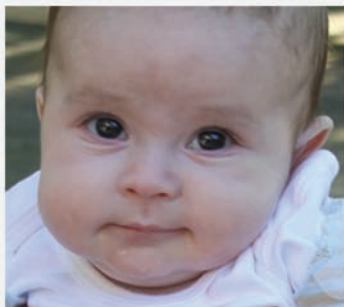
## Fixing Blue-tinted Photos

Some of my outdoor photos appear bluish. Why?



**Mode:** Full Auto **Exposure:** 1/60  
**Aperture:** f-6.3 **ISO:** 200

**Notice the bluish tint in this photo, which was captured in the open shade.**



**Mode:** P (Program AE) **Exposure:** 1/80  
**Aperture:** f-5.6 **ISO:** 200  
**White Balance:** Shade

**The color here is more pleasing after the white balance is adjusted.**



Turn the Mode Dial to P (Program AE Zone). (1)

Press the WB button. (2)

Press the right cross key to select **Shade** (3) from the choices and press the SET button. (4)

Compose your scene with the main subject in the center of the viewfinder and press the shutter button fully to capture the picture. (5)



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Fixing Blue-tinted Photos



To remove the blue tint, we'll again adjust the *white balance* of the camera. By adjusting the camera's white balance to match the scene, the camera has captured the photo with a slightly warmer tint.

### Tip Talk

Photos that you take in the open shade may suffer from a lack of reddish light. Keep in mind that you cannot select any of the WB (White Balance) settings when you have your camera in any of the Basic Zones. If you, however, select one of the Creative Zones, you can manually set the white balance to compensate for the bluish flesh tones.

## More About White Balance

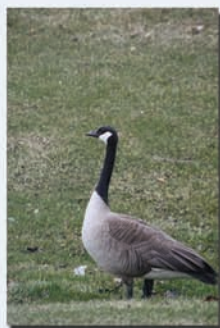
As its name suggests, white balance removes or adjusts the overall color of an image so objects that appear white in your scene also appear white in your photos. To do this, your camera depends on the "color temperature" of the light source and refers to the relative warmth or coolness of white light.

Keep in mind that most light sources are not 100% white but have a specific "color temperature." A low color temperature shifts light towards red while a high color temperature shifts light towards blue.

Different light sources emit light at different color temperatures producing the color cast. The unit of measurement for light temperature is Kelvin, named for its inventor, Lord Kelvin. The following table shows approximate temperatures of light sources that might affect your photography:

Type of Light	Color Temperature in degrees K
Candle Flame	1000-2000
Incandescent (Tungsten)	2500-3500
Sunrise / Sunset (clear skies)	3000-4000
Fluorescent Lamps	4000-5500
Electronic Flash	5000-5500
Bright overhead sun, clear sky	5000-6500
Cloudy Sky / Shade	6500-8000
Blue Sky	9,000
Overcast / Heavy cloud cover	9000-10,000

Why is it so important to understand white balance? An incorrect white balance (WB) setting can create blue, orange or even green color casts that can turn an otherwise good photo into a disappointing photo.



When you press the shutter button, your camera considers the overall color of the scene and calculates what it determines to be the automatic white balance (AWB). However, your camera can be tricked, especially if one color, say green, dominates the scene or if there is no natural white present in the scene.



In other words, your camera needs to find a reference point that represents white. It will then calculate all the other colors based on this white point. For example, if you photograph a halogen light shining on a white wall, the wall in the photo will have a yellow cast even though the wall to you appears white. If, however, the camera knows the wall is supposed to be white, it will then compensate all the other colors in the scene accordingly.



The trick is to tell your camera how to do this. Fortunately, this is why you may need to use one of the preset white balances on your camera.

Also, as you become more familiar with white balance, you can create your own white balance setting.



When you understand white balance, you'll avoid or overcome color casts that your camera may create. You'll also become a better photographer because you'll be improving your skills under a greater range of lighting conditions.

*An incorrect white balance setting can create different color casts that can turn a photo into a disappointing photo.*

## Capturing Colorful Sunsets

I'm starting to take sunset photos but too often they're not as "rich" as I would like. Can you suggest how I can take better sunset photos?



**Mode:** Tv (Shutter Priority) **Exposure:** 1/500  
**Aperture:** f-9 **ISO:** 100

**Although this photo is picturesque, some people may prefer a photo that is "richer."**



**Mode:** Tv (Shutter Priority) **Exposure:** 1/200  
**Aperture:** f-11 **ISO:** 400  
**Exposure Compensation:** -1

**This photo was taken a few seconds later and exhibits much richer colors.**



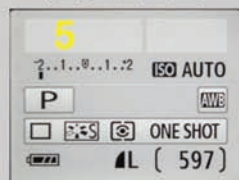
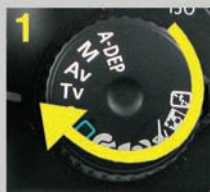
Turn the Mode Dial to Tv (Shutter Priority). (1)

Press the Metering mode button and choose Evaluative metering. (2) Press the SET button. (3)

Press and hold down the AV+/- button (4) and rotate the Main Dial (6) to -2. (5)

Compose your scene with the main subject in the center of the viewfinder and press the Shutter button halfway. (7)

Press the Shutter button fully to capture the sunset. (7)



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Capturing Colorful Sunsets

## Tip Talk

One way to add richer, saturated colors to your sunset photos is to adjust the *exposure compensation*.

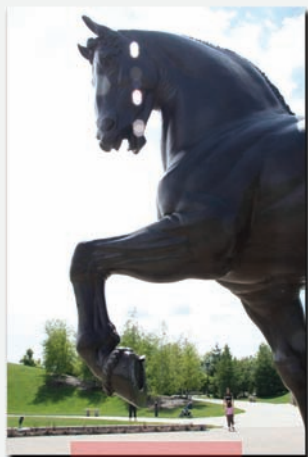
There is no right way or wrong way to capture sunsets because judging the results is very subjective. Because these photos are subjective, you may want to take several shots with some exposed evenly, some one stop underexposed and some two stops underexposed. Then compare the three results on your LCD monitor and see which you like the best.

Good sunset photos are often the result of careful planning. Look for places that might be good for sunsets before your photo shoot. Instead of a sunset over open water, consider adding foreground elements and silhouettes such as we did with the lighthouse.

Also consider the weather. Instead of waiting for a perfectly clear day for a sunset photo, you may find the most dramatic photos are on days when clouds appear above the horizon.

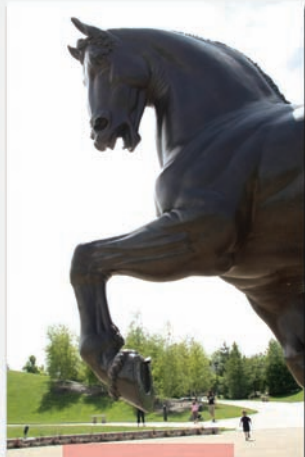
## Eliminating Sunspots

Why am I getting annoying sunspots on my photos?



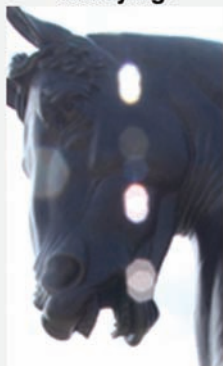
Mode: Full Auto Exposure: 1/160  
Aperture: f-11.0 ISO: 200

**You may notice that your outdoor photos have sunspots or streaks through the center. Although sunspots may add a nice effect to some photos, they're often distracting and annoying.**



Mode: Full Auto Exposure: 1/160  
Aperture: f-11.0 ISO: 200  
Lens Hood & Hand: Used

**Here's the same subject but this time without the annoying sunspot.**



## Tip Talk

Although most photographers consider sunspots as a problem to avoid, other photographers believe the sunspots can add a dramatic effect to their photos.

You may want to consider experimenting with sunspots to see if you can use them to add dramatic effects to your photos as well.



## Zooming In On Eliminating Sunspots

This technique is not a camera setting technique, but instead explains how to arrange your camera to minimize the chances of sunspots. The sunspots are the result of direct or reflected rays of sunlight reaching the front surface of your lens.



### Use A Lens Hood

A lens hood fits over the front of your lens and blocks rays of sunlight from striking the surface of your lens. If you don't already have a lens hood, you can purchase one for your lens at a nominal fee.

### Shield The Lens

Shield the front of the lens with your hand or a hat. When shooting towards the sun, you can often use your hand or an object such as a hat to block the direct rays of the sun from striking the front lens surface.

### Polarizing Filter

A polarizing filter screws into the front threads of your lens and allows the rays of light to pass through to the lens in an orderly manner. In doing so, it darkens the sky to produce a more dramatic effect to any captured photos.



## Taking Black & White Photos

How can I easily capture photos in black and white?



**Mode:** P (Program AE) **Exposure:** 1/400  
**Aperture:** f-10.0 **ISO:** 200  
**Picture Style:** Standard

**Here's a photo of several bike racks and one lonely bicycle.**



**Mode:** P (Program AE) **Exposure:** 1/320  
**Aperture:** f-10.0 **ISO:** 200  
**Picture Style:** Monochrome

**By changing your XS to record monochrome, you can make the photo more dramatic.**



If you like black and white photography, you can set your Canon XS to take great black-and-white photos automatically.

Press the Picture Style button (1).

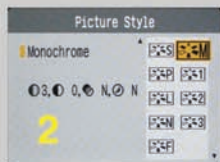
Press the down cross key to select **Monochrome**. (2)

Press the SET button. (3) Press the Shutter button (4) halfway to continue.

Compose your photo (5) and press the shutter button. (6)

**NOTE:** You can change the settings as needed just as you would with a color photograph. In other words, if the resulting photo is too dark, please read the section on fixing dark photos.

Make certain to cancel the Monochrome setting when you're finished (see page 48 for more information).



# Tips On Shooting In Black And White

Why shoot black and white photography when every one is so used to seeing a bright colorful photo. It's easy for most photographers to consider black-and-white photography as "old" in this digital age. It is, however, because of your digital camera that you can easily rediscover the beauty of black-and-white photography.

## Subject

Choose your subject carefully because some subjects that look interesting in color look dull in black-and-white (but the opposite is also true). Photographs of people look especially good in black-and-white but buildings, landscapes and other scenes are also valuable subjects in black-and-white photography.

## Perspective

Perspective in any photograph can help tell a story and bring new interest to an otherwise over-photographed subject. Try shooting from an unusual angle, for example, if you're photographing a building, stand at the bottom and aim your camera up to snap the photo.



## Background

Make certain any background elements don't interfere with your subject. If so, take the photo from a different angle or move your subject a few feet to the right or left.

The photograph on the right is an example. The small jet in the back is taking away from the nostalgia of the older aircraft in the foreground.



## Light and shadow

Using available light and shadows properly can turn a good black and white photograph into a more dramatic photo. You may need to visit the same scene at different times during the day to snap photos as the light and shadows change.

## Colors

Although you might not think so, you must consider color carefully in black and white photography. Some colors and color combinations that are eye-catching in a color photo can get washed out in a black-and-white photograph. Although red and green look very different in a color photograph, they're almost impossible to tell apart in a black-and-white photograph.



## Shapes

Black-and-white photography depends greatly on shapes and lines to provide interest to anyone looking at your photos. A black-and-white photograph that shows slanting lines, crooked lines or curves usually looks more interesting in black-and-white than photographs of straight lines.

## Texture

Textures, as with shapes, are very important in black-and-white photography. The surface of a straw hat, for example, has more visual impact than the surface of a baseball cap. People in black and white photographs usually look better if they're dressed simply and in solid colors.



# Fixing Photos That Are Too Dark

Sometimes either your photo or part of your photo can be too dark either from shade, lighting problems or flash problems. In this section we'll talk about how you can solve the problems of dark photos.

## Faces Are Dark Due To Backlighting

The grass and trees in the background look great in my photo but the faces are a little dark. How can I lighten the faces yet keep the background looking great?



**Mode:** Full Auto **Exposure:** 1/125  
**Aperture:** f-7.1 **ISO:** 200  
**Metering:** Evaluative Metering (default)

**The sky, grass and trees in this photo look great but the face is a bit dark. You'll need to change the metering mode of your camera to overcome this common problem.**



**Mode:** P (Program AE) **Exposure:** 1/125  
**Aperture:** f-5.6 **ISO:** 200  
**Metering:** Partial Metering

**By switching the metering mode to partial metering, we've lightened our subject's faces.**





Turn the Mode Dial to P (Program AE Zone). (1)

Press the Metering mode button. (2)

Press the up or down cross key to select Partial metering. (3)

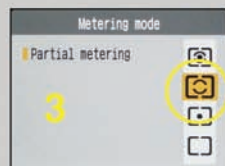
Press the SET button. (4)

Compose the picture by placing the central part of the viewfinder over the subject's face.

Press the shutter button halfway. (5)

If the subject's face is not directly in the central part of the viewfinder, press the AE Lock button (6) to lock the exposure and then recompose the picture.

Press the shutter button (5) fully to capture the picture.



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Faces Are Dark Due To Backlighting

## Tip Talk

To lighten the subject's face, you can change the metering mode to take the light falling on the subject's face into greater consideration. In this scene, the sun is lighting the background evenly but the faces are in the "shade" and, therefore, appear too dark. *Backlighting* occurs when the main light source (in this case, the sun) is shining from behind the main subject.

Your XS normally assumes the scene is evenly lit and determines the standard exposure using *evaluative metering*. In this backlit scene, the lighting is uneven; the sun is bright but the faces are heavily shadowed. When you select *Partial metering*, the XS determines the standard exposure by using the central part of the viewfinder, thereby lightening the faces.

### Zooming In On The XS Metering Modes

Metering is the brains behind how your camera determines the shutter speed and aperture, based on lighting conditions and ISO speed. Metering options for your XS include Evaluative, Partial, Spot and Center-weighted average.



Partial metering and Spot metering give you more control over the exposure than Center weighted average. They're useful when there is a small object within your scene that you either need to be perfectly exposed or know that it will provide the closest match to middle gray.

You may also want to use Spot metering or Partial metering when you're attempting creative exposures or in unusual ambient lighting conditions.

One of the most common applications of partial metering is when the subject is backlit (as in this "challenge"). By metering off of the subject, you can avoid having the subject look like an under-exposed silhouette against the bright background.

Spot metering works similarly to Partial metering but is used less often because its metering area is very small and therefore quite specific. Center-weighted average metering was until recently the most popular setting because it handled both a bright sky above a darker landscape below. However, the flexibility of partial and spot metering have replaced center weighted metering for many photographers. Nevertheless, some photographers prefer to use it as the default metering mode.

## Photo Is Dark Due To Backlighting

Why is the subject in some of photos dark but the background is well-lit. For example, in the following photo, how can I fix the backlighting from darkening the subject's face?



Mode: Full Auto Exposure: 1/250  
Aperture: f-11.0 ISO: 200

Although the photo looks good overall, the subject is a bit dark. You'll need to change the metering mode of your XS to overcome this common problem.



Mode: P (Program AE) Exposure: 1/200  
Aperture: f-9 ISO: 200  
Exposure Compensation: +1

By applying additional exposure to the scene we've again lightened our subject's face.



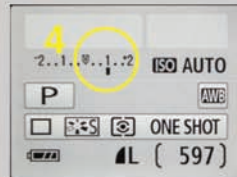
Turn the Mode Dial to P (Program AE). (1)



Press and hold down the Av+/- button (2) and turn the Main Dial to the right. (3)



Continue to turn until the exposure level indicator is set for one additional stop of exposure ("positive stops"). (4)



Compose the picture by placing the central part of the viewfinder over the subject's face and press the shutter button halfway. (5)



If the subject's face is not directly in the central part of the viewfinder, press the AE Lock button (6) to lock the exposure and then recompose.

Press the shutter button fully to capture the picture.



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Photo Is Dark Due To Backlighting

## Tip Talk

To fix the photo, we'll use a different technique called *exposure compensation* to lighten the subject's face.

As in the first example, this scene has backlighting where the main light source is shining from a position behind the main subject.

When you set one of the Basic Zones, the backlighting "fools" the exposure metering of your camera producing the dark face. To adjust the exposure, set the camera to one of these Creative Zones.

By turning the Main Dial to the right, you're adding more exposure (called *exposure compensation*), thereby lightening the dark face.

If neither solution corrects the dark face individually, combine the two solutions by changing the Partial metering and using exposure compensation.

### Zooming In On Locating Buttons & Keys

Refer to pages 12-13 for information on locating buttons, keys, etc., that we mention in the diagrams.



## Photo Is Dark Due To Backlighting #2

I have framed and focused everything properly but the subject in my photos is still dark. Do you have any suggestions as to how I can fix this?



Mode: Full Auto Exposure: 1/160  
Aperture: f-18.0 ISO: 200

Although the subject is framed and focused properly, backlighting is making her a bit too dark in this photo.



Mode: Full Auto Exposure: 1/200  
Aperture: f-8.0 ISO: 200

However by moving or rearranging the subject, you can also change the lighting conditions and overcome the problem of backlighting.



This technique isn't a camera setting technique, but instead explains how to arrange the subject to take advantage of the source of main light.

Ask the subject to move to a position so that the light is falling on his/her face.

As the picture-taker, move so that the light is coming from behind – often called “over the shoulder.” (1)

Turn the Mode Dial to the Full Auto Zone. (2)

Press the Shutter Button fully to capture the picture. (3)

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Photo Is Too Dark Due To Backlighting

## Tip Talk

The problem with this photo is that it has very strong backlighting. This makes the young girl's face dark. To lighten the face, we'll change the way in which we arrange the subject in the scene.

You may be wondering how you can move the subject and still include the original background?

Don't worry because you won't need to be a magician. You might think that this technique isn't very useful in this situation, but by moving to a slightly different angle, you can do wonders for lighting faces and including the scenic background. A few steps in one direction or another and some swiveling can yield dramatically improved photos.



## Photo Is Too Dark Due To Shade

I like taking photos outdoors in the bright sun but too often the shade is making the subject too dark. For example, the girl's face in the following photo is in the shade, which makes both faces too dark. How can I fix this?



Mode: Full Auto Exposure: 1/125  
Aperture: f-10 ISO: 200

**Shade presents a frustrating problem when taking photos in the sunlight. Part of the photo is fine but other parts are too dark because they're in the shade.**



Mode: P (Program AE) Exposure: 1/200  
Aperture: f-18.0 ISO: 400 Flash: Fired

**Fill flash is a great solution in situations where you need additional light to fill areas of the subject that are in the shade.**



Turn the Mode Dial to P (Program AE). (1)



Press the Flash button (2) to pop the flash.



Press the shutter button halfway (3) to focus the lens and to verify that the flash icon is ready.



Press the shutter button fully to capture the picture. (3)

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Photo Is Too Dark Due To Shade

## Tip Talk

To fix these types of problems, you'll lighten the subject's face by using the built-in flash. Using the built-in flash is an easy, effective way to add light to dark areas of your scene (i.e., photo).

When you use this technique outdoors, it's referred to as *fill flash* where the additional light fills the areas of the subject that are in shadows.

### Zooming In On Fill Flash

Although you'll most likely use fill flash to brighten dark areas when you're taking photos outdoors on sunny days, don't forget that you can use the technique whenever the background is much brighter than the subject.

Also keep in mind that, depending on your distance from the subject, you might not need the full power of the flash. If you're too close to your subject, the flash may overexpose your subject. To avoid this problem, set the Flash Exposure Compensation level and choose from different flash levels, such as 1/3, 1/2, or 1/8 power. Try setting the flash to 1/2 power and see if the natural light and the light from the flash are in balance.



## Photo Is Too Dark Due To Shade #2

Here's another example of how a scene is brightly lit but a nearby tree is partially shading the girl's face.



Mode: Full Auto Exposure: 1/80  
Aperture: f-7.1 ISO: 200

Here's another example where the background in the scene is brightly lit but a nearby tree is partially shading the girl's face.



Mode: P (Program AE) Exposure: 1/200  
Aperture: f-8.0 ISO: 800  
Built-in Flash: Fired

Although fill flash increases the amount of light falling on the subject's face, the range of the flash is limited. You can, however, increase the ISO to extend its range.



Turn the Mode Dial to P (Program AE). (1)

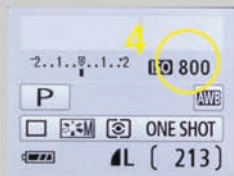
Press the ISO button (2) and rotate the Main Dial (3) to a higher value such as 800.

Press the SET button. (4)

Press the Flash button (6) to pop the flash. You'll find the Flash button on the left side of the camera near the lens opening.

Press the shutter button halfway to verify that the flash icon is ready. (7) (The flash icon looks like a downward-pointing lightning bolt and you may see it for a only a brief moment.)

Press the shutter button fully to capture the picture. (7)



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Photo Is Too Dark Due To Shade #2

To fix the photo, you'll need to lighten the subject's face by using the built-in flash. The camera is more than fifteen feet from the subject. The flash is normally effective to about fifteen feet. However, by boosting the ISO setting for your camera, you can extend the range of the flash (even outdoors in the daytime). The subject's face is now lighter.

### **Tip Talk**

The nearby tree has partially blocked the light from illuminating the subject's face even though the sun provides plenty of light for the background.

While fill flash increases the amount of light falling on the subject's face, the range of the flash is limited. By increasing the ISO setting of the camera, the range of the fill flash is extended and adds more exposure to the subject's face.

## Using A Reflector To Fix Dark Photos

The subjects in my photos are only slightly darker than I would like. Is there a way to fix this problem?



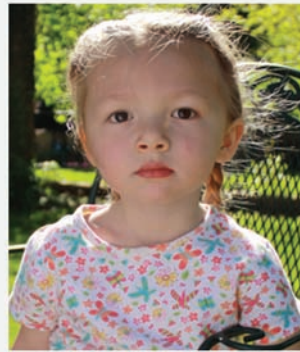
Mode: Full Auto Exposure: 1/500  
Aperture: f-3.5 ISO: 100

The faces of the subjects in this photo are slightly dark although the rest of the scene is fine. A reflector is one way to lighten the faces and soften the shadows in this situation.



Mode: Full Auto Exposure: 1/640  
Aperture: f-3.5 ISO: 100  
Reflector: Used

We used a reflector here to redirect the sunlight to the areas of the face that the shadows hide or make darker. You can also use a handkerchief or a pillowcase to make a "homemade" reflector.



This technique is not a camera setting technique, but instead explains how you can selectively add light to the subject's face without affecting the remainder of the scene.

Ask an assistant to hold a portable reflector (available from most photo and camera shops). If you don't have a reflector available, use a white sheet or pillowcase opposite the subject's face. You'll want the white surface to reflect the sunlight so as to lighten the shadows on the face. (1)



Turn the Mode Dial to the Full Auto Zone. (2)



Press the shutter button fully to capture the photo. (3)





## Tip Talk

In this type of situation when you want to lighten the faces and soften the shadows as well, we'll add light using a *portable reflector*.

A portable reflector is one of the best items to use in these situations. You can find a portable reflector at most photo and camera shops but you can improvise a reflector from a white sheet or pillowcase.

In this example, we used a portable reflector available from most photo and camera shops. You want to position the reflector so it redirects the sunlight to the areas of the face that are hidden or darkened by the shadows.

This reflector has a flexible wire frame that opens to a diameter of about three feet and includes several colors of reflective material, for example, white, silver and gold that add a tint to the reflective light. The unit collapses to a small size — about ten inches — for easy storage.

You can also improvise a reflector from a white sheet or pillowcase.

## Part Of The Photo Is Too Dark

I'm using the tree in the foreground in this picture to help frame my photo. The main subject is perfectly exposed but the tree is a bit dark. How can I fix this?



**Mode:** Full Auto **Exposure:** 1/200  
**Aperture:** f-9.0 **ISO:** 200  
**Flash:** Not Fired

The tree is used to help frame the scene. However, it's dark compared to the main subject.



**Mode:** P (Program AE) **Exposure:** 1/120  
**Aperture:** f-14 **ISO:** 400  
**Flash:** Fired

By using the built-in flash on your camera, you can add more light to the tree trunk and leaves making for an evenly exposed scene.



Turn the Mode Dial to P (Program AE). (1)



Press the flash button (2) to pop the flash (3). You'll find the flash button on the left side of the camera near the lens opening.



Compose the picture by placing the central part of the viewfinder over the main subject (building in this example). (4)



Press the shutter button (5) halfway to verify that the flash icon is ready.



Recompose if necessary.

Press the shutter button fully to capture the picture. (5)

## Tip Talk

To lighten the tree in this photo, you can use the built-in flash on your camera.

*Fill flash* is used most of the time to add more light to faces in a scene. But you'll find many other uses for the flash when you want to even out the lighting of a scene.

### Zooming In On Fill Flash

Although you'll most likely use fill flash to brighten dark areas when you're taking photos outdoors on sunny days, don't forget that you can use the technique whenever the background is much brighter than the subject.

Also keep in mind that, depending on your distance from the subject, you might not need the full power of the flash. If you're too close to your subject, the flash may overexpose your subject. To avoid this problem, set the Flash Exposure Compensation level and choose from different flash levels, such as 1/3, 1/2, or 1/8 power. Try setting the flash to 1/2 power and see if the natural light and the light from the flash are in balance.



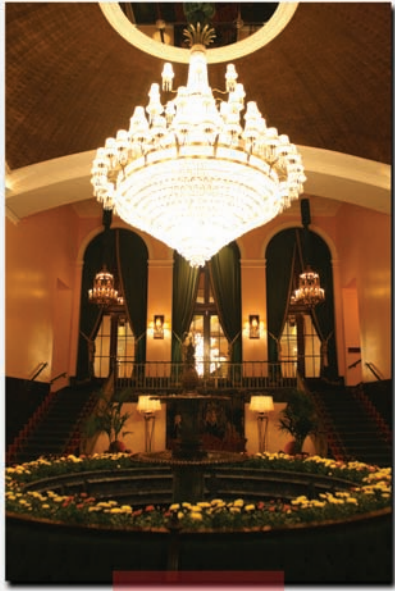
# Indoor Flashless Photo Is Too Dark

Sometimes I'm at places that prohibit using my flash indoors. How can I take an indoor photo without using the flash?



Mode: Full Auto Exposure: 1/5  
Aperture: f-5.6 ISO: 200

**When flash photography is prohibited, your photo may be too dark.**



Mode: P (Program AE) Exposure: 1/200  
Aperture: f-5.6 ISO: 800  
Exposure compensation +1

**Adjust the ISO and exposure compensation to capture a brighter photo.**



Turn the Mode Dial to P (Program AE mode). (1)

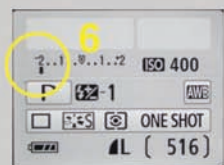
Press the ISO button (2).

Use the cross keys (3) to select a higher ISO setting, such as 200 or 400.

Press and hold down the Exposure Compensation button (AV+/- button) (4)

Rotate the Main Dial (5) so you select -2 (6) for the exposure compensation.

Verify that the scene is to your liking and press the Shutter button (7) fully to capture the photo.



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Indoor Flashless Photo Is Too Dark

## Tip Talk

You may find occasions where you're allowed to snap photos, but you cannot use the flash. You can still capture good photos even without the flash by adjusting the ISO and the exposure compensation. You may also need to change the white balance setting (see the "Fixing Color In Your Photos" section for more information on adjusting the white balance).

### Zooming In On Locating Buttons & Keys

Refer to pages 12-13 for information on locating buttons, keys, etc., that we mention in the diagrams.







# Fixing Photos That Are Too Light

Sometimes either your photo or part of your photo can be too light either from too much sunlight or other lighting problems or other exposure problems.

We'll talk in this section about how you can solve the challenge of light photos.

## Auto Exposure Bracketing

I'm confused by the exposure compensation settings on my XS; I just cannot seem to get it right. Is there a way to have my XS more easily set the exposure?



Mode: Tv (Shutter Priority) Exposure: 1/128  
Aperture: f-14 ISO: 200

Sometimes your photos can be underexposed or overexposed regardless of how you've changed the camera settings.



Mode: Tv (Shutter Priority) Exposure: 1/128  
Aperture: f-20.0 ISO: 200  
Flash Exposure Compensation: 0

You can sometimes eliminate some of the exposure "guesswork" by using Auto Exposure Bracketing.



Turn the Mode Dial to Tv (Shutter Priority). (1)

Press the Drive mode button (2) and press the left or right cross key to select Continuous shooting. (3) Press the SET button. (4)

Press the MENU button. (5)

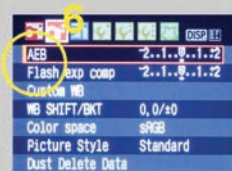
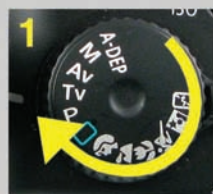
Press the right cross key to select the second tab. Make certain that AEB (6) is shown at the top of the list. Press the SET button.

Press right or left cross key to select desired amount of exposure. Press the SET button. (4)

Compose the photo in the viewfinder. Press the shutter button halfway.

Press the Shutter button (7) fully.

You now have three photos of different exposures. Preview the three photos in the LCD monitor and decide which is more to your liking.



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Auto Exposure Bracketing

## Tip Talk

Your Canon XS has a feature called Automatic Exposure Bracketing (AEB) in these types of situations. When you select AEB, the XS takes one exposure based upon what its metering thinks is perfect. It then takes a second photo that is overexposed and then a third photo underexposed compared to the first photo. You then have three photos with the same composition but at different exposures.

If you need a large variation in exposure between your three shots, press the right cross key to increase the size of the exposure gap. If you need only a slight variation, press the left cross key to select a smaller gap. You may want to start with a '1 stop' variation and work from there. You should try an AEB setting of  $\pm 2$  for most daylight situations to bring some detail into the shadows but not eliminate them entirely.



Press the cross key to increase the size of the exposure gap. If you need only a slight variation, press the cross key to select a smaller gap, such as a 1 stop.



Try a setting of  $\pm 2$  for most daylight situations to bring some detail into the shadows but not eliminate them entirely.

Although using AEB may take some practice, you may find it is very useful in many photo situations.



Examples of three photos using AEB to determine the exposure setting.

You don't necessarily have to be in Continuous mode to use AEB but if not, you'll need to press the shutter button three separate times, which might be difficult to hold the camera steady for three separate shots.

For a little more control, use AEB either in Aperture Priority (Av) or Shutter Priority (Tv) mode. Using AEB in Aperture Priority mode allows you to choose the aperture you want for the shot and tells the camera to make the variations in shots by varying shutter speed. Using AEB in shutter priority mode keeps the shutter speed at the speed you select and tells the camera to vary the exposure by changing the aperture in your shots.

# The Sky Is Too Light

How can I prevent the sky from appearing so light (washed out)?



Mode: Full Auto Exposure: 1/200  
Aperture: f-20.0 ISO: 100

Sometimes everything about a photo is good except the sky is too light.



Mode: P (Program AE)  
Exposure: 1/125 Aperture: f-18.0  
ISO: 100 Exposure Compensation: -1

By using exposure compensation, you can make the sky more vivid.

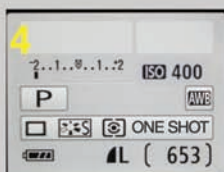


Turn the Mode Dial to P Program AE mode). (1)

Press and hold down the Exposure Compensation button (AV+/- button) (2) and rotate the Main Dial (3) to the left to see the value at -2. (4)

Press the Shutter button halfway (5) to frame the scene as desired.

When you have the photo framed, (6) press the Shutter button (7) fully to capture the photo.



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The Sky Is Too Light

### Tip Talk

The XS usually does a good job of setting an average exposure for the main part of the scene. However, the sky and clouds are often “overexposed” using the average exposure setting, making it appear very light.

Using compensation to reduce the amount of exposure of the sky and clouds can make the light areas of the scene more vivid. Keep in mind that too much exposure compensation may unduly darken the rest of the scene so you may want to experiment with the amount of compensation.

## Beach Sand Is Washed Out

My beach photos are too light. How can I prevent the sand from look so washed out?



**Mode:** Full Auto    **Exposure:** 1/400  
**Aperture:** f-7.1    **ISO:** 200

**Beach sand is sometimes quite difficult to photograph because the sand can appear “washed out.”**



**Mode:** P (Program AE)    **Exposure:** 1/400  
**Aperture:** f-11    **ISO:** 200

**By using Program AE mode and an exposure compensation setting, you can avoid the “washed out” beach scenes.**



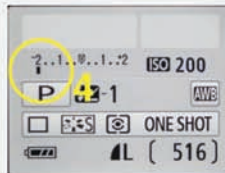


Turn the Mode Dial to P (Program AE) mode. (1)

Press and hold down the Exposure Compensation (AV +/- button) (2) and rotate the Main Dial (3) to set the value at -2. (4)

Press the shutter button (5) halfway to frame the scene as desired.

When you have the photo framed (6) press the shutter button (7) fully to capture the photo.



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Beach Scene Is Washed Out

## Tip Talk

Similar to adjusting the exposure for “The Sky Is Too Light,” you can use the same technique for preventing sand scenes from appearing too light.

### Zooming In On The LCD Monitor In Bright Sunlight

It's sometimes difficult to view the LCD monitor on your camera on bright sunny afternoons. You might be able to make it a bit easier to read the LCD monitor by adjusting its brightness.

Keep in mind, however, that Canon does recommend that you keep the LCD brightness level in the center of the adjustment scale. Therefore, if you do adjust it, make certain to adjust it back to its original setting.



- ❖ Press the MENU button.
- ❖ Press right cross key to the second brown color coded Tools tab.
- ❖ Press the down cross key to LCD brightness.
- ❖ Press the SET button.
- ❖ Press right or left cross key to set the desired brightness.
- ❖ Press the SET button

## Shooting Winter Wonderlands

My winter photos have a lot of snow in them but the snow is too bright. How can I fix this?



Mode: Full Auto Exposure: 1/1000  
Aperture: f-6.3 ISO: 400

This scene has many elements to cause problems in Full Auto mode, such as the gray sky, white snow and the light colored ice.



Mode: P (Program AE) Exposure: 1/500  
Aperture: f-10.0 ISO: 400  
Exposure Compensation: -2

By adjusting exposure compensation, you can darken the brightest elements of the scene.

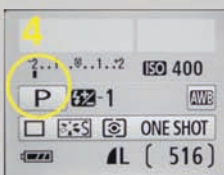


Turn the Mode Dial to P Program AE mode). (1)

Press and hold down the Exposure Compensation button (AV+/- button) (2) and rotate the Main Dial (3) to the left to set the value at -2. (4)

Press the Shutter button halfway (5) to frame the scene as desired.

When you have the photo framed (6), press the Shutter button (7) fully to capture the photo.



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Shooting Winter Wonderlands

### Tip Talk

You'll find photo opportunities everywhere after a freshly fallen snow. You don't necessarily need to look for nature shots but can also look for people using snow blowers, building snowmen, etc.

When your photos are too "white," you can rely on exposure compensation to adjust the brightness.

Although your camera will work just fine in cold temperatures, you do need to take some precautions. Make certain to read the "Taking Care Of Your Camera" section for more information.



# Fixing Flash Photos

Using the flash isn't difficult but it is something that sometimes requires a little bit of extra thought and planning. You'll probably use the flash most often when not enough light is available, such as a group portrait at gatherings.

There are, however, many other situations where you can use the flash too, such as fill-flash situations when the background is brighter than the subject, using the flash to light up a room and creating better coloring, or using the flash to freeze a moving object in a dark situation.

## Parts Of The Photo Are Too Dark

When I take photos using the flash, the subject turns out too dark. How do I prevent my subject from appearing so dark?



**Mode:** Full Auto **Exposure:** 1/60  
**Aperture:** f-4.5 **ISO:** 400

Sometimes your subject can appear too dark in your photo.



**Mode:** P (Program AE) **Exposure:** 1/60  
**Aperture:** f-4.5 **ISO:** 400  
**Flash Exposure Compensation:** +1

Switching To P mode and using Flash exp comp (flash exposure compensation) can fix the problem.





Turn the Mode Dial to P (Program AE). (1)



Press the flash button (2) to pop the flash (3). You'll find the flash button on the left side of the camera.



Press the MENU button. (4)



Press the right cross key to select the second camera menu. (5) Press the down cross key to select **Flash exp comp** (flash exposure compensation) (6) and press the SET button. (7)



Press the left cross key to choose **+1** (one f/stop less exposure) and press the SET button. (7)



Compose your picture in the viewfinder and press the shutter button (8) to capture the photo.



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Faces Are Too Dark

## Tip Talk

Your XS usually does a good job overall when taking flash photos. However, if you find that your photos are turning out too dark, you can use the camera's flash exposure compensation to add light to the scene. You may have to experiment some since one additional stop of exposure (+1) may over expose the subject.

## Faces Are Too Light

When I take a photos of my daughter using the flash, her face often turns out too light. Is there a way to prevent her face from appearing so washed out?



Mode: Full Auto Exposure: 1/60  
Aperture: f-4.0 ISO: 400

Sometimes your subject can appear "washed out" or too light in your photo.



Mode: P (Program AE) Exposure: 1/60  
Aperture: f-4.0 ISO: 400  
Flash Exposure Compensation: -1

Setting the Flash exposure compensation can fix the problem of your subject being too light in your photo.



Turn the Mode Dial to P (Program AE). (1)



Press the flash button (2) to pop the flash (3). You'll find the flash button on the left side of the camera.



Press the MENU button. (4)



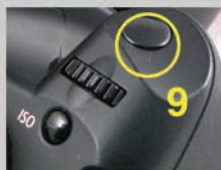
Press the right cross key to select the second camera menu. (5) Press the down cross key to select **Flash exp comp** (flash exposure compensation) (6) and press the SET button. (7)



Press the left cross key to choose **-1** (one f/stop less exposure) (8) and press the SET button. (7)



Compose your picture in the viewfinder and press the shutter button (9) to capture the photo.



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Faces Are Too Light

## Tip Talk

When taking portraits with the flash, the faces may turn out too light, especially if you're close to the subject. When this happens, use the flash exposure compensation on your XS to provide less light than used for a "normal" exposure. This feature determines the amount of light that is emitted by the flash, thus allowing you to provide a range of lightness (and darkness) that illuminates the subject.

Note that flash compensation appears on the menu only when the Main Dial is set to one of the Create Zones; it's unavailable when the Main Dial is set to any of the Basic Zones.

### Exposure Compensation or Flash Exposure Compensation?

Don't confuse the Exposure Compensation of your XS with its Flash Exposure Compensation.

The Exposure Compensation lets you intentionally lighten or darken the ambient lighting in the background and is completely separate from Flash Exposure Compensation; it has no effect on how much flash output strikes your subject. On the other hand, Flash Exposure Compensation affects only the flash output. The ambient light in your background will remain unchanged as you adjust Flash Exposure Compensation.

Don't be surprised if you find that you need to use Flash Exposure Compensation occasionally in fill-in flash photos. Also, if you think the flash output in your fill-in shots isn't quite right, you can adjust it by increasing or decreasing the amount of exposure.



## Background Is Black Or Too Dark

When I take flash photos in Portrait mode, the main subject turns out fine but the background is almost completely black so we cannot tell where the photo was taken. How do I lighten up the background?



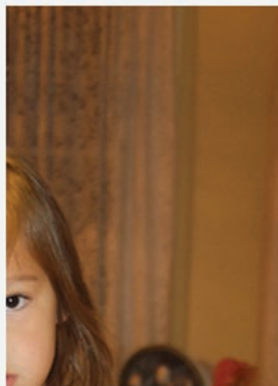
Mode: Portrait Exposure: 1/60  
Aperture: f-5.6 ISO: 400

**The main subject in this photo turned out fine but the background is almost too dark making it difficult to determine where the photo was taken.**



Mode: Night Portrait Exposure: 1/6  
Aperture: f-5.6 ISO: 400

**By simply switching to Night Portrait, the background now appears brighter.**



Turn the Mode Dial to Night Portrait mode. (1)

Press the shutter button halfway (2) to “pop” open the flash unit. (3)

Compose your picture in the viewfinder and press the shutter button to capture the photo. (4)

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Background Is Black Or Too Dark

## Tip Talk

When you're using the flash in the Portrait mode, your camera determines a normal exposure based on the distance from the subject. Since the subject is usually separated from the background, the background receives little or no light from the flash. The result is that the background appears darker or blacker in the photo.

Any existing light that is illuminating the background is known as *ambient light*. When you change the mode to Night Portrait mode, the camera uses a slow flash synchronization speed. Using a slower speed, the camera can capture both the subject with the flash and the background with the ambient light.

Since the shutter speed may be low, you'll want to hold the camera steady when using Night Portrait mode so as not to introduce camera shake.

### Zooming In On Locating Buttons & Keys

Refer to pages 12-13 for information on locating buttons, keys, etc., that we mention in the diagrams.





## Harsh Lighting

My flash photo has enough light but it's harsh, which makes the photo very "contrasty." What can I do to make the light less harsh?



Mode: Full Auto Exposure: 1/60  
Aperture: f-4.0 ISO: 400  
Flash: Fired (flash uncovered)

**Harsh lighting conditions can add objectionable contrast to your photos.**



Mode: Full Auto Exposure: 1/60  
Aperture: f-4.0 ISO: 400  
Flash: Fired (with diffuser covering flash)

**A simple way to overcome harsh lighting conditions is to cover the built-in flash with a facial tissue.**



Find a clean, white handkerchief, Kleenex® or even a baby sock to use as a diffuser.

Place the diffuser over the flash. (1) and (2)

Compose your picture in the viewfinder and press the shutter button to capture the photo. (3)

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Harsh Lighting

## Tip Talk

In harsh lighting situations you should consider using a *diffuser*. Although you can buy a diffuser at your favorite camera store, you can also make a simple one.

The concentrated light that comes from the flash produces bright highlights and strong shadows. By placing a diffuser over the flash, the light from the flash bounces from the ceiling, walls and other surfaces thereby softening the light. The resulting flash is spread more evenly over the subject and reduces harshness.



# Taking Better Nighttime Photos

**Don't be shy about taking photos at night. You have an almost endless amount of photo opportunities to select...traffic lights, people walking, bridges, etc.**

**Grab your XS and venture out into the night.**

## Shooting Bridges Or Buildings At Night

I've wanted to try nighttime photography. I know the shimmering and colorful lights can transform dark backgrounds into beautiful images.

Although the lights do shimmer in my photo, the overall photo is blurry. How can I fix this?



**Mode:** Flash Off **Exposure:** 2.0"  
**Aperture:** f-5.0 **ISO:** 800  
**Flash:** Not fired  
(Camera hand held)

**Notice how the lights shimmer in this nighttime photo but that it's too blurry overall. The reason for the blurry photo is camera shake.**



**Mode:** Flash Off **Exposure:** 2.0"  
**Aperture:** f-5.0 **ISO:** 800  
(Camera resting on flat surface)

**Simply setting the camera on a sturdy surface can help eliminate or at least greatly reduce the chances of taking a blurry nighttime photo.**



Turn the Mode Dial to Flash Off. (1)



Stabilize your camera on a flat surface (2) with the lens pointing at the bridge and building. (Make certain it's a safe and strong surface.)



Press the shutter button (3) down halfway and verify that the scene is composed to your liking.



Press the shutter button (4) fully to capture the photo.



Make certain to press the shutter button carefully to capture the photos. Use a "delicate" touch to minimize any shaking or jerking of the camera.

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Shooting Bridges Or Buildings At Night

## Tip Talk

The blur of the bridge and building lights comes from *camera shake*. In this photo, the camera automatically set a 1.6 second shutter speed. No photographer, however, can hold a camera steady while the shutter is open for that length of time. The typical way to “fix” the blur is to use a tripod.

The problem, however, is that you can't always carry a tripod with you even though you still need to keep your camera steady when you're taking night shots. The answer is setting your XS on a sturdy, flat surface instead of using a tripod. This will help eliminate, or at least greatly reduce, the chances of camera shake and a blurry nighttime photo.



## Night Photography

We already know that minimizing camera shake can mean the difference between a good and a great nighttime photo.

Here's a nighttime photo of an attractive building. The building is located in an area that was very dimly lit and the camera automatically set an exposure of three seconds.



Mode: Flash Off Exposure: 1"  
Aperture: f-3.5 ISO: 800  
(Camera hand held)

**This building is located in a dimly lit area and the XS automatically set a long exposure. Although the camera was placed on a flat surface, the photo could be better.**



Mode: Flash Off Exposure: 1.3"  
Aperture: f-3.5 ISO: 800  
(Self-timer set on camera)

**Another way to prevent camera shake is to use the self-timer on the XS.**



Turn the Mode Dial to Flash Off. (1)

Press the Drive Mode button (2) and select **Self-timer/Remote control** (3) and press the SET button. (4)

Place the camera on a flat surface (5) to prevent camera shake. Make certain the lens is pointing at the scene.

Press the shutter button (6) down halfway to verify that the scene is composed to your liking.

Press the shutter button (6) down fully. You'll hear the faint beep of the self-timer. You can check the remaining seconds in the LCD monitor. When the time counts down to zero, the shutter is released to capture the photo.



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Night Photography Without The Flash

## Tip Talk

When you press the shutter button, you're likely to produce camera shake. This is especially true with nighttime photography. By using the self-timer feature, the camera has a few seconds to stabilize itself. This is usually enough time to remove the excess camera shake so you can capture a sharper image.

### Zooming In On Clearing Custom Settings

Don't forget to clear or change any settings to your XS that you have made before your next photo opportunity.

You can do this easily by following these steps:

- ❖ Turn the Mode Dial to select a mode in the Creative Zone (such as Tv).
- ❖ Press the MENU button.
- ❖ Press the right cross key to highlight the third Tool icon.
- ❖ Press the down cross key to select "Clear settings"
- ❖ Press the SET button
- ❖ Press the down cross key to select "Clear all camera settings"
- ❖ Press the SET button
- ❖ Press the right cross key only if you want to confirm that you want to clear the camera settings.
- ❖ Press the SET button.

This will return your XS to the original settings, for example, ISO, exposure, etc.



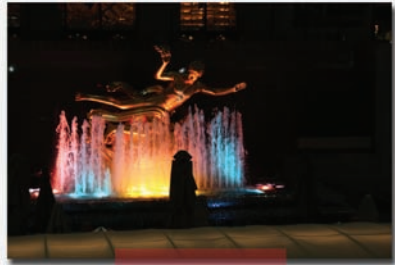
## Bright Lights

Some of my shots of bright lights are too bright. Why?



**Mode:** Flash Off **Exposure:** 1/15 second  
**Aperture:** F-5.0 **ISO:** 800

**This photo shows the bright colors of the fountain but some of the lights may be too bright for some people.**



**Mode:** P (Program AE) **Exposure:** 1/60  
**Aperture:** F-5.0 **ISO:** 800  
**Exposure Compensation:** -2

**This photo shows the same bright colors of the fountain but slightly darker.**



Turn the Mode Dial to P (Program AE mode). (1)

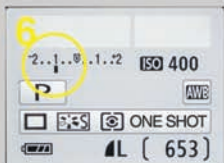
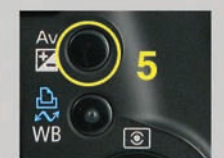
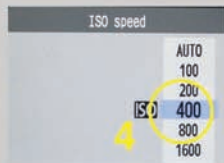
Press the ISO button. (2) Turn the Main Dial (3) to select a setting of 400 for the ISO. (4)

Press and hold down the AV+/- button (Exposure Compensation) (5)

Rotate the Main Dial (3) to -1. (6)

Press the shutter button (7) halfway and verify that the “light” scene is to your liking.

Press the shutter button (7) fully to capture the photo.



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Nighttime Photography Holiday Lights

## Tip Talk

Although it may be dark when you're shooting lights, you may be surprised that the lights can be quite bright. Therefore, taking photos of these lights may not require long exposure times. If you're shooting with a normal length lens (for example, up to 55-mm) and have a steady hand, you should be able to hand-hold your camera to capture the lights.

The photos above show us the bright colors of outdoor lights. However, some revelers may feel that the white lights here are overly bright and should be turned down slightly. The resulting image will appear sharper since the glare of the lights is reduced.

Your camera automatically sets longer shutter speeds in low-light situations. To prevent camera shake, you can set the camera on a flat surface.

Keep in mind that photography is subjective so the choice of which photo is better is up to you; some may prefer the first photo with the brighter light.

This is also another advantage of using a digital camera because you can use both techniques and print both photos.

## Nighttime Action

I'd like to take photos in our exciting, bustling nighttime environment. But many places won't let you use flash, even though the lighting is dim. Do you have any suggestions for taking better shots?



Mode: Flash off Exposure: 1.5 sec  
Aperture: f-4.5 ISO: 800

**In the dark restaurant, the exposure was a long 1.5 seconds which caused the blur.**



Mode: P (Program AE) Exposure: .8 sec  
Aperture: f-5.0 ISO: 1600

**By boosting the ISO you can use a shorter exposure.**



Turn the Mode Dial to P (Program AE). (1)



Press the ISO button. (2)



Turn the Main dial (3) to select 1600.



Hold the camera as steady as you can -- perhaps bracing your elbows on a table surface. (4)



Carefully press the shutter button (5).

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Nighttime Action



## Tip Talk

You have to deal with at least two challenges here...exposure time and low light. However, by boosting the ISO, you can use a shorter exposure.

When you set the camera to Flash Off mode, you're limiting the ISO to a maximum of 800. However, by using Program AE mode, you can boost the ISO to 1600.

Also remember to hold the camera as steady as possible to help keep the image sharp.

### Zooming In On Locating Buttons & Keys

Refer to pages 12-13 for information on locating buttons, keys, etc., that we mention in the diagrams.



## Traffic Streaks & Lights

How can I capture the moving headlights of auto traffic?



**Mode:** Flash Off **Exposure:** 1/13"  
**Aperture:** f-5.0 **ISO:** 800

**You may “stop” the action of the traffic by using the the Flash Off mode.**



**Mode:** Tv (Shutter Priority) **Exposure:** .6"  
**Aperture:** f-14 **ISO:** 800  
 (Camera placed on flat, stable surface)

**By setting the shutter speed for a long exposure, you can create exciting streaks of light.**



You'll need to use a tripod or a place the camera on a solid surface on which to set the camera for this shot.

Turn the Mode Dial to Tv (Shutter Priority). (1)

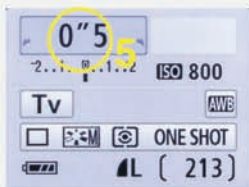
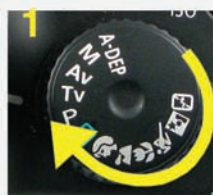
Press the ISO button (2) and turn the Main Dial (3) to select 800.

Press the SET button. (4)

Turn the Main Dial (3) to select a shutter speed of 0"5 or 0"6 (5) (which represents .5 or .6 seconds, respectively).

Wait patiently until the auto traffic is flowing with multiple sets of headlights in the viewfinder.

Press the shutter button carefully to (6) minimize camera shake and capture the photo. (Make certain not to hold down the shutter button but to press it.)



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Traffic Streets & Lights

## Tip Talk

By using a relatively long shutter speed (.5 seconds or .6 seconds, for example), you can record the auto lights as a streak of lights rather than a single headlight.

Experiment using different shutter speeds. You'll capture varying "lengths" of light streaks to produce interesting and colorful effects.

## More Ideas On Taking Nighttime Photos

Here are a few more tips and suggestions for shooting nighttime photos.

### Tripod

If you plan to take lots of photos at night, a tripod is essential. Mounting your camera on the tripod prevents camera shake, the most common cause of blur.

Keep in mind that the most important feature of a tripod is to provide a stable platform for your camera so make sure that its legs are sturdy. You'll find that the range and cost of tripods varies widely depending on the other features: weight, ease of setup and quality of the head (platform) to name a few.

But for nighttime shots, you'll find that taking pictures with a low-cost tripod is better than taking them without a tripod.

Keep your tripod handy and you'll find your nighttime photos greatly improved.



## More Ideas On Taking Highttime Photos (continued)

### Camera Mode

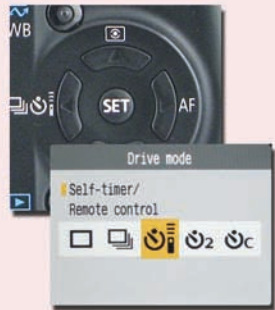
When set to Night Portrait mode the camera tries to blend the background lighting of a scene with the foreground. Depending on the lighting, the flash may pop up to light your subject in the foreground.

If you don't want to introduce flash into your photo, use Flash off mode instead. Without flash, keep your subject from becoming too dark by positioning the subject so that the available light is falling on his or her face.

If your pictures are too dark with Flash off mode, use Program AE mode and boost the ISO to the maximum setting of 1600.

### Self-Timer

The self-timer is your phantom remote control. You can set the XSi to have either a 2 second delay or a 10 second delay. Normally, pressing the shutter introduces shake to your nighttime photos, but with the slight delay, the camera has time to stabilize before the scene is captured.



*Press the Self-timer button and then the right cross key to select elf timer*



### Small Flashlight

A small flashlight comes in very handy when its dark and you need to adjust the the camera settings. We suggest using a miniature model that focuses its beam on a small area and won't spoil your nighttime vision. This small model cost lest than \$3.00 and fits easily into a camera bag.

## More Ideas On Taking Hightime Photos (continued)

### Remote Control or Remote Switch

Consider buying a remote control or remote switch. These handy accessories let you release the shutter without introducing any camera movement. Canon has three remotes for the XS:

RS-60E (pictured above right #1) is a wired device provides same functions as shutter release (cost about \$29.00).

RC-5 (pictured near photo #2) is a small infrared device that provides a two second delay (cost about \$25.00).

RC-1 (pictured near photo #3) is a small infrared device that provides instant release or 2 second delay (cost about \$25.00).







# Showing Motion In Your Photos

**Your Canon XS is known as a still camera but that doesn't mean that you cannot use it to capture the feeling of motion in your subjects.**

## Suggesting Motion In Photos

I've seen photos where some of the scene is sharp but the subjects seem to be moving. How can I recreate this effect to show that the subject is a live, animated person and not a statue?



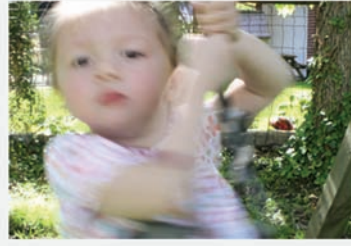
**Mode:** Full Auto **Exposure:** 1/125  
**Aperture:** f-7.1 **ISO:** 200

The photos are often stop action when you use Full Auto mode.



**Mode:** Tv (Shutter Priority) **Exposure:** 1/8  
**Aperture:** f-18.0 **ISO:** 200

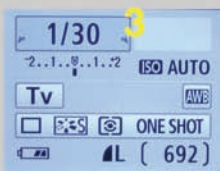
By switching to Tv mode, you can introduce motion to make your photos "come alive."



Turn the Mode Dial to Tv (Shutter Priority Zone). (1)



Turn the Main Dial (2) to select a shutter speed of 1/30. (3)



Compose your scene with the main subject in the center of the viewfinder. (4)



Press the shutter button halfway. (5)

Wait patiently for the moment when your main subject's face is still, but his/her hands or legs are moving.

Press the shutter button fully to capture the picture. (5)



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Suggesting Motion In Photos

## Tip Talk

By setting your camera to use a relatively slow shutter speed, such as  $1/30$  you can introduce motion into your photos. When you capture the picture as the subject moves his/her hands, they will appear blurred thereby creating the effect of motion.

If you can hold the camera steady, you may be able to use a shutter speed as long as  $1/8$ th or  $1/4$ th of a second, especially if your lens has the IS (Image Stabilization) feature.

## Conveying A Sense Of Motion By Panning

When using Sports mode to shoot my son doing tricks on his bicycle, the resulting photo looks great with everything sharply in focus. However, I've seen shots where the biker is in focus with the background out of focus. How can I get this effect?



**Mode:** Sports **Exposure:** 1/640  
**Aperture:** f-6.3 **ISO:** 400

**Your photos may look “flat” when you use the Sports mode because there isn’t a sense that anything is happening.**



**Mode:** Av (Aperture Priority) **Exposure:** 1/100  
**Aperture:** f-16 **ISO:** 400  
**Technique used:** Panning

**By panning you can introduce motion to your photo and help it “move.”**



Turn the Mode Dial to Tv (Shutter Priority Zone). (1)



Turn the Main Dial (2) to select a shutter speed of 1/200 (or slower).



Press the AF button. (3)

Press the cross key to select AI SERVO mode. Press the SET button.



Your LCD Monitor should look similar to this. (4)



Press the shutter button halfway. (5)

Compose your scene by slowing following the motion of your subject in the viewfinder. For best results, you'll want to keep the subject centered in the viewfinder.

Press the shutter button (5) fully to capture the picture.



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Conveying A Sense Of Motion By Panning

## Tip Talk

The technique of following the subject in the viewfinder is called *panning*. If done properly, the motion of the camera will make the background blurred while at the same time keeping the main subject sharp and in focus. This adds to the feeling of action.

You'll want to practice this technique to become proficient. To achieve the best results, when following the subject in the viewfinder remember to move the camera slowly and steadily until you gently squeeze the shutter button.

You'll get even more action if you pan with a slower shutter speed, for example, 1/100 or slower. This may take some practice but you'll produce some exciting effects.

### Zooming In On Panning

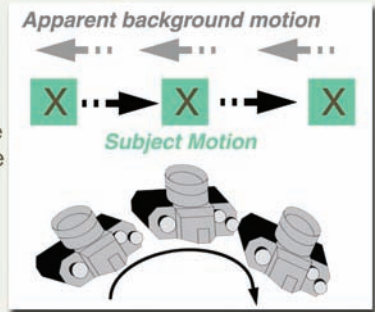
The technique of panning to convey a sense of motion is one that takes practice. You'll need slow shutter speeds and steady hands.

One reason that panning requires practice is that unlike most of your other photos, panning means you're moving the XS instead of holding it still.

Note the subject in this diagram is moving from left to right but could be moving in the other direction or up or down. What is important is that you can follow the movement evenly throughout the time it takes to capture the photo. How fast and how close the moving subject is will determine the shutter speed to use.

Use a slower shutter speed if you want to emphasize the sense of movement but keep in mind that this will make it more difficult to keep your camera steady.

Plant your feet, draw your arms into your body, hold your camera securely and rotate the top half of your body as you track your subject. Pan as fast as the subject moves so you keep it in the same position in your viewfinder. Press the shutter down as you continue your motion and follow through even after the shutter has closed. Use continuous shooting mode if you have time for more exposures.



## Making Water Flow

After shooting a scenic waterfall, the water appeared to “hang” in midair in the resulting photograph. How can I make the water appear as if it were flowing?



**Mode:** Full Auto **Exposure:** 1/250  
**Aperture:** F-8.0 **ISO:** 200

**Using Full Auto mode may stop the action resulting in no sense of the water flowing.**



**Mode:** Tv (Shutter Priority) **Exposure:** 1/20  
**Aperture:** F-16.0 **ISO:** 100

**By switching to Shutter Priority, the water looks like it's flowing.**





Turn the Mode Dial to Tv (Shutter Priority AE). (1)

Press the ISO button. (2) Rotate the Main Dial (3) to select **AUTO** from the choices. (4)

Press the SET button. (5)

Turn the Main Dial (3) to select a shutter speed of **1/30**. (7)

Compose your scene in the viewfinder. (8) Press the shutter button halfway. (9)

Press the shutter button (9) fully to capture the picture.



**Tip Talk**

Water drops over a waterfall at a rapid rate. By using a slow shutter speed to capture the scene, the water appears to “flow” adding to the feeling of motion. By using an even slower shutter speed than  $1/30$  of a second, you may be able to create the “mist effect.”

# Taking Better Nature Photos

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I enjoy nature photography and want to capture the birds visiting my backyard. How can I capture the action of my winged friends?



Mode: Full Auto Exposure: 1/250  
Aperture: f-11.0 ISO: 200

Although this shot is nicely composed, it doesn't convey much action.



Mode: Full Auto Exposure: 1/250  
Aperture: f-16.0 ISO: 200

By being patient and waiting for the right moment, you can capture a more interesting photo.



Turn the Mode Dial to P (Program AE). (1)

Press the ISO button (2) and rotate the Main Dial (3) to select 800. Press the SET button. (4)

Press the Drive Mode button. (5) Press the right cross key and select **Continuous shooting** and press the SET button. (4)

Press the AF button. (6) Press the right cross key to select **AI SERVO** and press the SET button. (4)

Press the AF point selection button. (7) Rotate the Main Dial (3) to select the center focus point.

Compose your scene. (8) Make certain the center focus point over the bird blinks red in the viewfinder.

Press the shutter button (9) halfway to lock the focus.

Press the shutter button (9) fully to capture the picture. To make multiple shots, keep the shutter button depressed and move the camera slowly in the direction of the motion.



Canon  
XS

Taking Better Nature Photos

### Tip Talk

Taking photos of wildlife is often a labor of patience. You may have to wait several minutes or even hours for that perfect moment to capture your favorite bird or wild animal.

Use a high ISO setting to help “stop” the action of birds and other moving creatures.

To maximize your chances of capturing the best photos, have your camera set to take multiple shots (Continuous Shooting Mode) so that you can choose from a group of photos.



# Taking Care Of Your Camera

**After spending hundreds of dollars to buy your Canon XS camera, it's now important to protect your photography investment by caring for it in the best way possible.**

## Accessories

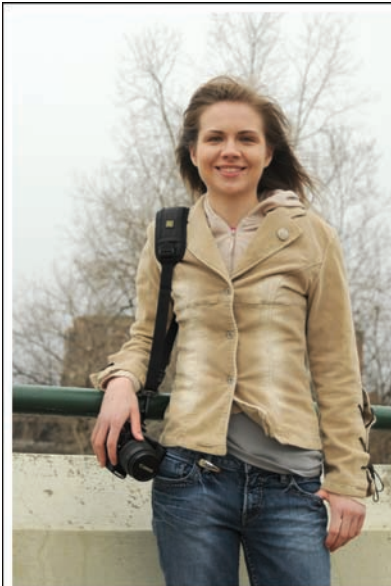
As a proud owner of a Canon XS, you'll probably soon own more than just the camera. Since DSLRs are *system* cameras, you can easily extend the capabilities of your XS by adding accessories, such as lenses, filters, batteries, chargers, memorycards and more.

### Camera strap

You'll usually rely on the camera strap when carrying your camera. As you lengthen your shooting sessions, you may discover that your camera seems to feel heavier. The innovative R-Strap is worn diagonally across the torso from shoulder to hip and is adjustable to fit most photographers.

The lightweight RS-4 is an innovative solution for both comfort and easy of access for any camera. The R-Strap has a sizing adjustment located on the front for quick adjustments. It also features a quick access, secure pocket for storing two extra memory cards in their protective cases.

The locking FastenR connects the R-Strap to the tripod socket located on either the camera body or the lens. Once connected, the camera hangs upside down, resting securely at your side or in the small of your back, with the lens pointing behind you.



The lightweight R-Strap ([www.blackrapid.com](http://www.blackrapid.com)) is an innovative alternative to the camera strap.



With the camera at your hip or behind your back, you can maneuver quickly and easily through a crowd, carry a tripod or other gear, or simply have both hands free.

When you're ready to take the shot, the camera quickly glides up the strap into shooting position.

## Camera Bag

You certainly don't want to just toss your camera into your car or backpack and head out for a photo shoot. Instead, you're likely to want it to keep working for more than a few months. Therefore, you might consider the safety of a protective camera bag.

How do you choose the right camera bag? Consider the type of photos you'll be taking and what you'll need to take those photos, such as lenses, filters, extra batteries, etc. You should also think about future accessories you may be purchasing. Look for a camera bag of the appropriate size to hold it all.

The camera bag should feature durable, well padded exterior walls. Look for adjustable compartments on the inside of the bag so you can safely separate your accessories.

The camera bag should include several pockets either inside or outside the bag where you can keep smaller items like filters and batteries. Although the bag should have secure, strong latches, make certain you can open them easily with one hand because you may be holding your camera in the other hand. Finally, you want a durable exterior that can hold up to being bounced around.

See the checklist on page 171 for information on what you might want to have in your camera bag.



*Jill-e Designs features a line of camera bags designed specifically for the female photographer (see [www.jill-e.com](http://www.jill-e.com) for details).*

Another camera bag idea is the Shootsac. It lets you transport lenses and other camera accessories not only safely but also fashionably. It holds three to six lenses and other accessories safely and conveniently at your fingertips. Unlike most camera bags, you can fold it completely flat for easy transportation and storage.

Its slim ergonomic shape hugs your body so you feel sleek and mobile instead of clumsy and bulky.



The Shootsac ([www.shootsac.com](http://www.shootsac.com)) lets you transport your camera and accessories safely and fashionably.



The slim design of the Shootsac actually makes it less obvious that you are carrying camera equipment.

### **Tripods, Monopods & Pods**

Although you won't always need a tripod, they're nevertheless an accessory you may want to consider.

However, you won't always need to carry around the typical large, heavy tripod. Several types of tripods are now available that you can even carry in a pocket or camera bag.

We've already talked about a few different examples (see page 143). Other similar ideas include the Pod ([www.thepod.ca](http://www.thepod.ca)). It's a flexible beanbag with a mounting bolt to connect to your XS. You can set it up quickly on tables, rocks, cars, benches, etc.

## Protecting The LCD Monitor

One overlooked area of camera protection is the LCD monitor. Although a fingerprint or slight scratch won't hurt the camera, a deep scratch could be a problem. Therefore, you should cover the LCD monitor with a clear adhesive film that is made for cameras.

You can find the LCD screen protectors at camera stores or the internet for a few dollars.

## Cleaning Accessories

Keeping your camera clean inside and outside is important but be careful when doing so. Make certain to use a blower instead of canned air. Canned air has moisture and can freeze parts as the compressed air is released. Furthermore, your camera isn't airtight and canned air may blow dust into the inside of the lens.



Occasionally wipe your camera with dry or slightly damp lint-free cloth (eyeglass cloths or microfiber cloths are good for this purpose). Be very careful not to get the controls and the electronics wet.

An item to have handy is the Spudz Microfiber Lens Cloth. The cloth stays hooked inside a protective pouch but is small enough for you to carry easily in your camera bag. See [www.alpineinnovations.com](http://www.alpineinnovations.com) for more information.



You can connect the Spudz Microfiber Lens Cloth ([www.alpineproducts.com](http://www.alpineproducts.com)) to your camera strap where the cleaning cloth stays hooked inside the protective pouch.

## Fun Accessories

Make certain to have some fun with your photography, too. One way is by sharing your photos in different ways. You're probably familiar with Flickr and other photo sharing sites on the Internet. However, you can share photos in other ways as well, such as in digital photo key chains, digital pens, digital slideshows, digital photo frames and more.

## Quick Care Suggestions

Here are some quick things you should do take care of your camera:

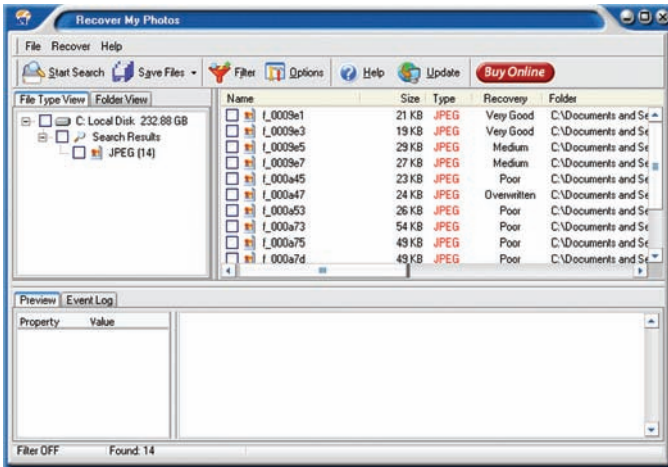
### Recovering Deleted Photos

Although accidentally deleting photos or formatting the memory card before moving the photos to your computer doesn't sound like a common problem, it can happen to anyone at anytime. Fortunately you may be able to recover some or all of the missing photos even after you format the SD card by using special recovery software.

You can find several reasonably priced recovery software packages on the Internet. Use a search engine such as Google and type "SD card recovery software" for the search.

These programs typically need your camera to be connected to your computer (so the SD card appears as a drive letter on your computer). You can also use a digital camera card reader instead of connecting the camera to the computer.

The recovery programs work similarly and have similar features. You install the software, connect your XS to your PC (or insert the SD card into a card reader connected to your PC) and run the recovery software. It will scan your memory card or your PC hard drive and then display the photos/files it can recover.



*Recover My Photos is a program you can use to recover accidentally deleted photos from your SD card.*

The following are some examples of recovery programs you might consider. All have free trial versions that you can download and determine if the program can recover your missing images.

- ❖ Card Recovery ([www.cardrecovery.com/](http://www.cardrecovery.com/))
- ❖ Photorescue Wizard ([www.datarescue.com/](http://www.datarescue.com/))
- ❖ Recover My Photos ([www.recovermyphotos.com](http://www.recovermyphotos.com))
- ❖ MediaRECOVER 4.0 ([www.mediarecover.com](http://www.mediarecover.com))
- ❖ Image Recall Don't Panic - Photo Edition ([www.imagerecall.com](http://www.imagerecall.com))

## Removing Dust Spots

Some spots on your photos may be the result of setting the ISO too high but these spots are typically in the shadows and darker areas of the photo. So, if you're seeing dark points or spots in brighter areas of your photos, it's possible that you have dust inside your camera.

It's probably best to prevent dust from getting inside your camera in the first place. Although the sensor cleaning does remove a lot of the dust inside your camera, it cannot remove all of it.

One common way for dust to sneak into your camera is when you change lenses. Therefore, before you change the lens, make certain to turn off the camera power. Then always change lenses with the body pointed toward the floor or ground (regardless of how clean you think your house is, dust can still find its way inside your camera).

You can also have the camera do a manual sensor cleaning that is similar to the sensor cleaning the camera does when you shut it off.

- ❖ Press the MENU button
- ❖ Press right cross key to the second brown color coded Tools tab.
- ❖ Press the down cross key to Sensor cleaning
- ❖ Press Set
- ❖ Press either [Cancel] or [OK] to continue. You'll have to turn off the camera after performing the Sensor cleaning.

## Storing Your Camera

You don't want to have your camera just lying around on a table or desk where it could be damaged. Instead, keep the following suggestions in mind:

- ❖ Store your camera correctly, such as in a secure camera bag, if you won't be using it for a long time.
- ❖ Store it properly away from humid, dusty or dirty places.
- ❖ Keep your camera dry and free from condensation.
- ❖ Don't subject it to extreme hot or cold temperatures.
- ❖ Keep it out of direct sunlight for prolonged times or inside a car when it is hot.

## Handling

- ❖ Use a clear protective filter over the lens to protect the front element from scratches. A filter also makes cleaning the camera easier and safer.
- ❖ Be careful when handling your camera. This is especially true when passing your camera to friends so they can see your photos in the LCD monitor. According to a survey by *PC Photo* magazine, this is when a camera is most likely to be dropped.
- ❖ Turn off the camera before removing or disconnecting the power source or a cable, or removing the battery or memory card.
- ❖ Do not subject your camera to knocks, vibration, magnetic fields, smoke, water, steam, sand or chemicals.
- ❖ Don't subject it to extreme hot or cold temperatures.
- ❖ Keep it out of direct sunlight for prolonged times or inside a car when it is hot.
- ❖ Be careful around water — if you drop it in water, the camera may be damaged beyond repair.

# Photographer's Checklist

## Is The Battery Charged?

Your XS depends on its battery for power so if your camera runs out of power, or is even low on power, you may find yourself missing some great photo opportunities. Therefore, you should get into the habit of checking the battery power after each time you use your camera. The camera then will be ready the next time a great photo opportunity arises. It's also not a bad idea to keep an extra battery in your camera bag (make sure it's charged, too) in case you lose or cannot charge the first battery.

You can check the level of power in the battery anytime by turning on your camera and looking at the LCD monitor. Look for the battery icon similar to the image on the right.

## Format Your Memory Card

Unless you're using a CF card or memory card with a very large capacity, it's a good idea to format your card before going out to snap your photos. Make certain though that you've safely transferred any photos you want to keep BEFORE formatting the card because you'll lose everything on the card.

## Check The Camera Settings

You may have changed some of the camera settings the last time you used the camera, for example, ISO, white balance, exposure compensation, etc.

Therefore, make certain to have the right settings appropriate to the conditions you're shooting. For example, you may have used Tungsten light for the white balance setting the last time you used the camera. That setting, however, probably won't work so well outdoors on a bright sunny day. Therefore, it's best to check the various settings before you start shooting.



### Zooming In On Clearing Custom Settings

Don't forget to clear or change any settings to your XS that you have made before your next photo opportunity.



- ❖ Turn the Mode Dial to select a mode in the Creative Zone (such as Tv).
- ❖ Press the MENU button.
- ❖ Press the right cross key to highlight the third Tool icon.
- ❖ Press the down cross key to select "Clear settings"
- ❖ Press the SET button
- ❖ Press the down cross key to select "Clear all camera settings"
- ❖ Press the SET button
- ❖ Press the right cross key only if you want to confirm that you want to clear the camera settings.
- ❖ Press the SET button.

This will return your XS to the original settings, for example, ISO, exposure, etc.

### What To Have Handy In Your Camera Bag

Some of the items you should have handy in your camera bag may be obvious but sometimes the obvious is what we overlook the most. Therefore, we're including the following checklist of items for you to have in your camera bag.



#### **Battery charger**

This is a necessary item for you to have in your camera bag. A good habit to begin developing is to charge your battery after each day of shooting. You cannot do that without having the battery charger in your camera bag. Also, don't forget a battery charger for an external flash, too.

**Bug Repellent**

Whether you should keep a can of bug repellent in your camera bag may depend on where you live and when you're shooting. If you like to shoot landscapes near a river or in the woods during the summer months, you should consider carrying some bug repellent.

**Cable release**

You may discover a cable release to be important when you're shooting nighttime shots or other shots that require long exposures.

**Camera**

There isn't much point going on a photoshoot if you don't keep your camera safely secured in a camera bag.

**External flash**

If you have an external flash, there isn't a reason not to have it in your camera bag, depending on what you're planning to photograph. Also don't forget to take a long a spare set of batteries for the external flash.

**Extra lenses**

The best place to store extra lenses is securely in the camera bag. This will help protect the lenses but you'll also know where they are located.

**Extra filters**


As with extra lenses, the best place to store extra filters is securely in the camera bag. This will not only protect the filters but you'll also know where they are located.

**Facial tissue**

You may discover facial tissues to be quite useful on a photoshoot from cleaning the camera to using as a diffuser to keeping your hands clean.

**USB cables**

Although inexpensive, USB cables (for transferring your photos to your computer) are easy to lose. Therefore, a great place to store these cables is in your camera bag.

-  **Garbage bags**  
You can use a large garbage bag to sit on or kneel on when you're shooting low to the ground.
-  **Cleaning materials**  
This will include a lens cleaning cloth (a micro fiber cloth requiring no liquid is best), lens cleaning fluid and lens tissue.
-  **Lightweight tripod or monopod**  
Although perhaps too large to fit inside a camera bag (useful for shots using a timer)
-  **Notebook, paper and pen/pencil**  
A small notebook with a pen is good to have for taking notes on shooting locations, settings, time, etc.
-  **Plastic bags**  
These are very useful to protect your camera and lenses in the event of bad weather.
-  **Small roll of duct tape**  
Duct tape is a handy thing to include especially if your photoshoot is out in the middle of nowhere. You should also include a small pair of scissors to cut the duct tape if needed.
-  **Spare car key**  
A spare car key is an often overlooked item to include in a camera bag. However, you may lock your keys in the car or, worse, lose your car keys on a landscape photoshoot.
-  **Spare lens cap**  
A lens cap is so easy to misplace or lose on a photoshoot. It's always a good idea to have at least one spare lens cap in your camera bag.
-  **Sunscreen**  
This suggestion is similar to the bug repellent; it may depend on where you live and when you're shooting. If you're planning a long photoshoot outdoors on a bright sunny day, definitely consider carrying a container of sunscreen in your camera bag.

**Extra memory cards**

You might not think you could ever fill the memory card since you can delete or transfer all the photos. However, did you consider that you might lose a memory card or somehow damage it? This is why it's important to keep a second memory card in the camera bag.

**Wrist strap or neck strap for the camera**

Double-check the neck strap on your camera often to make certain it's secured correctly to the camera.

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# Glossary

## **Aberration**

The inability of the camera lens to produce a sharp image, especially around the edges of a photograph.

## **Ambient Light**

The existing light in an indoor or outdoor setting that you do not provide.

## **Aperture**

The opening in a camera lens through which light passes. The aperture size is usually calibrated in f-numbers; the larger the f-number, the smaller the lens opening (and the slower the shutter must be). See “Boosting Your Photography IQ” for more information.

## **Artificial light**

Any light such as a flash that isn't coming from a natural source.

## **Backlighting**

This is a light source that appears from behind the subject, and towards the camera lens, so that the subject stands out against the background. See “Fixing Photos That Are Too Dark” for more information.

## **Cable release**

This is a flexible cable for firing a camera shutter. You should consider a cable release when shooting long exposures or in other situations where touching the shutter button might cause camera-shake and result in a blurry photograph.

## **Center Weighted**

This is a specific metering system on your XS that concentrates the light reading mostly to the central area of the viewfinder and feathering out to the edges.

## **Chromatic Aberration**

This occurs when the camera lens cannot focus different colors on the same focal plane. Chromatic aberrations appear as a color fringe around objects, especially at the edges of the photo.

## **Color Cast**

This is an overall bias towards one color in a color photo. See “Fixing The Color In Photos” for more information.

## **Depth Of Field**

This is the distance between the nearest and farthest objects that appear in acceptably sharp focus in a photograph. Depth of field depends on the lens aperture, the focal length of the lens, and the distance from the subject. See “Boosting Your Photography IQ” for more information.

## Depth of focus

This is the very narrow zone on the image side of the lens within which slight variations in the position of the film will make no appreciable difference to the focusing of the image. See “Boosting Your Photography IQ” for more information.

## Diffuse Lighting

Any lighting that is low or moderate in contrast; an overcast day is a good example. See “Fixing Flash Photos” for more information.

## EOS

This is a series of popular Canon cameras and is an acronym for Electro Optical System; it's also the name of the goddess of dawn in Greek mythology.

## Existing Light

This refers to all light that is available including natural lighting and any artificial lighting such as lamps, candles, daylight through windows, etc.

## Exposure

This is the amount of light allowed to enter your camera. The aperture controls the amount of light and the shutter speed controls the time. See “Boosting Your Photography IQ” for more information.

## Exposure compensation

You may need to change the exposure from the value suggested by the camera to get a better photo. To do this, you need to press the exposure compensation button [+/-] on your XS; set a positive compensation when the main subject is darker than the background or a negative compensation when the subject lighter than the background. See “Fixing Photos That Are Too Light” or “Fixing Photos That Are Too Dark” for more information.

## f /stop

The number that indicates the size of the lens opening is called the f/stop. Examples of f-numbers on your Canon camera are f1.4, f2, f2.8, f4, f5.6, f8, f11, f16 and f22. The larger the f-number means a smaller lens opening, so an f/22 will have the smallest lens opening in this example. The f/stops work with shutter speeds to indicate exposure settings. See “Boosting Your Photography IQ” for more information.

## Fill-in light

Light from any additional lamp, flash, or reflector is fill-in light or fill-in flash when flash is used. Photographers use fill-in light to soften or “fill in” the shadows caused by the brighter main light source, such as the sun. See “Fixing Photos That Are Too Dark” or “Fixing Flash Photos” for more information.

## **Focal length**

Focal length is the distance between the film plane and the focal point (optical center of the lens) when the lens is focused at infinity. The focal length of the lens is marked in millimeters on the lens mount. See "Boosting Your Photography IQ" for more information.

## **Hood**

A tube, usually made of metal or rubber, that prevents unwanted light from falling on the lens surface. See "Fixing Color In Your Photos" for more information.

## **Infinity**

Although it at first may seem like an astronomical term, infinity in photography refers to the focusing point at which the lens gives a sharp image of very distant objects, such as the far horizon.

## **ISO (International Standards Organization)**

ISO is the speed rating for photographic materials and is based on a mathematical progression so ISO 200 is twice as fast as ISO 100 but only half as fast as ISO 400.

## **Macro lens**

This lens provides continuous focusing from infinity to extreme close-ups. You can also use macro lenses at ordinary subject distances

## **Neutral density filter**

This is a neutral gray camera filter that you can use to reduce the amount of light entering the camera when a slow shutter speed or wide aperture is needed.

## **Over exposed**

This occurs when too much light reaches the camera. The resulting photo is either overall too light or is too light in different areas.

## **Panning**

This is a technique for photographing a moving subject. While the shutter is open, the camera moves to follow the moving subject. Although panning creates a blurred background, it does produce a sharp subject. Panning generally works better with slower shutter speeds. See "Showing Motion In Your Photos" or "Action & Sports Photos" for more information.

## **RAW**

As its name suggests, this is an unprocessed digital file direct from your camera. Raw is not a standard file format such as JPEG but typically created by the manufacturer specifically for their cameras.



## Shutter speed

The time in which the shutter stays open to light is called the shutter speed. It's measured in fractions of seconds so that speed setting of 1/4000 means 1/4000th a second, which is very fast, and a setting of 30" means 30 seconds, which is very slow.

Stop down This refers to when you change the lens aperture to a smaller opening, such as from f/4 to f/5.6. When you stop-down you're also increasing the depth of field.

See "Boosting Your Photography IQ" for more information.

## Under exposed

This occurs when not enough light reaches the camera. The resulting photo is either overall too dark (muddy looking) or is too dark in different areas. See "Fixing Dark Photos" for more information.

## White Balance

An otherwise good photo, depending on the lighting conditions, may appear slightly yellow or blue. To prevent this problem, you may need to adjust the white balance control settings on your camera. See "Fixing Color In Your Photos" for more information.

- \* Avoiding Out Of Focus Photos
  - \* Fixing Dark Photos
  - \* Taking Action Photos
  - \* Better Flash Photos
  - \* Fixing Washed Out Photos
  - \* Amazing Nighttime Photos
- ....and much more!

# Solve common shooting problems and capture the best photos with your Canon XS / 1000D

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## Fixing Photos That Are Too Dark

### Faces Are Dark Due To Backlighting

The grass and trees in the background look great in my photo but the faces are a little dark. How can I lighten the faces yet keep the background looking great?



Mode: Full Auto Exposure: 1/125  
Aperture: f/7.1 ISO: 200  
Metering: Evaluative Metering (default)

The sky, grass and trees in this photo look great but the faces are a little dark. You'll need to change the metering mode of your camera to overcome this common problem.



Mode: P (Program AE) Exposure: 1/125  
Aperture: f/5.6 ISO: 200  
Metering: Partial Metering

By switching the metering mode to partial metering, we've lightened our subject's faces.

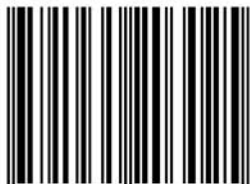


To lighten the subject's face, you can change the metering mode to take the light falling on the subject's face into greater consideration.

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## Fixing Photos That Are Too Dark

Turn the Mode Dial to P (Program AE Zone). (1)

Press the Metering mode button. (2)

Press the up or down cross key to select Partial metering. (3)

Press the SET button. (4)

Compose the picture by placing the central part of the viewfinder on the subject's face.

